Instructor Guide

Drug Recognition Expert Course

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

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Drug Recognition Expert Course

Administrator Guide

October 2017

Drug Recognition Expert Course
Instructor Guide
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02/2018 Curriculum

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PREFACE

The DRE course is a series of three training phases that, collectively, prepare police officers and other qualified persons to serve as DREs. Throughout this manual, the terms “drug recognition expert” and “DRE” are used to designate an individual who is specially trained and has continued training to conduct examinations of drug-impaired drivers. This training, developed as part of the Drug Evaluation and Classification (DEC) Program under the auspices and direction of NHTSA and IACP has experienced remarkable success since its inception in the 1980s.

As in any educational training program, an instruction manual is considered a “living document” that is subject to updates and changes based on advances in technology and science. A thorough review is made of information by the DEC Program Technical Advisory Panel (TAP) of the Highway Safety Committee of IACP with contributions from many sources in health care science, toxicology, jurisprudence, and law enforcement. Based on this information, any appropriate revisions and modifications in background theory, facts, examination, and decision-making methods are made to improve the quality of the instruction as well as the standardization of guidelines for the implementation of the DRE Training Curriculum. The reorganized manuals are then prepared and disseminated, both domestically and internationally, to the DEC Program State Coordinators. Changes will take effect 90 days after approval by the TAP, unless otherwise specified or when so designated.

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A. Purpose of this Document

This Administrator Guide provides an introduction to and an overview of the 7-day classroom training course on DEC Program. This course is perhaps better known as **The DRE School**. It is the second in a series of three phases of training that, collectively, prepare police officers and other qualified persons to serve as DREs. In some law enforcement agencies, these officers are known as Drug Recognition Technicians. IACP has adopted "DRE" as the generic title for the persons who carry out this program.

Throughout this manual, the term "DRE" is used to designate an individual who is specially-trained to conduct evaluations of drug-impaired drivers. In some participating agencies, the term stands for "Drug Recognition Expert"; in others, it means "drug recognition evaluator", and in others, "drug recognition examiner". In addition, some agencies use the term "DRT" – Drug Recognition Technician – and others prefer "DRS" – Drug Recognition Specialist. All of these and similar terms are acceptable and considered synonymous. But for this training program, the standard term is DRE.

It is worth repeating that this 7-day DRE School is neither the beginning nor the end of an officer's preparation to serve as a DRE. No one can be admitted to this course unless he or she has successfully completed the program titled "Preliminary Training for Drug Evaluation and Classification" (the "Pre-School"). The fact that an officer successfully completes this 7-day program does not qualify him or her to serve as a DRE. The officer must also complete the Certification Phase. The Certification Phase is conducted on-the-job. Under the observation and supervision of duly-authorized DRE instructors, the DRE trainee conducts evaluations of persons suspected of drug impairment.

This 7-day course, then, is only the middle phase of DRE training, but it is a very important phase. It is during this phase that the participant will learn to conduct systematic and standardized evaluations of persons suspected of drug impairment to determine:

(1) Whether the subject actually is impaired; and if so,

(2) Whether the impairment is drug- or medically-related; and if drugs,

(3) The category or combination of categories of drugs that is the likely cause of the observed impairment.

This Administrator Guide is concerned only with the second phase of training. During this phase, the participant becomes familiar with the various types of drugs that people use and – too often – abuse. The participant learns how the different drugs affect people and especially how they affect a person's ability to operate a vehicle. The participant learns how the different drugs manifest their presence in an individual. In particular, the participant learns how to examine a subject's eyes and vital signs to detect evidence of various kinds of drugs.
By the time the participant successfully completes the training, he or she is able to conduct a complete drug influence evaluation. He or she is able to describe the evidence that the evaluation will disclose to help determine if the subject suffers a medical condition or if a subject is under the influence of a particular category or combination of categories of drugs.

This Administrator Guide is intended to facilitate planning and implementation of the DEC Program training. The Guide overviews the 7-day course of instruction and the documents and other materials that make up the curriculum package for the course. It describes course administrative requirements and offers guidelines for discharging those requirements satis-factorily. It outlines the preparatory work that must be accomplished by a law enforcement agency before the course can be offered to that agency's personnel. And, it outlines the follow-up work that should be undertaken to ensure that the highest possible quality of instruction continues to be delivered during all phases of a DRE's training.

Before addressing the details of this classroom training in DEC Program procedures, a few words are appropriate concerning the procedures themselves. **In particular, it is important to make clear what the DEC Program procedures are <u>not</u>**:

- These procedures are <u>not</u> a field test or a pre-arrest investigative tool. It is highly unlikely that they could be conducted with adequate care in an outdoors, scene-of-investigation setting. In any event, they are not designed to provide probable cause for a subject's arrest. Rather, they are a post-arrest investigative tool, intended for application to arrestees for whom there is at least some articulable suspicion of drug use or drug impairment.

- These procedures do <u>not</u>, generally speaking, disclose what <u>specific</u> drug or drugs the subject has used. That may seem to be a startling and upsetting statement. Nevertheless, it is true. What the procedures <u>will</u> do, however, is to disclose (with reasonable accuracy) the category or combination of categories that produce distinguishable indicators visible to a qualified DRE. Some of the categories include relatively few individual drugs. Others include many drugs. The DRE can tell, usually, if a particular category is present. Except in special circumstances, he or she cannot tell which individual drug of that category is in question. For example, a DRE usually will not be able to distinguish between:

    - A person impaired by Diazepam from a person impaired by Secobarbital
    - A Codeine-impaired subject and someone under the influence of Vicodin
    - Someone under the influence of Peyote and someone under the influence of Psilocybin

- The procedures are not a substitute for chemical testing. Laboratory analysis of toxicological samples by qualified personnel remains an important step in the acquisition of evidence in drug-related cases. The DEC Program procedures provide articulable bases for requesting a subject to supply a toxicological sample, guide the laboratory technicians toward the general categories of drugs they can expect to find in the sample, and disclose important evidence to supplement the laboratory analysis. But the DRE does not eliminate the need for the laboratory technician.

None of the foregoing remarks is intended to lessen the importance of the DEC Program procedures. A cadre of skilled DREs definitely will enhance a department's ability to recognize and convict persons under the influence of drugs. The DRE is a very important "tool" in law enforcement's anti-drug toolbox.

One final word of introduction: the primary orientation of this course is toward traffic law enforcement. Persons under the influence of drugs endanger society in many ways, but the danger they cause as drivers of motor vehicles is the principal focus of this course. This course assumes the DRE will devote his or her skills in large part to conducting evaluations of suspected impaired drivers. Although the skills acquired in this training have many non-traffic applications, it is the traffic applications that will receive most of the participant's attention.

B. Overview of the Course

Intended Audience

This training definitely is not intended for just anyone. The candidate DRE isn't just any qualified person, but one who already has some very special knowledge and skills and a very definite commitment to DWI and drug enforcement.

The following lists the prerequisites and desirable characteristics of the participants for whom this training is intended, of the departments that employ those participants, and of the communities served by those departments.

Participant Prerequisites

To be considered a qualified candidate for this training, the proposed participant must be a law enforcement officer, or an employee of a public criminal justice agency, or an institution providing law enforcement training, and must:

- Have achieved the learning objectives of the Pre-School
- Have demonstrated proficiency in the use of the Standardized Field Sobriety Tests (SFSTs) (i.e., Horizontal Gaze Nystagmus (HGN), Walk and Turn (WAT), and One Leg Stand (OLS))
- Have good communications skills and a demonstrated ability to testify in court
- Be willing to continue to serve as a DRE for at least two years following completion of the training

It is highly desirable, although not essential, that the proposed participant have prior knowledge of drug symptomatology and experience in drug enforcement.

Departmental Prerequisites

To be considered qualified to submit participants for this training, the interested law enforcement agency must:

- Have active drug enforcement and DWI enforcement programs
- Be pro-active in training officers in SFST
  - Also, the training must be consistent with NHTSA/IACP guidelines and the agency must maintain records of officers' SFST enforcement activities
- Have access to adequate chemical-testing resources to support the DEC Program and ensure effective prosecution of drug-impaired subjects
- Have adequate facilities and equipment to support the DEC Program Evaluations
- Demonstrate the firm support and commitment of the chief law enforcement officer and other appropriate officials for the DEC Program
  - Evidence of this support includes but is not limited to:
    - Willingness to conduct DRE training in a manner that complies fully with NHTSA/IACP curriculum and guidelines
    - Willingness to adopt NHTSA/IACP-approved DRE evaluation forms
    - Willingness to authorize DREs and DRE candidates to devote sufficient time to the DRE function to develop and maintain proficiency
    - Willingness to provide the services of qualified DRE instructors to assist NHTSA/IACP in training candidate DREs from other agencies

Legal and Political Prerequisites

To be considered qualified to recommend a law enforcement agency for this training, a State or community must have laws or court-established precedents that:

- Specifically allow for the analysis of chemical samples obtained from persons suspected of impaired driving to determine the presence and/or concentration of drugs other than alcohol
- Allow the arresting officer or law enforcement agency to specify the chemical test or tests to be given to suspected impaired drivers
- Specifically facilitate testing for drugs other than alcohol

In addition, it is desirable that the State or community have laws that:

- Make the fact of the driver's refusal to submit to the test or tests admissible in court
- Make it an offense to be under the influence of alcohol and/or illicit drugs, whether or not the person is operating a vehicle

Furthermore, the State's or community's prosecutors must:

- Demonstrate a willingness to introduce SFST evidence in alcohol/drug cases
- Express a willingness to participate in this training to become familiar with DEC Program procedures and related information

The State's or community's judges must:

- Demonstrate a willingness to accept and consider SFST evidence in alcohol/drug cases
- Express a willingness to consider DEC Program evidence in alcohol/drug cases

Finally, it is desirable that the jurisdiction's political and community leaders express support for the DEC Program.

Purpose of the Course

The ultimate goal of this course is to help prevent crashes, deaths, and injuries by improving enforcement of drug-impaired driving offenses. It is not exactly clear how many drug-impaired drivers are on our Nation's roads or how many crashes they cause. Even the most conservative estimates indicate that these drivers kill thousands and injure tens of thousands each year.

Benefits of the Training

The classroom training course is designed to help the participants achieve four goals and eight specific learning objectives.

Goals: The participant who successfully completes this phase of DRE training will be able to:

- Determine if the subject is impaired
- Determine if the impairment is resulting from an injury, illness, or drugs
- Determine, if drug-related, what category (or categories) of drugs is (or are) the likely cause of the subject's impairment
- Progress to the Certification Phase of the training

Objectives: In order to pass this course, the participant must be able to:

- Describe the involvement of drugs in impaired-driving incidents
- Name the seven categories of drugs and recognize their effects
- Describe and properly administer the psychophysical examinations used in the DEC Program procedures
- Document the results of the DRE evaluation
- Properly interpret the results of the evaluation
- Prepare a narrative drug influence report
- Discuss appropriate procedures for testifying in a DRE case
- Maintain an up-to-date relevant Curriculum Vitae (CV)

Course Content

The course focuses primarily on two topics:

1. The examinations, observations, measurements, etc. that constitute the DEC Program procedures
2. The nature, effects, signs, and symptoms of each of the seven categories of drugs and of the combination of categories

More specifically, the course provides formal presentations on:

- Drugs in Society and in Motor Vehicle Operation
- Development and Effectiveness of the DEC Program Procedures
- An Overview of Physiology and Drugs
- An Overview of the DEC Program Procedures
- Eye Examinations (HGN, Vertical Gaze Nystagmus (VGN), Lack of Convergence (LOC), Estimation of Pupil Size, and Pupil Reaction to Light)
- Vital Signs Examinations (Pulse Rate, Blood Pressure, and Temperature)
- DRE Reference Resources
- The Seven Categories of Drugs (Central Nervous System (CNS) Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis)
- Drug Combinations
- Drug Influence Evaluation (DRE Facesheet and Narrative Report)
- Case Preparation and Testimony
- Curriculum Vitae (CV) Preparation and Maintenance

Training Activities

Formal presentations, or lectures, occupy approximately one-half of the course. These presentations cover the content topics outlined earlier. The presentations are supplemented by video segments and by reading material contained in the Participant Manual.

Most of the remainder of the course is devoted to demonstrations and hands-on practice of the DEC Program procedures. Participants repeatedly practice in teams, developing and sharpening their skills in administering eye examinations, vital signs examinations, and other components of the DRE's job. They also participate in several test interpretation practice sessions in which they review sample DRE reports and identify the category or categories of drugs responsible for the "evidence" described in the reports.

The remaining major activity is testing of the participants' knowledge and proficiency. A written knowledge examination is administered at the end of the course. A formal assessment of each participant's skill in administering the DEC Program procedures is conducted during the next-to-last session.

Length of Training

This classroom training course occupies seven training days. A typical schedule calls for each day to begin at 8 am and conclude at 5 pm. A one-hour lunch period and hourly breaks of 10 minutes are accommodated in that schedule.

The course is divided into 30 sessions and two optional review sessions, conducted after normal class hours on the fourth and sixth days of the School. No participant can progress to the Certification Phase of training until he or she has attended all mandatory sessions. In the event that some emergency causes a participant to miss all or a portion of a session, after-hours tutoring must be conducted for that participant prior to his or her enrollment in Certification Training.

The titles, durations and sequence of the sessions are given below.

Session	Title	Duration
1	Introduction and Overview	1 Hour, 50 Minutes
2	Drugs in Society and in Motor Vehicle Operation	50 Minutes
3	Development and Effectiveness of the DEC Program	50 Minutes
4	Overview of Drug Recognition Expert Procedures	2 Hours, 30 Minutes
5	Eye Examinations	1 Hour, 45 Minutes
6	Physiology and Drugs: An Overview	2 Hours
7	Examination of Vital Signs	2 Hours
8	Demonstration of the Evaluation Sequence	1 Hour, 45 Minutes
9	Central Nervous System Depressants	1 Hour, 45 Minutes
10	Central Nervous System Stimulants	1 Hour, 45 Minutes
11	Practice: Eye Examinations	1 Hour
12	Alcohol Workshop	1 Hour, 45 Minutes
13	DRE Reference Sources	30 Minutes
14	Hallucinogens	1 Hour, 45 Minutes
15	Practice: Test Interpretation	45 Minutes
16	Dissociative Anesthetics	1 Hour, 40 Minutes
17	Narcotic Analgesics	3 Hours
Review	Mid-Course Review	2 Hours, 30 Minutes

Session	Title	Duration
18	Practice: Test Interpretation	45 Minutes
19	Inhalants	1 Hour, 35 Minutes
20	Practice: Vital Signs Examinations	1 Hour
21	Cannabis	1 Hour, 25 Minutes
22	Overview of Signs and Symptoms	1 Hour
23	Curriculum Vitae Preparation and Maintenance	50 Minutes
24	Drug Combinations	1 Hour, 50 Minutes
25	Practice: Test Interpretation	45 Minutes
26	Preparing the Narrative Report	50 Minutes
27	Practice: Test Administration	1 Hour, 30 Minutes
28	Case Preparation and Testimony	1 Hour, 30 Minutes
Review	Review of the DRE School	2 Hours, 30 Minutes
29	Classifying a Suspect (Role Play)	2 Hours
30	Transition to the Certification Phase of Training	2 Hours, 30 Minutes

NOTE: **All sessions of this course are absolutely essential. No shortcuts are permissible**.

A model schedule for the 7-day course is given on the next page.

Alternate Schedule #1 combines the Pre-School and 7-Day School.

Alternate Schedule #2 combines the DWI Detection and Standardized Field Sobriety Testing, Pre-School, and 7-Day School.

If you use Alternate Schedule #1 or #2, you will need to make copies of those schedules for the participants.

THE DRE SCHOOL – SCHEDULE (page 1)		
WEDNESDAY	**THURSDAY**	**FRIDAY**
0800-0850 SESSION 1: Intro and Overview	0800-0850 SESSION 5: (cont)	0800-0850 SESSION 9: CNS Depressants
0850-0900 BREAK	0850-0900 BREAK	0850-0900 BREAK
0900-1000 SESSION 1: (cont)	0900-1005 SESSION 6: Physiology and Drugs	0900-1000 SESSION 9: (cont)
1000-1010 BREAK	1005-1015 BREAK	1000-1010 BREAK
1010-1030 Pre-Test	1015-1110 SESSION 6: (cont)	1010-1100 SESSION 10: CNS Stim.
1030-1120 SESSION 2: Drugs In Soc.	1110-1120 BREAK	1100-1110 BREAK
1120-1130 BREAK	1120-1200 SESSION 7: Vital Signs	1110-1200 SESSION 10: (cont)
1130-1230 SESSION 3: Development of DEC Program	1200-1300 LUNCH	1200-1300 LUNCH
1230-1330 LUNCH	1300-140 SESSION 7: (cont)	1300-1400 SESSION 11: Eye Examinations
1330-1440 SESSION 4: Overview of DEC Procedures	1400-1410 BREAK	1400-1415 BREAK
1440-1450 BREAK	1410-1430 SESSION 7: (cont)	1415-1700 SESSION 12: Alcohol Workshop
1450-1550 SESSION 4: (cont)	1430-1515 SESSION 8: Demonstrations of the Evaluation Sequence	
1550-1600 BREAK	1515-1530 BREAK	
1600-1630 SESSION 4: (cont)	1530-1605 SESSION 8: (cont)	
1630-1730 SESSION 5: Eye Examinations	1605-1635 QUIZ NUMBER ONE	

THE DRE SCHOOL – SCHEDULE (page 2)			
MONDAY	**TUESDAY**	**WEDNESDAY**	**THURSDAY**
0800-0830 SESSION 13: DRE Reference Sources	0800-0820 Quiz Number Two	0800-0930 SESSION 24: Drug Combinations	0800-1000 Final Exam
0830-0915 SESSION 14: Hallucinogens	0820-0850 SESSION 17: (cont.)	1005-1050 SESSION 25: Practice Test Interpretation	1000-1015 BREAK
0915-0930 BREAK	0850-0900 BREAK	1050-1100 BREAK	1015-1200 SESSION 29: Classifying a Suspect-Role Play
0930-1030 SESSION 14: (cont.)	0900-0945 SESSION 18: Practice Test Interpretation	1100-1150 SESSION 26: Narrative Report	1200-1300 LUNCH
1030-1045 BREAK	0945-1020 SESSION 19: Inhalants	1150-1210 Quiz Number Four	1300-1600 Administration of the Test Validation
1045-1130 SESSION 15: Test Interpretation	1020-1030 BREAK	1210-1310 LUNCH	1600-1630 SESSION 30: Transition to Certification Trng
1130-1200 SESSION 16: Dissociative Anesthetics	1030-1130 SESSION 19: (cont.)	1310-1440 SESSION 27: Practice Test Administration	1630-1700 Course Critique; Closing Remarks and Certificates
1200-1300 LUNCH	1130-1145 BREAK	1440-1450 BREAK	
1300-1410 SESSION 16: (cont.)	1145-1300 SESSION 20: Vital Signs and Exams	1450-1535 SESSION 28: Case Preparation and Testimony	
1410-1420 BREAK	1300-1400 LUNCH	1535-1545 BREAK	
1420-1515 SESSION 17: Narcotics	1400-1530 SESSION 21: Cannabis	1545-1630 SESSION 28: (cont.)	
1515-1530 BREAK	1530-1540 BREAK	1630-1700 Quiz Number Five	
1530-1630 SESSION 17: (cont.)	1540-1640 SESSION 22: Overview of Signs and Symptoms	1700-1800 BREAK	
1630-1730 SESSION 17: (cont.)	1640-1650 BREAK	1800-2000 Optional Review – Session #2	
1730-1800 BREAK	1650-1730 SESSION 23: C.V. Preparation and Maintenance		
1800-2030 Optional Review – Session #1	1730-1800 QUIZ NUMBER THREE		

ALTERNATE SCHEDULE #1: COMBINED PRE-SCHOOL AND 7-DAY SCHOOL			
Time	Session Title	**D** – 7-day DRE School **P** – Pre-School	Duration
8:00A – 10:00A	Introduction and Overview	D	2 Hours
10:00A – 11:00A	Drugs and Society	D	1 Hour
11:00A – 12:00P	Development and Effectiveness	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 3:30P	Overview of DRE Classification Procedures	D	2 Hours, 30 Minutes
3:30P – 5:00P	Psychophysical Tests	P	1 Hour, 30 Minutes
END OF DAY			
8:00A – 11:00A	Eye Examinations	D	3 Hours
11:00A – 12:00P	Vital Signs	P	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Vital Signs (cont.)	p	1 Hour, 30 Minutes
2:30P – 4:00P	Overview of Signs and Symptoms	P	1 Hour, 30 Minutes
4:00P – 5:00P	Alcohol as a Drug	P	1 Hour
END OF DAY			
8:00A – 9:30A	Demonstration of the Evaluation Sequence	D	1 Hour, 30 Minutes
9:30A – 12:00P	Physiology of Drugs	D	2 Hours, 30 Minutes
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Central Nervous System Depressants	D	1 Hour, 30 Minutes
2:30P – 5:00P	Alcohol Workshop (All Instructors)	P	2 Hours, 30 Minutes

END OF DAY			
Time	Session Title	**D** – 7-day DRE School **P** – Pre-School	Duration
8:00A – 9:00A	Central Nervous System Depressants (cont.)	D	1 Hour
9:00A – 11:30A	Central Nervous System Stimulants	D	2 Hours, 30 Minutes
11:30A – 12:00P	Quiz Number One	D	30 Minutes
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Eye Examinations	D	1 Hour
2:00P – 2:30P	DRE Reference Sources	D	30 Minutes
2:30P – 5:00P	Review and Pre-School Final Examination	P	2 Hours, 30 Minutes
END OF DAY			
8:00A – 10:00A	Hallucinogens	D	2 Hours
10:00A – 11:00A	Practice Test Interpretation	D	1 Hour
11:00A – 12:00P	Dissociative Anesthetics	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Dissociative Anesthetics (cont.)	D	1 Hour
2:00P – 4:00P	Mid-Course Review (All Instructors)	D	2 Hours
END OF DAY			
8:00A – 11:00A	Narcotic Analgesics	D	3 Hours
11:00A – 12:00P	Practice Test Interpretation	D	1 Hour

12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Inhalants	D	1 Hour
2:00P – 3:00P	Practice Vital Signs All Instructors	D	1 Hour
3:00P – 4:00P	Quiz Number Two	D	30 Minutes
END OF DAY			
Time	Session Title	**D** – 7-day DRE School **P** – Pre-School	Duration
8:00A – 11:00A	Cannabis	D	3 Hours
11:00A – 12:00P	Overview of Signs and Symptoms	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Curriculum Vitae		1 Hour
2:00P – 3:00P	Drug Combinations	D	1 Hour
3:00P – 3:30P	Quiz Number Three	D	30 Minutes
3:30P – 6:00P	Alcohol Workshop All Instructors	D	2 Hours, 30 Minutes
END OF DAY			
8:00A – 9:00A	Drug Combinations	D	1 Hour
9:00A – 10:00A	Practice Test Interpretation	D	1 Hour
10:00A – 11:00A	Preparing the Narrative Report	D	1 Hour
11:00A – 12:00P	Practice Test Administration All Instructors	D	1 Hour

12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Case Preparation and Testimony	D	1 Hour, 30 Minutes
2:30P – 3:00P	Quiz Number Four	D	30 Minutes
3:00P – 5:00P	Final Course Review All Instructors	D	2 Hours
END OF DAY			
8:00A – 11:00A	Final Examination All Instructors	D	3 Hours
11:00A – 12:00P	Transition to Certification Training	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 3:00P	Classifying a Suspect (Role Play) All Instructors	D	2 Hours
3:00P – 4:00P	Graduation		2 Hours

ALTERNATE SCHEDULE #2
COMBINED DWI DETECTION AND STANDARDIZED FIELD SOBRIETY, PRE-SCHOOL AND 7-DAY SCHOOL

WEEK ONE **DAY ONE**	DURATION
Block I – *Introduction and Overview* (merger of DWI Detection and SFST manual Session 1 and the DRE manual Session 1) *SFST and DRE School Pre-tests*	2 Hours
Block 2 – *Definition of drug and overview of the drug categories* (modified Pre-School Session 1, Introduction and Overview)	1 Hour
Block 3 – *Detection and Deterrence* (SFST manual Session 2)	1 Hour
Block 4 – *The Legal Environment* (SFST manual Session 3)	45 Minutes
Block 5 – *Overview of Detection, Note-taking and Testimony* (SFST manual Session 4)	45 Minutes
Block 6 – *Phase One: Vehicle in Motion* (SFST manual Session 5)	1 Hour
Block 7 – *Phase Two: Personal Contact* (SFST manual Session 6)	1 Hour
Block 8 – **Phase Three: Pre-Arrest Screening** (SFST manual Session 7)	30 Minutes
DAY TWO	DURATION
Block 9 – *Concepts and Principles of the SFST* (SFST manual Session 8, segments A (development and validity) and B (types of nystagmus)	1 Hour
Block 10 – *Eye examinations* (Pre-School manual Session 4, segments A (purposes of the eye examinations) and B 1, 2 and 3 (procedures and clues for HGN, VGN, and LOC)	1 Hour
Block 11 – *Psychophysical Tests* (Pre-School manual Session 3, segments A and B, Modified Romberg Balance (MRB) and WAT)	1 Hour
Block 12 – *Psychophysical Tests* (Pre-School manual Session 3, segments C and D, OLS and Finger to Nose (FTN))	1 Hour
Block 13 – *SFST Demonstrations* (SFST manual Session 9, plus MRB and FTN, utilizing the DRE order)	1 Hour
Block 14 – *SFST Dry Run Practice* (SFST manual Session 10, plus MRB and FTN, in the DRE order)	1 Hour

Block 15 – *Alcohol Correlation Study #1* (merger of SFST manual Session 11 and Pre-School manual Session 5)	2 Hours
DAY THREE	DURATION
Block 16 – *Alcohol as a Drug* (Pre-School manual Session 8)	2 Hours
Block 17 – *Overview of Signs and Symptoms* (Pre-School manual Session 7)	1 Hour
Block 18 – *Eye Examinations* (Pre-School manual Session 4, beginning with B4 (estimation of pupil size) through 5 (reaction to light)).	1 Hour
Block 19 – *Drugs in Society and in Motor Vehicle Operation* (DRE manual Session 2)	1 Hour
Block 20 – *Development and Effectiveness* (DRE manual Session 3)	2 Hours
Block 21 – *Review Session – SFST curriculum*	1 Hour
DAY FOUR	DURATION
Block 22 – *SFST Course Final Examination* (SFST manual Session 10)	30 Minutes
Block 23 – *Eye Examinations – Practice Session* (merger of the practice sessions in DRE manual Session 11 and Pre-School manual Session 4)	30 Minutes
Block 24 – *Examination of Vital Signs* (merger of Pre-School manual Session 6 and DRE manual Session 7)	3 Hours
Block 25 – *Overview of DEC Program Procedures* (merger of Pre-School manual Session 2 and DRE manual Session 4)	1 Hour
Block 26 – *Demonstrations of the Evaluation Sequence* (DRE manual Session 8)	2 Hours
Block 27 – *Review Session – Pre-School Curriculum*	1 Hour
DAY FIVE	DURATION
Block 28 – *Pre-School Final Examination* (Pre-School manual Session 10)	30 Minutes
Block 29 – *Physiology and Drugs: An Overview*	4 Hours
Block 30 – *SFST Report Writing* (SFST manual Session 13 and SFST practice session)	1 Hour, 30 Minutes

Block 31 – *Alcohol Correlation Study #2* (merger of Pre-School manual Session 5 and SFST manual Session 14; includes SFST Proficiency Test)	2 Hours
WEEK TWO **DAY SIX**	DURATION
Quiz #1	30 Minutes
Block 32 – *DRE Reference Sources* (DRE manual Session 13)	2 Hours
Block 33 – *Methods of Administration and Elimination* (Note: This is not a current standard manual session, but is an LAPD curriculum addition)	30 Minutes
Block 34 – *Central Nervous System Depressants* (DRE manual Session 9)	2 Hours
Block 35 – *Central Nervous System Stimulants* (DRE manual Session 10)	3 Hours
DAY SEVEN	DURATION
Quiz #2	30 Minutes
Block 36 – *Hallucinogens* (DRE manual Session 14)	2 Hours
Block 37 – *Practice: Test Interpretation* (DRE manual Session 15)	1 Hour
Block 38 – *Dissociative Anesthetics* – (DRE manual Session 16)	2 Hours
Block 39 – *Narcotic Analgesics* (DRE manual Session 17, including examination of injection marks)	2 Hours, 30 Minutes
DAY EIGHT	DURATION
Quiz #3	30 Minutes
Block 40 – *Inhalants* (DRE manual Session 19)	1 Hour, 30 Minutes
Block 41 – *Practice: Test Interpretation* (DRE manual Session 18)	1 Hour
Block 42 – *Cannabis* (DRE manual Session 21)	2 Hours
Block 43 – *CV Preparation and Maintenance* (DRE manual Session 23)	1 Hour
Block 44 – *Practice: Vital Signs* (DRE Session 20)	30 Minutes
Block 45 – *Alcohol Correlation Study #3* (DRE manual Session 12)	1 Hour, 30 Minutes

DAY NINE	DURATION
Quiz #4	30 Minutes
Block 46 – Overview of Signs and Symptoms (DRE manual Session 22)	1 Hour
Block 47 – Drug Combinations (DRE manual Session 24)	2 Hours
Block 48 – Practice Session: Eye Examinations (Note: Participants practice the pupil size examinations in this segment. There is no standard lesson plan for this segment.)	1 Hour
DAY NINE (cont.)	DURATION
Block 49 – *Practice: Test Interpretation* (DRE manual Session 25)	1 Hour
Block 50 – *Practice: Test Administration* (DRE manual Session 27)	30 Minutes
Block 51 – *Review of the DRE School* *Quiz #5 is also incorporated into this session.*	2 Hours
DAY TEN	DURATION
Block 52 – *DRE School Final Examination* (DRE manual Session 30)	1 Hour, 20 Minutes
Block 53 – *Preparing the Narrative Report* (DRE manual Session 26)	1 Hour
Block 54 – *Case Preparation and Testimony* (DRE manual Session 28)	1 Hour
Block 55 – *Classifying a Suspect* (Role Plays) (DRE manual Session 29)	2 Hours
Block 56 – *Transition to Certification Phase of Training* (DRE manual Session 30)	1 Hour
Block 57 – *Graduation – Presentation of Certificates and Achievement Awards* (Note: Course critiques are finished during this segment.)	1 Hour

ALTERNATE SCHEDULE #3
ACCELERATED DRE SCHOOL

Week One				
Day	**Time**	**Manual**	**Session/Segment**	**Title**
Monday	(1) 1000 to 1200	SFST DRE	Session 1 Session 1	*Introduction and Overview (SFST Script and Matrix Handouts)*; participant/instructor introductions
	1200 to 1300			*SFST and DRE Pre-tests*
	(2) 1300 to 1400	Pre-School	Session 1	*Introduction*
	1400 to 1500			Lunch Break
	(3) 1500 to 1545	SFST	Session 2	*Detection and Deterrence*
	(4) 1545 to 1630	SFST	Session 3	*The Legal Environment*
	(5) 1630 to 1730	SFST	Session 4	*Overview of Detection, Note-taking and Testimony*
	(6) 1730 to 1815	SFST	Session 5	*Phase One: Vehicle in Motion and Explanation of Divided Attention Impairment*
	(7) 1815 to 1900	SFST	Session 6	*Phase Two: Personal Contact*
Tuesday	(8) 1200 to 1230	SFST	Session 7	*Phase Three: Pre-Arrest Screening* (modified PBT Session)
	(9) 1230 to 1330	SFST	Session 8/A, B	*Concepts and Principles of the SFST* (development and types of nystagmus)
	(10) 1330 to 1400	Pre-School	Session 4/A and B, 1, 2, and 3	*Eye Exams* (Purpose of Eye examinations, procedures and clues for HGN, VGN and LOC)

	(11) 1400 to 1500	Pre-School	Session 3/A and B	*MRB and WAT*
	(12) 1500 to 1600	Pre-School	Session 3/C and D	*OLS and FTN*
	1600 to 1700			Lunch Break
	(13) 1700 to 1800	SFST	Session 9	*SFST Demonstrations* (includes MRB, FTN in DRE order)
	(14) 1800 to 1900	SFST	Session 10	*SFST "Dry Run" Practice* (includes MRB, FTN, in DRE order)
	(15) 1900 to 2100	SFST Pre-School	Session 9 Session 5	*Alcohol Correlation Study #1* – coordinator; wrap-up; bartender; log; vitals
Wednesday	(16) 1000 to 1200	Pre-School	Session 8	*Alcohol as a Drug* (Magic Mountain DVD alcohol driving study)
	(17) 1200 to 1300	Pre-School	Session 7	*Overview of Signs and Symptoms* (distribution of blank drug matrix)
	(18) 1300 to 1400	Pre-School	Session 4/B4, 5	*Eye Exams* (pupil size and reaction to light)
	1400 to 1500			Lunch Break
	(19) 1500 to 1600	DRE	Session 2	*Drugs in Society and Motor Vehicle Operation*
	(20) 1600 to 1800	DRE	Session 3	*Development and Effectiveness*
	(21) 1800 to 1900			*SFST Review Session*

Thursday	(22) 1000 to 1030	SFST	Session 10	*Final Examination*
	(23) 1030 to 1100	DRE Pre-School	Session 11 Session 4	*Eye Exams: Practice Session*
	(24) 1100 to 1300	Pre-School DRE	Session 6 Session 7	*Examination of Vital Signs*
	1300 to 1400			*Vital Signs: Practice*
	1400 to 1500			Lunch Break
	(25) 1500 to 1600	Pre-School DRE	Session 2 Session 4	*Overview: DEC Program Process* (LETN and Chevron)
	(26) 1600 to 1800	DRE	Session 8	*Demonstrations of the Evaluation Sequence*
	(27) 1800 to 1900			*Pre-School Review Session*
Friday	(28) 1200 to 1230	Pre-School	Session 10	*Final Examination*
	(29) 1230 to 1530	DRE	Session 6	*Physiology and Drugs: An Overview*
	1530 to 1630			Lunch Break
	1630 to 1730			*Physiology and Drugs: Physiological Pursuit*
	(30) 1730 to 1800	SFST	Session 13	*Report Writing*
	1800 to 1900			*SFST Practice*
	(31) 1900 to 2100	Pre-School SFST	Session 5 Session 14	*Alcohol Correlation Study #2 and SFST Proficiency Test* – coordinator; wrap-up; log; vitals; bartender

Week Two				
Day	**Time**	**Manual**	**Session/Segment**	**Title**
Monday	1000 to 1030			*DRE Quiz #1*
	(32) 1030 to 1230	DRE	Session 13	*DRE Reference Sources*
	(33) 1230 to 1330	non-manual session		*Methods of Administration and Elimination*
	(34) 1330 to 1400	DRE	Session 9	*CNS Depressants*
	1400 to 1500			Lunch Break
	1500 to 1630	DRE	Session 9	*continued*
	(35) 1630 to 1900	DRE	Session 10	*CNS Stimulants*
Tuesday	1000 to 1030			*DRE Quiz #2*
	1030 to 1130	DRE	Session 10/E	*continued*
	(36) 1130 to 1230	DRE	Session 14	*Hallucinogens*
	1230 to 1300	DRE	Session 14	*continued*
	(37) 1300 to 1400	DRE	Session 15	*Practice: Test Interpretation* (includes Clinton Williams evaluation)
	1400 to 1500			Lunch Break
	(38) 1500 to 1600	DRE	Session 16	*Dissociative Anesthetics*
	1600 to 1700	DRE	Session 16/E	*continued*
	(39) 1700 to 1900	DRE	Session 17/includes E	*Narcotic Analgesics*
Wednesday	1200 to 1230			*DRE Quiz #3*
	1230 to 1330	DRE	Session 17	*Injection Marks Examination*
	(40) 1330 to 1430	DRE	Session 19	*Inhalants*
	(41) 1430 to 1530	DRE	Session 18	*Practice: Test Interpretation*
	(42) 1530 to 1700	DRE	Session 22	*Cannabis*

	1700 to 1800			Lunch Break
	(43) 1800 to 1900	DRE	Session 23	*C.V. Preparation and Maintenance*
	(44) 1900 to 1930	DRE	Session 20	*Practice: Vital Signs*
	(45) 1930 to 2100	DRE	Session 12	*Alcohol Correlation Study #3 – coordinator; wrap-up; vitals; bartender; log*
Thursday	1000 to 1030			*DRE Quiz #4*
	(46) 1030 to 1130	DRE	Session 22	*Overview of Signs and Symptoms*
	(47) 1130 to 1330	DRE	Session 24	*Drug Combinations*
	(48) 1330 to 1430	non-manual session		*Practice: Eye Exams*
	1430 to 1530			Lunch Break
	(49) 1530 to 1630	DRE	Session 25	*Practice: Test Interpretation*
	(50) 1630 to 1700	DRE	Session 27	*Practice: Test Administration*
	(51) 1700 to 1900			*DRE Full Course Review "Your Brain on DRE"* *DRE Quiz #5*
Friday	(52) 1000 to 1100			*Final Examination: DRE School*
	(53) 1100 to 1200	DRE	Session 26	*Preparing the Narrative Report*
	(54) 1200 to 1300	DRE	Session 28	*Case Preparation and Testimony*
	1300 to 1400			Lunch Break
	(55) 1400 to 1600	DRE	Session 29	*Classifying a Suspect: Role Plays* – coordinator

	(56) 1600 to 1800	DRE	Session 30	*Transition to the Certification Phase of Training*
	(57) 1800 to 1900			*Graduation: Presentation of Certificates and Achievement Awards*

C. Overview of the Curriculum Package

In addition to this Administrator Guide, the curriculum package for the classroom training program in DEC Program training consists of the following documents and materials:

- Instructor Guide
- Audio-Visual Aids
- Participant Manual
- Set of Drug Evaluation Exemplars

Instructor Guide

The Instructor Guide is a complete and detailed outline of what the course covers and how it is to be taught. It is organized into 30 sessions with each session corresponding to one of the training sessions and two optional review sessions.

Each session consists of a cover page, an outline page, and the lesson plans themselves.

The cover page presents the session title and the estimated instructional time required to complete the session.

The outline page presents the training objectives for the session, i.e., exactly what the participant will be able to do as a result of successfully completing the session. The outline page also lists the major content segments of the session, as well as the principal instructional activities that take place during the session.

The lesson plans themselves are arranged in a standard, content/instructional notes format. The "content" of each page outlines what is to be taught.

The "Instructional Notes" on each page are listed in bold italicized print and serve as reminders of important information the instructor should elicit during the training and relate to the participants. These notes define how the instructor is to present the material and involve the participants in the presentation and ensure that they understand and assimilate the material.

Typical "Instructional Notes" include:

- The approximate amount of time to be devoted to each major content segment
- Indications of what visual aids are to be used and when they are to be used
- Questions to be posed to participants to involve them actively in the presentation
- Indications of points requiring special emphasis
- Guidelines for conducting particular demonstrations to clarify how drug evaluations are to be performed
- Specifications of group exercises and other methods of involving participants more actively in the lesson

The Instructor Guide serves, first, as a means of preparing the instructor to teach the course. He or she should review the entire guide, become familiar with the content, and develop a clear understanding of how the course "fits together". He or she is also expected to become thoroughly familiar with each session that he or she is assigned to teach, to prepare the visual aids, to assemble all "props" and other instructional equipment referenced in the lesson plans, and to augment the "instructional notes" as necessary to ensure that his or her own teaching style is applied to the content.

Subsequently, the Instructor Guide serves as an in-class reference document for the instructor to help him or her maintain the sequence and pace of presentations and other learning activities.

It is worth emphasizing that the Instructor Guide does not contain the text of a speech. Although its content information is fairly well detailed and comprehensive, it is not to be read verbatim to the participants. This training program is intended to be a dynamic, highly interactive learning experience in which the participants are active participants. It should not be permitted to degenerate into a series of mere lectures.

Audio-Visual Aids

Four types of audio-visuals are used in this course:

- Wall charts
- Dry-erase board and/or easel/easel pad presentations
- "Visuals" (PowerPoint)
- Videos

The wall charts are permanently-displayed items or information, intended to depict major themes and segments of the training. The wall charts should have text large enough so they may be viewed from any seat in the classroom.

Wall charts should be placed high on the far left and right sides of the classroom's front wall, or on the side walls, where they will be visible without distracting from the screen or dry-erase board.

The dry-erase board and/or easel/easel pad presentations, as recommended in the lesson plans, are self-explanatory.

The "visuals" (PowerPoint slides) are simple displays of graphic and/or narrative material that emphasize key points and support the instructor's presentation. Each "visual" is numbered to indicate the session to which it belongs and its sequence within that session. For example, Visual 7-3 is the third slide used in Session 7.

The videos include a number of segments that demonstrate the DEC Program procedures and the kinds of evidence associated with various categories of drugs. These segments feature subjects who are actually under the influence of drugs.

Participant Manual

The Participant Manual is the basic textbook and study source for the course. It provides a session-by-session summary of the subject matter and a list of study topics to help the participants assimilate the material.

During the course, the Participant Manual will be primarily useful for previewing the sessions and for studying the subject matter in preparation for the final knowledge and proficiency examinations. After the classroom training is completed, the participant will find the manual is a useful reference document, especially during the Certification Phase of training.

Participants are expected to be familiar with all of the contents of their Participant Manual. Instructors must encourage the participants to study the manual carefully as they progress through the school. Note: Participants are expected to be able to answer the "test your knowledge" review questions that appear at the end of various sections of their Participant Manual.

Drug Symptomatology Matrix

The Drug Symptomatology Matrix outlines the expected results of the drug influence evaluation for each drug category. Note: For purposes of this course, "symptomatology" and "symptomology" are interchangeable and are referring to effects of drugs on the human body. A completed Matrix is located in Session 22.

Instructors are encouraged to facilitate the participants' learning of the Matrix throughout this training course. During the Certification Phase, it is expected that the participants recreate the Matrix in its entirety for the Certification Knowledge Exam.

Set of Drug Evaluation Exemplars

The exemplars are the documented results of simulated DEC Program evaluations. A standardized reporting form is used for the exemplars. This is the same form the participants use as a recording instrument when they practice administering and documenting the DEC Program evaluation.

The exemplars support learning activities that take place during eleven sessions:

- Sessions 9, 10, 14, 16, 17, 19, and 21 cover the seven individual drug categories. Exemplars have been prepared for each session to illustrate the kinds of indicators that can be expected when the evaluation is conducted on a person under the influence of that category. For example, the exemplars designed for Session 9 illustrate the results of typical evaluations of persons under the influence of CNS Depressants. These exemplars will be found in the Instructor Guide and the Participant Manual.

- Session 15, 18 and 25 are "Test Interpretation Practice" sessions. Participants work in small groups reviewing exemplars and determining, from the documented "evidence" they contain, what category or categories of drugs are present in each case. These exemplars are found in the Participant Manual.

- Session 29 is the "role play" practice session. Instructors serve as "test subjects." Participants work in small groups administering the entire drug influence evaluation to each instructor. Each instructor uses an exemplar to inform the participants as to what data they should record at each stage of the evaluation. For example, as part of the evaluation, the participants will actually measure blood pressure. The instructor will observe the participants' technique and offer constructive criticism. The instructor will inquire as to the pressure readings that the participants obtain. <u>But</u>, the instructor will tell the participants to <u>record</u> the blood pressure readings documented on his or her assigned exemplar. Subsequently, the participants must review their completed exemplars and determine what category or categories of drugs the instructor was "simulating." These exemplars are found at the end of the lesson plans for Session 29.

D. General Administrative Requirements

Facility Requirements

Several types of facilities are needed to support this training. First, a standard classroom is required. This should provide comfortable seating and adequate desk/table space for each participant and should be equipped with a large screen, audio-visual projectors, dry-erase boards and/or easel/easel pads. All visuals should be readily and fully visible from all seating locations. The classroom should also provide adequate unobstructed space to allow the instructors to demonstrate evaluation procedures. A U-shaped seating arrangement is preferable for the classroom.

A large, open area also is needed to support the hands-on practice sessions. A gymnasium or similar facility will serve this need very well. Ideally, it should be possible to control the lighting in this practice facility to the point of total darkness, to demonstrate and practice key elements of the DEC Program procedures that take place in a darkroom.

A separate room must be available, ideally adjacent to the gymnasium or practice facility. This room will serve as the "staging area" for the volunteer drinkers who will participate in the alcohol workshop (Session 12).

Another separate room is recommended to serve as the instructors' "office," i.e., the place where they can prepare for their teaching assignments, store materials, etc.

Special Instructional Equipment and Personnel

For the alcohol workshop, volunteer drinkers must be available. The volunteer drinkers cannot be members of the class. There should be one volunteer for every three or four participants. For example, if there are 25 participants in the class, there should be 7-9 volunteer drinkers. Sufficient alcohol, mixers, cups, napkins, ice, etc. must be provided. Adequate breath testing devices must be available to provide for monitoring volunteers' blood alcohol concentrations (BACs). At least three people must be assigned to monitor and escort the volunteers. Ideally, each volunteer should have his or her own monitor.

Note: Every volunteer must read and sign the "Statement of Informed Consent" prior to receiving any alcohol. Any person who refuses to sign the Statement cannot serve as a volunteer drinker.

For the hands-on practice sessions involving eye examinations, at least one Angle of Onset template should be provided for every two participants. The template should display angles between 30 and 45 degrees, in 5 degree increments. An example template is provided in the Pre-School manual, Session 4.

At the beginning of DRE training, it is essential that every participant have his or her own full complement of DRE equipment. This equipment must include: a sphygmomanometer, stethoscope, penlight, thermometer and probe covers, schematic light, protective gloves, and pupillometer. The pupillometer should be capable of measuring pupil diameters across the range from 1.0 mm to 10 mm, in one-half millimeter increments.

Instructor Qualifications

The principal instructors for this course must be State-certified, IACP-credentialed DRE Instructors. That means they (1) hold currently-valid certifications as DREs, (2) have completed the NHTSA/IACP DRE Instructor Development Course (IDC), and (3) have completed the required delivery of both classroom and certification training under the supervision of instructor-trainers. Instructors with special credentials for certain blocks of instruction may be enlisted to supplement the DRE instructors. For example, a physician would be well qualified to teach Session 7 (Examination of Vital Signs) and a prosecutor might be a good choice as the instructor for Session 26 (Preparing the Narrative Report) and Session 28 (Case Preparation and Testimony).

In addition to their occupational competencies, all instructors must be qualified teachers. They need to understand, and be able to apply, fundamental principles of instruction.

Perhaps most importantly, they need to be competent coaches. Much of this classroom training is devoted to hands-on practice. The quality of coaching will have a major impact on the success of those practice sessions. For the hands-on practice sessions, there should be at least one instructor for every three participants to permit adequate monitoring and coaching.

Class Size Considerations

The recommended maximum class size for this course is 25 participants. Larger classes make it difficult to devote sufficient attention to each participant to ensure that he or she develops evaluation skills to a level sufficient to progress to the Certification Phase. The preferred class size is 15-20 participants.

E. Course Planning and Preparation Requirements

The fundamental preparatory step for any law enforcement agency desiring this training is to contact their State Coordinator to ensure the agency and its community or State satisfy the prerequisites outlined in Section A of this Administrator Guide.

The next step is to select appropriate candidate DREs in accordance with State Coordinator's guidelines. Make sure each candidate satisfies the participant prerequisites outlined in Section A.

The third step is to provide preliminary training to the candidate DREs. The NHTSA/IACP has developed a curriculum to support preliminary training for potential DREs. The State Coordinator is responsible for appointing a course manager and scheduling this training for candidate DREs. This training enables the candidates to become familiar with, and to start to develop skills in, the vital signs examinations and other elements of the DEC Program procedures.

The next step will be for the State Coordinator to appoint a course manager and schedule the course. States with well-established DEC Programs, are expected to plan and manage their own DRE Schools. IACP supplies digital manuals for printing and other standard instructional materials at no charge. For States whose DEC Programs are new or developing, NHTSA/IACP may assist with the planning and management of the Schools.

In general, this classroom training course is conducted at facilities operated by the host agency or at other suitable locations. All DRE Pre-Schools and 7-day Schools must be authorized by that State's DEC Program Coordinator.

F. Examinations of Participants' Knowledge and Proficiency

It is very important to test the participants' knowledge and skill development. Testing in this course is conducted for two principle reasons: (1) to assess participants' progress and identify deficiencies that need correction; and, (2) as a learning activity for the participants. Knowledge testing starts in the very first session of the course, when a Pre-Test is given. After the participants have finished the Pre-Test, they can use it as a study guide throughout the course. Five formal quizzes also will be given. In addition, a self-study quiz is provided in the Instructor and Participant Manuals.

The most important knowledge test is the Final Examination. It is given on the final day of the School. The participant must achieve a grade of at least 80% in order to progress to Certification Training. If a participant fails the examination, the IACP International Standards permit one additional attempt. The additional attempt must be based on an examination approved for that purpose by IACP and cannot occur earlier than two weeks, nor later than four weeks, following completion of the DRE School.

A skill examination also occurs during the next-to-last session of the DRE School. That is the session in which the participants will examine instructors who are "playing the roles" of a drug-impaired person. A Proficiency Examination Checklist (found in Session 30 of this Manual) is used to evaluate the participants' performance.

G. Follow-Up Requirements

Upon completion of the classroom training, participants will transition to the Certification Phase. During Certification Training, the participants are observed and supervised by certified DRE instructors. Under the IACP International Standards for certification, each participant must participate in conducting at least 12 drug evaluations, at least 6 of which he or she must personally administer.

The participant must also identify at least three of the seven drug categories in his or her evaluations. Toxicological specimens must be submitted from at least nine of the examined subjects and analysis of those specimens must corroborate the participant's opinion for at least 75% of the specimens submitted. Most importantly, the numbers and percentages cited here are minimum requirements: no participant can be certified as a DRE until two instructors attest that he or she qualifies for certification.

The appointed Course Manager will compile the information needed to support an assessment of the classroom training each time it is conducted. This assessment will include the (anonymous) Participant's Critique Form which appears in Session 30 of the Instructor Guide.

H. Guidelines for Preparing Post-Course Evaluation

A standard NHTSA/IACP participant's critique form is provided to document participant's initial ratings of course content and activities. The form is divided into eight parts:

- Workshop/Seminar Objectives
- Course Activities
- Course Design
- Topic Deletions
- Topic Additions
- Ability to Identify Drug Categories
- Overall Quality of the Course
- Quality of Instruction
- Final Comments or Suggestions

I. Requests for Information, Assistance or Materials

Departments interested in this program should contact their State Highway Safety Office (SHSO) or the individual State DEC Program Coordinator. Formal requests for this training should come from the SHSO and should be directed to the cognizant NHTSA Regional Office and IACP.

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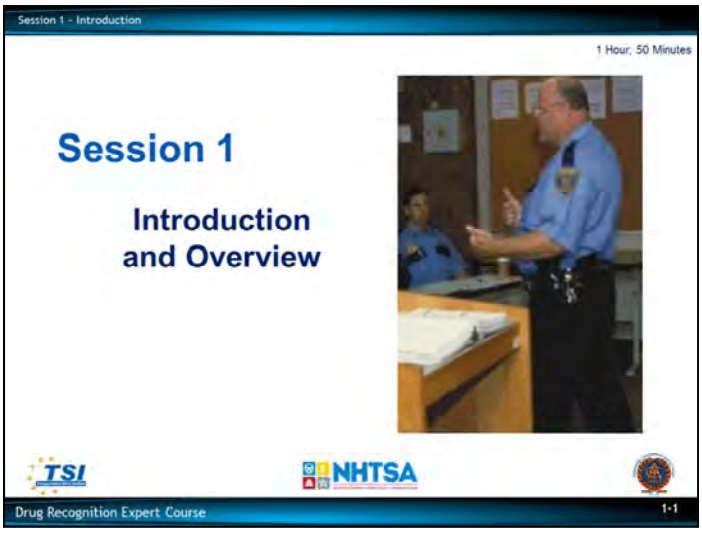

Session 1 - Introduction
1 Hour, 50 Minutes
Session 1
Introduction
and Overview
TSI
NHTSA
Drug Recognition Expert Course
1-1

A. Welcoming Remarks and Goals

Welcoming Remarks

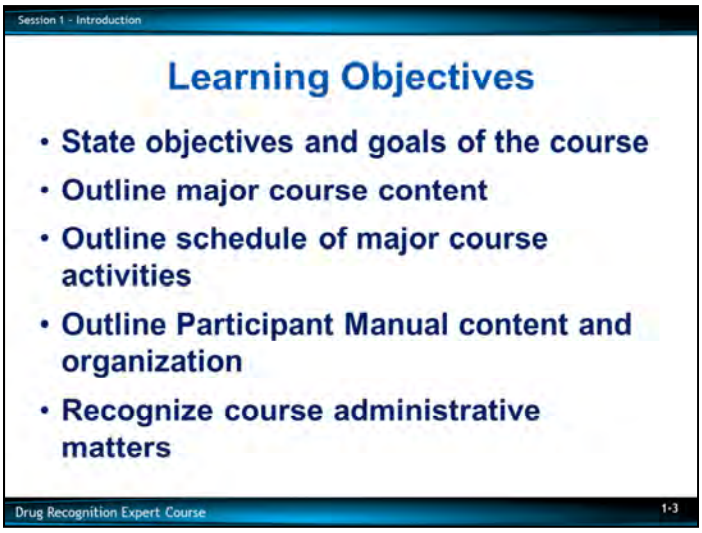
Welcome to the second phase of Drug Recognition Expert (DRE) training. The DRE training focuses on a set of examination procedures, or steps, that make up the drug influence evaluation. The DRE School provides detailed explanations of the evaluation procedures, careful demonstrations of these procedures, both "live" and via video, and ample opportunities for the participants to practice administering the evaluations.

Introductions - Representatives of Host Agencies and Other Dignitaries

Dignitary introductions and their welcoming remarks must be kept brief; no more than 10 minutes can be devoted to this.

Faculty Introductions

Lead off instructors introduce the instructor faculty. State names, agency affiliations, and experience. Ask each instructor to stand as they are introduced.



Upon successfully completing this session participants will be able to:

- State the objectives and goals of the course
- Outline the major course content
- Outline the schedule of major course activities
- Outline the Participant Manual content and organization
- Recognize course administrative matters

During this session, participants will demonstrate current knowledge of basic concepts and terminology relevant to the Drug Evaluation and Classification (DEC) Program process.

CONTENT SEGMENTS

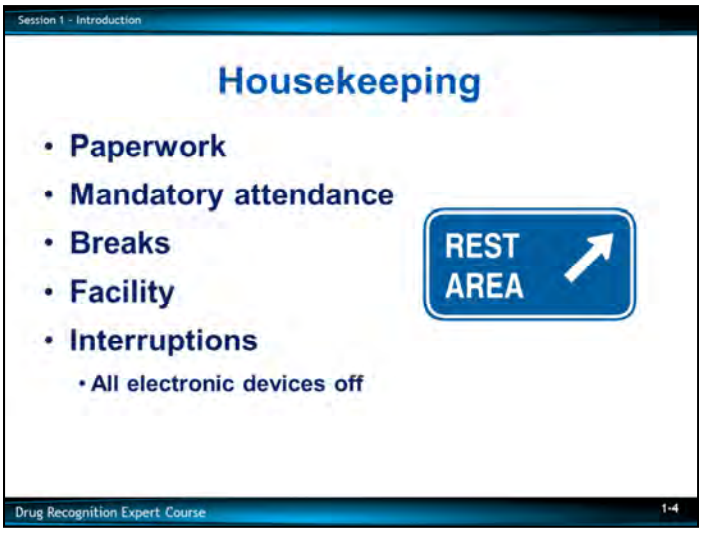
A. Welcoming Remarks and Goals
B. Housekeeping
C. Participant Introductions
D. Training Goals
E. Training Objectives
F. Overview of Content and Schedule
G. Course Activities
H. Overview of Participant Manual
I. Glossary of Terms
J. Course Pre-Test Administration

LEARNING ACTIVITIES

Instructor-Led Presentations
Participant-Led Presentations
Knowledge Examination
Reading Assignments

Materials needed for this session:

- ***Course Pre-tests***
- ***Participant Manual with current course schedule***



B. <u>Housekeeping</u>

Paperwork

- ***Completion of registration forms, travel vouchers, etc.***

Attendance

Attendance is mandatory at all sessions of this school.

- ***If a participant misses any portion of this school, he or she must make up the deficiency via after-hours tutoring before beginning certification training***

Breaks

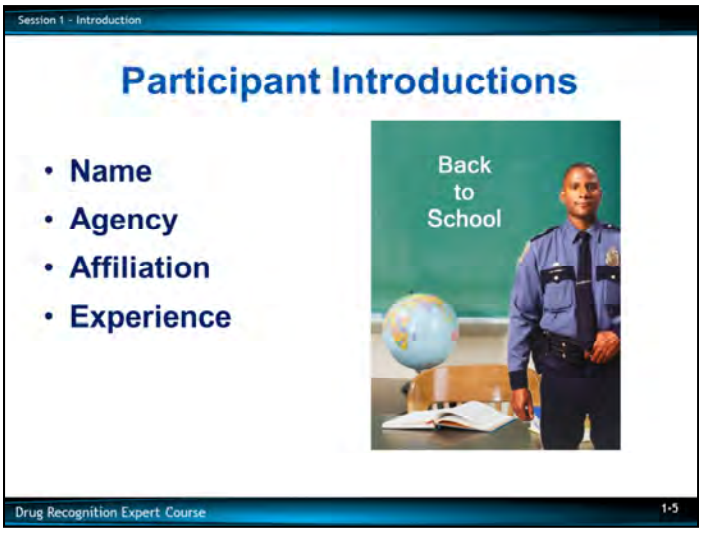
- ***Time is allotted for breaks and reconvening***

Facility

- ***Locations of restrooms, lunchrooms, etc.***

Interruptions

- ***No texting or email monitoring***
- ***Turn off all electronic devices***



C. <u>Participant Introductions</u>

Whenever possible, consider using creative and innovative icebreaking techniques.
At a minimum, instruct each participant to stand and give their name, agency affiliation, and experience.

The term "DRE" is used to designate an individual who is specially trained to conduct evaluations of suspected drug-impaired subjects. In some agencies, the term stands for "drug recognition expert," in others, it means "drug recognition examiners," and in others "drug recognition evaluator." In addition, some agencies use the terms "DRT" (for drug recognition technician) or "DRS" (drug recognition specialists). All of these are acceptable and synonymous. But for this training program, the standard term is DRE.

Drug Recognition Expert (DRE) Certification Phases

You have all completed the DRE Pre-School and we look forward to working with you to successfully complete phase two of the certification process. Upon completion of this course, you will be fully proficient in checking vital signs, conducting careful examinations of the eyes, administering divided attention tests, and, in general, carrying out the procedural steps of the DRE's job.

There is one essential learning experience this classroom training cannot provide – the opportunity to practice examining subjects who are under the influence of drugs other than alcohol. For this reason, this classroom training only constitutes Phase II in the process of developing DRE skills. Phase III of the training (which commences upon the successful completion of this course) involves hands-on practice of examining persons who are under the influence of drugs.

Although this DRE School will not conclude with the participant's immediate certification as a DRE, successful completion of this classroom training is highly important. No one can advance to Certification Training until they demonstrate a mastery of basic knowledge of drug categories and their effects on the human mind and body and of the basic skills in administering and interpreting the examinations in the DEC Program process.

_____

_____

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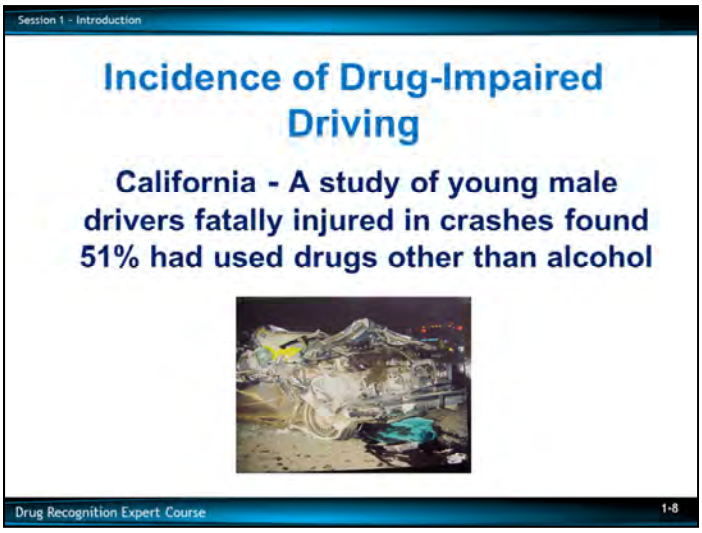
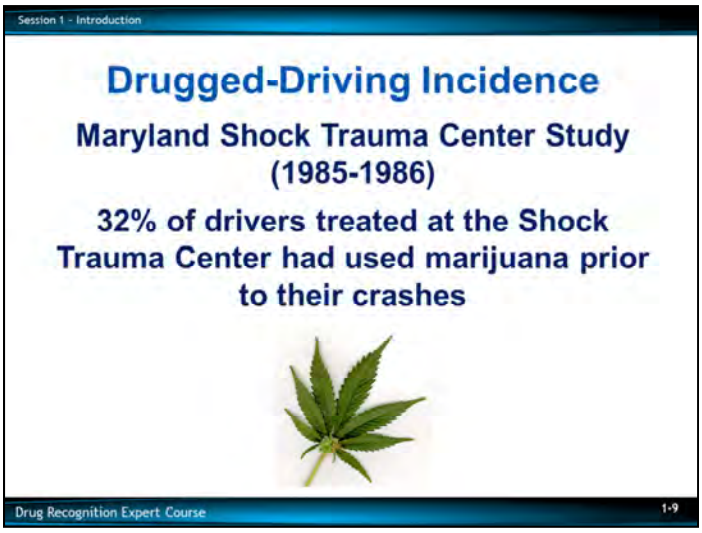
The ultimate goal of the DEC Program and of this course of instruction is to "help you prevent crashes, deaths, and injuries caused by drug-impaired drivers."

No one knows precisely how many people operate motor vehicles while under the influence of drugs or how many crashes, deaths, and injuries these people cause. But even the most conservative estimates suggest drug-impaired drivers kill thousands of people each year and seriously injure tens of thousands of others.

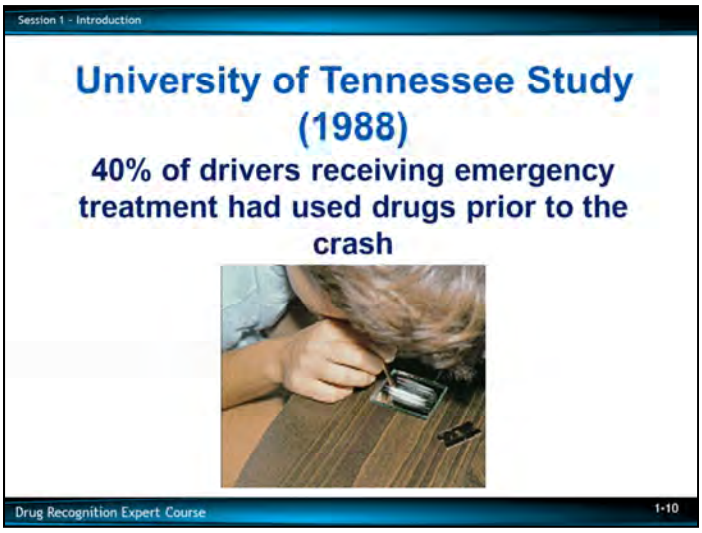


A study in California of young (15-34 years old) male drivers killed in crashes in the early 1980's revealed more than half (51%) tested positive for drugs other than alcohol. The most prevalent drug (other than alcohol) was Cannabis at 37%. 30 percent of all cases had both alcohol and Cannabis. ***Source: Compton, R. and Anderson, T., The Incidence of Driving Under the Influence of Drugs: 1985. National Highway Traffic Safety Administration, 1985***



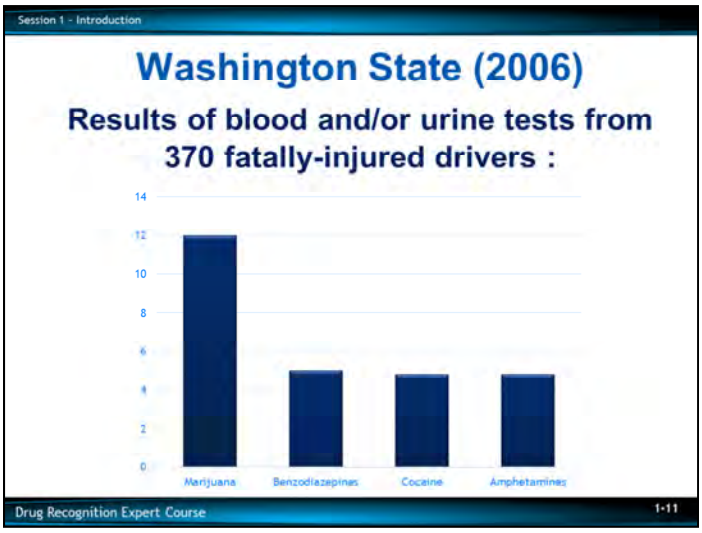
Maryland Shock Trauma Center study (1985 – 1986)

- 32% of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes



University of Tennessee study (1988)

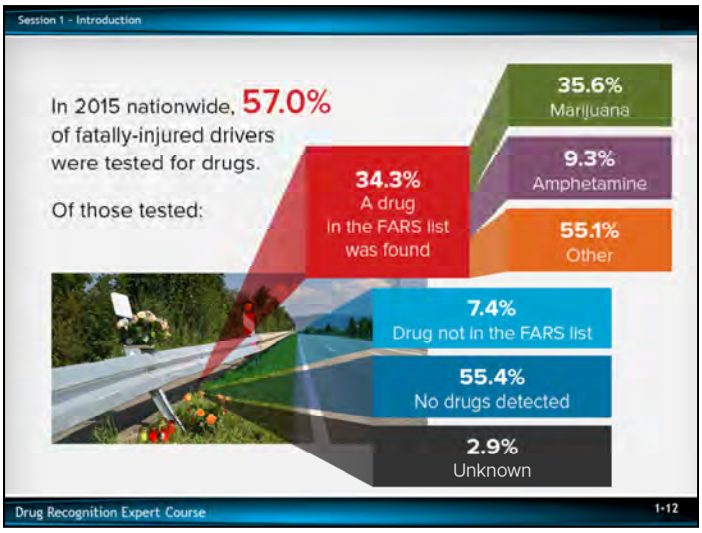
- 40% of drivers treated at Trauma Center for crash injuries had drugs other than alcohol in them



Washington State (Schwilke, et al., 2006)

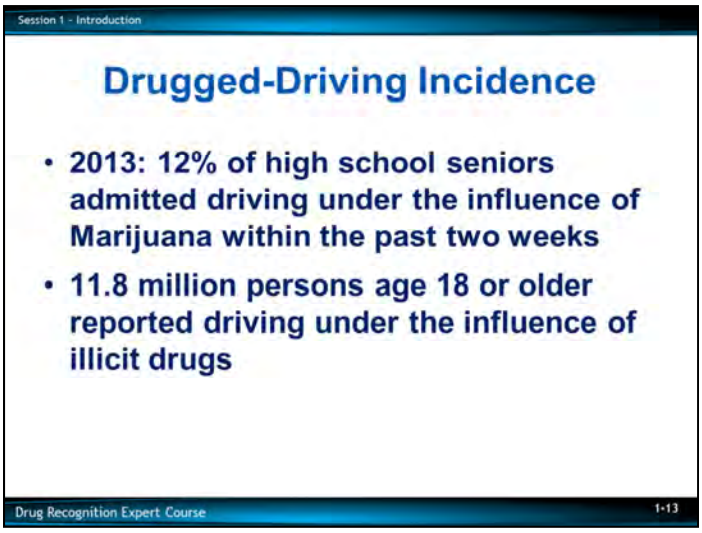
The results of tests of blood and/or urine from 370 fatally injured drivers revealed:

- Marijuana was the most encountered drug (12 %) followed by:
  - Benzodiazepines (5 %)
  - Cocaine (4.8 %)
  - Amphetamines (4.8 %)



In 2015 nationwide Fatality Analysis Reporting System (FARS) annual report file, 57.0% of the fatally-injured drivers were tested for drugs. Of those tested, no drugs were detected in 55.4%, a drug in the FARS list was found in 34.3%, some other drug in 7.4%, and test results were unknown for 2.9%. Over one-third – 36.5% – of the identified drugs were Marijuana in some form, followed by amphetamine at 9.3%.

Source: FARS Query System. http://www-fars.nhtsa.dot.gov//QueryTool/



Drugged-Driving Incidence

- 2013: 12% of high school seniors admitted driving under the influence of marijuana within the past two weeks

- 11.8 million persons age 18 or reported driving under the influence of illicit drugs ***Source: National Survey on Drug Use and Health (NSDUH, September 2016)***

Sources:

- ***O'Malley PM, Johnston LD. Driving after drug or alcohol use by US high school seniors, 2001-2011. Am J Public Health. 2013;103(11):2027-2034. doi:10.2105/AJPH.2013.301246***
- ***2014 National Survey on Drug Use and Health***

The DEC Program is based on solid medical and scientific facts.

The validity of the DEC Program has been tested in carefully-controlled research in both the laboratory and the field.

By enrolling in DRE training, you have become part of an elite international program. DREs form one of the tightest knit fraternities in law enforcement.

DREs from many agencies and from many parts of the country work closely together to share information and other resources and to maintain the highest standards of quality.
Each of you have been selected to receive this training because you were recognized by your department as a skilled and dedicated law enforcement professional.
Your instructors welcome you to this school and are proud to have you here and we're sure you are proud to be here.

D. <u>Training Goals</u>

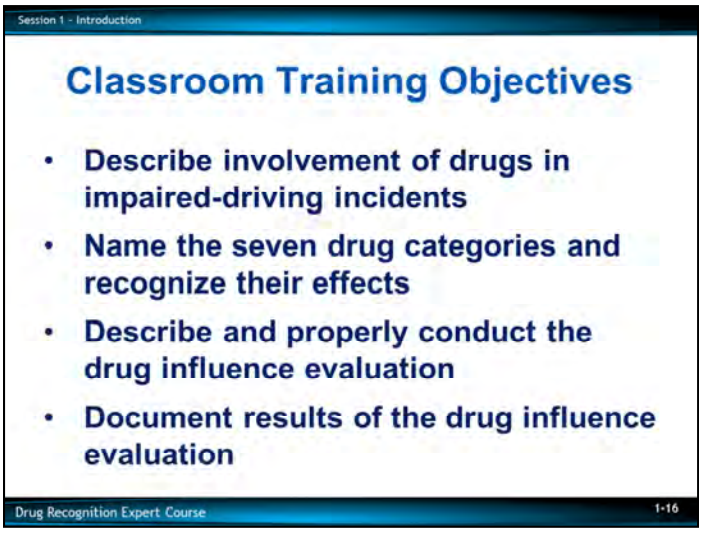
The goals of the classroom training, from the viewpoint of the law enforcement agencies participating in it, are threefold:

1. To help police officers acquire the knowledge and skills needed to distinguish individuals under the influence of:
   - Alcohol
   - Other drugs
   - Combinations of alcohol and other drugs

   -or-
   - Who are suffering from an injury or illness

2. To enable police officers to identify the broad category or categories of drugs inducing the observable signs of impairment manifested by an individual

3. To qualify police officers to progress to Certification Training

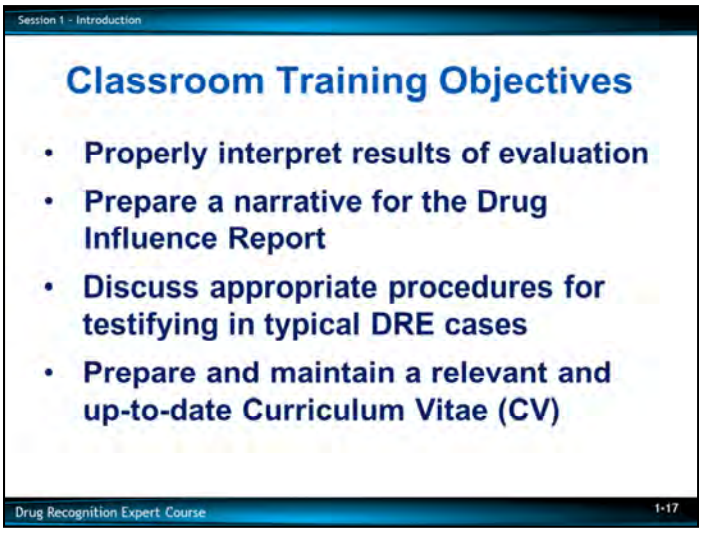


E. <u>Training Objectives</u>

Refer to wall charts when previewing the content topics. Give a brief overview of the contents covered under each major topic.

When you successfully complete this training, you will be able to:

- Describe the involvement of drugs in impaired-driving incidents
- Name the seven categories of drugs and recognize their effects
- Describe and properly conduct the drug influence evaluation
- Document the results of the drug influence evaluation



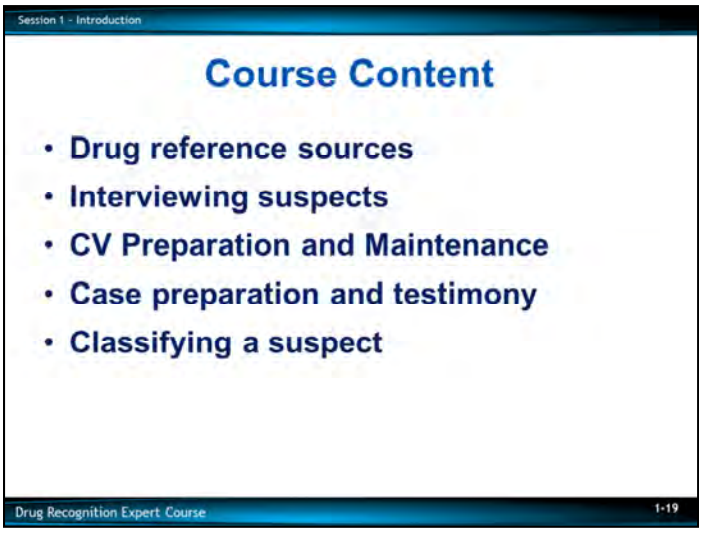
- Properly interpret the results of the evaluation
- Prepare a narrative for the Drug Influence Report
- Discuss appropriate procedures for testifying in typical DRE cases
- Prepare and maintain a relevant and up-to-date Curriculum Vitae (CV).

Before you can be certified as a DRE, you will have to demonstrate that you can do each of these things.

F. <u>Overview of Course Content and Schedule</u>

The course will cover the following topics:

- Drugs in Society and in Vehicle Operation
- Development and Effectiveness of the DEC Program
- Overview of the DEC Program Procedures
- Eye Examinations (a major component of the DEC Program procedures)
- Physiology and Drugs
- Vital Signs Examinations (a major component of the DEC Program procedures)
- The Seven Categories of Drugs



- Drug reference sources
- Interviewing Suspects (a major component of the DEC Program procedures)
- CV Preparation and Maintenance
- Case Preparation and Testimony
- Classifying a Suspect (interpreting and documenting the results of an evaluation)

Solicit questions concerning the course content major topics.

G. <u>Course Activities</u>

Refer to the wall chart outlining practice sessions.

Hands-on practice is the principal learning activity of the course.

Eye Examinations Practice:

- Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), Lack of Convergence (LOC), Pupil Size, and Reaction to Light

Alcohol Workshop:

- Psychophysical testing practice
- Volunteer drinkers from outside the class will be recruited for this session

Practicing interpretation of the examination results:

- Several sessions will be devoted to this allowing the participants to review drug evaluation reports and identify the probable drug category or combinations of categories

Vital signs examinations:

- Pulse, Blood Pressure, Body Temperature

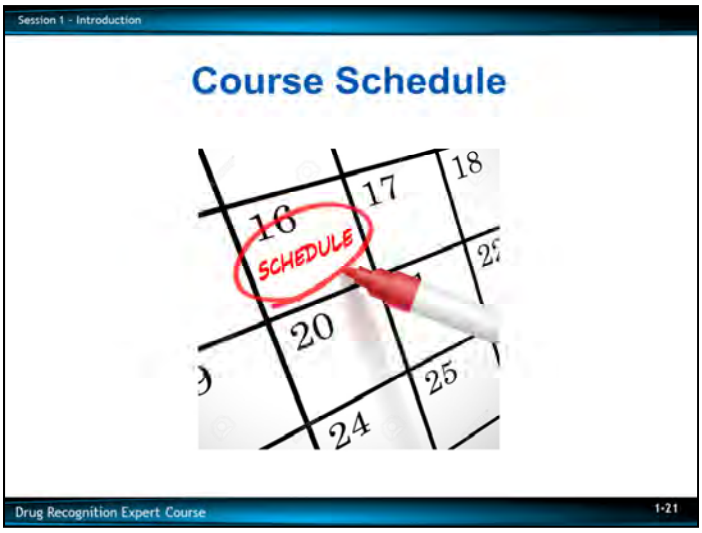
Practicing administration of the drug influence evaluation process:

- Several sessions will be devoted to this
  - In each, participants will practice administering the drug influence examinations to each other
  - No hands-on practice with actual drugged subjects is included in the classroom portion of DRE training

Simulated drug-impaired subject examinations:

- Participants will work in teams to conduct and document examinations of instructors who will be simulating the indicators of drug-impaired subjects

Solicit questions concerning the hands-on practice sessions.

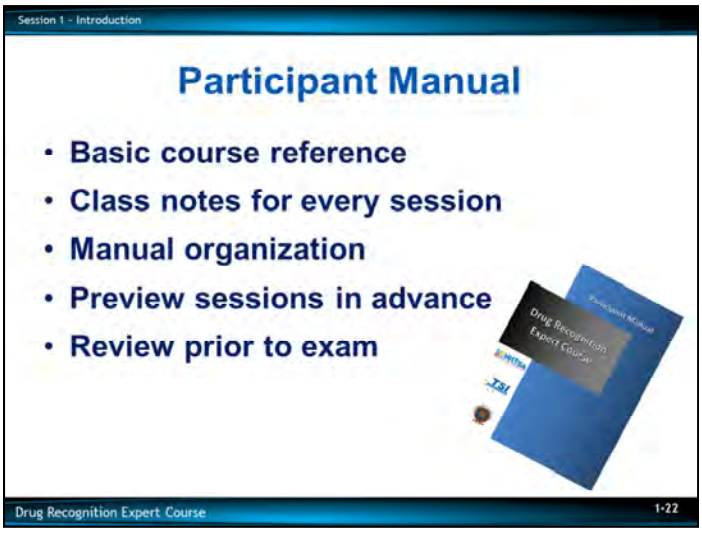


Schedule

Refer to the wall chart outlining practice sessions.

- ***Course schedule is located in the Participant Manual***
- ***Give a brief overview of the schedule of sessions***

Solicit questions concerning the schedule.

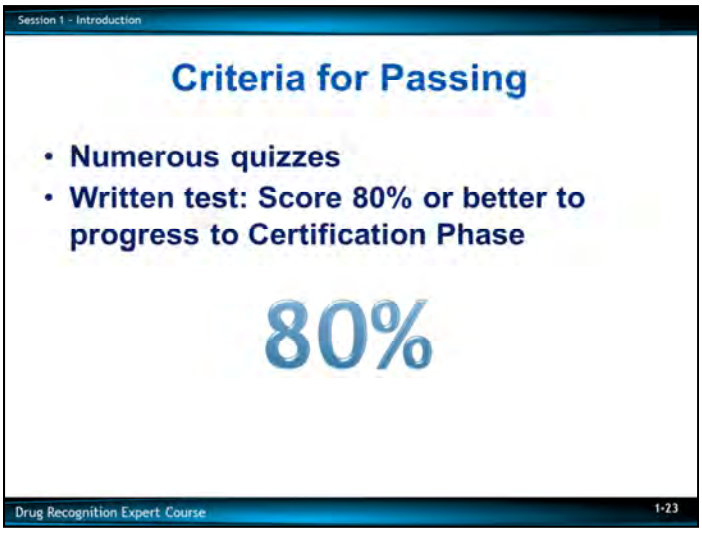


H. <u>Overview of Participant Manual</u>

- The Participant Manual is the basic reference document for this course
- The manual contains thumbnails of each instructor presentation per session that includes key messages for each slide

Open the manual to Session 1 and briefly review the content which illustrates how the document is organized.

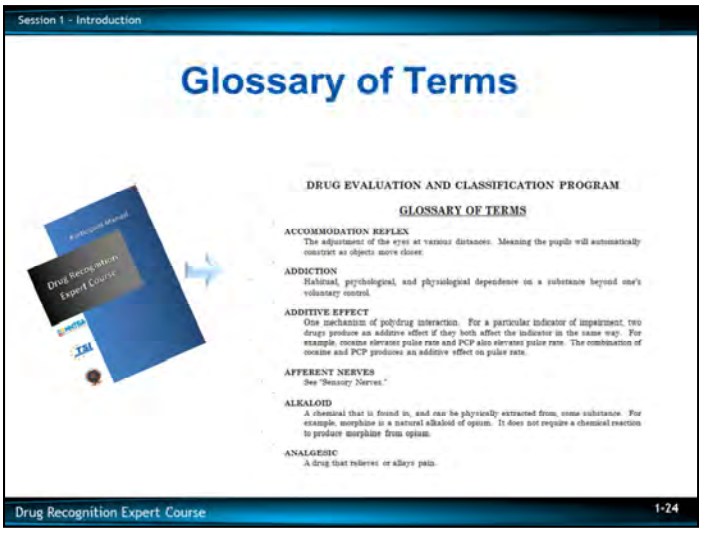
- Read each session prior to each day's classes
- Use the manual to review the material prior to taking the final exam



By taking good notes and by studying the manual carefully, participants should have no trouble in passing the course.

- There will be numerous quizzes during the class

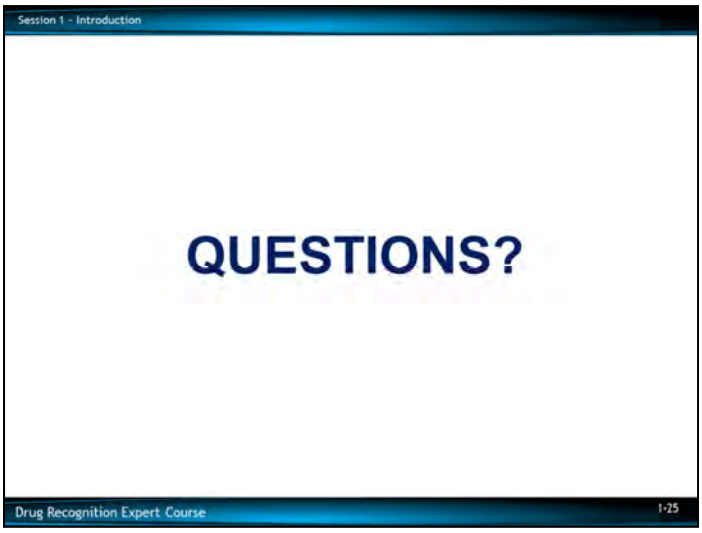
At the conclusion of the classroom training, the participant must pass the written test with a score of 80% or better in order to progress to the Certification Phase.



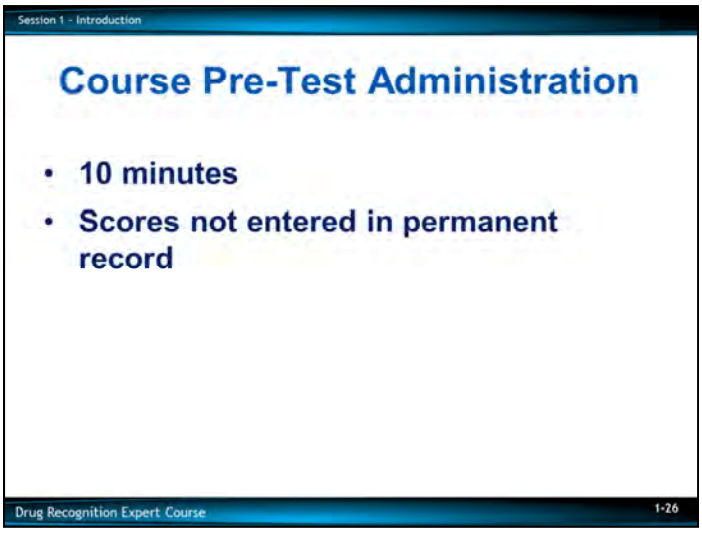
I. Glossary of Terms

The Glossary of Terms used in the course is located in the Participant Manual.

It is recommended that participants be familiar with the terms and definitions in the Glossary of Terms.



Solicit participants' comments or questions concerning the Introduction and Overview.



J. <u>Course Pre-Test Administration</u>

At this time, hand out pre-test.

The Pre-Test scores do not affect passage of this course, nor will the Pre-Test be a part of the participants' permanent record. Allow 10 minutes for the participants to complete, then collect the Pre-Test.

GLOSSARY OF TERMS

ACCOMMODATION REFLEX

The adjustment of the eyes for viewing at various distances. Meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away.

ADDICTION

Habitual, psychological, and physiological dependence on a substance beyond one's voluntary control.

ADDITIVE EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an additive effect if they both affect the indicator in the same way. For example, cocaine elevates pulse rate and PCP also elevates pulse rate. The combination of Cocaine and PCP produces an additive effect on pulse rate.

AFFERENT NERVES

See: "Sensory Nerves."

ALKALOID

A chemical that is found in, and can be physically extracted from, some substance. For example, Morphine is a natural alkaloid of Opium. It does not require a chemical reaction to produce Morphine from Opium.

ANALGESIC

A drug that relieves or allays pain.

ANALOG (of a drug)

A chemical that is very similar to the drug, both in terms of molecular structure and in terms of psychoactive effects. For example, the drug Ketamine is an analog of PCP.

ANESTHETIC

A drug that produces a general or local insensibility to pain and other sensation.

ANTAGONISTIC EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an antagonistic effect if they affect the indicator in opposite ways. For example, Heroin constricts pupils while Cocaine dilates pupils. The combination of Heroin and Cocaine produces an antagonistic effect on pupil size. Depending on how much of each drug was taken, and on when they were taken, the suspect's pupils could be constricted, or dilated, or within the DRE Average range of pupil size.

ARRHYTHMIA

An abnormal heart rhythm.

ARTERY

The strong, elastic blood vessels that carry blood away from the heart.

AUTONOMIC NERVE

A motor nerve that carries messages to the muscles and organs that we do not consciously control. There are two kinds of autonomic nerves, the sympathetic nerves and parasympathetic nerves.

AXON

The part of a neuron (nerve cell) that sends out a neurotransmitter.

BAD TRIP

A hallucination where the user becomes panic-stricken by what he/she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror.

BLOOD ALCOHOL CONCENTRATION (BAC)

The percentage of alcohol in a person's blood.

BREATH ALCOHOL CONTRATION (BrAC)

The percentage of alcohol in a person's blood as measured by a breath testing device.

BIPOLAR DISORDER

A condition characterized by the alteration of manic and depressive states.

BLOOD PRESSURE

The force exerted by blood on the walls of the arteries. Blood pressure changes continuously, as the heart cycles between contraction and expansion.

BRADYCARDIA

Abnormally slow heart rate.

BRADYPNEA

Abnormally slow rate of breathing.

BRUXISM

Grinding the teeth. This behavior is often seen in persons who are under the influence of Cocaine or other CNS Stimulants.

CANNABIS

This is the drug category that includes Marijuana. Marijuana comes primarily from the leaves of certain species of Cannabis plants that grow readily all over the temperate zones of the earth. Hashish is another drug in this category, and consists of the compressed leaves from female Cannabis plants. The active ingredient in both Marijuana and Hashish is a chemical called delta-9 tetrahydrocannabinol, usually abbreviated THC.

CARBOXY THC

A metabolite of THC (tetrahydrocannabinol).

CENTRAL NERVOUS SYSTEM (CNS)

A system within the body consisting of the brain, the brain stem, and the spinal cord.

CHEYNE-STOKES RESPIRATION

Abnormal pattern of breathing. Marked by breathlessness and deep, fast breathing.

CNS DEPRESSANTS

One of the seven drug categories. CNS Depressants include alcohol, barbiturates, anti-anxiety tranquilizers, and numerous other drugs.

CNS STIMULANTS

One of the seven drug categories. CNS Stimulants include Cocaine, the Amphetamines, Ritalin, Desoxyn, and numerous other drugs.

CONJUNCTIVITIS

An inflammation of the mucous membrane that lines the inner surface of the eyelids caused by infection, allergy, or outside factors. May be bacterial or viral. Persons suffering from conjunctivitis may show symptoms in one eye only. This condition is commonly referred to as "pink eye", a condition that could be mistaken for the bloodshot eyes produced by alcohol or Cannabis.

CONVERGENCE

The "crossing" of the eyes that occurs when a person is able to focus on a stimulus as it is pushed slowly toward the bridge of their nose. (See, also, "Lack of Convergence".)

CRACK/ROCK

Cocaine base, appears as a hard chunk form resembling pebbles or small rocks. It produces a very intense, but relatively short duration "high".

CURRICULUM VITAE (CV)

A written summary of a person's education, training, experience, noteworthy achievements and other relevant information about a particular topic.

CYCLIC BEHAVIOR

A manifestation of impairment due to certain drugs, in which the person alternates between periods (or cycles) of intense agitation and relative calm. Cyclic behavior, for example, sometimes will be observed in persons under the influence of PCP.

DELIRIUM

A brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

DENDRITE

The part of a neuron (nerve cell) that receives a neurotransmitter.

DIABETES

A condition that can result in insulin shock (taking too much insulin) which may produce tremors, increased blood pressure, rapid respiration, lack of coordination, headache, confusion, and seizures.

DIACETYL MORPHINE

The chemical name for Heroin.

DIPLOPIA

Double vision.

DIASTOLIC

The lowest value of blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded, or relaxed (Diastole).

DISSOCIATIVE ANESTHETICS

One of the seven drug categories. Includes drugs that inhibits pain by cutting off or disassociating the brain's perception of pain. PCP and its analogs are considered Dissociative Anesthetics.

DIVIDED ATTENTION

Concentrating on more than one thing at a time. The four psychophysical tests used by DREs require the suspect to divide their attention.

DOWNSIDE EFFECT

An effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed.

DRUG

Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

DRUG RECOGNITION EXPERT (DRE)

An individual who successfully completed all phases of the DRE training requirements for certification established by the IACP and NHTSA. The word “evaluator,” “technician,” or similar words may be used as a substitute for “expert,” depending upon locale or jurisdiction.

DYSARTHIA

Slurred speech. Difficult, poorly articulated speech.

DYSMETRIA

An abnormal condition that prevents the affected person from properly estimating distances linked to muscular movements.

DYSPHORIA

A disorder of mood. Feelings of depression and anguish.

DYSPNEA

Shortness of breath.

EFFERENT NERVES

See: "Motor Nerves".

ENDOCRINE SYSTEM

The network of glands that do not have ducts and other structures. They secrete hormones into the blood stream to affect a number of functions in the body.

EXPERT WITNESS

A person skilled in some art, trade, science or profession, having knowledge of matters not within the knowledge of persons of average education, learning and experience, who may assist a jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge. (NOTE: Only the court can determine whether a witness is qualified to testify as an expert.)

FLASHBACK

A vivid recollection of a portion of a hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional -- feelings of panic, fear, etc.; (2) somatic -- altered body sensations, tremors, dizziness, etc.; and (3) perceptual -- distortions of vision, hearing, smell, etc.

GAIT ATAXIA

An unsteady, staggering gait (walk) in which walking is uncoordinated and appears to be “not ordered.”

GARRULITY

Chatter, rambling or pointless speech. Talkative.

GENERAL INDICATOR

Behavior or observations of the subject that are observed and not specifically tested for. (Observational and Behavioral Indicators)

HALLUCINATION

A sensory experience of something that does not exist outside the mind, e.g., seeing, hearing, smelling, or feeling something that isn't really there. Also, having a distorted sensory perception, so that things appear differently than they are.

HALLUCINOGENS

One of the seven drug categories. Hallucinogens include LSD, MDMA, Peyote, Psilocybin, and numerous other drugs.

HASH OIL

Sometimes referred to as “marijuana oil” it is a highly concentrated syrup-like oil extracted from marijuana. It is normally produced by soaking marijuana in a container of solvent, such as acetone or alcohol for several hours and after the solvent has evaporated, a thick syrup-like oil is produced with a high THC content.

HASHISH

A form of cannabis made from the dried and pressed resin of a marijuana plant.

HEAD TRAUMA

A blow or bump to the head that injures the brain and may cause observable signs and symptoms which may mimic drug and alcohol impairment.

HEROIN

A powerful and widely-abused narcotic analgesic that is chemically derived from morphine. The chemical, or generic name of heroin is "diacetyl morphine".

HOMEOSTASIS

Dynamic balance, or steady state, involving levels of salts, water, sugars and other material in the body’s fluids.

HORIZONTAL GAZE NYSTAGMUS (HGN)

Involuntary jerking of the eyes occurring as the eyes gaze to the side.

HORMONES

Chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and that aid in the regulation of numerous body processes.

HYDROXY THC

A metabolite of THC (tetrahydrocannabinol).

HYPERFLEXIA

Exaggerated or over extended motions.

HYPERGLYCEMIA

Excess sugar in the blood.

HYPERPNEA

A deep, rapid or labored breathing.

HYPERPYREXIA

Extremely high body temperature.

HYPERREFLEXIA

A neurological condition marked by increased reflex reactions.

HYPERTENSION

Abnormally high blood pressure. Do not confuse this with hypotension.

HYPOGLYCEMIA

An abnormal decrease of blood sugar levels.

HYPOPNEA

Shallow or slow breathing.

HYPOTENSION

Abnormally low blood pressure. Do not confuse this with hypertension.

HYPOTHERMIA

Decreased body temperature.

ICE

A crystalline form of methamphetamine that produces a very intense and fairly long-lasting "high".

IMPAIRMENT

One of the several items used to describe the degradation of mental and/or physical abilities necessary for safely operating a vehicle.

INHALANTS

One of the seven drug categories. The inhalants include volatile solvents (such as glue and gasoline), aerosols (such as hair spray and insecticides) and anesthetic gases (such as nitrous oxide).

INSUFFLATION

One method of ingesting certain drugs. Insufflation requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Insufflation is also known as snorting.

INTEGUMENTARY SYSTEM

The skin and accessory structures, hair and nails. Functions include protection, maintenance of body temperature, excretion of waste, and sensory perceptions.

INTRAOCULAR

"Within the eyeball".

KOROTKOFF SOUNDS

A series of distinct sounds produced by blood passing through an artery, as the external pressure on the artery drops from the systolic value to the diastolic value.

LACK OF CONVERGENCE (LOC)

The inability of a person's eyes to converge, or "cross" as the person attempts to focus on a stimulus as it is pushed slowly toward the bridge of his or her nose.

MAJOR INDICATORS

Physiological signs that are specifically assessed and are, for the most part, involuntary reflecting the status of the central nervous system (CNS) homeostasis (Physiological Indicators).

MARIJUANA

Common term for the Cannabis Sativa plant. Usually refers to the dried leaves of the plant. This is the most common form of the cannabis category.

MARINOL

A drug containing a synthetic form of THC (tetrahydrocannabinol). Marinol belongs to the cannabis category of drugs, but Marinol is not produced from any species of cannabis plant.

MEDICAL IMPAIRMENT

An opinion made by a DRE based on the evaluation that the state of a suspected impaired driver is more likely related to a medical impairment that has affected the subject's ability to operate a vehicle safely.

METABOLISM

The combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions. There are two basic phases of metabolism: anabolism, the constructive phase during which molecules resulting from the digestive process are built up into complex compounds that form the tissues and organs of the body; and catabolism, the destructive phase during which larger molecules are broken down into simpler substances with the release of energy.

METABOLITE

A chemical product, formed by the reaction of a drug with oxygen and/or other substances in the body.

MIOSIS

Abnormally small (constricted) pupils.

MOTOR NERVES

Nerves that carry messages away from the brain, to the body's muscles, tissues, and organs. Motor nerves are also known as efferent nerves.

MULTIPLE SCLEROSIS

A degenerative muscular disorder.

MUSCULAR HYPERTONICITY

Rigid muscle tone.

MYDRIASIS

Abnormally large (dilated) pupils.

NARCOTIC ANALGESICS

One of the seven drug categories. Narcotic analgesics include opium, the natural alkaloids of opium (such as morphine, codeine and thebaine), the derivatives of opium (such as Heroin, Dilaudid, Oxycodone and Percodan), and the synthetic narcotics.

NERVE

A cord-like fiber that carries messages either to or from the brain. For drug evaluation and classification purposes, a nerve can be pictured as a series of "wire-like" segments, with small spaces or gaps between the segments.

NEURON

A nerve cell. The basic functional unit of a nerve. It contains a nucleus within a cell body with one or more axons and dendrites.

NEUROTRANSMITTER

Chemicals that pass from the axon of one nerve cell to the dendrite of the next cell, and that carry messages across the gap between the two nerve cells.

NULL EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce a null effect if neither of them affects that indicator. For example, PCP does not affect pupil size, and alcohol does not affect pupil size. The combination of PCP and alcohol produces a null effect on pupil size.

NYSTAGMUS

An involuntary jerking of the eyes.

"ON THE NOD"

A semi-conscious state of deep relaxation. Typically induced by impairment due to Heroin or other narcotic analgesics. The suspect's eyelids droop, and chin rests on the chest. Suspect may appear to be asleep, but can be easily aroused and will respond to questions.

OVERLAPPING EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an overlapping effect if one of them affects the indicator but the other doesn't. For example, cocaine dilates pupils while alcohol doesn't affect pupil size. The combination of cocaine and alcohol produces an overlapping effect on pupil size: the combination will cause the pupils to dilate.

PALLOR

An abnormal paleness or lack of color in the skin.

PARANOIA

Mental disorder characterized by delusions and the projection of personal conflicts that are ascribed to the supposed hostility of others.

PARAPHERNALIA

Drug paraphernalia are the various kinds of tools and other equipment used to store, transport or ingest a drug. Hypodermic needles, small pipes, bent spoons, etc., are examples of drug paraphernalia. The singular form of the word is "paraphernalium". For example, one hypodermic needle would be called a "drug paraphernalium".

PARASYMPATHETIC NERVE

An autonomic nerve that commands the body to relax and to carry out tranquil activities. The brain uses parasympathetic nerves to send "at ease" commands to the muscles, tissues, and organs.

PARASYMPATHOMIMETIC DRUGS

Drugs that mimic neurotransmitter associated with the parasympathetic nerves. These drugs artificially cause the transmission of messages that produce lower blood pressure, drowsiness, etc.

PHENCYCLIDINE

A contraction of PHENYL CYCLOHEXYL PIPERIDINE, or PCP. Formerly used as a surgical anesthetic, however, it has no current legitimate medical use in humans.

PHENYL CYCLOHEXYL PIPERIDINE (PCP)

Often called "phencyclidine" or “PCP”, it is a specific drug belonging to the Dissociative Anesthetics category.

PHYSICIAN'S DESK REFERENCE (PDR)

A basic reference source for drug recognition experts. The PDR provides detailed information on the physical appearance and psychoactive effects of licitly-manufactured drugs.

PHYSIOLOGY

Physiology is the branch of biology that deals with the functions and activities of life or living matter and the physical and chemical phenomena involved.

PILOERECTION

Literally, "hair standing up", or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.

POLYCATEGORY USE

Ingesting drugs from two or more drug categories.

POLYDRUG USE

Ingesting two or more different drugs.

PSYCHEDELIC

A mental state characterized by a profound sense of intensified or altered sensory perception sometimes accompanied by hallucinations.

PSYCHOPHYSICAL TESTS

Methods of investigating the mental (psycho-) and physical characteristics of a person suspected of alcohol or drug impairment. Most psychophysical tests employ the concept of divided attention to assess a suspect's impairment.

PSYCHOTOGENIC

Literally, "creating psychosis" or "giving birth to insanity". A drug is considered to be psychotogenic if persons who are under the influence of the drug become insane, and remain so after the drug wears off.

PSYCHOTOMIMETIC

Literally, "mimicking psychosis" or "impersonating insanity". A drug is considered to be psychotomimetic if persons who are under the influence of the drug look and act insane <u>while</u> they are under the influence.

PTOSIS

Droopy eyelids.

PULSE

The rhythmic dilation and relaxation of an artery that results from the beating of the heart.

PULSE RATE

The number of expansions of an artery per minute.

PUPILLARY LIGHT REFLEX

The pupils of the eyes will constrict and dilate depending on changes in lighting.

PUPILLARY UNREST

The continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions.

REBOUND DILATION

A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size.

RESTING NYSTAGMUS

Jerking of the eyes as they look straight ahead.

SCLERA

A dense white fibrous membrane that, with the cornea, forms the external covering of the eyeball (i.e., the white part of the eye).

SENSORY NERVES

Nerves that carry messages to the brain, from the various parts of the body, including notably the sense organs (eyes, ears, etc.). Sensory nerves are also known as afferent nerves.

SINSEMILLA

The unpollinated female cannabis plant, with a relatively high concentration of THC.

SNORTING (See Insufflation)

One method of ingesting certain drugs. Snorting requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Snorting is also known as insufflation.

SPHYGMOMANOMETER

A medical device used to measure blood pressure. It consists of an arm or leg cuff with an air bag attached to a tube and a bulb for pumping air into the bag, and a gauge for showing the amount of air pressure being pressed against the artery.

STANDARDIZED

Conforming to a model in comparative applications.

STANDARDIZED FIELD SOBRIETY TESTING (SFST)

There are three SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn (WAT), and One Leg Stand (OLS). Based on a series of controlled laboratory studies, scientifically validated clues of impairment have been identified for each of these three tests. They are the only Standardized Field Sobriety Tests for which validated clues have been identified.

STETHOSCOPE

A medical instrument used, for drug evaluation and classification purposes, to listen to the sounds produced by blood passing through an artery.

STROKE

A medical condition that occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or a burst and may cause observable signs and symptoms which may mimic drug and alcohol impairment.

SYMPATHETIC NERVE

An autonomic nerve that commands the body to react in response to excitement, stress, fear, etc. The brain uses sympathetic nerves to send "wake up calls" and "fire alarms" to the muscles, tissues and organs.

SYMPATHOMIMETIC DRUGS

Drugs that mimic the neurotransmitter associated with the sympathetic nerves. These drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

SYNAPSE (or Synaptic Gap)

The gap or space between two neurons (nerve cells).

SYNESTHESIA

A sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. An example of this would be a person “hearing” a phone ring and “seeing” the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of hallucinogens.

SYSTEMATIC

Done or acting according to a fixed plan or system; methodical.

SYSTOLIC

The highest value of blood pressure. The blood pressure reaches its systolic value when the heart is fully contracted (systole), and blood is sent surging into the arteries.

TACHYCARDIA

Abnormally rapid heart rate.

TACHYPNEA

Abnormally rapid rate of breathing.

TETRAHYDROCANNABINOL (THC)

The principal psychoactive ingredient in drugs belonging to the cannabis category.

TOLERANCE

An adjustment of the drug user's body and brain to the repeated presence of a drug. As tolerance develops, the user will experience diminishing psychoactive effects from the same dose of the drug. As a result, the user typically will steadily increase the dose he or she takes, in an effort to achieve the same psychoactive effect.

TRACKS

Scar tissue usually produced by repeated injection of drugs, via hypodermic needle, along a segment of a vein.

VEIN

A blood vessel that carries blood back to the heart from the body tissues

VERTICAL GAZE NYSTAGMUS (VGN)

An involuntary jerking of the eyes (up-and-down) which occurs as the eyes are held at maximum elevation. The jerking should be distinct and sustained.

VOIR DIRE

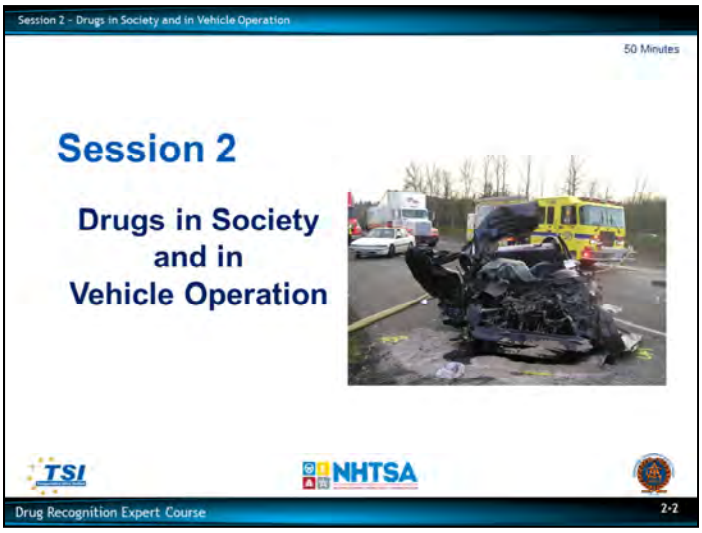
A French expression literally meaning “to see, to say.” Loosely, this would be rendered in English as “To seek the truth,” or “to call it as you see it.” In a law or court context, one application of voir dire is to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court.

VOLUNTARY NERVE

A motor nerve that carries messages to a muscle that we consciously control.

WITHDRAWAL

This occurs in someone who is physically addicted to a drug when he or she is deprived of the drug. If the craving is sufficiently intense, the person may become extremely agitated, and even physically ill.


Session 2 - Drugs in Society and in Vehicle Operation
50 Minutes
Session 2
Drugs in Society and in Vehicle Operation
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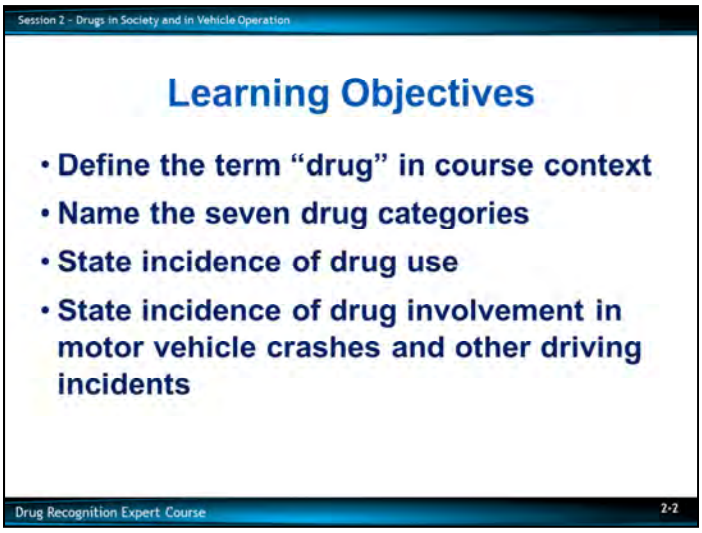


Briefly review the objectives, content, and activities of this session.

Upon completion of this session, participants will be able to:

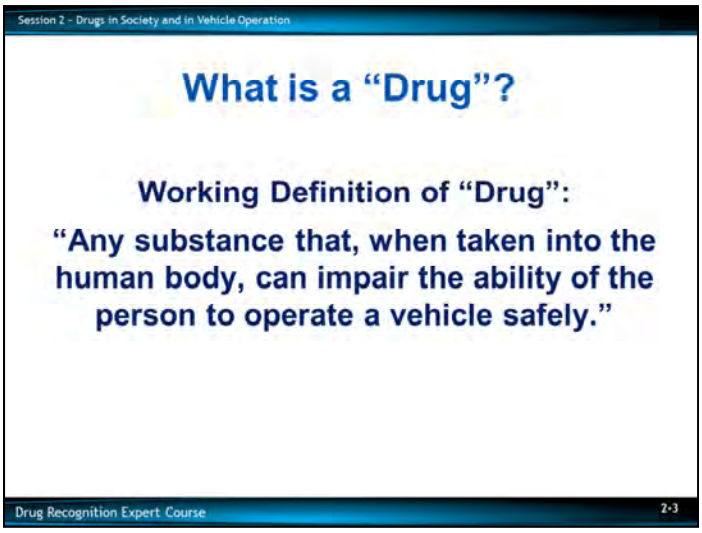
- Define the term "drug" in the context of this course
- Name the seven drug categories relevant to the Drug Evaluation and Classification (DEC) Program
- State in approximate, quantitative terms the incidence of drug use among various segments of the American public
- State in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and other driving incidents

CONTENT SEGMENTS

A. Definition and Categories of Drugs
B. Incidence and Characteristics of Drug Use in America
C. Incidence of Drug-Impaired Driving

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments



A. <u>Definition and Categories of Drugs</u>

If this has been covered in the Pre-School, pose this question: "What is our working definition of the word "drug" and proceed to the next slide.
Pose this question to the participants.
Solicit several responses.
What do we mean by the word "drug"?

What is a Drug?

- Medicines? Are all drugs medicines? Are all medicines drugs?
- Narcotics? Are all drugs Narcotics?
- Habit forming substances? Are all drugs habit forming? Are all habit forming substances drugs?
- A simple, law enforcement oriented definition
- This definition is derived from the California Vehicle Code

"Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely."

Point out this definition excludes many substances physicians, chemists, etc. might consider to be "drugs," e.g., antibiotics, Novocain, vitamins, etc. It also includes some substances that aren't normally thought of as "drugs," such as model airplane glue, insecticides, etc.

- Within this simple, law enforcement-oriented definition, there are seven categories of drugs
- Each category consists of substances that impair a person's ability to drive
- The categories differ from one another in terms of how they impair driving ability and in terms of the kinds of impairment they cause
- Because the categories produce different types of impairment, they generate different signs and symptoms
- With training and practice, you will be able to recognize the different signs of drug influence and determine which category is causing the impairment you observe in a subject

Ask participants: "What are the seven categories of drugs?"
Write the names of the categories on the dry erase board or easel/easel pad as they are mentioned by the participants.

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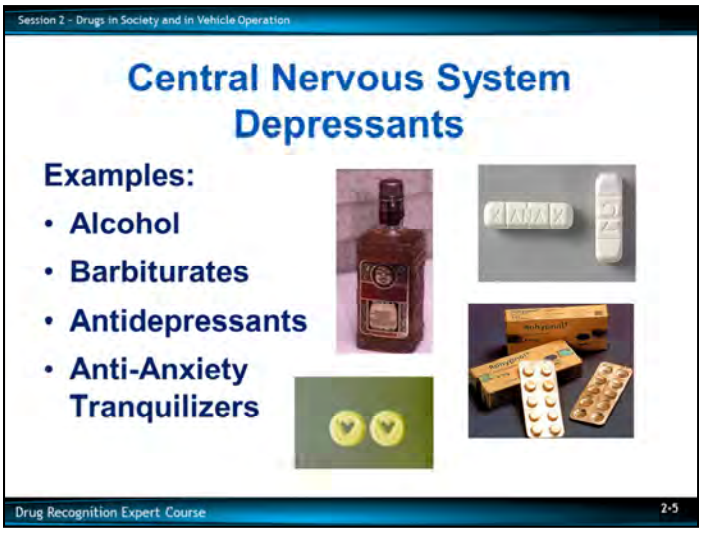
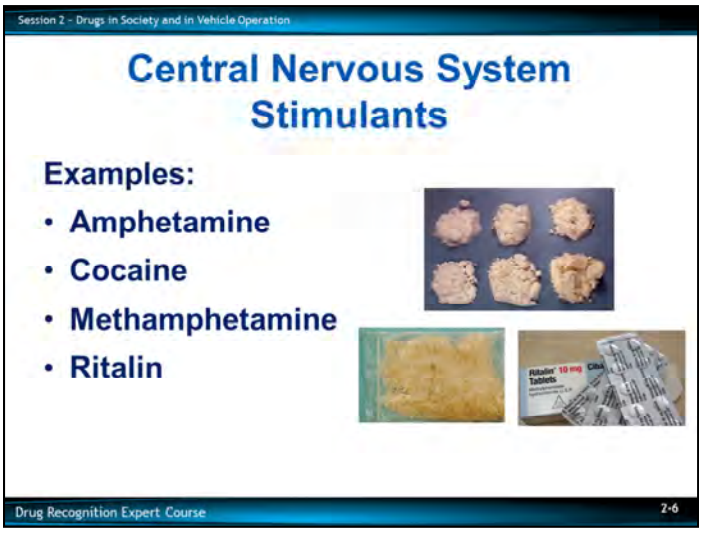


Central Nervous System (CNS) Depressants
The category of CNS Depressants includes some of the most commonly-abused drugs.
Point out tens of millions of prescriptions for such drugs are written in this country each year.

Alcohol remains the most familiar drug. In 2015, 51.7% of the population aged 12 and older were current drinkers of alcohol.
Source: National Survey on Drug Use and Health (NSDUH), September 2016

CNS Depressants:
- Slow down the operation of the central nervous system (i.e., brain, brain stem, and spinal cord)
- Cause the user to react more slowly
- Cause the user to process information more slowly
- Relieve anxiety and tension
- Induce sedation, drowsiness, and sleep
- In high doses, CNS Depressants will produce general anesthesia (i.e., depress the brain's ability to sense pain)
- In very high doses, induce coma and death

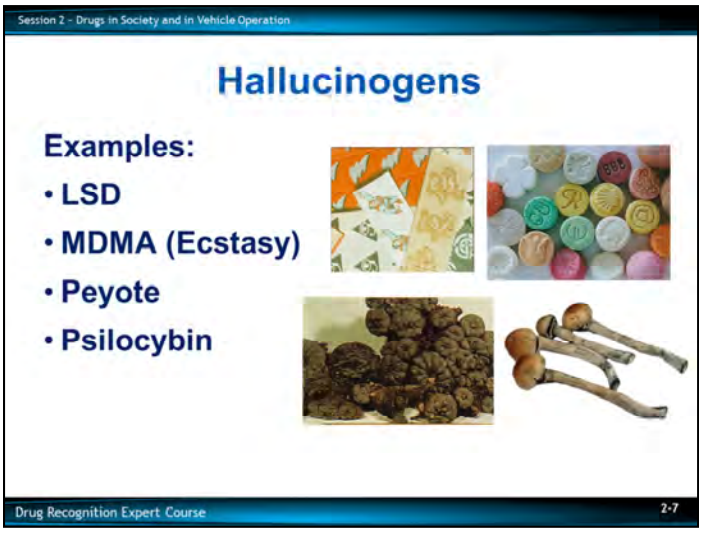


Central Nervous System (CNS) Stimulants
CNS Stimulants constitute another widely-abused category of drugs.

According to the 2015 NSDUH Survey, there appears to be approximately 1.8 million current (within the last month) Cocaine users aged 12 and older in the U.S.

Estimates of drug use vary widely, especially for illicit drugs such as Cocaine, Methamphetamines, etc.
- In 2015, approximately 1.6 million persons aged 12 or older were current non-medical users of stimulants. ***Source: NSDUH, September 2016***

CNS Stimulants:
- Speed up the operation of the central nervous system and of the various bodily functions controlled by the central nervous system
- Cause the user to become hyperactive, extremely talkative
- Speech may become rapid and repetitive
- Heart rate increases
- Blood pressure increases
- Body temperature rises, user may become excessively sweaty
- Induce emotional excitement, restlessness, irritability
- Can induce cardiac arrhythmia (abnormal beating of the heart), cardiac seizures, and death



Hallucinogens
Hallucinogens are also widely-abused.

LSD and Peyote are only two examples of Hallucinogens. There are many other Hallucinogens.

In recent years, significant increases in the abuse of both LSD and "Ecstasy" (MDMA) have been reported.

Hallucinogens :

- Create perceptions that differ from reality
  - These perceptions are often very distorted, so the user sees, hears, and smells things in a way quite different from how they really look, sound, and smell

- Hallucinogens cause the nervous system to send strange or false signals to the brain

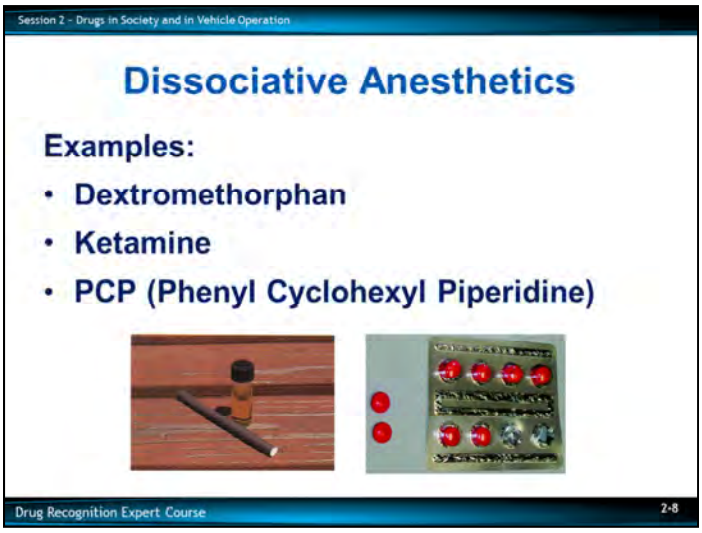
- Clarification: Hallucinogens confuse the Central Nervous System (as well as speeding it up, like CNS Stimulants)

- Produce sights, sounds, odors, feelings, and tastes that aren't real

- Induce a temporary condition very much like psychosis or insanity

- Can create a "mixing" of sensory modalities, so the user "hears colors," "sees music"

This mixing of the senses is called Synesthesia. With all of these false and distorted perceptions a person under the influence of hallucinogens would be a very unsafe driver.



Dissociative Anesthetics

This category was changed from PCP to Dissociative Anesthetics in 2005.

PCP, its analogs, and Dextromethorphan are examples of Dissociative Anesthetics. PCP is considered by the medical community to be a Hallucinogen. However, because of the symptomatology it presents, it is in a separate category.

People under the influence of Dissociative Anesthetics may exhibit a combination of the signs associated with CNS Depressants, CNS Stimulants, and Hallucinogens.

- Phencyclidine is a short form of the chemical name Phenyl Cyclohexyl Piperidine, from which we get the abbreviation "PCP"

PCP is a synthetic drug, i.e., it does not occur naturally but must be produced in a laboratory-like setting.

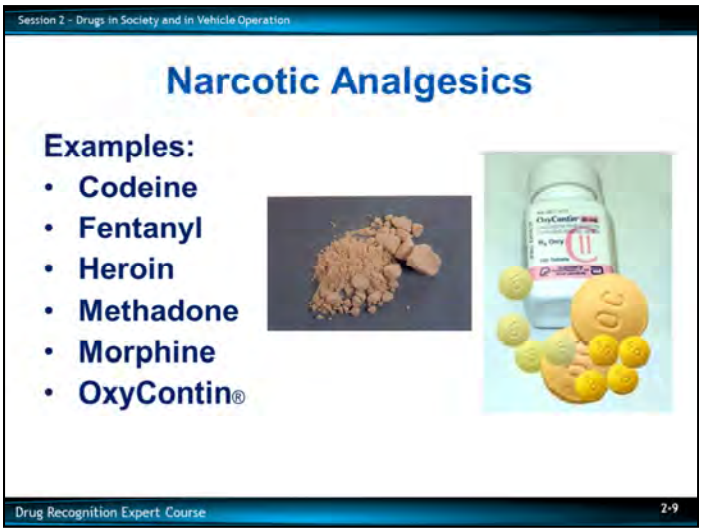
PCP has many analogs, or "chemical cousins," very similar to PCP in chemical structure and produce essentially the same effects.

- Analogs of PCP include Ketamine, Ketalar and Ketajet
- PCP is also a very powerful pain killer, or anesthetic.

Point out the reason PCP is a Dissociative Anesthetic is because it "separates" the user from any sensation of pain without making him or her unconscious.

Dextromethorphan (DXM) is found in many over-the-counter antitussive cold medications such as Robitussin, Coricidin Cough and Cold, and Dimetapp. DXM is typically abused by school age children, teenagers, or young adults to achieve impairment.

- DXM is normally used in liquid or pill form
- In high doses, DXM impairment is similar to the effects of PCP or Hallucinogens



Narcotic Analgesics
There are two subcategories of Narcotic Analgesics:
1. Natural Opiates are derivatives of Opium
Point out Morphine and Codeine are examples of Opiates.

2. Synthetics are produced chemically in the laboratory. The synthetics are not derived in any way from Opium, but produce similar effects.
Point out Methadone and Fentanyl are examples of a synthetic narcotic.

The word "analgesic" means pain reliever. All of the drugs in this category reduce the person's reaction to pain.
- Heroin is one of the most-commonly abused of the Narcotic Analgesics
- Heroin is highly addictive

In addition to reducing pain, Narcotic Analgesics produce euphoria, drowsiness, apathy, lessened physical activity, and sometimes impaired vision.

Persons under the influence of Narcotic Analgesics often pass into a semi-conscious type of sleep or near-sleep. This condition is often called being "on the nod." They often are sufficiently alert to respond to questions effectively. Higher doses of Narcotic Analgesics can induce coma, respiratory failure, and death.

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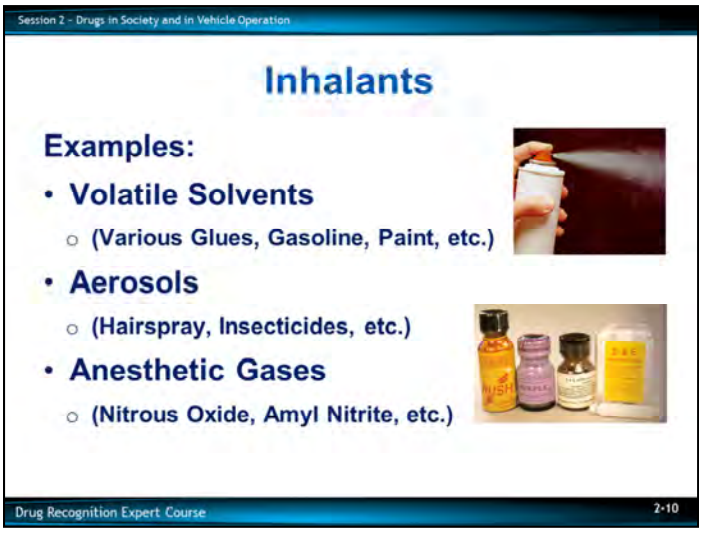


Inhalants

Inhalants are the fumes of certain substances.

These substances are found in many common products:

- Gasoline
- Oil-based paints
- Various glues
- Aerosol cans
- Varnish remover
- Cleaning fluids
- Etc.

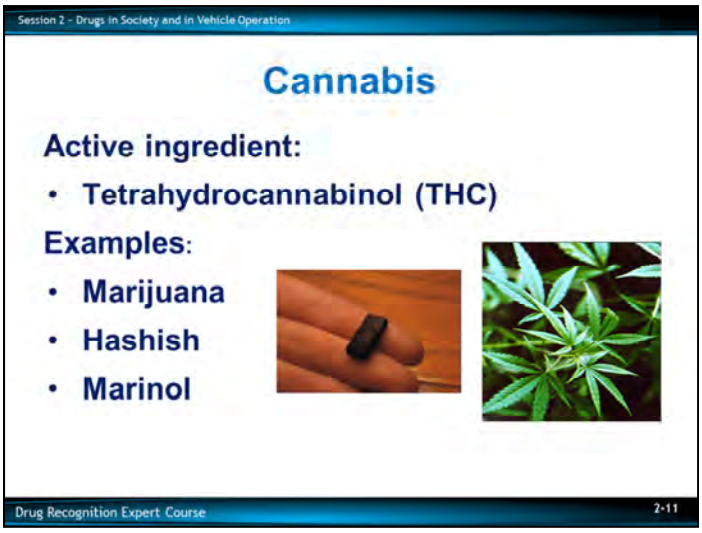
Examples:

- Volatile Solvents (Various Glues, Gasoline, Paint, etc.)
- Aerosols (Hairspray, Insecticides, etc.)
- Anesthetic Gases (Nitrous Oxide, Amyl Nitrite, etc.)

Different Inhalants produce different effects.

- Many produce effects similar to those of CNS Depressants
- A few produce stimulant-like effects
- Some produce hallucinogenic effects

The Inhalant abuser's attitude and demeanor can vary from inattentive, stuporous and passive, to irritable, violent, and dangerous. The abuser's speech will often be slow, thick, and slurred.



Cannabis
The category "Cannabis" includes the various forms and products of the Cannabis Sativa plant and other species of Cannabis plants.
Write "Cannabis Sativa" on the dry erase board or easel/easel pad.

The primary active ingredient in Cannabis products is the substance known as "Delta-9 Tetrahydrocannabinol" or "THC."
Write "∆-9 THC" on the dry erase board or easel/easel pad.

Apart from alcohol, Marijuana is the most commonly-abused drug in this country.

According to the NSDUH 2015 Survey, Marijuana was listed as the most common illicit drug used in the U.S. There were 22.2 million Americans over the age of 12 reporting use in the past month.

Daily or almost daily use of marijuana (used on 20 or more days in the past month) increased from 5.1 million persons in 2005-2007 to 8.1 million persons in 2013.
Source: National Household Drug Use and Health Survey, 2014

Cannabis appears to interfere with the attention process. Drivers under the influence of Marijuana often do not pay attention to their driving.
Divided attention SFSTs usually disclose some of the best evidence of Cannabis impairment.

Cannabis also produces a distortion of the user's perception of time, an increased heart rate (often over 100 beats per minute), and reddening of the eyes.

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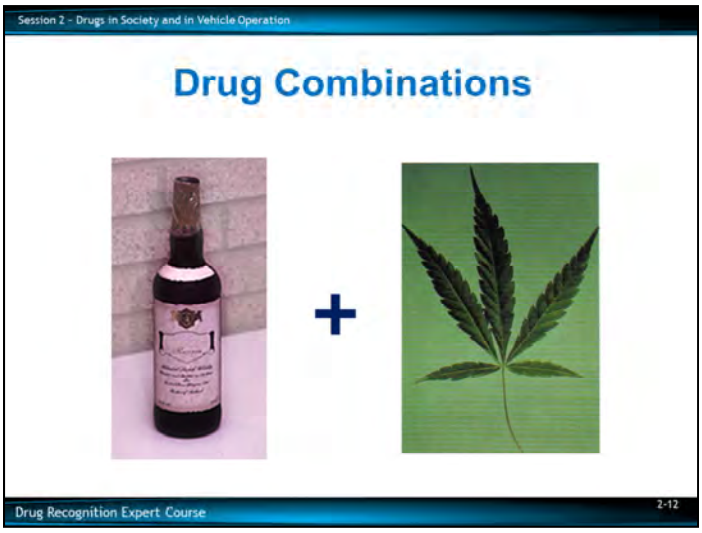

Drug Combinations

Many drug users appear to be "chemical gluttons." They often ingest drugs from two or more different drugs at the same time.

The term for this is "polydrug use."

Write "polydrug use" on the dry erase board or easel/easel pad. "Poly" is the Greek prefix for "many."

When drug users ingest drugs from two or more categories, this is termed "polycategory use."

Write "polycategory use" on the dry erase board or easel/easel pad.

Some very common examples of polydrug or polycategory use include:

- Alcohol with virtually any other drug
- Marijuana and PCP - A common way to ingest PCP is to sprinkle it on a Marijuana "joint" and smoke it
- Cocaine and Heroin, sometimes called a "speedball"
- Heroin and Amphetamine, sometimes called a "poor man's speedball"
- Heroin and PCP, sometimes called a "fireball"
- "Crack" Cocaine and PCP, sometimes called a "space base"
- "Crack" Cocaine and Marijuana, sometimes called a "primo"
- "Crack" and Methamphetamine, sometimes called "croak"

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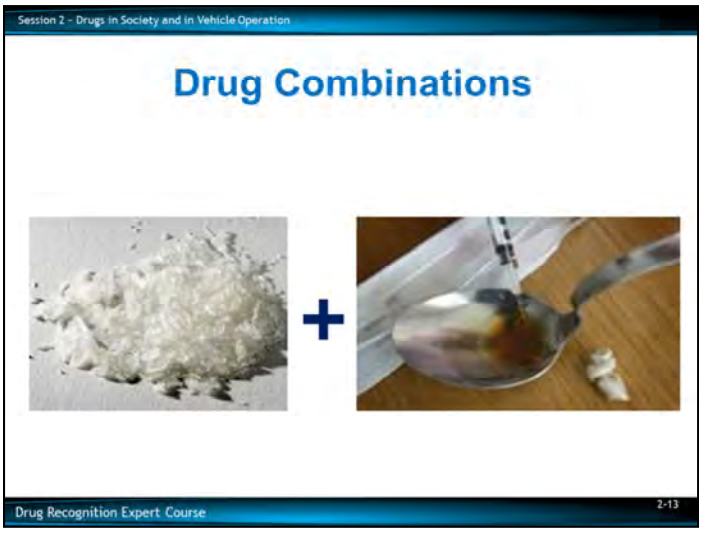


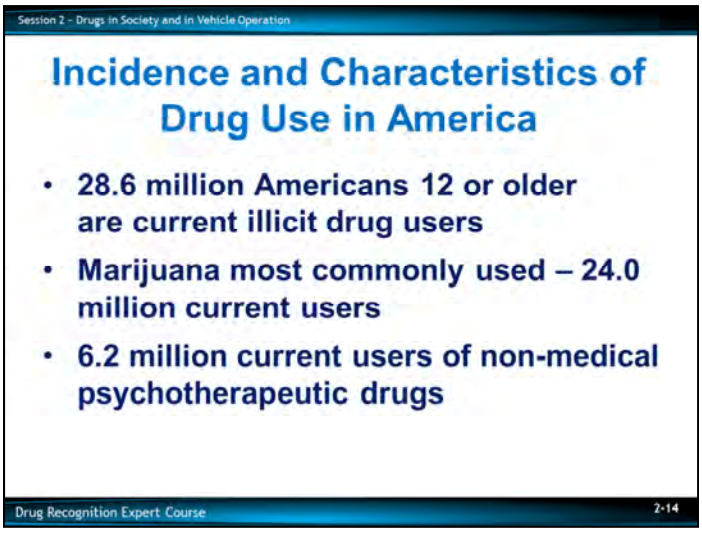
Sometimes, people take two different drugs (such as Heroin and Cocaine) that produce some opposite effects.

- Example: Heroin tends to lower blood pressure and Cocaine tends to elevate blood pressure

Different drug combinations may produce unique, interactive effects.

When a person has ingested multiple drugs, that person will experience multiple drug effects.

Under proper medical supervision, specific drugs often are used to reverse overdose conditions. However, it is important to bear in mind, in a polydrug or polycategory situation some of the signs of a particular drug may not be evident even though the person is under the influence of that drug.



B. <u>Incidence and Characteristics of Drug Use in America</u>

- In 2016, 28.6 million Americans aged 12 years or older were current illicit drug users
- Marijuana was the most commonly used illicit drug in 2016, with 24.0 million users reporting use in the past month
- In 2016, 6.2 million current users of non-medical psychotherapeutic drugs
    - These include pain relievers, tranquilizers, stimulants, and sedatives

Source: 2016 National Survey on Drug Use and Health (NSDUH, September 2017)

C. <u>Incidence of Drug-Impaired Driving</u>

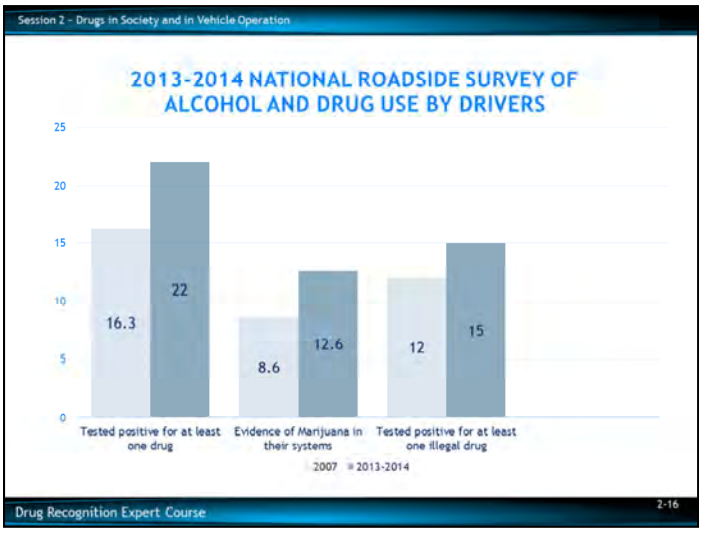
Accurate data on the frequency with which people drive while under the influence of drugs is somewhat limited.

This is due to the various reasons that include:

- Many impaired drivers are never detected
- Many drug users also consume alcohol
    - When they <u>are</u> stopped for impaired driving they may be arrested (and tabulated in statistics) as <u>alcohol</u>-impaired drivers only

Fact: About 11.8 million people aged 12 years and older admitted driving under the influence of illicit drugs in the past year.
Source: 2016 National Survey on Drug Use and Health (NSDUH, September 2017)

When they are involved in crashes, they may not be tested for drugs.



The National Highway Traffic Safety Administration (NHTSA) undertook a comprehensive study of the prevalence of potentially-impairing drug use by drivers in 2013 and 2014. Report: The 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers. (NHTSA)

Approximately 30,000 drivers were asked to provide an oral fluid or blood sample. Samples were tested for illegal drugs, prescription medicines, and over-the-counter drugs.

- About 22% of drivers tested positive for at least one drug, up from 16.3% in the 2007 Roadside Study

- 12.6% of the drivers had evidence of Marijuana use in their systems, up from 8.6% in the 2007 Roadside Study

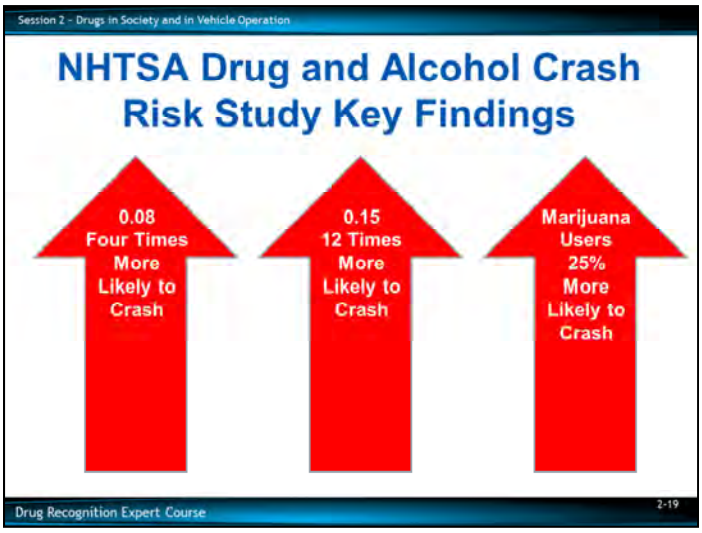
- More than 15% of drivers tested positive for at least one illegal drug, up from 12% in 2007

Source: National Roadside Survey Fact Sheet, January 2014

The facts are unmistakable: Drug use is common among many Americans. So is drug-impaired driving. ***Consult national and local resources for updated data on drugs and driving.***

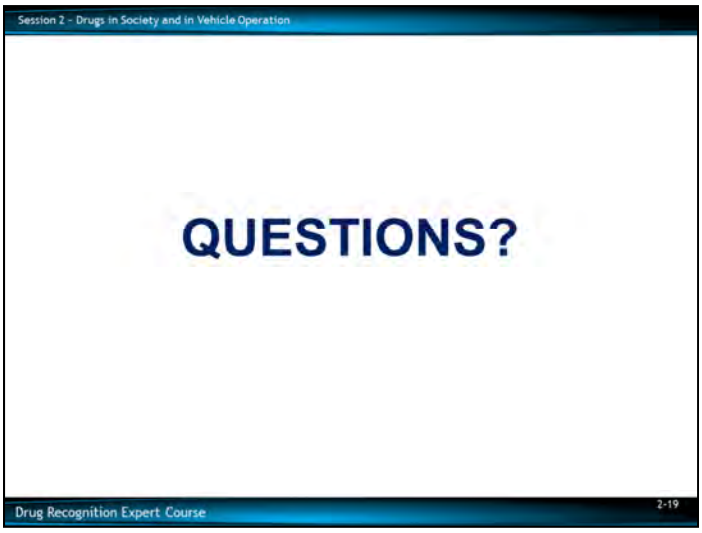
- Largest such study ever conducted to assess the comparative risk of drunk- and drugged-driving
- Conducted in Virginia Beach, VA over a 20-month period
- Collected data from more than 3,000 drivers involved in a crash and more than 6,000 non-crash drivers for comparison
- Drivers were tested for a wide range of drugs, but marijuana was the only drug found in large enough numbers for statistically significant findings

Source: NHSTA Drug and Alcohol Crash Risk Study Fact Sheet, January 2014

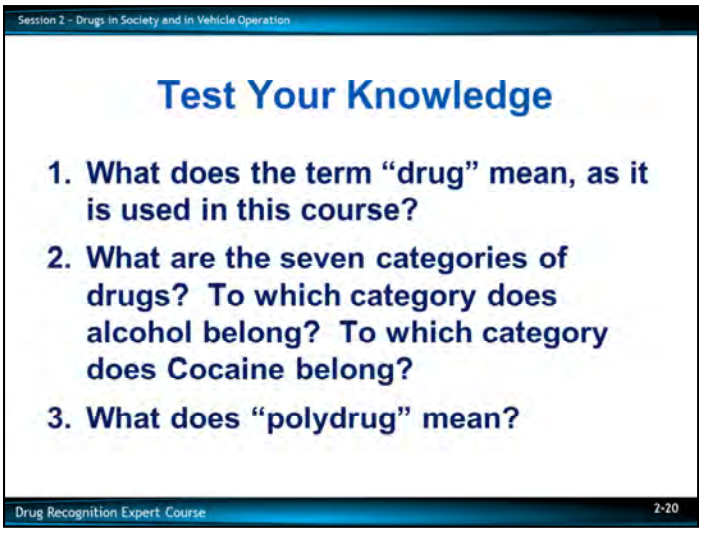


- Drivers at a BAC level of 0.08 percent were about four times more likely to crash than sober drivers
- Drivers with a BAC level of 0.15 percent were 12 times more likely to crash than sober drivers
- Marijuana users were about 25% more likely to be involved in a crash than drivers with no evidence of Marijuana use

Source: NHSTA Drug and Alcohol Crash Risk Study Fact Sheet, Jan 2014



Solicit participants' comments and questions about Drugs in Society and in Vehicle Operation.



Test Your Knowledge

1. What does the term "drug" mean, as it is used in this course?

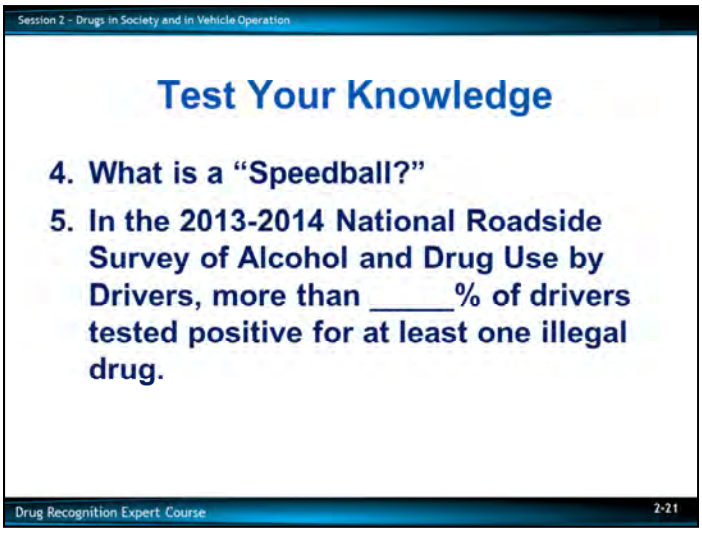
A drug is any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

2. What are the seven categories of drugs? To which category does alcohol belong? To which category does Cocaine belong?

CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants and Cannabis; CNS Depressants; CNS Stimulants

3. What does "polydrug use" mean?

Ingesting two or more different drugs.



4. What is a "Speedball?"
Cocaine and Heroin or Methamphetamine and Heroin

5. In the 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers, more than ____ % of drivers tested positive for at least one **illegal** drug.
15%

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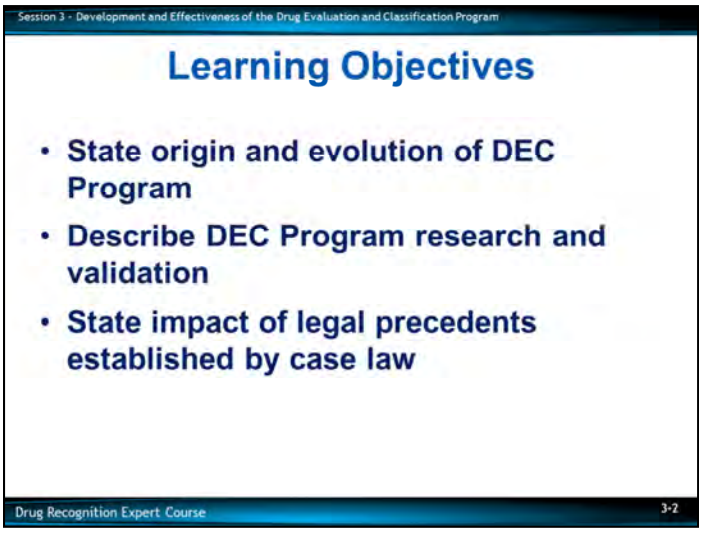
Session 3 - Development and Effectiveness of the Drug Evaluation and Classification Program
50 Minutes
Session 3
Development and Effectiveness of the Drug Evaluation and Classification Program
TSI
NHTSA
Drug Recognition Expert Course
3-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- State the origin and evolution of the Drug Evaluation and Classification (DEC) Program
- Describe research and demonstration project results that validate the effectiveness of the program
- State the impact of legal precedents established by case law

CONTENT SEGMENTS

A. Origin and Evolution of Drug Evaluation and Classification Program
B. Evidence of Program Effectiveness
C. Case Law Review

LEARNING ACTIVITIES

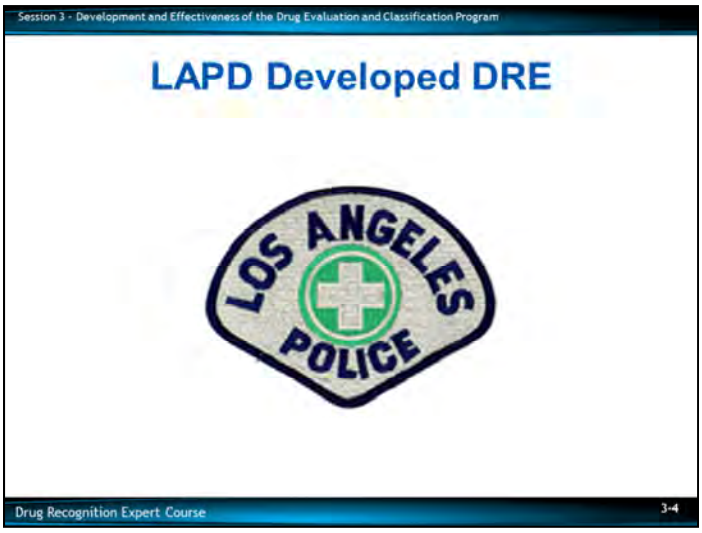
Instructor-Led Presentations
Reading Assignments

A. <u>Origin and Evolution of the Drug Evaluation and Classification (DEC) Program</u>
Write: "LAPD" on dry erase board or easel/easel pad.

The DEC Program was developed by personnel of the Los Angeles Police Department (LAPD). Development of the DEC Program began in the early 1970's in response to a growing awareness that many people apprehended for impaired driving were under the influence of drugs rather than alcohol.

Dick Studdard (Traffic Officer):
- Sergeant Studdard retired from the LAPD in June, 1990
- Sgt. Studdard and his fellow officers often encountered many impaired drivers whose blood alcohol concentrations (BACs) were zero or very low

They occasionally succeeded in having physicians examine some of these low BAC subjects, resulting in diagnosis of drug influence.
Examining physicians subsequently would be subpoenaed to testify in contested cases.
For various reasons, physicians were often reluctant or unwilling to conduct these examinations and offer opinions.



Some reasons why doctors may be reluctant:

- They typically receive little training in the recognition of specific signs of drug impairment, particularly at street-level doses

- They may not see the subject until hours after the drugs were used, by which time the signs and symptoms often have changed

As a result, some drivers whom Studdard and other officers were certain were impaired by drugs were not prosecuted or convicted for DWI.

Studdard concluded it was essential to develop appropriate procedures officers could use when confronted with persons suspected of drugs.

Len Leeds, former LAPD Narcotics Officer:

- Approached by Sergeant Studdard and asked to collaborate in the development of a program to help identify drug-impaired subjects

- Initiated some independent research by consulting with physicians, enrolling in relevant classes, studying text books, technical articles, etc.

- Secured management-level support within the department to continue research and program development

As time went on, many other key persons both within and outside LAPD contributed to the development and refinement of the program.

In 1979, the program was officially recognized by LAPD.
The LAPD program was referred to as the Drug Recognition Expert (DRE) program.

B. <u>Evidence of Program Effectiveness</u>

LAPD and the National Highway Traffic Safety Administration (NHTSA) worked together to develop the Drug Recognition Expert (DRE) training as we know it today.

The first step was to develop and validate standardized field sobriety tests (SFSTs) for investigating alcohol-impaired driving.

LAPD personnel played a major role in the research that led to the wide spread use of Horizontal Gaze Nystagmus (HGN), the Walk and Turn (WAT) test, and the One Leg Stand (OLS) test.

By the early 1980's, NHTSA completed its validation of the standardized tests for DWI enforcement.

At this time, NHTSA began to assist LAPD in validating the DRE program.

The DRE process evolved into what is essentially a three-part determination.

- First, it establishes the subject is impaired and verifies his or her alcohol level is not consistent with the degree of impairment that is evident

Emphasize the impairment is not consistent with the alcohol level.
Clarification: the first portion of the drug influence evaluation is devoted principally to SFST of the subject and to the administration of a breath test.

Inconsistency between the observed impairment and the BAC suggests the presence of some other drug(s) or some other complicating factor such as an illness or injury.

- Second, it uses evaluation procedures to determine whether the impairment may stem from illness or injury requiring medical attention or is drug-related

- Third, it uses evaluation procedures to determine what category (or categories) of drugs are the likely cause of the impairment

Key Point
The entire evaluation process is standardized.

- Administered the same way to all subjects
- Administered the same way by all officers

Pose this question: "Why is it necessary for an officer to use reliable standardized assessment procedures to determine the category of drugs causing the impairment?"
Follow-up question: "If we see a subject is impaired and the BAC is too low to account for that impairment, why don't we simply obtain a blood sample and ask the laboratory to analyze the sample for all drugs?"
Solicit responses from participants.

_____

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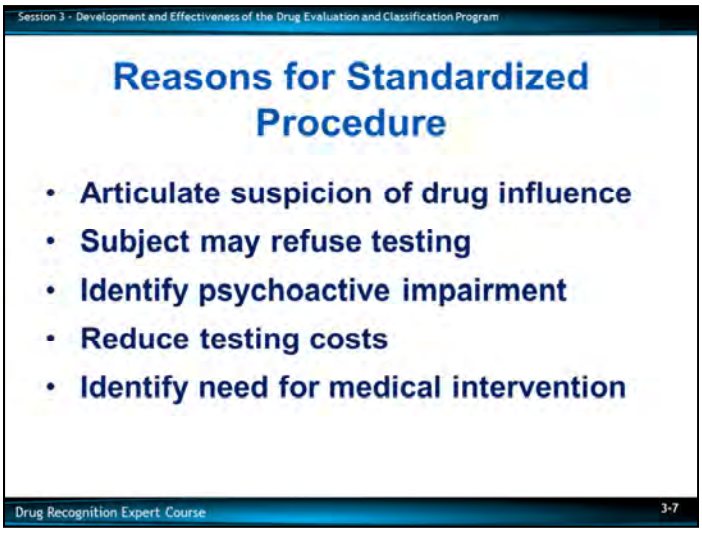


The Need for Reliable Standardized Assessment Procedure

- One reason for needing a reliable standardized assessment procedure is we may be called upon to submit evidence of an articulable suspicion of drug influence to support our request for a chemical test of the subject

- Some courts or motor vehicle hearings officers may find a low BAC result, by itself, does not provide adequate basis for requesting the subject to submit to a second chemical test

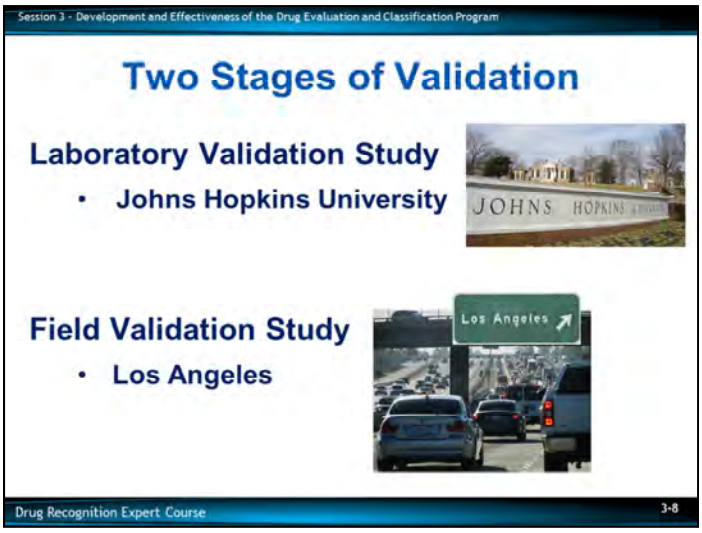
- Another reason is the subject may refuse to submit to the chemical test, denying us of scientific evidence of drug influence
  - In that case, conviction or acquittal may hinge on the officer's observations and expertise as a DRE

- A third reason is chemical tests usually disclose only that the subject has used a particular drug recently
  - The chemical test usually does not indicate whether the drug is psychoactive at the present time

  - Thus, the DRE procedures are needed to establish the subject not only has used the drug, but also that he or she is under the influence

- A fourth reason is it can be expensive and require a large sample of blood or urine to perform a broad analysis for any or all drugs
  - Practical constraints require we be able to point the laboratory technician toward those types of drugs most likely to be found in the sample

- It is always possible that a person suspected of drug impairment is actually suffering from some medical problem
  - If a sample is collected and the subject is not examined by someone who is qualified, evidence of medical problems may not come to light until it is too late



Two Stages of Validation

NHTSA assisted LAPD in a two-phase validation study.

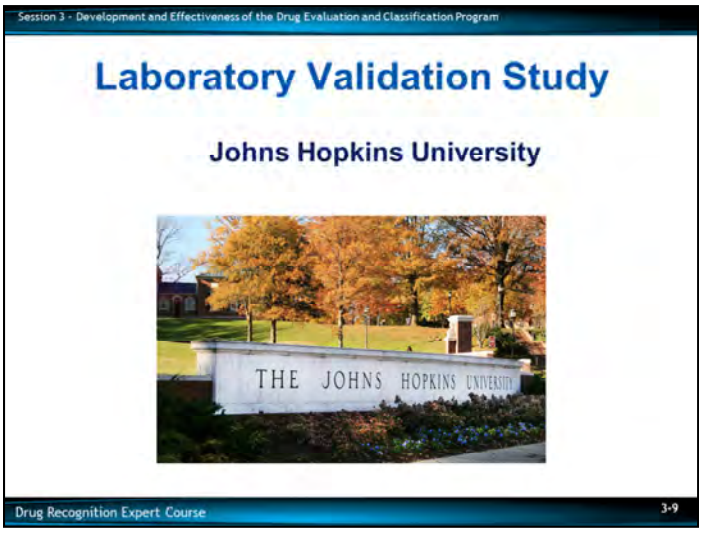
- Laboratory validation, using volunteers who ingested selected drugs
  - Johns Hopkins validation was conducted in 1984

- Field validation, using persons actually arrested in Los Angeles on suspicion of drug influence
  - LAPD Field Validation Study was conducted in 1985

The research validation studies and their titles were:

- Identify Types of Drug Intoxication: Laboratory Evaluation of a Subject Examination Procedure, May 1984 Final Report. George E. Bigelow, Ph.D. et al. Behavioral Pharmacology Research Unit, Department of Psychiatry and Behavioral Sciences. Funded by the U.S. Department of Transportation's NHTSA and the National Institute of Drug Abuse. ***(Source: Commonly called the Johns Hopkins Study), NHTSA, Pub. No. DOT HS 806 753 (1985)***

- Field Evaluation of the Los Angeles Police Department Drug Detection Procedure, February, 1986, DOT HS 807 012, A NHTSA Technical Report, National Highway Traffic Safety Administration. Richard P. Compton. (Commonly referred to as the 173 Case Study)

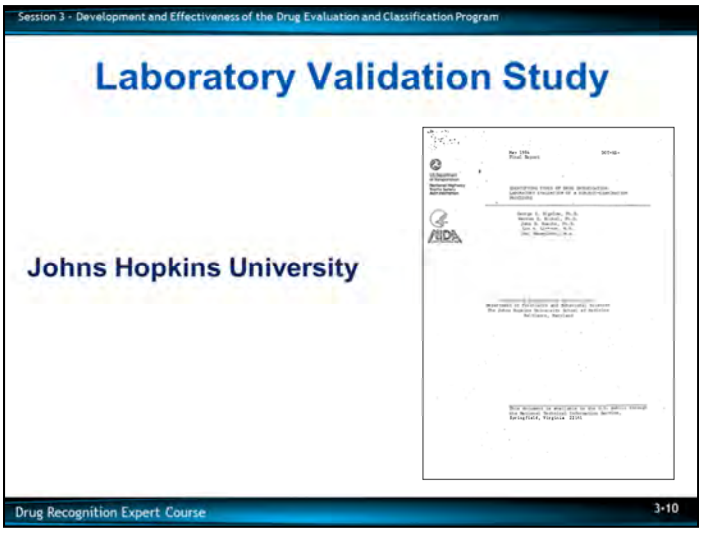


Laboratory Validation Study

- The Laboratory Validation took place at Johns Hopkins University in Maryland

- The drug examiners were senior DREs from LAPD. The LAPD participants:
  - Dick Studdard
  - Jerry Powell
  - Pat Russell
  - Doug Laird
- The laboratory experiments were planned and conducted by researchers from Johns Hopkins

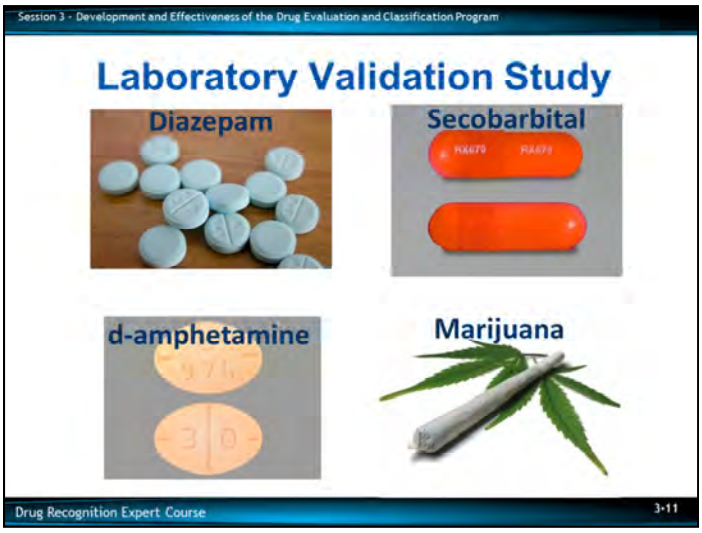
- Volunteers each took a "pill" and smoked a "cigarette"
  - The "pill" contained either no drug (placebo) or one of the following drugs:
    - Secobarbital (CNS Depressant)
    - Valium (i.e., Diazepam – CNS Depressant)
    - d-amphetamine (CNS Stimulant)



Secobarbital, Diazepam, and d-amphetamine were the pharmaceuticals used in the study. All were administered in identical gelatin capsules and were not brand name drugs.
A common brand name for Secobarbital is Seconal; a common brand name for Diazepam is Valium and a common brand name for d-amphetamine is Dexedrine.

The "cigarette" contained either THC or no drug (placebo). Neither the volunteers nor the LAPD officers knew what the volunteers had taken.
Inform participants this condition is known as a "double blind" experiment. The people being tested and the people doing the testing are kept uninformed of the test condition.
Two different dose levels of Marijuana, Diazepam, and d-amphetamine were used.

Clarification: some of the Diazepam and d-amphetamine pills were "weak," some were "strong." Similarly, some of the Marijuana cigarettes were "weak," some "strong." All of the Secobarbital pills were "strong."

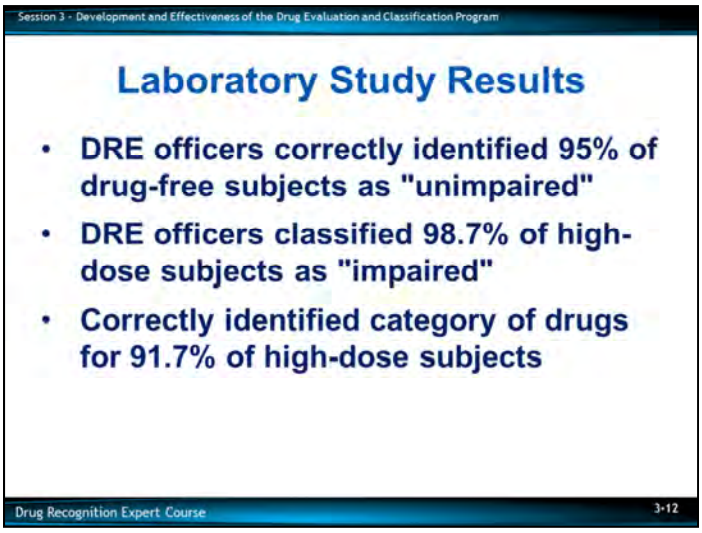


Normal daily dose for therapeutic purposes:

- Secobarbital: approx. 100 mg
- Diazepam: 4-40 mg
- d-amphetamine: 15 mg

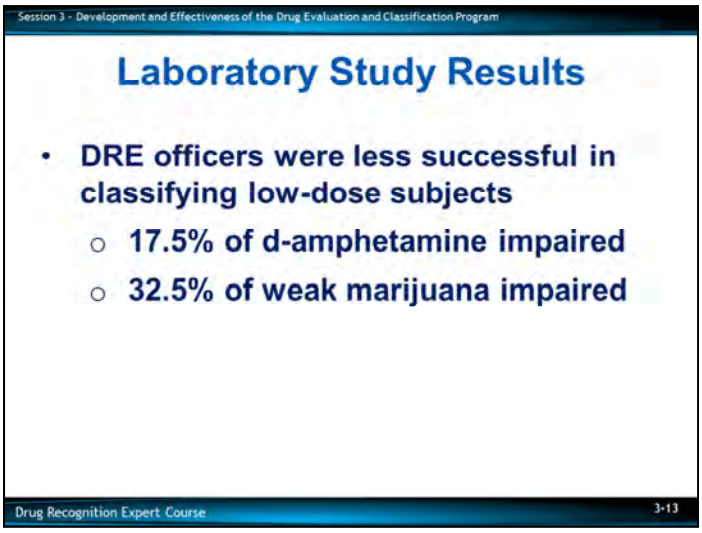
Doses administered for this study:

- Secobarbital: 300 mg
- Diazepam: weak – 15mg, strong – 30mg
- d-amphetamine: weak – 15 mg, strong – 30 mg
- Marijuana: weak – 12 puffs or 1.3% THC cigarettes, strong – 12 puffs of 2.8% THC cigarettes



Results

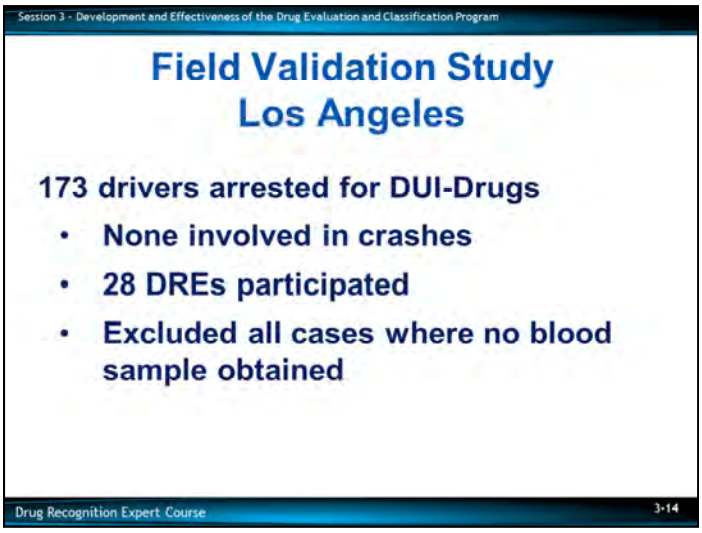
- The DREs were excellent in identifying subjects who received only placebo doses: they classified 95% of the drug-free subjects as “not impaired”
- Similarly, they were excellent in identifying the high-dose subjects
- They classified as “impaired” 98.7% of the subjects who received Secobarbital or strong doses of Marijuana, Diazepam, or d-amphetamine
- They correctly identified the category of drug for 91.7% of those strong dose subjects



- The DREs were less successful in identifying the weak dose subjects
- Only 17.5% of the subjects who received the weak dose of d-amphetamine were classified as "impaired"
- Only 32.5% of the subjects who smoked the "weak" Marijuana cigarettes were classified as "impaired"

Emphasize these low-dose subjects probably would never have been stopped and arrested by police officers if they had been driving.

- The results of the laboratory validation study were considered to be extremely positive
- The DRE procedures correctly identified the category of drugs in more than 90% of the subjects who were impaired
- The procedures only rarely indicated that unimpaired subjects were under the influence of drugs
- Laboratory studies can only allow certain dose levels of drugs, which are much lower than those seen at street levels
  - Therefore, participants in laboratory studies may not show many of the signs of impairment that are seen with subjects ingesting street-level doses of drugs



Field Validation Study

The field validation study was based on 173 people actually arrested on suspicion of driving under the influence of drugs.

Point out during the study period, many other drugged-driving arrests were made by LAPD officers.

None of the 173 cases involved a crash. In all of the cases, the arrested subjects agreed to submit to a blood test.

Twenty-eight different DREs from LAPD and the Los Angeles area participated in the examinations of these 173 subjects.

The researchers excluded all cases where the subjects refused to give blood since it would have been impossible to check the DREs accuracy in those cases. Similarly, they excluded all cases that involved crashes since the subjects' injuries could have confounded the drug examination. Also excluded were subjects who were found in possession of drugs or had any charges other than the drugged driving charge.

Results of the Field Study

Based on the independent blood tests, only one of the 173 subjects was found to have no alcohol or other drugs. Another ten subjects were found to have only alcohol in them.

Point out it is possible these ten so-called "drug free" subjects may have used drugs the independent laboratory could not identify for various reasons. Even if we assume these ten people really had not used any drug, ten out of 173 is a very small "false positive" rate.

- Thirty-seven (21%) of the subjects were found to have only one drug other than alcohol

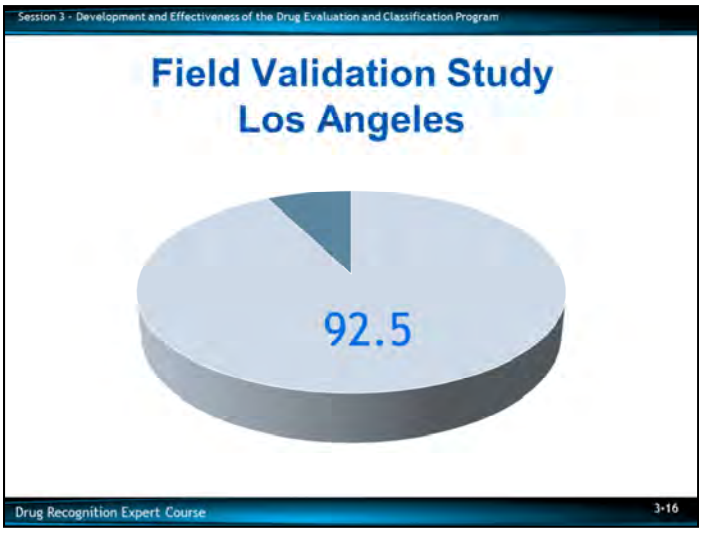
- Eighty-two had two drugs (including alcohol) (47%) and forty-three (25%) had three or more drugs (including alcohol)

Write on dry erase board "72% - two or more drugs."

This means 125 of the 173 subjects had ingested two or more drugs: that is more than 72% of the subjects.

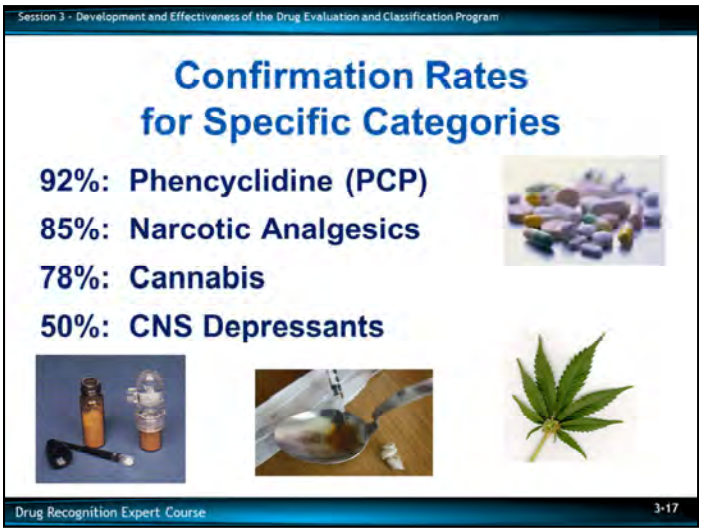
Emphasize: Polydrug use is very common.

PCP was the drug most often found among these 173 subjects: more than half of them (56%) had used PCP.



The key finding of this study was the following:

- For more than nine out of ten of the subjects (92.5%), the blood test confirmed the presence of at least one drug category "opined" by the DREs



The confirmation rates for specific categories:

- PCP: blood tests confirmed DREs' predictions in 92% of the cases

Point out: Study data for PCP was collected when PCP was considered a DRE drug category. In the other 8% it is possible a PCP analog might have been used.

- Narcotic Analgesics: blood tests confirmed 85% of the DREs' predictions

- Cannabis: blood tests confirmed 78% of DREs' predictions

- Central Nervous System (CNS) Depressants: blood tests confirmed 50% of DREs' predictions

Point out there are literally hundreds of different CNS Depressants, many of which may not have been identifiable by the independent laboratory.

- CNS Stimulants: blood tests confirmed 33% of DREs' predictions.

Emphasize, in this study, blood samples were not frozen after collection. Unfortunately, Cocaine continues to degenerate in a blood sample if the sample isn't frozen. It is quite possible the Cocaine had degraded from some samples before the lab analyzed them.

Numerous States have conducted comparisons of laboratory analysis and DRE opinions. The correlation rates exceeded 80% in those studies.

Emphasize: Simply because a lab cannot find "drugs" in a sample does not guarantee that no drug is present. Not all labs are able to test for every possible drug.

A study conducted in 1990 by the Arizona Department of Public Safety Central Regional Crime Laboratory compiled records of the toxicological analysis corresponding to Arizona DREs were analyzed showing a laboratory confirmation rate of 86.5% had been achieved.

The overall conclusion of the laboratory and field studies is the DEC Program is an effective tool for law enforcement.

Solicit participants' questions about the laboratory and field studies.

C. <u>Case Law Review</u>

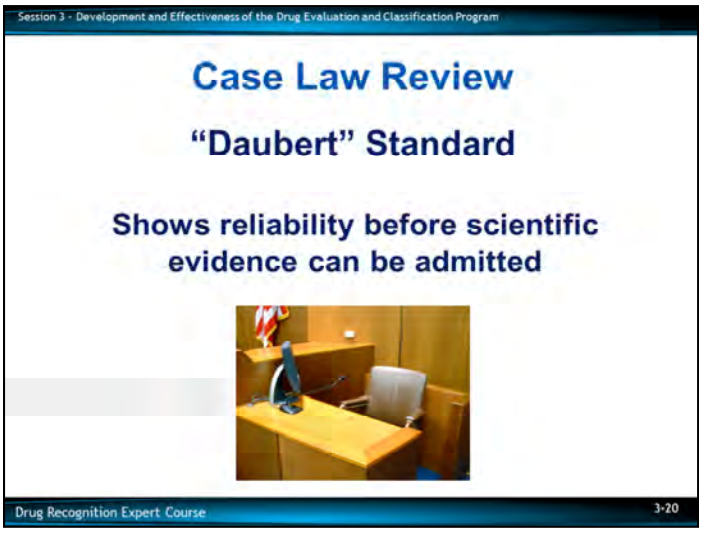
Court Rulings
Favorable Court Rulings on DEC Procedures

Courts in various States have ruled favorably on the DEC Program. Most American courts employ either the Frye or Daubert Standard for determining the admissibility of scientific evidence.

The Frye standard is the traditional test for admissibility of "new" scientific evidence.
Print "Frye Standard" on the dry erase board or easel/easel pad.

The Frye standard: "Is the procedure or principle espoused, accepted by the relevant scientific community?"

Frye standard was set by the US Supreme Court in 1923.



In Daubert, courts serve as a gatekeeper for all scientific evidence.
Print "Daubert" on the dry erase board or easel/easel pad.

Daubert standard requires a showing of reliability before scientific evidence can be admitted.
Courts assess evidence by considering four factors:

- Opinions are testable
- Methods/principles have been subject to peer review
- Known error rate can be identified
- Opinions rest on methodology that is generally accepted within the relevant scientific/technical community

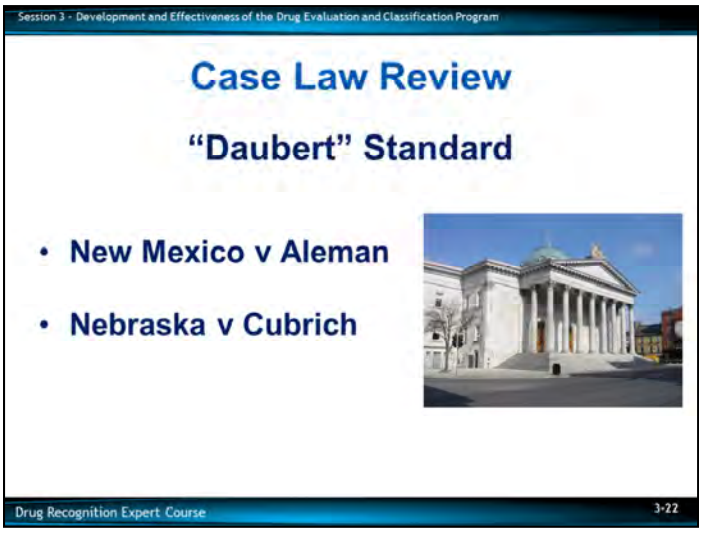
The traditional standard for scientific admissibility of evidence was the Frye Standard.

- *State of Arizona v. Dayton Johnson and Samuel Rodriguez, et al, NOS 90056865 and 90035883, (1990)*
  - An Arizona court (Tucson Municipal Court) ruled the Frye Standard was met
  - However, upon appeal, the Arizona State Supreme Court ruled the Frye Standard did not apply to the DEC Program

- *Washington v. Baity, 991P.2d, 1151, 140 Wn. 2d 1 (2000)*
  - A Washington Supreme Court ruled the DRE protocols are the application of traditional techniques

- *State of Minnesota, City of Minneapolis v. Larry Michael Klawitter, 518 N.W.2d 577, (1993)*
  - A Minnesota Court (City of Minneapolis) ruled that outside of nystagmus, the DEC Program is not subject to the Frye Standard

- *State of Colorado v. Daniel Hernandez, 92M 181, (1992)*
  - A Colorado Court (Boulder County Court) ruled the procedures used by DREs are not new or novel and the Frye Standard did not apply



- *New Mexico v. Mariam Aleman, Dona Ana County, 3rd District (2003)*
  - A New Mexico Court ruled the DRE's opinion was correct and the DRE protocol is admissible

- *Nebraska v. Cubrich, Case No. CR03-8203 Sarpy County Court (2004)*
  - In this case, the court used the Daubert Standard

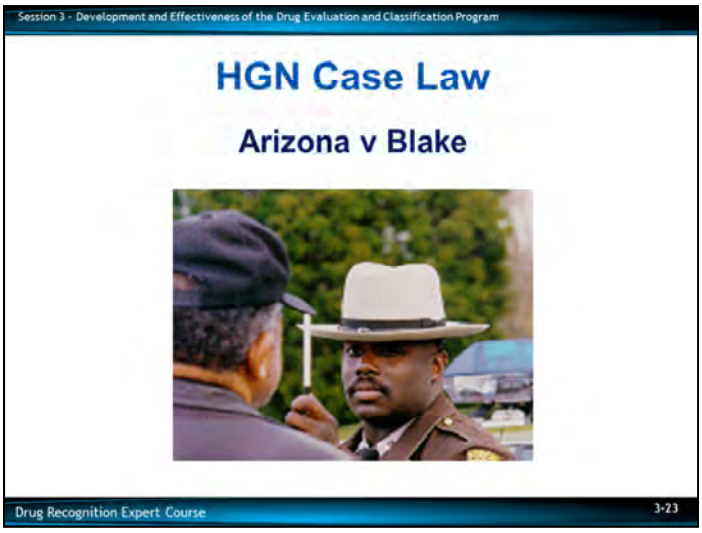
In many jurisdictions, it will not be necessary to have expert scientific testimony to secure admissibility of a DRE's examination of a subject.

The DEC Program is gaining acceptance in many courts.

In fact, testimony based on DRE investigation have been accepted by courts for years.

Expert testimony regarding drug influence has long been accepted by numerous courts. The components of DRE evaluation are generally accepted in the scientific community.

The DEC Program simply combined those components into a systematic and standardized procedure. Thus, many prosecutors believe FRYE standards do not apply to DRE evaluations and testimony.



HGN Case Law

One key element of DEC – namely, HGN – has been recognized as meeting the Frye standard by several State Supreme Courts. First to do so was Arizona, in the case known as State vs. Blake.

Print "Arizona vs. Blake" on the dry erase board or easel/easel pad.

Point out additional court rulings on HGN are summarized in the Participant Manual.

Emphasize participants should familiarize themselves with the case law on HGN to ensure they avoid the errors that kept evidence from being admitted in the past.

If there are significant cases concerning DEC or HGN from the participants' State, review them at this time.

Solicit participants' questions and comments about case law.

Summary of HGN Case Law

The American Prosecutor's Research Institute HGN State Case Law Summary is available at the end of this session.

The prevailing trend is for courts to admit HGN as evidence of impairment, with the proper scientific foundation.

But courts consistently reject all attempts to introduce HGN as evidence of a quantitative BAC.

Write on dry erase board or easel/easel pad – "Cannot be used as evidence of specific BAC level.

The court ruled in cases where there is no chemical test to determine a BAC level, HGN test results can be admitted the same as of SFSTs to show a "neurological dysfunction," one cause of which could be the ingestion of alcohol.

Write "No Chemical Test – HGN Admissible."

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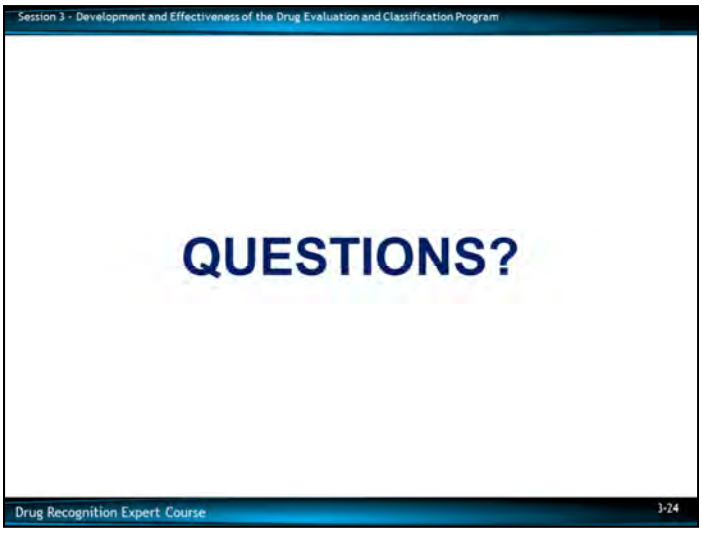
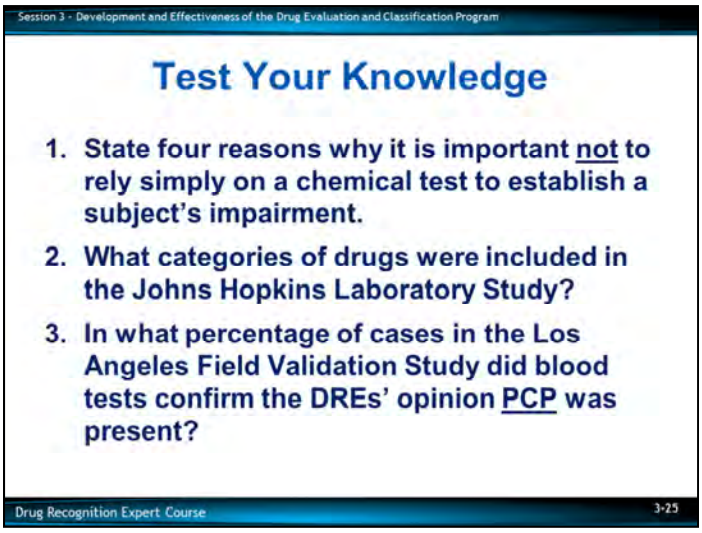


Solicit participants' questions and comments about Development and Effectiveness of the Drug Evaluation and Classification Process.



Test Your Knowledge

1. State four reasons why it is important not to rely simply on a chemical test to establish a subject's drug impairment.

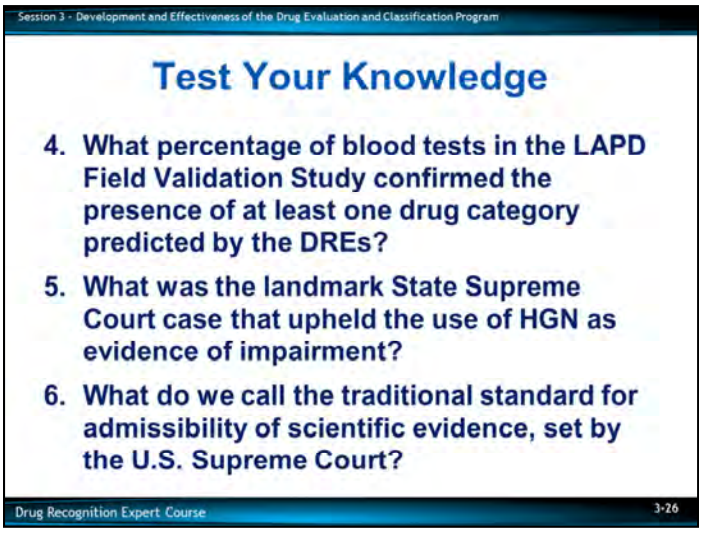
Answer: Develop articulable evidence of drug impairment; Suspect may refuse chemical test; Chemical tests do not indicate recency of use; Suspect may be suffering from injury or illness.

2. What categories of drugs were included in the Johns Hopkins Laboratory Study?

Answer: CNS Depressants, CNS Stimulants and Cannabis

3. In what percentage of cases in the Los Angeles Field Validation Study did blood tests confirm the DREs' opinion PCP was present?

Answer: 92%

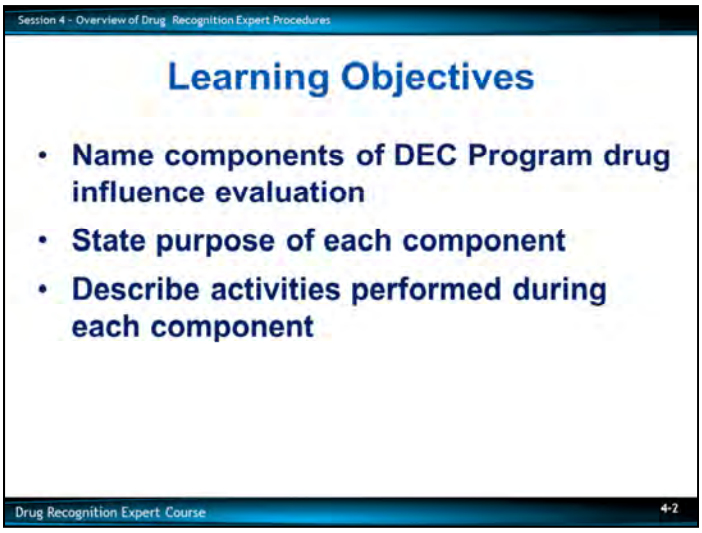


4. What percentage of blood tests in the LAPD Field Validation Study confirmed the presence of at least one drug category predicted by the DRE's?
Answer: 92.5%

5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?
Answer: State (AZ) vs. Blake

6. What do we call the traditional standard for admissibility of scientific evidence, set by the U.S. Supreme Court?
Answer: Frye Standard

Session 4 - Overview of Drug Recognition Expert Procedures
2 Hours, 30 Minutes
Session 4
Overview of
Drug Recognition Expert
Procedures
TSI
NHTSA
Drug Recognition Expert Course



Briefly describe the objectives for this session.

Upon successfully completing this session, the participant will be able to:

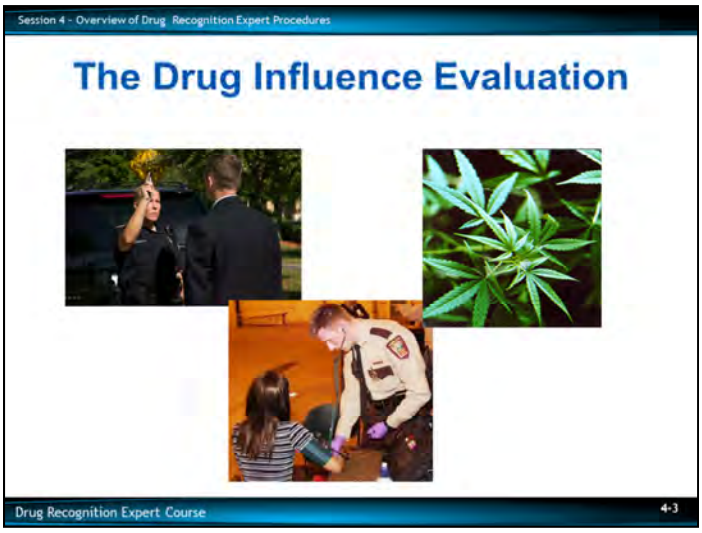
- Name the components of the Drug Evaluation and Classification (DEC) Program drug influence evaluation
- State the purpose of each component
- Describe the activities performed during each component

CONTENT SEGMENTS

A. Components of the Drug Evaluation and Classification Program Procedure
B. Interview of the Arresting Officer
C. The Preliminary Examination
D. Examinations of the Eyes
E. Divided Attention Tests
F. Examinations of Vital Signs
G. Dark Room Checks of Pupil Size
H. Examination of Muscle Tone
I. Examination for Injection Sites
J. Subject Statements
K. Opinion of Evaluator
L. Toxicological Examination
M. Video Demonstration

LEARNING ACTIVITIES

Instructor-Led Presentation/Demonstrations
Video Presentations
Reading Assignments



A. <u>Components of the Drug Evaluation and Classification Process</u>

The Drug Influence Evaluation
The DEC Program Process is a systematic and standardized method to:

- Establish the subject is impaired <u>and verifies his or her alcohol level is not consistent with the degree of impairment that is evident</u>

Inconsistency between the observed impairment and the blood alcohol concentration (BAC) suggests the presence of some other drug(s) or some other complicating factor such as an illness or injury.

- Determine whether the impairment may stem from illness or injury requiring medical attention or is drug-related

- Determine what category (or categories) of drugs are the likely cause of the impairment

Write on the dry erase board or easel/easel pad: "A SYSTEMATIC AND STANDARDIZED PROCESS."
Definition of systematic: Done or acting according to a fixed plan or system; methodical.
Definition of standardized: Conforming to a model in comparative applications.

- Some of these observable signs and symptoms relate to the subject's appearance

Write "appearance" on the dry erase board or easel/easel pad.

- Some of these observable signs and symptoms relate to the subject's behavior

Write "behavior" on the dry erase board or easel/easel pad.

- Some relate to the subject's performance of carefully administered psychophysical tests

Ask participants: "What does 'psychophysical' mean?"
Point out "psychophysical" relates to the subject's mind (psyche) and body (physique).
Write "psychophysical testing" on the dry erase board or easel/easel pad.

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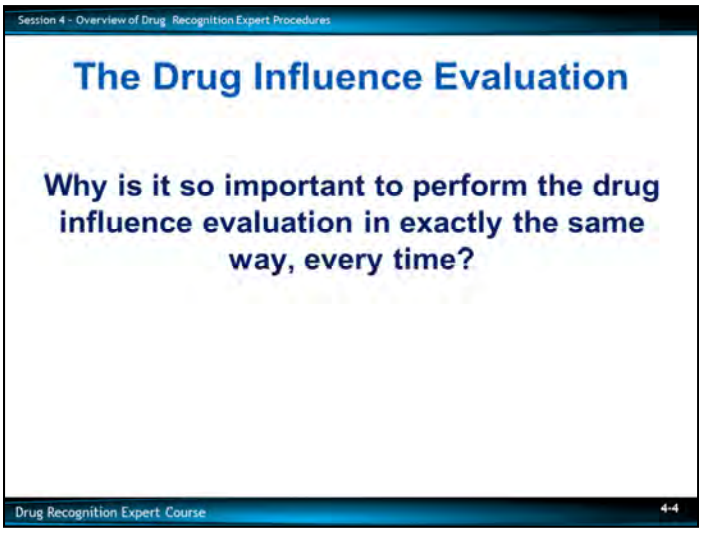


Drugs impair the subject's ability to control his or her mind and body.

- Psychophysical tests can disclose the subject's ability to control mind and body is impaired
- The specific manner in which the subject performs the psychophysical tests may help indicate the category or categories of drugs causing the impairment
- Some of the observable signs and symptoms relate to the subject's automatic responses to the specific drugs that are present
- All of these reliable indicators are examined and carefully considered before a judgment is made concerning what categories of drugs are affecting the subject

The evaluation is standardized in that it is administered the same way, every time.

Emphasize DREs should always try to conduct the 12-step process in the same manner each time. However, there may be times when that is not possible, i.e., uncooperative subject, equipment failure, or refusals.

Explain if they are unable to complete all the steps of the evaluation, they must explain the reasons for this in their narrative report and if they are still able to form an opinion, what evidence and observations support their opinion.

Ask participants: "Why is it so important to perform the drug influence evaluation in exactly the same way, every time?"

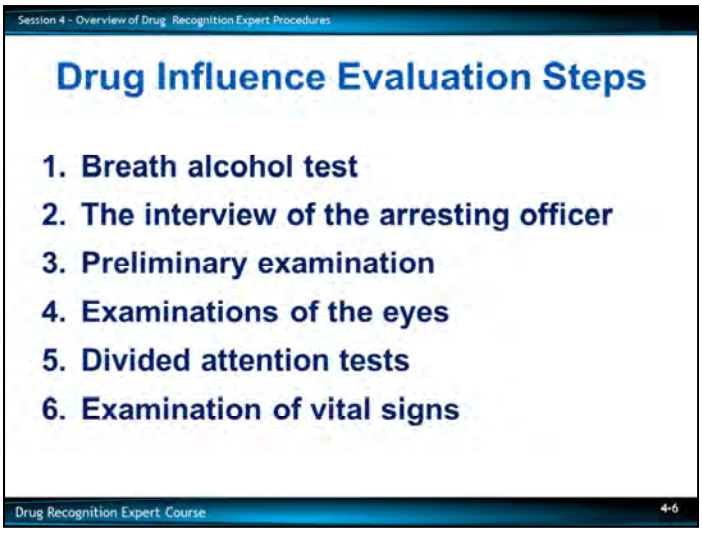
Probe to draw out all major reasons for standardization.

- Standardization helps to ensure no mistakes are made
- No steps are omitted
- No extraneous or unreliable "indicators" are included
- Standardization helps to promote professionalism among Drug Recognition Experts (DREs)

Discuss examples of reasons when the DRE may be unable to complete each step of the evaluation, i.e., injuries, uncooperative subject, equipment failure.

- Standardization helps to secure acceptance in court

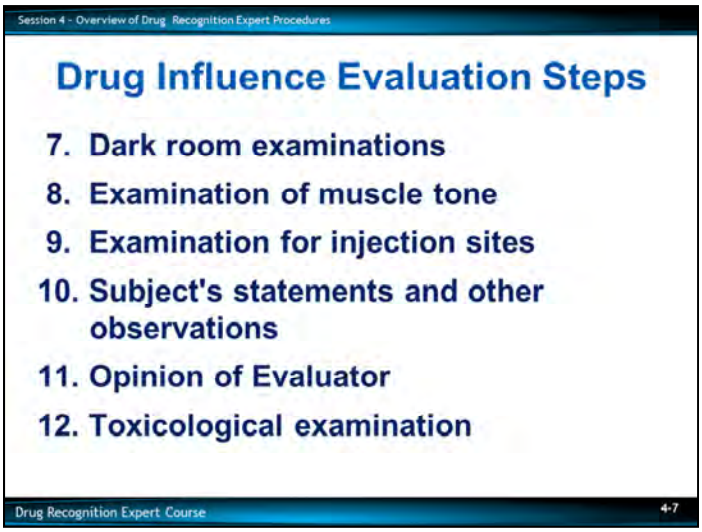
In such cases, the DRE may still be able to form an opinion based upon the evidence obtained. State v. Cammack, 1997 WL 104913 (Minnesota Ct. Appeals, 1997) ruled a DRE need not complete the entire 12-step evaluation for an opinion to be admissible so long as there is sufficient admissible evidence.

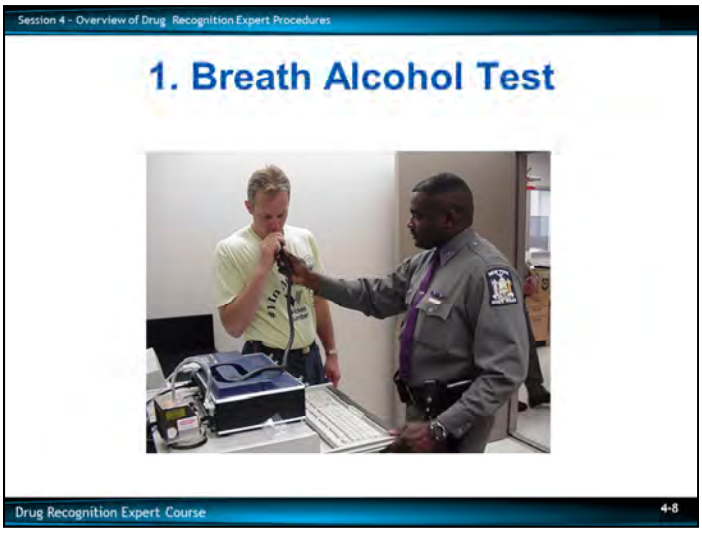


Drug Influence Evaluation Steps

The DEC drug influence evaluation has twelve components or steps.

Refer participants to the 12-step evaluation checklist in their participant manual.

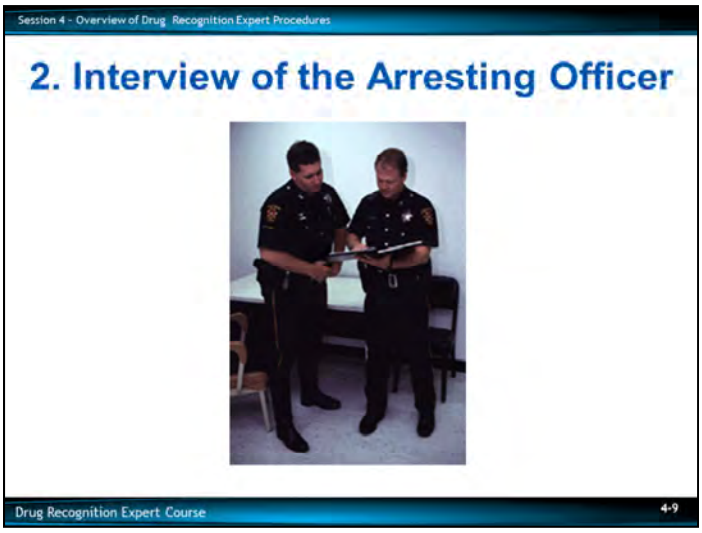

Session 4 - Overview of Drug Recognition Expert Procedures
Drug Influence Evaluation Steps
7. Dark room examinations
8. Examination of muscle tone
9. Examination for injection sites
10. Subject's statements and other observations
11. Opinion of Evaluator
12. Toxicological examination
Drug Recognition Expert Course
4-7



Breath Alcohol Test
The Breath Alcohol Test is needed to determine BAC.

The purpose of the breath test is to determine whether the specific drug, alcohol, may be contributing to the impairment observed in the subject.

Obtaining an accurate measurement of BAC enables the DRE to assess whether alcohol may be the sole cause of the observable impairment or whether it is likely some other drug or drugs, or other complicating factors, are contributing to the impairment.
Remind participants many subjects who are under the influence of drugs other than alcohol also have alcohol in their system.

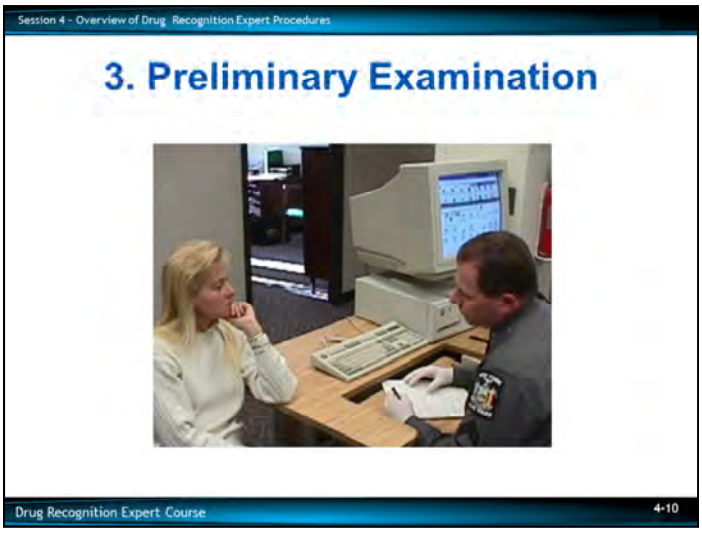


The Interview of the Arresting Officer.
In most cases, the subjects you will examine will not be people you arrested.

The arresting officer may have seen or heard things that would be valuable indicators of the kinds of drugs the subject has ingested.

The arresting officer, in searching the subject, may have uncovered drug-related paraphernalia or even drugs themselves.

The arresting officer also may be able to alert you to important information about the subject's behavior that could be very valuable for your own safety.



The Preliminary Examination

Remind participants protective gloves must be worn from this portion of the evaluation on.

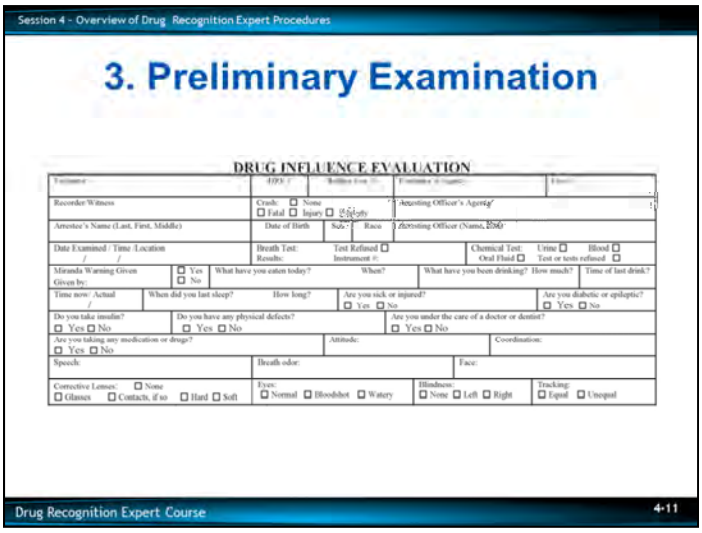
- The preliminary examination is your first opportunity to observe the subject closely and directly

- A major purpose of the preliminary examination is to determine if the subject may be suffering from an injury or some other medical condition not necessarily related to drugs

- **The preliminary examination will help you decide whether to continue with the drug influence evaluation, pursue a possible medical complication, or proceed with a DWI (alcohol) case**

- Another major purpose of the preliminary examination is to begin systematically assessing the subject's appearance, behavior, and automatic bodily responses for signs of drug-induced impairment

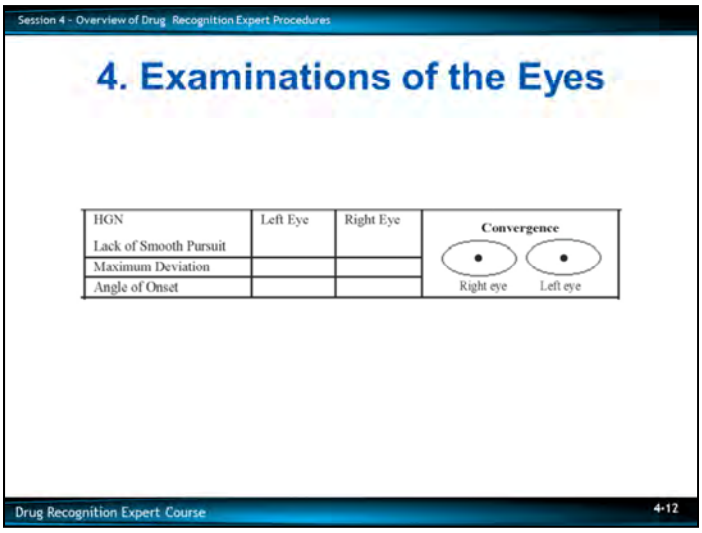
Emphasize the term "preliminary" does not imply "unimportant." Very valuable evidence often comes to light during the preliminary examination.



The preliminary examination consists of a series of questions dealing with:

- Possible injuries or medical problems
- Observations of the subject's face, speech, and breath
- Pupil size and tracking ability
- Initial checks of the subject's eyes
- Initial examination of the subject's pulse

While you are assessing the subject's tracking ability, you can also perform a preliminary assessment of whether any nystagmus is present in the subject's eyes. In particular, an initial estimation of the angle of onset can be made. The approximate angle of onset may help to determine whether the subject has consumed some drug other than alcohol. This is not a complete Horizontal Gaze Nystagmus (HGN) test at this time. An entire HGN test will be conducted in the next step.
Emphasize courts generally accept these questions as not being in conflict with the subject's Constitutional rights. However, the participants must comply with their own department's policies as to whether they should advise the subjects of their Constitutional rights before asking these questions.



Examinations of the Eyes

Certain drugs produce very easily observable effects on the eyes.

Ask participants: "What do we look for, in a subject's eyes, to determine if he or she may be under the influence of alcohol?" Probe, as necessary, to draw out the response "nystagmus."

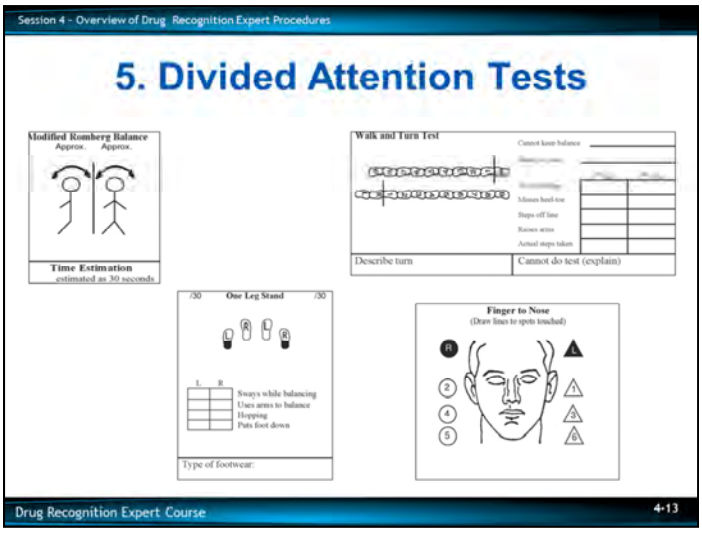
One of the most dramatic of these effects is nystagmus, which means an involuntary jerking of the eyes.

Persons under the influence of alcohol usually will exhibit HGN, which is an involuntary jerking of the eyes occurring as the eyes gaze to the side.

Alcohol is not the only drug that causes HG.

HGN is not the only observable effect on the eyes that will be caused by various drugs.

Point out examinations of the eyes will be covered in much greater depth later in this training.



Divided Attention Psychophysical Tests

Ask participants: "What does 'divided attention' mean?" Probe, as necessary, to draw out responses indicating the concept of "concentrating on more than one thing at a time."

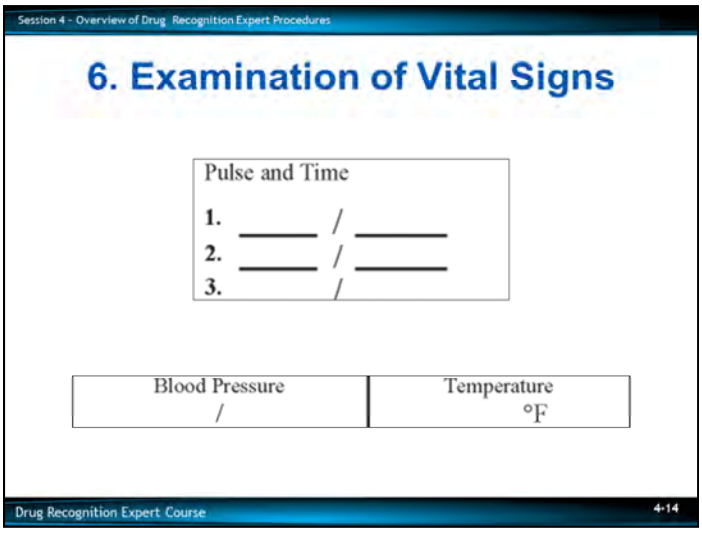
All drugs that impair driving ability will also impair the subject's ability to perform divided attention tests. These tests are familiar to you in the context of examining alcohol-impaired subjects.

The same tests are very valuable for disclosing evidence of impairment due to drugs other than alcohol.

Point out participants will have opportunities to practice administering these tests subsequently in the course.

The divided attention tests used in the DRE examination include:

- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS)
- Finger to Nose (FTN)

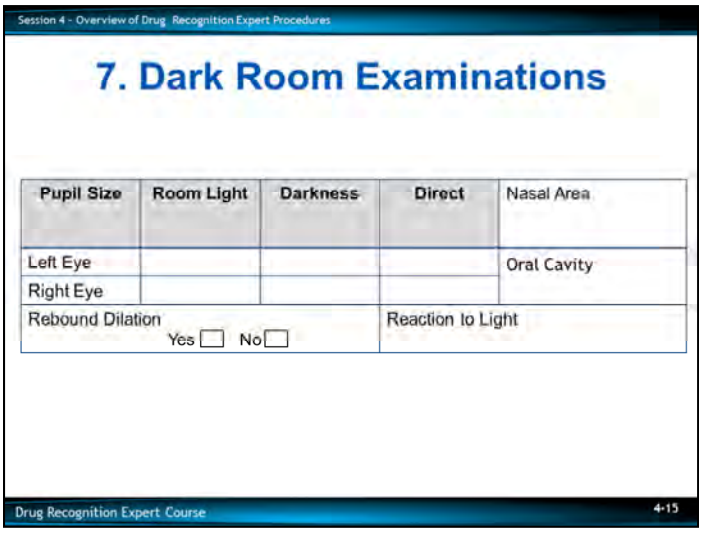


Examination of Vital Signs

Many categories of drugs affect the operation of the heart, lungs, and other major organs of the body. These effects show up during examination of the subject's vital signs.

Point out examinations of vital signs will be covered in depth later and participants will have ample opportunity to practice measuring vital signs.

The vital signs that are reliable indicators of drug influence include blood pressure, pulse, and temperature.



Dark Room Examinations
Many categories of drugs affect how the pupils will appear and how they respond to light.

Certain kinds of drugs will cause the pupils to widen dramatically, or dilate.

Some other drugs cause the pupils to narrow, or constrict.

By systematically changing the amount of light entering the subject's eyes, we can observe the pupils' appearance and reaction under controlled conditions.

We carry out these examinations in a dark room, using a penlight to control the amount of illumination entering the subject's eyes.
Exhibit a penlight.

We use a device called a pupillometer to estimate the size of the subject's pupils.
Exhibit a pupillometer.

Point out the pupillometer has a series of circles or semi-circles of various sizes.
By lining the circles up along side the subject's pupil, the pupil's size can be determined.
Point out participants will have several opportunities to practice conducting dark room examinations later in the course.

Other examinations are also conducted in the darkroom, using the penlight, i.e., examination of the nasal area and mouth for signs of drug use and for concealed contraband.

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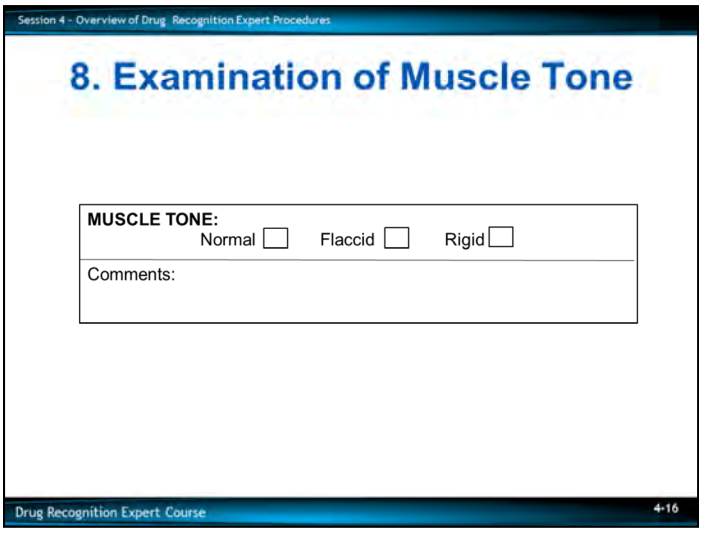
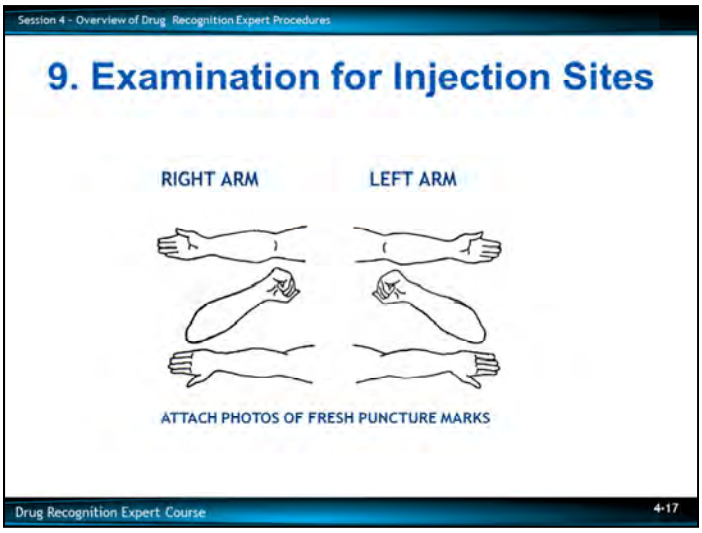


Examination of Muscle Tone
Evidence of muscle tone can also be observed when taking the subject's pulse, blood pressure, or while examining for injection sites.

Certain categories of drugs can cause the user's muscles to become markedly tense and rigid. Others may cause flaccidity or "rubbery-like" muscle tone.

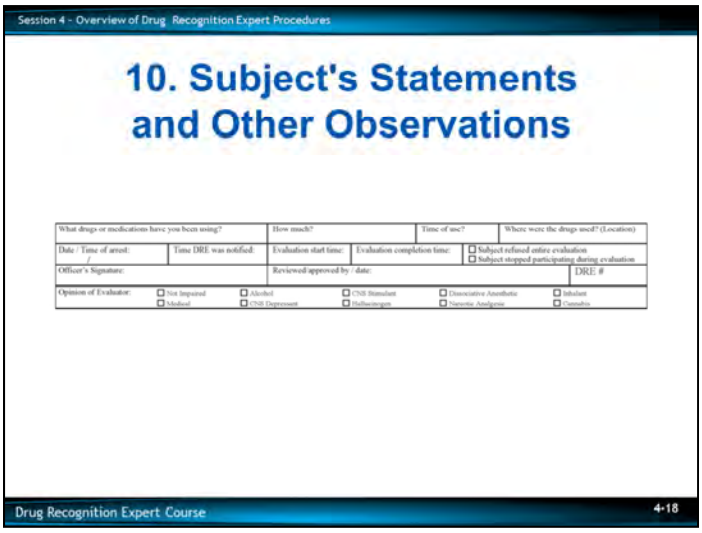
Evidence of this muscle tone may come to light when the subject attempts to perform the divided attention tests.
Point out examination for muscle tone will be covered in greater depth subsequently in the course.



Examination for Injection Sites
Certain drugs are commonly injected by their users via hypodermic needles.
Ask participants: "What drug is most often associated with injection via hypodermic needle?"

Heroin is probably most commonly associated with injection, but several other types of drugs also are injected by many users.

Uncovering injection sites on a subject provides evidence of possible drug use.

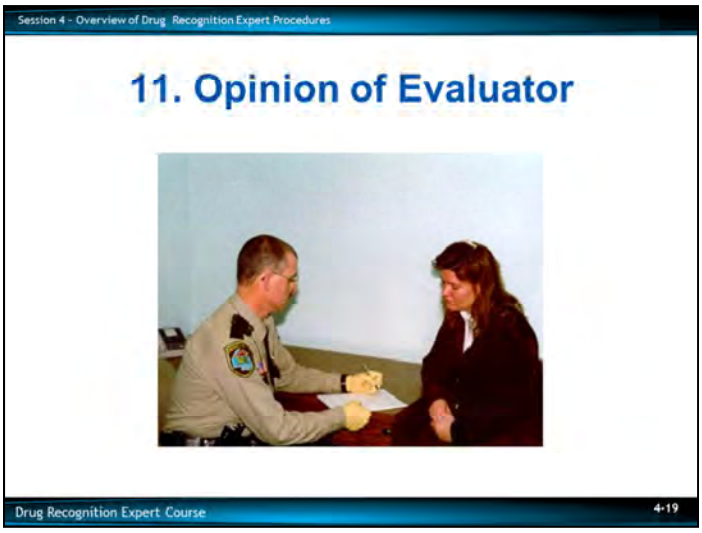


Subject's Statements and Other Observations
At this point in the examination, the DRE may have reasonable grounds to believe the subject is under the influence of a drug or drugs.

The DRE may also have at least an articulable suspicion as to the category or categories of drugs causing the impairment.

The DRE should proceed to interview the subject to support their opinion concerning the drug category or categories involved.
Emphasize any such interview can proceed only in conformance with formal admonition and strict observance of the subject's Constitutional rights.

The DRE must carefully record the subject's statements and any other observations that may constitute relevant evidence of drug-induced impairment.
Point out appropriate procedures for interviewing subjects vary with the probable category or categories of drugs involved.



Opinion of Evaluator

Based on all of the evidence and observations gleaned from the preceding steps, the DRE should be able to reach an informed opinion as to:

- Whether the subject is under the influence of a drug or drugs, and if so
- The probable category or categories of drugs causing impairment

The DRE must record a narrative summary of the facts forming the basis for their opinion.

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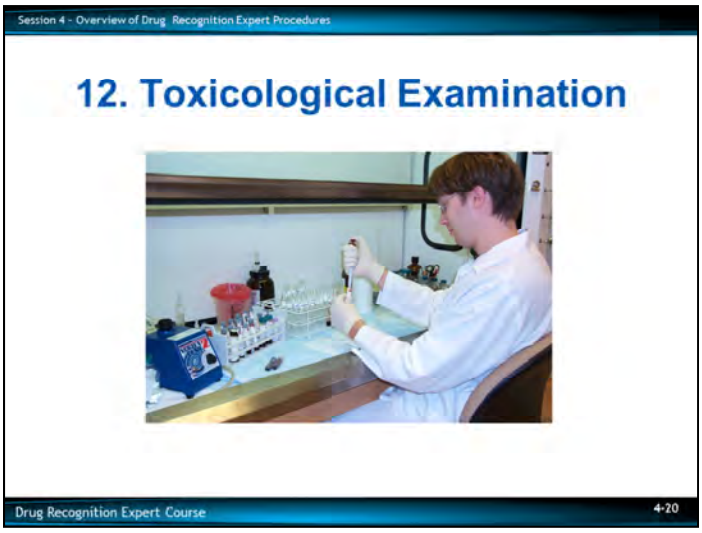


Toxicological Examination

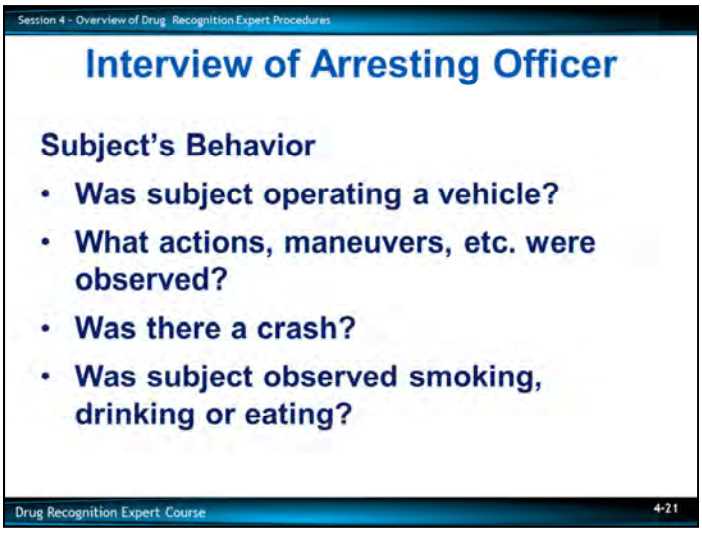
The toxicological examination is a chemical test or tests designed to obtain scientific, admissible evidence to support the DRE's opinion.

Departmental policy and procedures should be followed in requesting, obtaining, and handling the toxicological sample.

Point out in some cases the arresting officer may have already obtained the specimen prior to the DRE's arrival.

Point out just because the subject refuses to provide a specimen for analysis does not affect the evaluation or your ability to form an opinion.

Solicit participants' comments and questions concerning this preview of the DRE procedures.

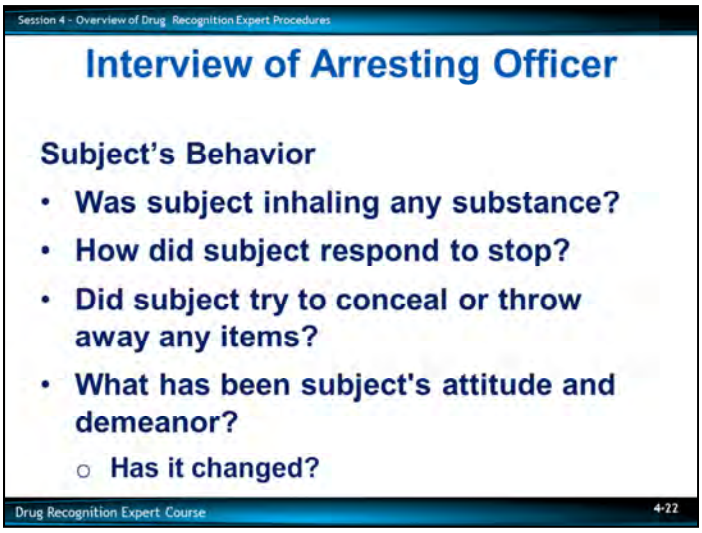


B. <u>Interview of the Arresting Officer</u>

The purpose of the interview of the arresting officer is to obtain a summary of the subject's actions, behaviors, etc. that led to the arrest and the suspicion that drugs other than alcohol may be involved. ***Emphasize DREs should form the habit of posing explicit questions to arresting officers using a systematic process. A cursory or open-ended interview (e.g., "What do we have here?") may fail to elicit some relevant information because arresting officers won't always know what is relevant to a drug evaluation.***

Interview Behavior
Issues concerning the subject's behavior:

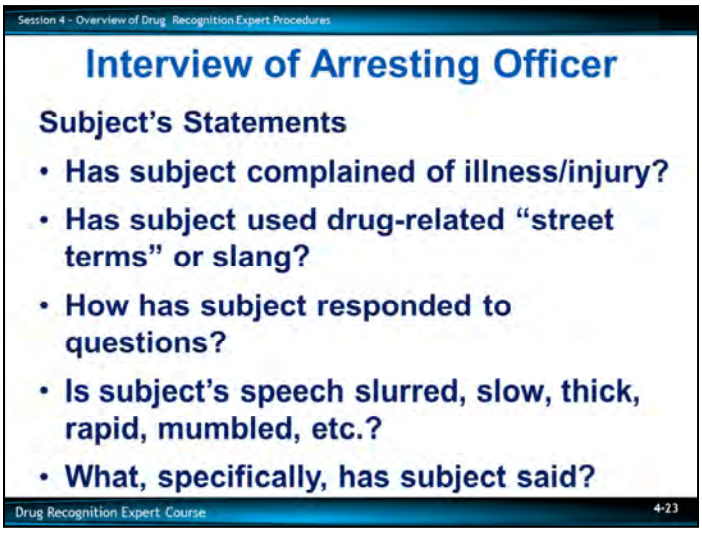
- Was the subject operating a vehicle?
- What actions, maneuvers, etc. were observed?
- Was there a crash?
  - If yes, was the subject injured?
- Was the subject observed smoking, drinking or eating?



- Was the subject apparently inhaling any substance?
- How did the subject respond to the arresting officer's stop?
- Did the subject attempt to conceal or throw away any items or materials?
- What has been the subject's attitude and demeanor during contact with the arresting officer and have there been any changes?

Ask participants to suggest any other questions that might be relevant concerning the arresting officer's observations of the subject's behavior.

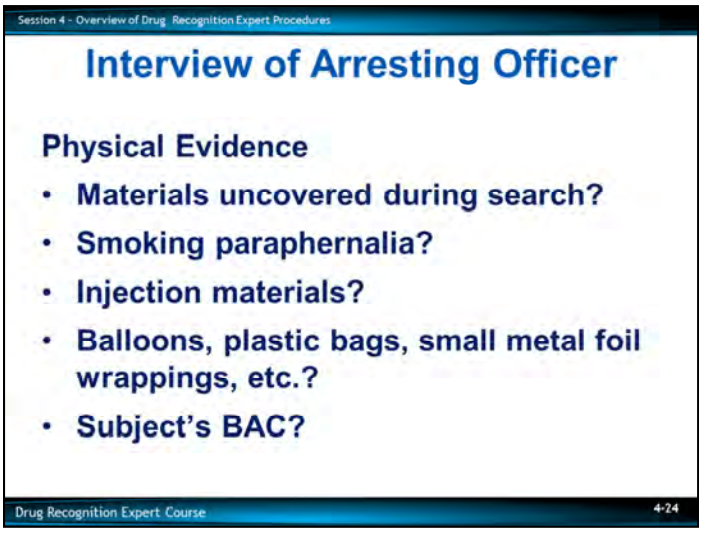
Remind participants they are acting as investigators and advisors to the arresting officers.



Interview Concerning Subject's Statements

- Has the subject complained of an illness or injury?
- Has the subject used any "street terms" or slang associated with drugs or drug paraphernalia?
- How has the subject responded to the arresting officer's questions?
- Was the subject's speech slurred, slow, rapid, thick, mumbled, etc.?
- What, specifically, has the subject said to the arresting officer?

Ask participants to suggest any other questions that might be relevant concerning statements the subject made in the arresting officer's presence.



Interview: Physical Evidence

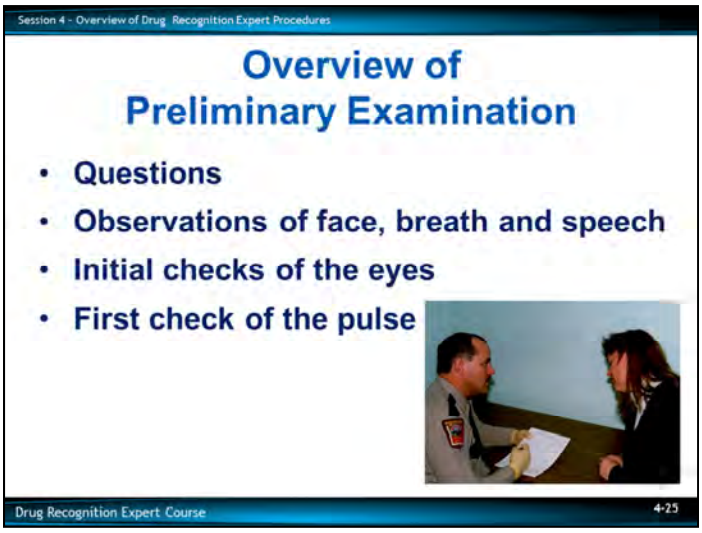
Issues concerning physical evidence:

- What items or materials were uncovered during the search of the subject or vehicle?
- Were any smoking paraphernalia uncovered?
- Were any injection materials, i.e., needles, syringes, leather straps, rubber tubes, spoons, bottle caps, etc. found
- Were there any balloons, plastic bags, small metal foil wrappings, etc. found?
- What was the subject's blood alcohol concentration?

Emphasize the subject should be requested to submit to a breath test if that has not already been done.

Ask participants to suggest any other relevant questions concerning physical evidence.

Solicit participants' comments and questions concerning the interview of the arresting officer.

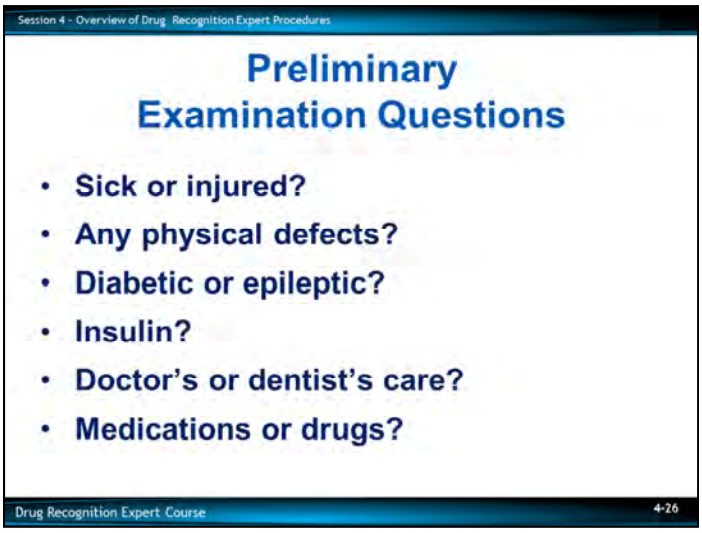


C. <u>Overview of the Preliminary Examination</u>

The preliminary examination consists of:

- Questions
- Observations of face, breath, and speech
- Initial checks of the eyes
- The initial check of the subject's pulse

Point out pulse check actually is part of the examination of the subject's vital signs. Pulse is checked three times during the drug influence evaluation to rule out nervousness as a factor of elevated pulse. This gives a more accurate and reliable pulse.



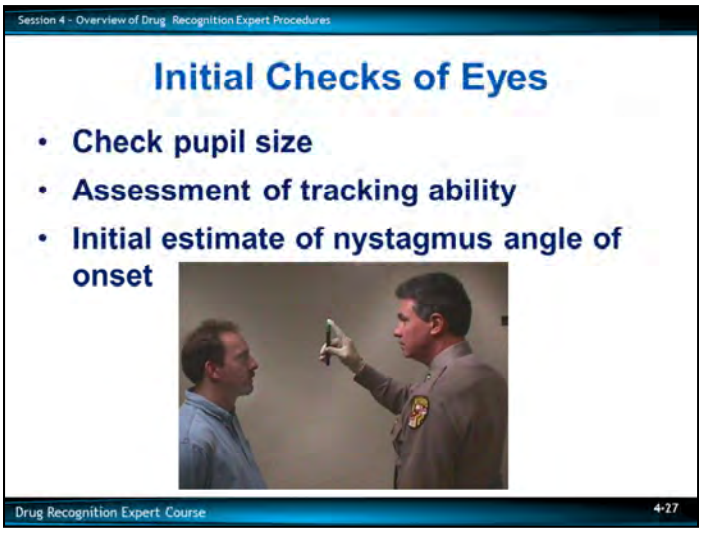
Preliminary Examination Questions

The questions deal with injuries or medical problems the subject may have. They include:

Point out these questions are incorporated into the Drug Influence Evaluation Form which the participants will use during all of their practice sessions.

Briefly discuss the relevance of each question.

- Are you sick or injured?
- Do you have any physical defects?
- Are you diabetic or epileptic?
- Do you take insulin?
- Are you under a doctor or dentist's care?
- Are you taking any medications or drugs?



Initial Checks of the Eyes
The initial checks of the subject's eyes include several particularly important steps, which include:

Check of the Size of Each Pupil
The initial examination of the eyes may reveal signs of injury or illness. A difference in pupil size of greater than 0.5 mm may indicate an injury or existing medical condition.
Point out if the two pupils are of unequal size, this may indicate the subject is suffering from a head injury, brain tumor, or other condition that may require prompt medical attention.
Also point out the influence of certain categories of drugs may be present if the pupils are dilated or constricted.

Assessment of the Ability of the Eyes to Track a Moving Object
Demonstrate how to use a stimulus to assess the ability of eyes to track a moving object.

The presence of nystagmus indicates the possible presence of certain categories of drugs.
Point out if the two eyes do not exhibit the same tracking ability, this too may indicate a head injury or other medical problem.

Initial Estimation of the Angle of Onset of HGN

The approximate angle of onset may indicate the presence of some drug other than alcohol.
Point out certain categories of drugs cause HGN. For example, this will be true of CNS Depressants, Inhalants, and Dissociative Anesthetics.

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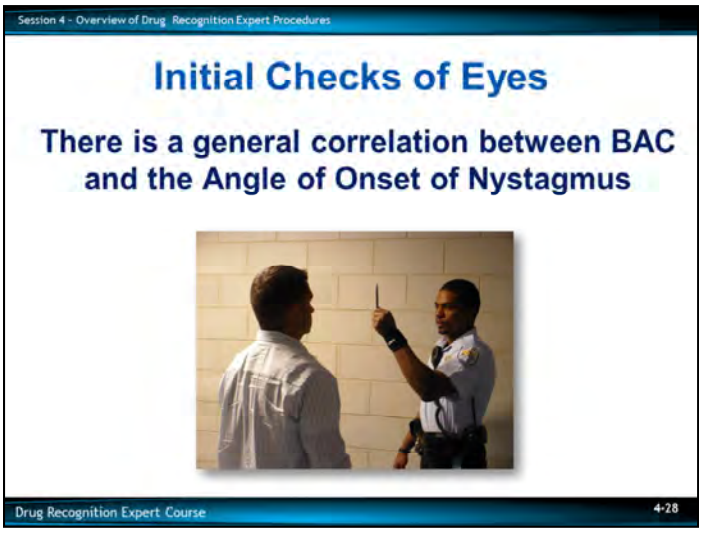

Remind participants there is a general correspondence, or correlation, between BAC and the Angle of Onset of Nystagmus. Generally speaking, the higher the BAC, the earlier the angle of onset.
If the subject has also ingested some other drug that also causes nystagmus, the angle of onset may occur even earlier than the BAC would indicate.

Example: Suppose you are examining a subject who has an angle of onset at 40 degrees. Based on that alone, you would expect the person's BAC to be in the .08 - .10 percent range. But if that subject has also ingested a Dissociative Anesthetic, the onset could occur much earlier, perhaps as soon as the eyes start to move to the side.
Emphasize if the angle of onset does not match the BAC level, the DRE should be alert to the possible presence of some drug other than alcohol.
But also emphasize the nystagmus onset angle could correspond very closely to what would be expected from the alcohol level alone even though the subject has ingested large quantities of other drugs.

For example: Cannabis, Narcotic Analgesics, CNS Stimulants, and Hallucinogens do not cause nystagmus and will not affect the angle of onset.

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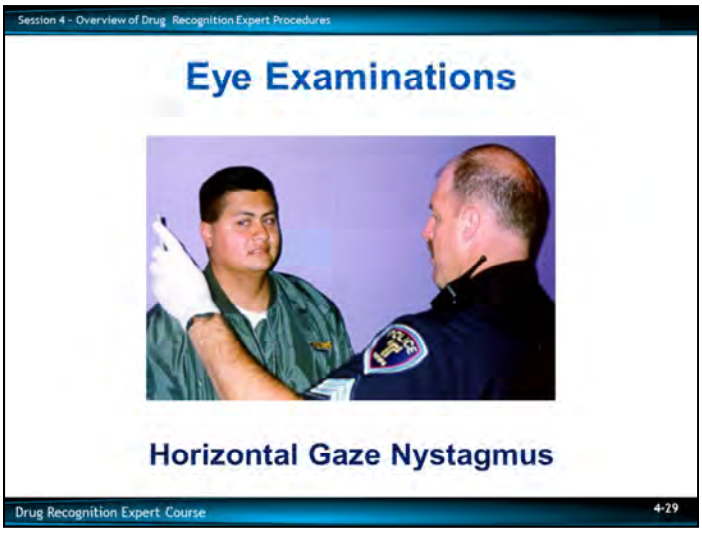
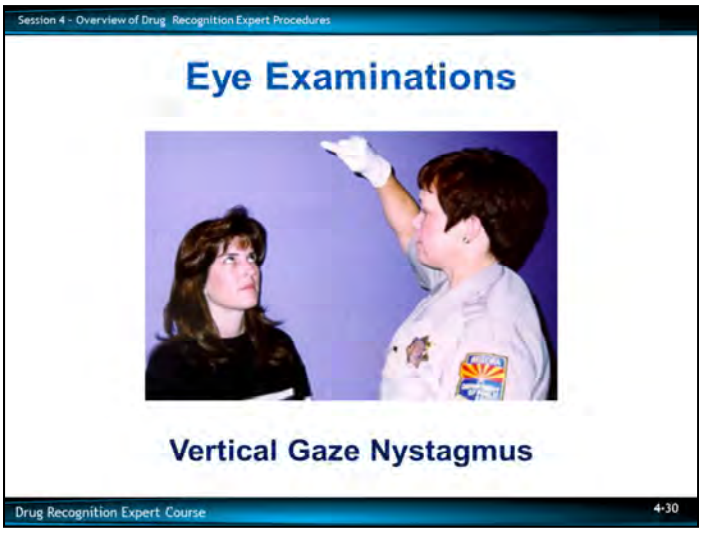


D. <u>Examinations of the Eyes</u>

Eye Examinations
Emphasize this is a full scale, formal, and precise examination unlike the initial estimation of angle of onset conducted during the preliminary examination.
The Examinations of the Eyes consist of three tests:

HGN
Clue #1 – Lack of Smooth Pursuit
Clue #2 – Distinct and Sustained Nystagmus at Maximum Deviation
Clue #3 – Angle of Onset
Point out if the subject's eyes begin to jerk before they have moved to the 30 degree angle, the DRE will not attempt to estimate the angle precisely, but will simply record the subject exhibits "immediate onset."
Point out the importance of checking for each of these clues in every examination of the eyes.



Vertical Gaze Nystagmus (VGN)

Point out VGN is an involuntary jerking of the eyes (up-and-down) which occurs when the eyes gaze upward at maximum elevation.

Select a participant and demonstrate how to perform a test of VGN on that participant.

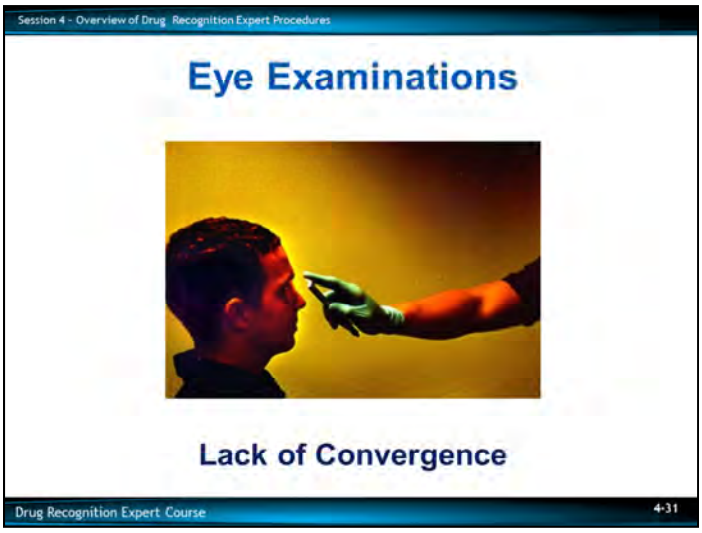
Hold the stimulus horizontally in front of the subject's face and about 12-15 inches in front of their face.

Instruct the person to focus on the center of the stimulus and to keep the head steady. Raise the stimulus until the subject's eyes are elevated as far as possible. Hold the eyes at that position for a minimum four seconds.

If the eyes are observed to jerk noticeably, VGN is present.

Point out certain types of drugs tend to cause VGN, while others do not.

Also point out VGN tends to develop with relatively high doses of certain drugs for that individual.



Illustrate on the dry erase board or easel/easel pad different examples of LOC.
Lack of Convergence (LOC)
Point out LOC is the inability of the eyes to draw in toward the center (cross) while fixating on a stimulus being moved in toward the bridge of the nose.
LOC is checked by first getting the subject to focus on and track the stimulus as it slowly moves in a circle in front of the subject's face.
Point out the circular motion (either left or right) serves to demonstrate the subject is tracking the stimulus.
Demonstrate this circular motion using the participant volunteer.

Then, the stimulus is slowly pushed in toward the bridge of the subject's nose and held for approximately one (1) second.
Demonstrate using the participant volunteer.
Remind participants that it is a good idea to conduct the LOC test twice to confirm the results.
Point out the stimulus does not actually touch the subject's nose, stopping approximately, but no closer than, 2 inches from the nose.

Under the influence of certain types of drugs, the eyes may not be able to converge.
Point out many people may not be able to converge their eyes.
Remind participants subjects who normally wear reading glasses should be afforded the opportunity to wear their glasses during the LOC test if available.
Excuse the participant volunteer and thank him or her for participating.
Solicit participants' comments and questions concerning the Examinations of the Eyes.

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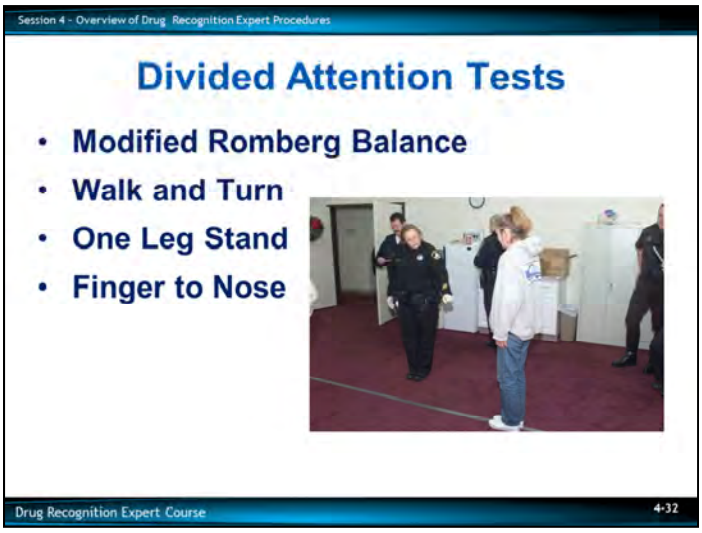


E. <u>Divided Attention Tests</u>

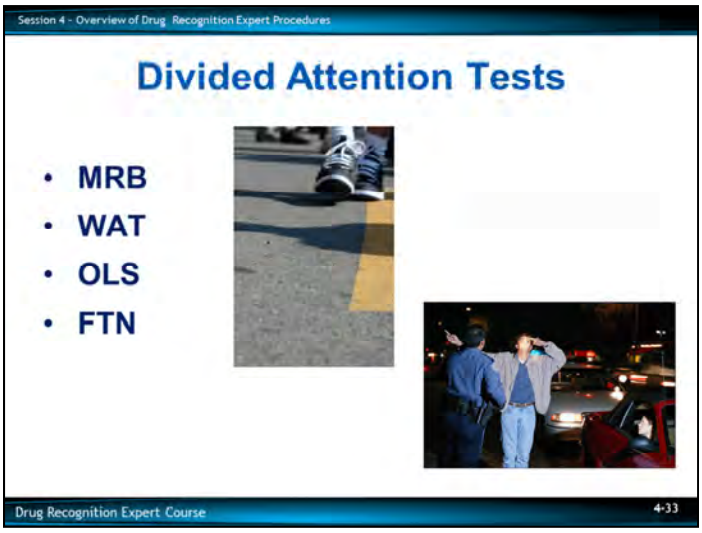
Several Divided Attention tests used for drug examinations are the same familiar tests used for examining alcohol-impaired subjects.

- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS)

Point out the OLS is administered twice during the DEC drug influence evaluation (one on each leg).

- Finger to Nose (FTN)

Point out all of these tests were covered in their entirety in Session 3 of the Pre-School
You may need to review the tests. If so, the tests are detailed in the Participant Manual for this session.

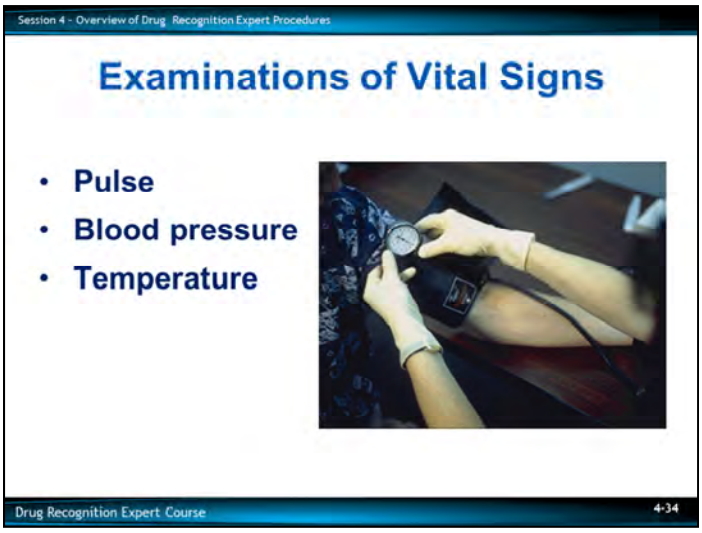


MRB Test Demonstration
Instruction stage:
Select a participant known to be proficient in administering the MRB test. Select another participant to serve as the test subject. Instruct the participant administrator to administer the MRB test to the participant subject. Point out officer safety is of major importance during this test. Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.

WAT Test Demonstration
Instruction stage:
Select a participant known to be proficient in administering the WAT test. Select another participant to serve as the test subject. Instruct the participant administrator to administer the WAT test to the participant subject. Point out officer safety is of major importance during this test. Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.

OLS Test Demonstration
Instruction stage:
Select a participant known to be proficient in administering the OLS test. Select another participant to serve as the test subject. Instruct the participant administrator to administer the OLS test to the participant subject. Point out officer safety is of major importance during this test. Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.

FTN Test Demonstration
Instruction stage:
Select a participant known to be proficient in administering the FTN test to administer the test. Select another participant to serve as the test subject. Instruct the participant administrator to administer the test to the participant subject. Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating. Point out participants will have numerous opportunities to observe and practice the divided attention tests during the remainder of the course.



F. <u>Examinations of Vital Signs</u>

Point out these examinations will be covered in detail in Session 7.

The vital signs consist of three things routinely measured in basic physical examinations:

- Pulse
- Blood Pressure
- Temperature

These measurements require some familiar instruments.

Display these items.

- Stethoscope
- Manual blood pressure cuff and gauge (sphygmomanometer)
- Oral thermometer with disposable mouthpieces

Any other equipment must be approved by the Technical Advisory Panel (TAP), a subcommittee of the International Association of Chiefs of Police (IACP) Highway Safety Committee.

A time piece capable of measuring in seconds is also required.

Point out procedures for measuring blood pressure, pulse, and temperature will be explained and practiced later in this course.

Solicit participants' comments and questions concerning examinations of vital signs.

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G. <u>Dark Room Checks of Pupil Size</u>

Dark Room Checks for Pupil Size
The principal activity that takes place during the dark room examinations is the estimation of pupil size under three lighting conditions, or levels.

- Room light
- Near total darkness
- Direct light

Point out the room light estimation is conducted prior to darkening the room lights. Whenever possible, the room light estimation should be conducted in the same room where the other pupil estimations are conducted.

For safety reasons, whenever possible, another officer should always accompany you and the subject into the dark room.
Point out this is essential for officer safety. Remind participants no one should normally be carrying a firearm when in the presence of a subject during the dark room examination.

Room Light
Before turning off the lights, you will estimate the size of the subject's pupils under room light.
Point out some departments require the subject be handcuffed before going into the darkroom.

You must always first estimate the left pupil, then the right.

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Point out the subject should be instructed not to try to focus on you or on the penlight, but to look "slightly up and at a specific focal point" (straight ahead and several feet away) during the estimation of pupil size.
You must position the pupillometer alongside the eye to ensure an accurate estimation.

After you have completed the room light estimations, turn off the lights and wait at least 90 seconds to allow your eyes and the subject's eyes to adapt to the darkness.

Near Total Darkness
The next check will be of pupil size under near total darkness.

You will need the bare minimum amount of light necessary to see the subject's pupils and the pupillometer.

You can create the necessary light by covering the tip of the penlight with your finger or thumb. ***Demonstrate this. Point out a slight glow emanates. If possible, darken the room and exhibit the slight glow.***

The light is then moved near the subjects left eye just until it is possible to distinguish the colored portion of the eye (Iris).

Hold the pupillometer alongside the eye and locate the circle or semi-circle closest in size to the pupil. ***Repeat the procedure for the right eye.***

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Direct Light
The third and final check will be of the pupil size under direct light.

You will shine the full strength of the penlight directly into the subject's eye for a minimum of 15 seconds.
Point out it is necessary to maintain reasonably fresh batteries in the penlight.

Do this by activating the penlight pre-positioned in front of the eye.
Demonstrate this using a participant volunteer.

The penlight should be held close enough to the subject's eye so its beam fills the eye socket.
Demonstrate this. Point out this will illuminate the area that usually would be discolored if the subject had a "black eye."

When the light is initially shown into the eye, you will check for the pupil's reaction to light. Then immediately estimate the pupil size under direct light.
If possible, darken the room and exhibit the illumination using a participant volunteer.
Emphasize it is very important not to position the penlight too closely or too far away since this will affect the constriction or dilation of the pupil.
Excuse the participant and thank him or her for participating.

Other Activities
Two other activities are conducted while in the darkroom.
- Examination of the nasal area
- Examination of the oral cavity

Solicit participants' comments and questions concerning these checks of pupil size.

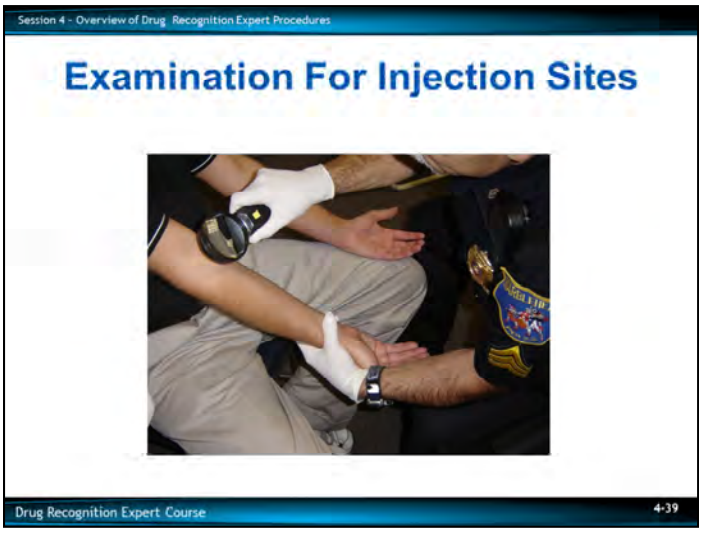
H. <u>Examination of Muscle Tone</u>

Muscle Tone
Starting with the subject's left arm, examine the arm muscles.

Firmly grasp the upper arm and slowly move down to determine muscle tone.

The muscles should appear flaccid, normal, or rigid to the touch.
Demonstrate.

Examine the right arm in the same fashion.



I. <u>Examination for Injection Sites</u>

Some injection sites may be relatively easy to notice.

Persons who frequently inject certain drugs develop lengthy scars, commonly referred to as "tracks," from repeated injections in the same veins.

Injection of certain drugs may result in severe caustic action against the skin and flesh producing easily observable sores.

Often, a fresh injection site may not be readily observable.
Point out injection sites can be observed with some drug categories. Injection sites will be covered in detail in Session 17.

Frequently, a DRE will locate the injection site initially by touch, running the fingers along such commonly used locations as the neck, forearms, wrists, back of hand, etc.
Emphasize gloves should be worn when touching the subject.
Select a participant and demonstrate a tactile search for injection sites.

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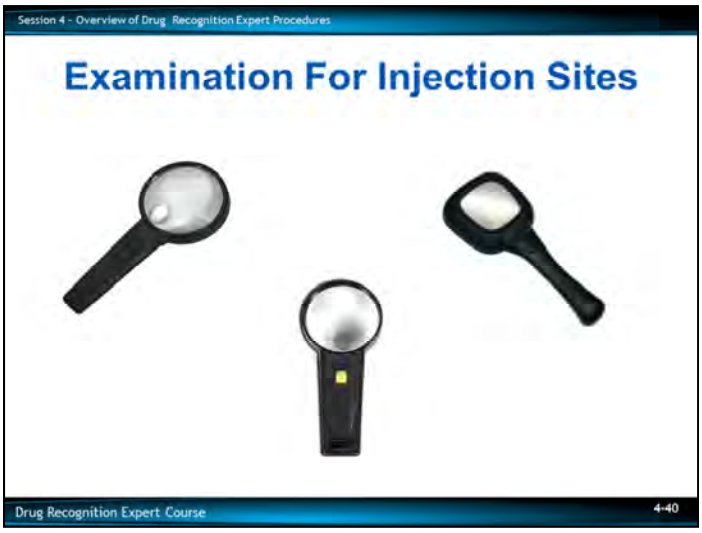
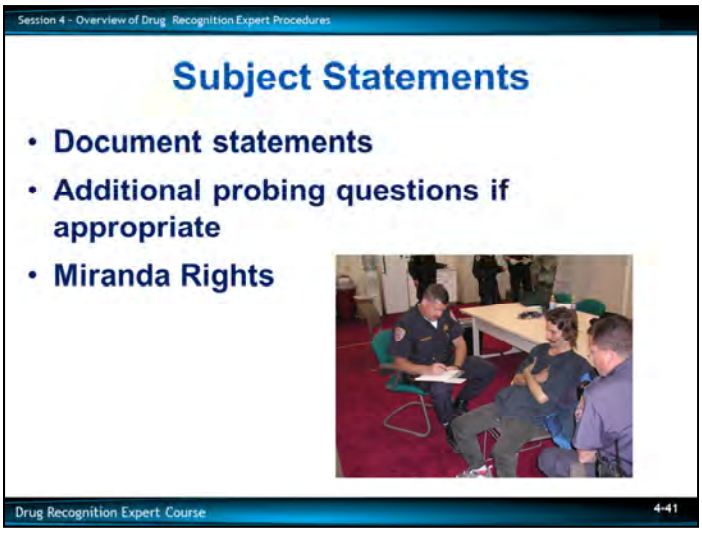


When the DRE locates a possible injection site, a light magnifying lens, commonly known as a "ski light," can be used to provide a magnified visual examination. "Ski" – short for schematic
If available, display this instrument. Demonstrate its use.
Solicit participants' comments and questions concerning examination for injection sites.
Point out hypodermic needles are sized according to gauge. The gauge of a needle is a measurement of the inside diameter.
Point out the gauge number represents how many needles of that size would be needed to equal one inch. The higher the gauge, the smaller the diameter of the needle, i.e., a 16 gauge needle is 1/16th of an inch.

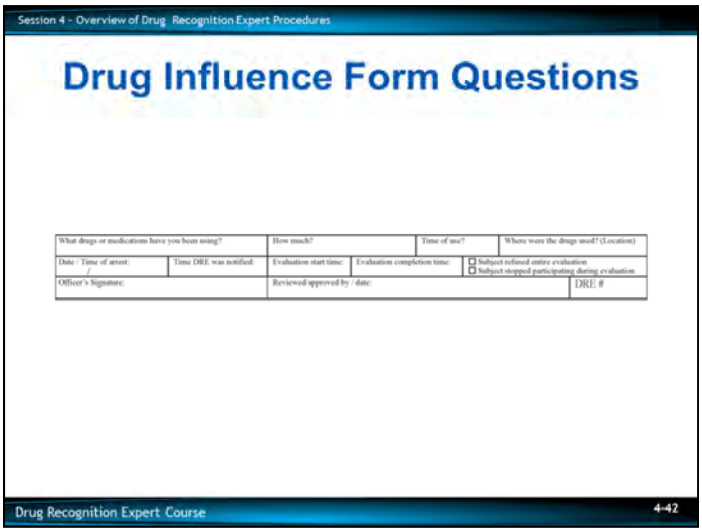
During this step, the third pulse is taken.



J. <u>Subject Statements</u>

All spontaneous statements and subject's response to questions should be documented. Ask additional probing questions as appropriate.

Remind participants to make sure the subject has been advised of their Constitutional rights.
Give specific examples of probing questions, admissions, and denials.
Ask participants for additional examples and list all on dry erase board or easel/easel pad.

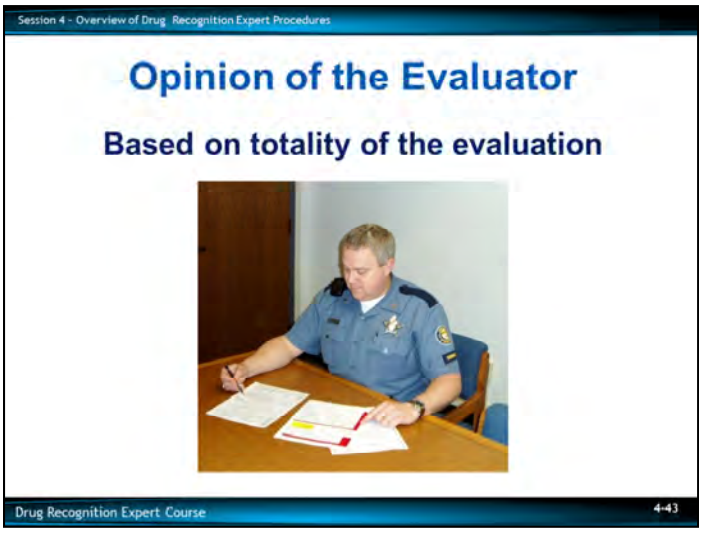


Drug Influence Form Questions:

- What medication or drug have you been using? How much?
- Time of use?
- Where were the drugs used? (location)

Be Sure to Record:

- Date/Time of Arrest
- Time DRE Notified
- Evaluation Start Time
- Time Completed
- DRE signature (Include rank)
- ID #
- Reviewed by



K. <u>Opinion of the Evaluator</u>

By this point in the evaluation, the DRE should have formed an opinion of the category or categories of drugs responsible for any observed impairment.

This opinion is based on the totality of the evaluation.

L. <u>Toxicological Examination</u>

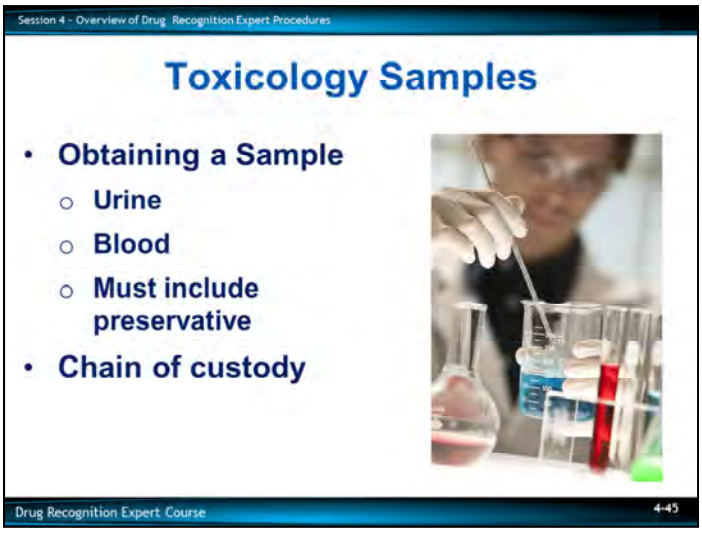
The toxicological examination is a chemical analysis of the subject's blood, urine, or oral fluid by an approved toxicology laboratory. This is not to be confused with the collection of the toxicology sample.

Toxicology Samples
Your State's implied consent statues will dictate the type of sample you can obtain; urine, blood, breath, or saliva.

Departmental policy, State laboratory guidelines, and procedures should be followed in requesting, obtaining, and handling the toxicology sample.

There may be times when the toxicology sample was obtained prior to Step 12 of the DRE protocol. If the toxicology sample has not been collected prior to Step 12, it should be collected now. The DRE should document the details of collecting the evidentiary toxicological sample regardless of when it was obtained.
Review participants' department's policy and procedures for requesting, obtaining, and handling toxicological samples.
Ask the participants to relate the law of their State. The implied consent laws may vary significantly from State to State.
Have the participants discuss their individual laws and possibly write their requirements on the flip-chart for comparison.

Specimen Containers
The type of container for collecting the sample will be dictated by the type of sample taken and the laboratory requirements where it will be tested.
Containers should be sterile and have a lid that will seal tightly. Make sure the seal is tight to prevent leaks.



Obtaining a Sample

- Urine – normally the officer must witness the collection of the sample
- Blood – should be drawn by a qualified technician and witnessed by the officer
- The sample must include a preservative
  - This is often pre-packaged in the container intended for this use.

Samples should be refrigerated or frozen as soon as possible to minimize degeneration during storage.

Chain of Custody

DREs should follow their department policy regarding the chain of custody of evidence. Particularly, DREs should ensure:

- The evidence is sealed properly, which may include officer identification markings (i.e., initials, labels, tags, and packaging)

- Proper completion of paperwork for the chain of custody and laboratory analysis of the sample

- The sample is properly submitted following established evidential protocols

These are issues that must be addressed with the individual agencies to insure proper and standardized procedures. Participants should follow-up with the appropriate representatives from their agencies to coordinate this activity.

Solicit participants' comments and questions concerning toxicological examinations.

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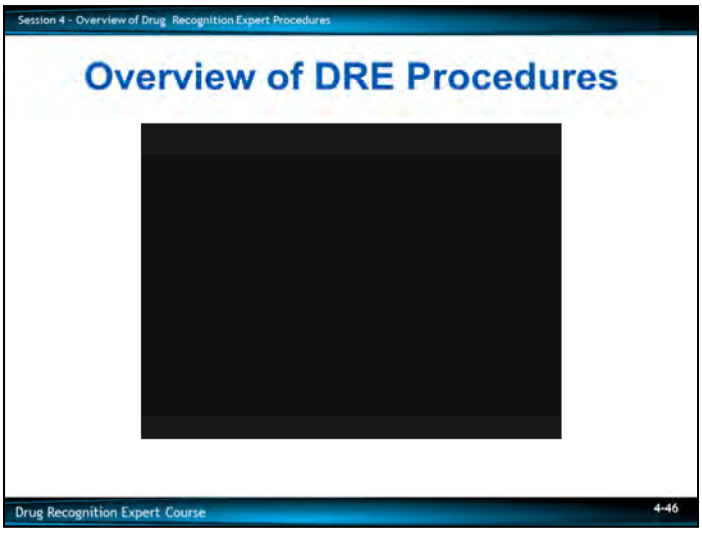
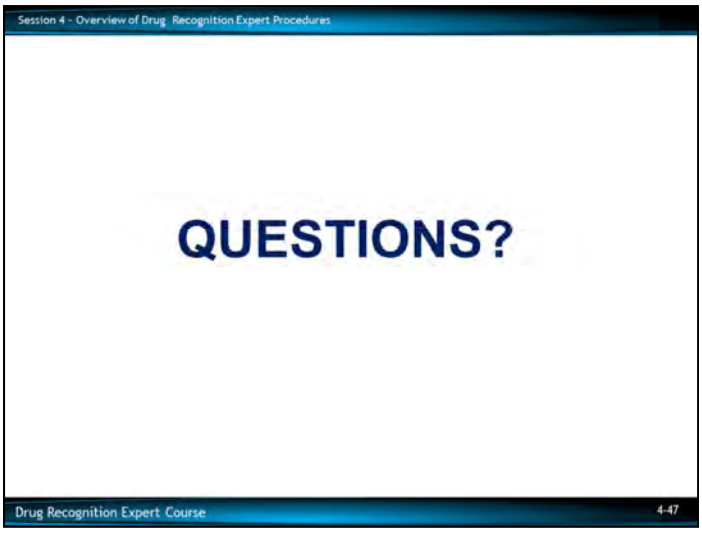


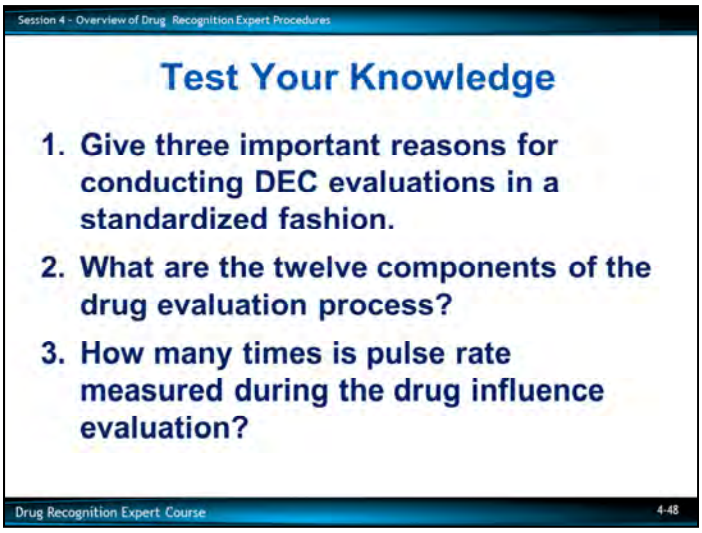
M. <u>Video Demonstrations (Optional)</u>

Instruct participants to refer to their drug influence evaluation checklist and the drug evaluation form as they watch the video.

Play the video "Overview of DRE Procedures." (This is the same video shown during Session 2 of the Pre-School). Questions?



Solicit participants' comments and questions regarding Overview of DRE Procedures.



Test Your Knowledge

1. Give three important reasons for conducting DEC evaluations in a standardized fashion.

Help avoid mistakes, help promote and maintain professionalism and consistency among DREs, and help secure the court's acceptance of your testimony.

2. What are the twelve components of the drug evaluation process?

1. ***Breath Test***
2. ***Interview with Arresting Officer***
3. ***Preliminary Exam***
4. ***Eye Exam***
5. ***Divided Attention Test***
6. ***Vital Signs Exam***
7. ***Dark Room Exam***
8. ***Muscle Tone Exam***
9. ***Injection Site Exam***
10. ***Subject Interview***
11. ***Opinion of the Evaluator***
12. ***Toxicological Examination***

3. How many times is pulse rate measured during the drug influence evaluation?

Three

International Association of Chiefs of Police

Drug Evaluation and Classification Program

Drug Influence Evaluation Checklist

_____ 1. Breath alcohol test

_____ 2. Interview of arresting officer

_____ 3. Preliminary examination and first pulse
(Note: Gloves must be worn from this point on.)

_____ 4. Eye examinations

_____ 5. Divided attention tests:

- _____ Modified Romberg Balance
- _____ Walk and Turn
- _____ One Leg Stand
- _____ Finger to Nose

_____ 6. Vital signs and second pulse

_____ 7. Dark room examinations and ingestion examination

_____ 8. Check for muscle tone

_____ 9. Check for injection sites and third pulse

_____ 10. Interrogation, statements, and other observations

_____ 11. Opinion of evaluator

_____ 12. Toxicological examination

DRUG INFLUENCE EVALUATION

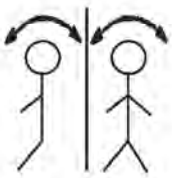
Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle)	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time /Location / /	Breath Test: Test Refused ☐ Results: Instrument #:		Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today? When?		What have you been drinking? How much?	Time of last drink?
Time now/ Actual /	When did you last sleep? How long?		Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No		Are you under the care of a doctor or dentist? ☐ Yes ☐ No	
Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:		Coordination:	
Speech:	Breath odor:		Face:	
Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery		Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal
Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

Pulse and Time 1. ____ / ____ 2. ____ / ____ 3. ____ /	HGN	Left Eye	Right Eye	**Convergence** Right eye Left eye
	Lack of Smooth Pursuit			
	Maximum Deviation			
	Angle of Onset			

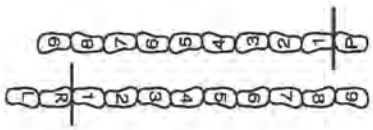
/30 **One Leg Stand** /30

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance
Approx. Approx.



Walk and Turn Test

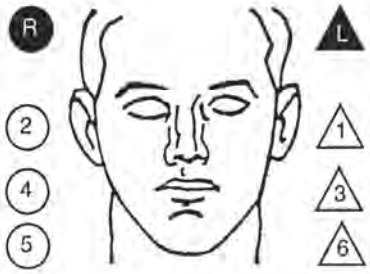


Cannot keep balance ____
Starts too soon ____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation ____estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

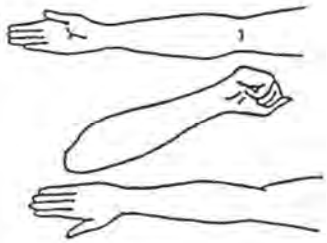
Nasal area:

Oral cavity:

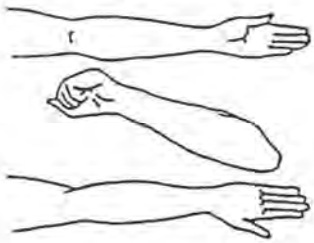
Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM



LEFT ARM



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid
Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

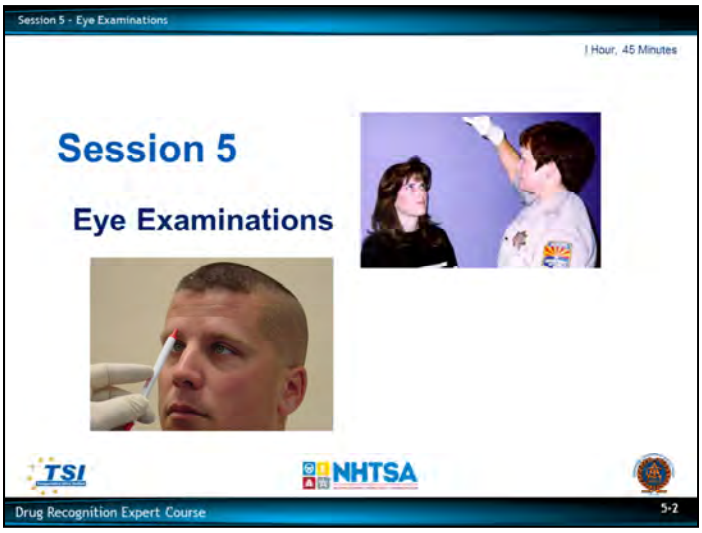
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:

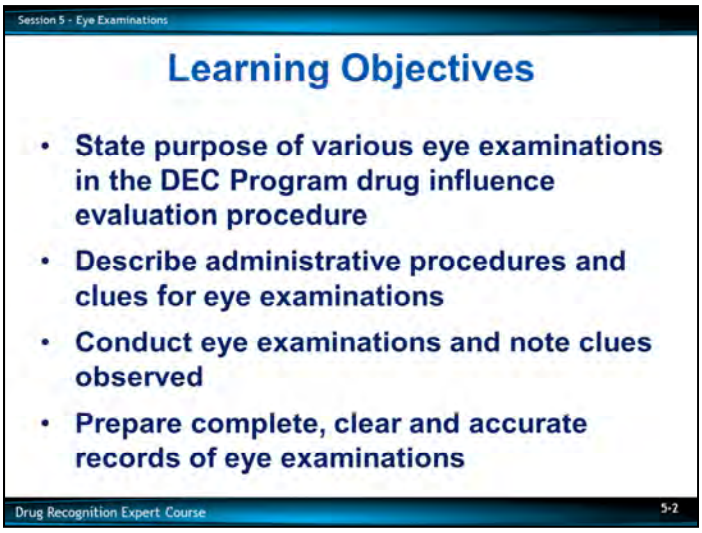
☐ Subject refused entire evaluation
☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis


Session 5 - Eye Examinations
1 Hour, 45 Minutes
Session 5
Eye Examinations
TSI
NHTSA
Drug Recognition Expert Course
5-2



Briefly describe the objectives for this session.

Upon successfully completing this session, the student will be able to:

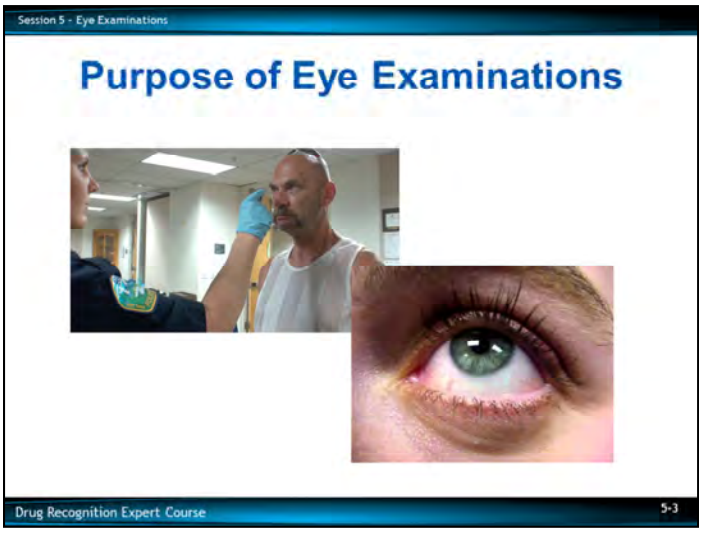
- State the purpose of various eye examinations in the Drug Evaluation and Classification (DEC) Program drug influence evaluation procedure
- Describe the administrative procedures for the eye examinations
- Describe the clues for each eye examination
- Conduct the eye examinations and note the clues observed
- Prepare complete, clear, and accurate records of the eye examinations

CONTENT SEGMENTS

A. Purpose of the Examinations
B. Procedures and Clues
C. Demonstrations
D. Document Procedures

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Student-Led Demonstrations
Students' Hands-On Practice
Reading Assignments



A. <u>Purpose of the Eye Examinations</u>

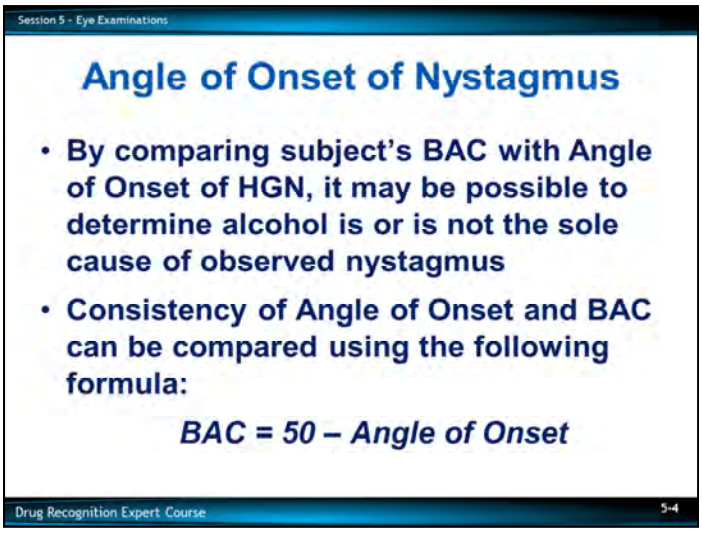
The principal purpose of all of the eye examinations is to obtain articulable facts indicating the presence or absence of specific categories of drugs.

Certain drug categories usually cause the eyes to react in specific ways. Other drug categories usually do not cause those reactions.

The tests of Horizontal Gaze Nystagmus (HGN) and Vertical Gaze Nystagmus (VGN) provide important indicators of the drug categories that may or may not be present.
Ask participants: "What causes HGN?" Alcohol and certain other drugs will cause HGN.

If HGN is observed, it is likely the subject may have ingested alcohol or another CNS Depressant, an Inhalant, a Dissociative Anesthetic, or a combination of those.

If VGN is observed, the implication may be the subject ingested a large dose of alcohol for that individual, a Dissociative Anesthetic, such as PCP, or high doses of other Depressants or Inhalants.
Point out it is very unlikely a subject would exhibit VGN without also exhibiting HGN.



By comparing the subject's blood alcohol concentration (BAC) with the Angle of Onset of HGN, it may be possible to determine that alcohol is or is not the sole cause of the observed nystagmus. **Clarification: If the angle of onset is significantly inconsistent with the BAC, the implication may be the subject has also taken a Dissociative Anesthetic, such as PCP, an Inhalant, or some CNS Depressant other than alcohol.**

The consistency of the Angle of Onset and BAC can be compared using the following formula:
Write the formula on the dry erase board or easel/easel pad:
BAC = 50 – Angle of Onset
Emphasize this is not an absolute mathematical formula.

Explanation: BAC = 100 x blood alcohol (i.e., if blood alcohol is 0.10, BAC = 10)

Example: If onset angle is 35 degrees, then: BAC = 50 – 35 = 15

The corresponding BAC would be approximately 0.15.

Keep in mind this formula is only a statistical approximation. It is not an exact relationship for all subjects at all times.

Emphasize this point: The formula can easily be "off" by 0.05 or more even though the subject has consumed no drug other than alcohol.

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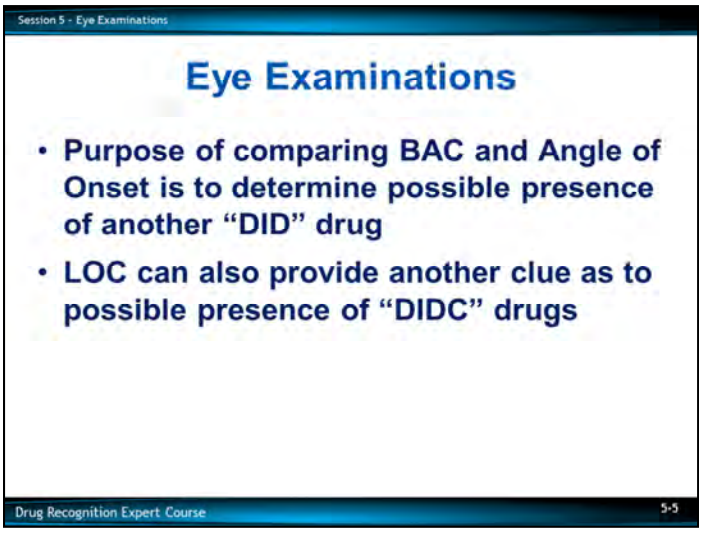
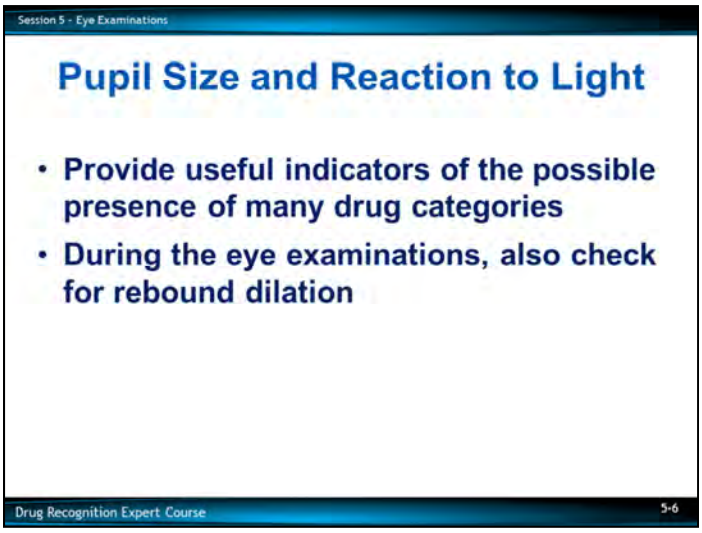


The purpose of comparing BAC and Angle of Onset is to obtain a general indication of the possible presence of another CNS Depressant, a Dissociative Anesthetic, or an Inhalant.

The check for Lack of Convergence (LOC) can provide another clue as to the possible presence of Depressants, Inhalants, Dissociative Anesthetics, or Cannabis ("DIDC" drugs).

LOC is also an indicator of the possible presence of Cannabis.
Point out a DRE might begin to suspect the presence of Cannabis if LOC was observed but no nystagmus was observed.



- The checks of pupil size and Reaction to Light provide useful indicators of the possible presence of many drug categories

- CNS Depressants, CNS Stimulants, and Inhalants will normally cause the pupils to react slowly
  - There will generally be little movement with Narcotic Analgesics

- CNS Stimulants and Hallucinogens normally will cause the pupils to dilate

- Cannabis normally causes dilation of the pupils, although this isn't always observed

Point out pupil dilation due to Cannabis isn't always observed in laboratory studies but may be due to lab dose levels are less than "street" doses.

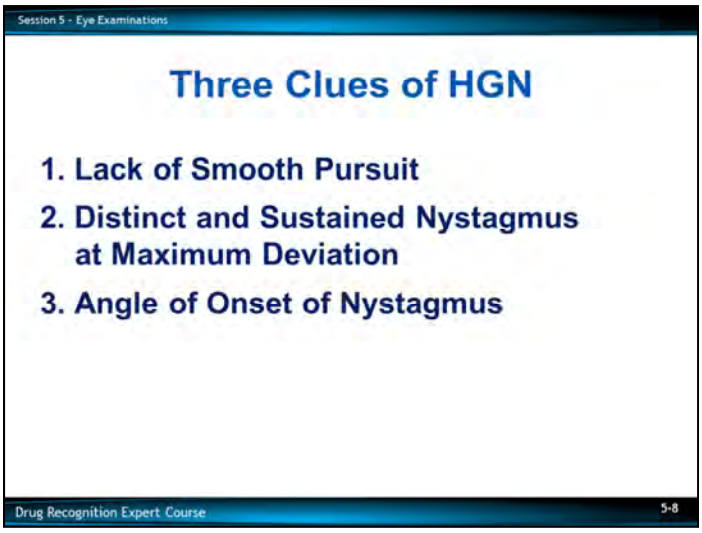
- Some specific Inhalants may cause pupil dilation

- Narcotic Analgesics will normally cause observable constriction of the pupils

During the eye examinations you will also check for rebound dilation.

Review of Eye Examinations

- HGN
- VGN
- LOC
- Pupil Size Estimation
- Reaction to Light



B. <u>Procedures and Clues</u>

Three Clues of HGN

- Lack of Smooth Pursuit
- Distinct and Sustained Nystagmus at Maximum Deviation
- Angle of Onset of Nystagmus

Remind participants prior to checking for the three clues of nystagmus, they need to check for Equal Pupil Size, Equal Tracking, and Resting Nystagmus.

HGN test consists of three separate checks, administered independently to each eye.

First Clue: Lack of Smooth Pursuit

Select a participant and demonstrate the first check of HGN on that participant.

If the subject is wearing contact lenses, note that fact on the report but don't have the subject remove them.

Mention research and testing has proven contacts will not interfere with the HGN test or cause nystagmus.

If the subject is wearing eyeglasses, have him or her remove them.

- Position the stimulus approximately 12 – 15 inches in front of the subject's nose

- Hold the tip of the stimulus slightly above the level of the subject's eye

Point out this procedure ensures the subject's eyes will be wide open and easy to observe.

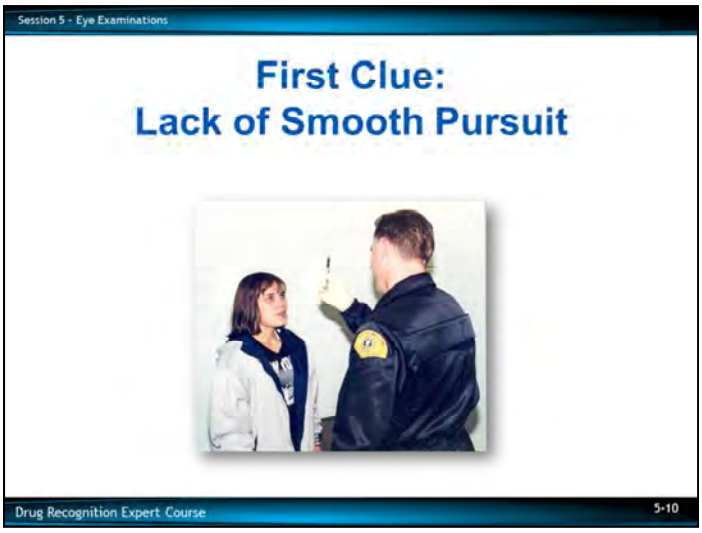
- Instruct the subject to hold the head still and follow the stimulus with their eyes and to keep looking at the stimulus until told the test is over

The first check is for "Lack of Smooth Pursuit."

- Move the stimulus smoothly all the way to the subject's left side and back all the way to the right side

Point out the stimulus should be moved at a speed that requires approximately 2 seconds to bring it from the center out all the way to the side. It should then be moved from side to side at the same speed. This means it should take approximately 4 seconds to move from the extreme left to the extreme right.

Make at least two complete passes of the stimulus: to the left side, to the right side, back to the left side, and finally back to the right side.



- When doing this, don't pause at the center of the subject's face; move all the way to the left, then all the way to the right, then again all the way to the left and back all the way to the right, in a smooth, continuous motion

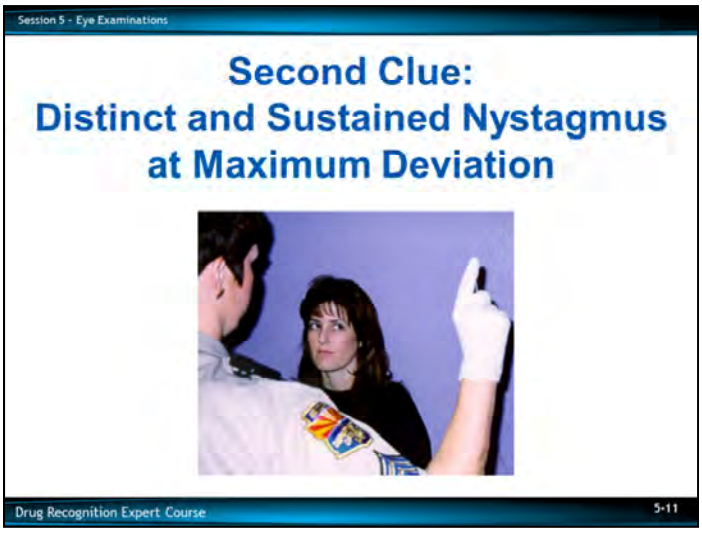
- While the eye is moving, examine it for evidence of a Lack of Smooth Pursuit

Use the following analogy:

- ***A smoothly pursing eye will move without friction, much the way a windshield wiper glides across the windshield when it is raining steadily***

- ***An eye showing Lack of Smooth Pursuit will move in a fashion similar to a wiper across a dry windshield***

Instruct participants to work in pairs, taking turns checking each other's eyes for Lack of Smooth Pursuit.
Excuse the participant volunteer and thank him or her for participating.
Monitor, coach, and critique the participants' practice.
Allow this practice to continue for only about 2 minutes.



Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation

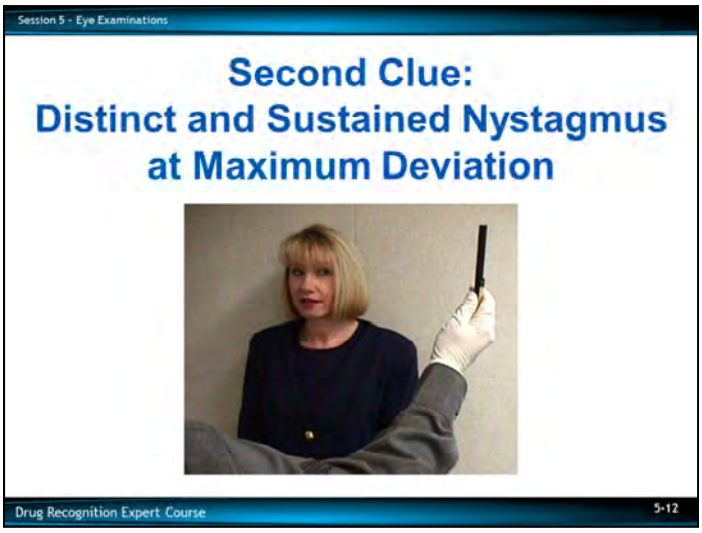
The second check is for "Distinct and Sustained Nystagmus at Maximum Deviation."

Select a participant and demonstrate the second check of HGN on that participant.

- Again position the stimulus as before
- Move the stimulus all the way to the subject's left side and hold it there so the subject's eye is turned as far to the side as possible
- Hold the eye at that position for a minimum of 4 seconds, to check carefully for jerking that may be present and is distinct

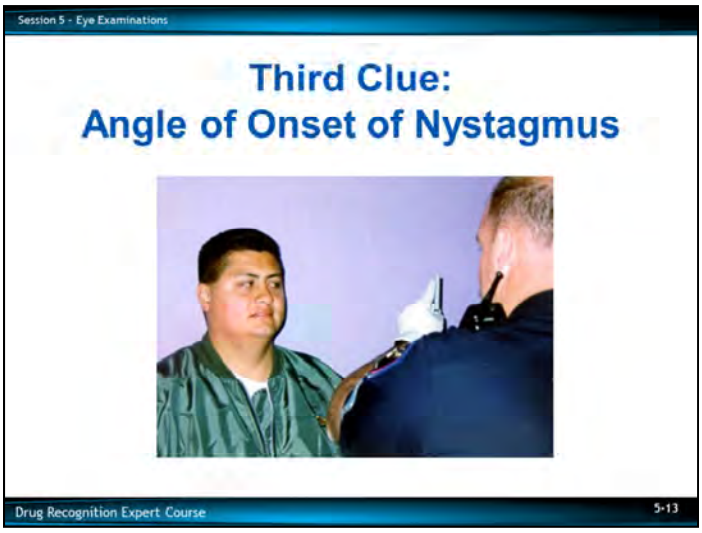
Point out for this to be a clue, the nystagmus (jerking) must be distinct and sustained.

When you have completed this check for the left eye, repeat the process for the right eye. Then, do it once again for the left eye, and again for the right, to verify distinct and sustained nystagmus is or is not present.



Point out some people exhibit slight jerking of the eye at maximum deviation, even when unimpaired, but this will not be evident or sustained for more than a few seconds. When impaired by alcohol and CNS Depressants, Inhalants, or Dissociative Anesthetics ("DID" drugs), the jerking will be larger, more pronounced, sustained for more than 4 seconds, and easily observable.
A slight or barely visible tremor is not sufficient to consider this clue present.

A definite, sustained jerking must be seen.
Excuse the participant volunteer and thank him or her for participating.
Instruct participants to work in pairs, taking turns checking each other's eyes for Distinct and Sustained Nystagmus at Maximum Deviation.
Monitor, coach, and critique the participants' practice.
Allow this practice to continue for only about 2 minutes.



Third Clue: Angle of Onset of Nystagmus

The final check is for the "Angle of Onset of Nystagmus."

Select a participant and demonstrate the third check of HGN on that participant.

- Position the stimulus as before
- Slowly move the stimulus to the subject's left side, carefully watching the eye for the first sign of jerking

Stimulus should be moved at a speed that requires approximately four seconds to travel from center to approximately 45 degrees.

- When you think you see the eye jerk, stop moving the stimulus and hold it still
- Verify the eye is, in fact, jerking

Point out if the eye is not jerking, it will be necessary to resume moving the stimulus slowly to the side, again observing for the first sign of jerking.

- Once you have established you have located the point of onset, estimate the angle

Point out angle estimation simply requires practice.

- Then, repeat the process for the right eye
- Then, again check onset for the left eye, and again for the right

Excuse the participant volunteer and thank him/her for participating.

Exhibit a template (if available).

Point out the template (if available) will be used during practice only.

Emphasize if the clues of HGN are markedly different for the two eyes, a neurological or other medical problem (such as head injury) may be present.

Participants' Initial Practice of Angle Estimation

Instruct participants to work in pairs, taking turns estimating angles of each other's eyes.

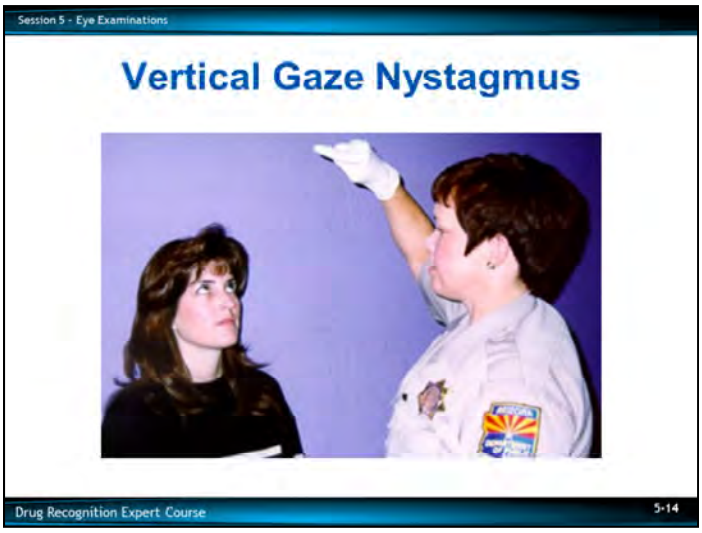
Instruct participants they are to try to draw their partner's eyes to three different angles:

- 30 degrees
- 35 degrees
- 40 degrees

Participants will check their accuracy using a template (the template is available at the end of this session).

Monitor, coach, and critique the participants' practice.

Allow this practice to continue for only about 3 minutes.



VGN

Select a participant and demonstrate the VGN test on the participant.

- Position the stimulus horizontally, approximately 12 – 15 inches in front of the subject's nose
- Instruct the subject to hold the head still and follow the stimulus with the eyes only
- Raise the stimulus until the subject's eyes are elevated as far as possible
- Watch closely for evidence of jerking

Point out the examiner should keep the subject's eyes elevated for a minimum of four (4) seconds to verify the jerking is present.

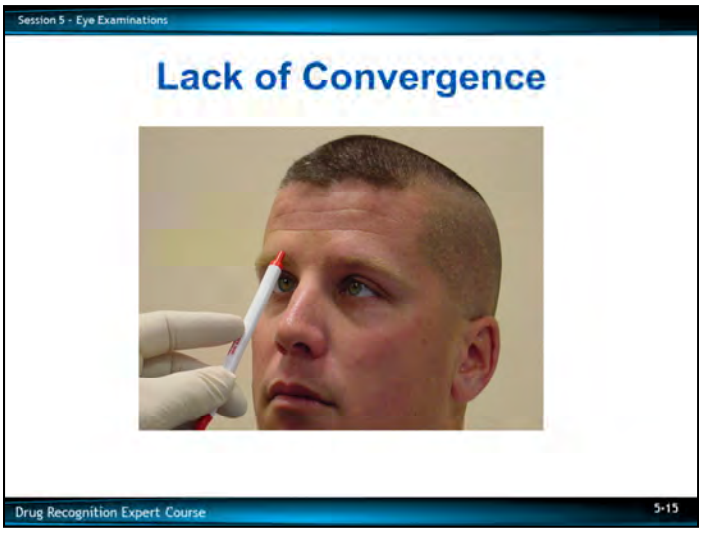
Point out it is permissible to repeat the VGN check to verify if the jerking was or was not observed.

Excuse the participant volunteer and than them for participating.

Participants' Initial Practice of the VGN Test

Instruct participants to work in pairs, taking turns administering the VGN test to each other. Monitor, coach, and critique the participants' practice.

Allow this practice to continue for only about 2 minutes.



LOC

The test for LOC is also very simple. This test may not be as reliable as the other eye tests because some people may have an inability to cross their eyes normally.

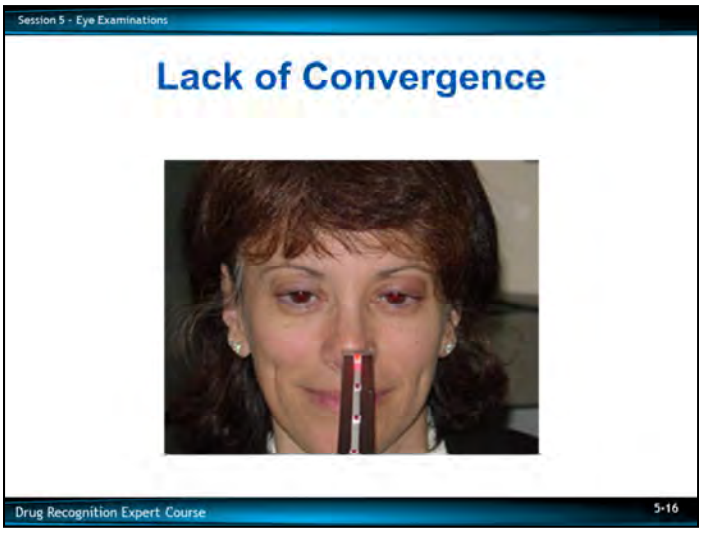
Select a participant and demonstrate the check for LOC on that participant.

- Lack of Convergence means an inability to cross the eyes

- If the subject to be tested routinely wears eyeglasses during reading and near visual tasks, the eyeglasses should be worn for the check for LOC if they are readily available

If the subject's eyeglasses are not readily available, the Drug Recognition Expert (DRE) should still conduct the test.

Citations for clinical use of testing with subject wearing eyeglasses for LOC:
"Clinical Procedures for Ocular Examination": Kurtz and Carlson; McGraw-Hill Medical, 3rd edition, Sept. 26, 2003
"A Recognized Clinical Trial of Treatments for Convergence Insufficiency in Children": Scheiman, Cotter, Cooper, etc.; Arch Ophthalmol, Jan 2005



- Position the stimulus approximately 12-15 inches in front of the subject's face

- Instruct the person to hold their head still and follow the stimulus with the eyes only

- Keep the object 12-15 inches away from the person's nose and start to move the stimulus slowly in a circle approximately the same size as the subject's face

Point out this initial circular motion helps to verify the subject has focused on the stimulus and is able to track it. Emphasize it doesn't matter whether the circular motion is clockwise or counter-clockwise.

- Once you have verified the subject is tracking the stimulus, stop moving in a circular manner with the stimulus above eye level, move it slowly and steadily toward the bridge of the nose

- Hold the stimulus near the bridge of the nose for approximately one (1) second
  - The stimulus should not come any closer than approximately two (2) inches from the bridge of the nose

- Carefully observe the subject's eyes to determine whether both eyes converge

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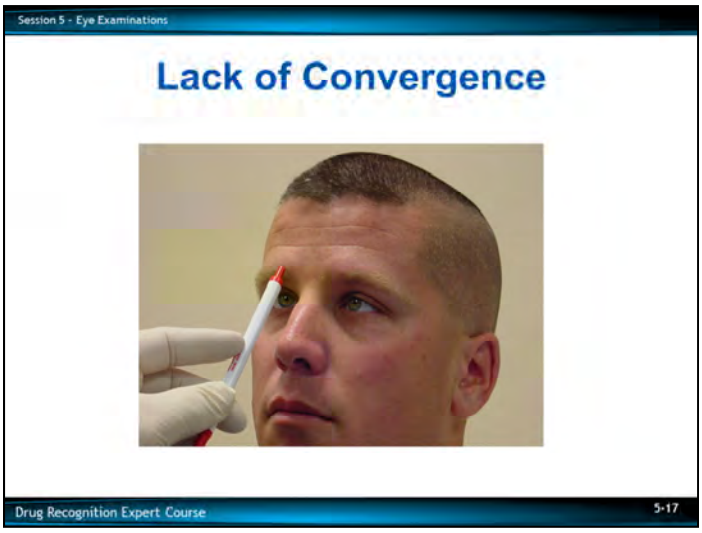
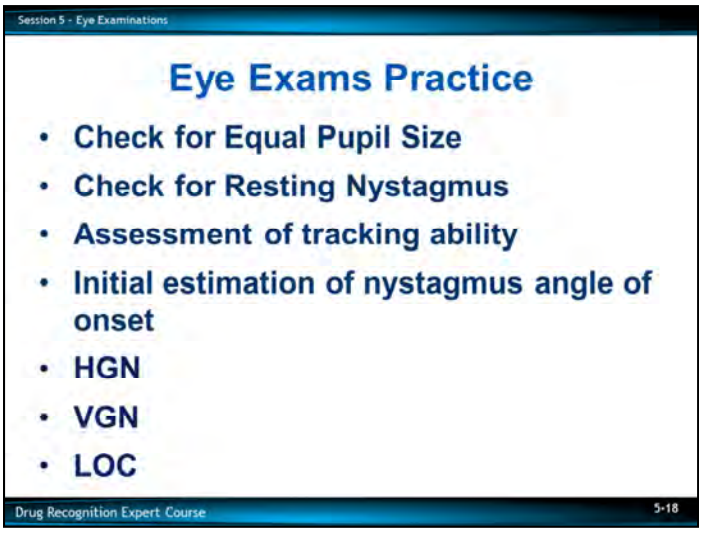


Point out if the subject being tested is wearing contact lenses, make note of the fact and conduct the check for LOC as normal.
Excuse the participant volunteer and thank him/her for participating.
Participants' Initial Practice of the Check for the LOC
Instruct participants to work in pairs, taking turns testing each other's eyes for LOC.
Monitor, coach, and critique the participants' practice.
Allow this practice to continue for only about 2 minutes.



Practice

Instruct participants to practice in pairs.

Each participant will conduct a complete set of eye examinations on his or her partner. Participants then will "reverse roles."

Preliminary Eye Exams

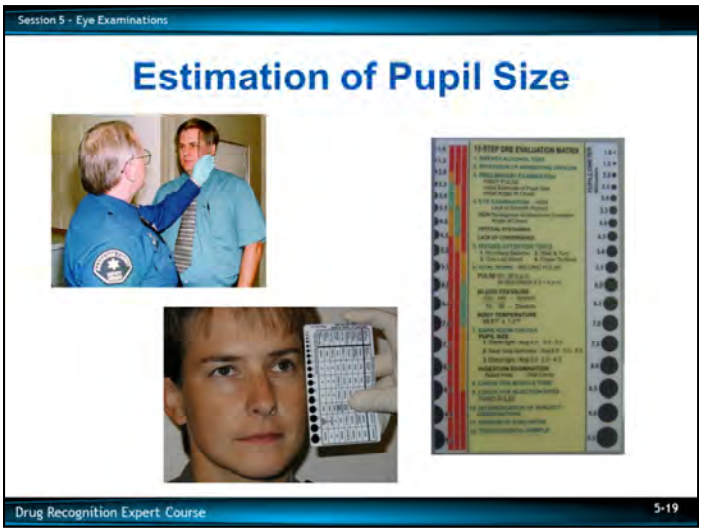
Monitor, coach, and critique participants' practice.

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial estimation of nystagmus angle of onset

Eye Exams

Make sure each participant administers a complete series of eye examinations at least once.

- HGN
- VGN
- LOC

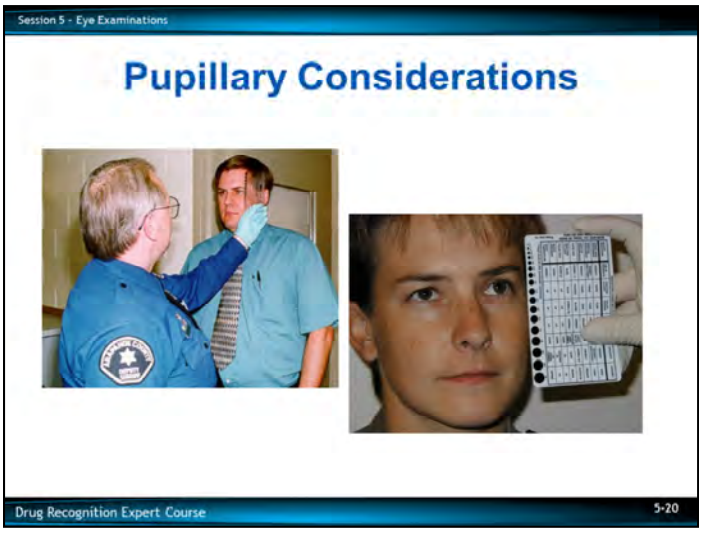


Estimating Pupil Size
The pupils of our eyes continually adjust in size to accommodate different lighting conditions.
Exhibit a pupillometer.

We use a device called a pupillometer to estimate the size of the subject's pupils.

The pupillometer is held alongside the subject's eye, moved up and down until the circle or semi-circle closest in size to the pupil is located.
Demonstrate the positioning of the pupillometer.

Pupil size estimations are recorded as the numeric value that corresponds to the diameter of the circle or semi-circle that is closest in size to the subject's pupil in each lighting condition.
Select a participant and demonstrate pupil size estimation using the participant.



"Accommodation Reflex" is an adjustment of the eyes for viewing at various distances, meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away. ***Refer participants to the glossary of terms in their manual for the definition of Accommodation Reflex.***

This should not be confused with Pupillary Unrest, the continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions or with pupillary light reflex which is the pupil's normal reaction to the changes in light.

Have the subject maintain his/her eyes fixated on a stationary object greater than six feet away. ***Demonstrate the Accommodation Reflex by having the participants focus on an object very close and one at a distance.***

Pupillary Unrest
Point out this term is defined in the glossary at the front of the participant manual.
Another eye sign that may be observed by the DRE is Pupillary Unrest.

Pupillary Unrest is defined as the continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions.

Pupillary Unrest is not abnormal or a sign of impairment. If observed, it is most likely not related to drug or medical impairment. Its presence can be due to various reasons, e.g., light source fluctuations in focusing and attention issues of the subject being tested. Pupillary Unrest is seen as natural pupillary movements that are active in the presence of light, focusing, and maintaining alertness in normal people.

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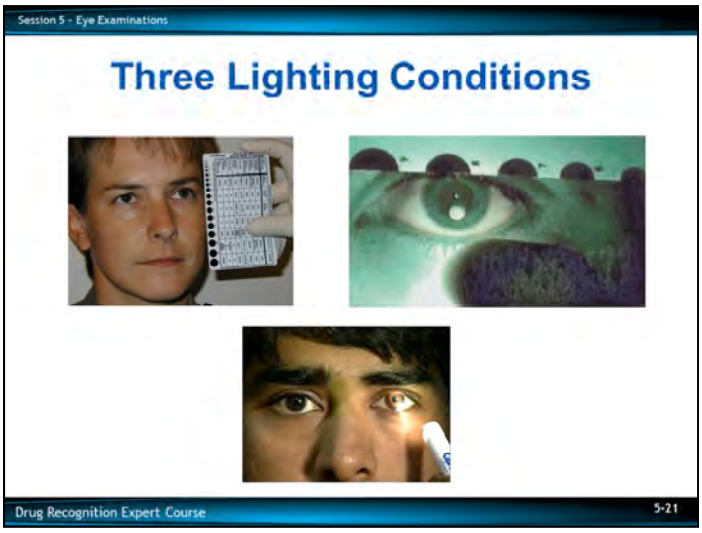
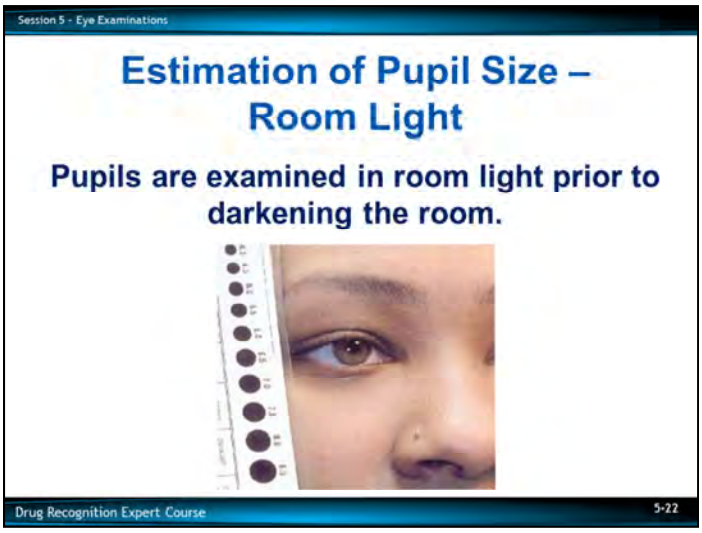


Write on the dry erase board or easel/easel pad "The Three Lighting Conditions."

The Three Lighting Conditions

Pupil sizes are estimated under three different lighting conditions:

- Room Light
- Near Total Darkness
- Direct Light



Estimation of Pupil Size under Room Light

- The pupils are examined in room light prior to darkening the room

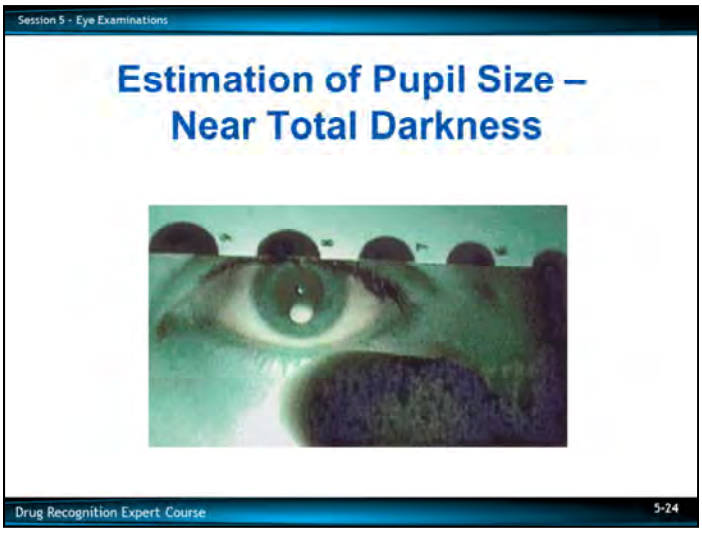
Point out since room lighting conditions can vary considerably and often cannot be controlled, the range of pupil sizes may be broad.

Participant's Initial Practice of Pupil Size Estimation—Room Light

Instruct participants to work in pairs, taking turns checking each other's pupils.
Monitor, coach, and critique the participants' practice.
Allow this practice to continue for only about 2 minutes.

Participant's Initial Practice of Pupil Size Estimation—Dark Room

After you have completed the pupil size estimations in room light, you must darken the room, wait approximately 90 seconds (for the officers eyes to adjust to the light), and then proceed with the dark room exam.



Estimation of Pupil Size under Near Total Darkness

- For the check under near total darkness completely cover the tip of the penlight with your finger or thumb, so only a slight glow is exhibited and no white light emerges

Demonstrate this.

Select a participant to aide in demonstrations of dark room pupil estimations.

- Bring the glowing tip up toward the subject's left eye until you can just distinguish the pupil from the colored portion of the eye (iris)

Demonstrate this.

- Continue to hold the glowing tip in that position and bring the pupillometer up alongside the subject's left eye and locate the circle or semi-circle that is closest in size to the pupil

- Repeat this procedure for the subject's right eye

Demonstrate this.

Monitor, coach, and critique the participants' practice.

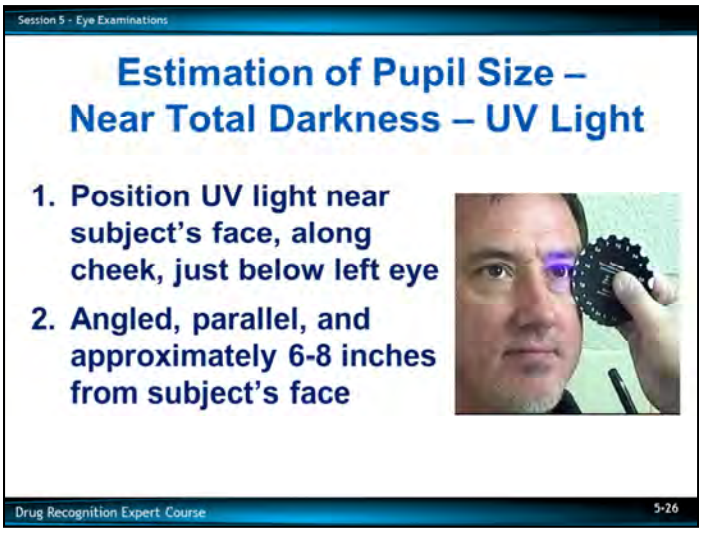
Allow this practice to continue for only about 2 minutes.

Estimation of Pupil Size under Near Total Darkness Using Ultra Violet Light
This procedure was approved by the DRE Technical Advisory Panel (TAP) in October 2013.
Independent research has demonstrated Ultraviolet (UV) lights are effective tools for assessing pupil size in near total darkness, giving essentially identical results to the standard evaluation regardless of subject eye color. Evaluators found the UV light easier to use, especially when assessing subjects with dark eyes. If this test is used, it should be used after pupil size estimations have been attempted with a finger-covered pen light.

Hold the UV light along the subject's face at any location from the side of the eye to just below the eye. If the light is held along the cheek, it can be used to illuminate the pupillometer.

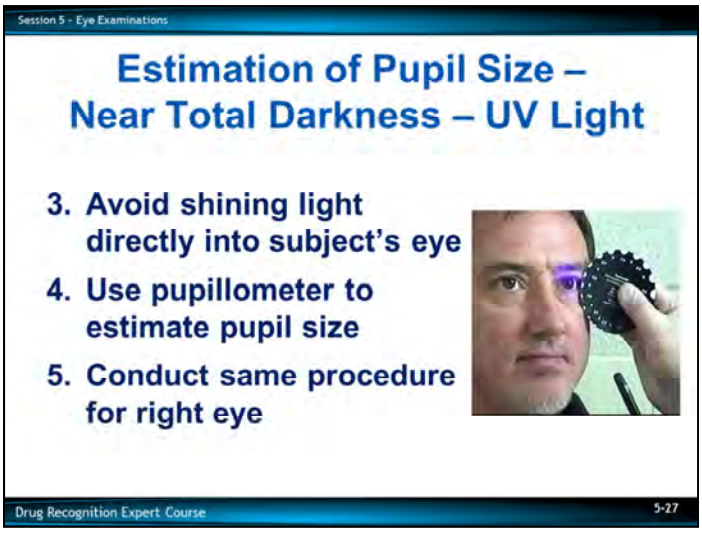
Start with the light about parallel to the plane of the subject's face and slowly increase the angle outward until the light just passes through the cornea, the clear window at the front of the eye.

When using a UV light to assess pupil size, it is important to remember to never shine the light directly into the subject's eye. In low dosages and for short exposure times, the UV light is not harmful to the subject's eye. However, the light does emit visible wavelengths in the blue-violet region of the spectrum, otherwise the evaluator would not be able to see the light is on. Consequently, shining the light directly into the subject's eye can unintentionally cause the pupil to constrict.
Source: "Using a UV Light During a DRE Evaluation," Karl Citek, OD, PHD, FAAO. October 2013



1. Position the UV light near the subject's face along the cheek just below the eye starting with the subject's left eye. Position the tip of the light approximately 6 - 8 inches from the eye (Refer to photo). However, the distance can vary depending on the brightness of the light being used.

2. Start with the light about parallel to the subject's face and slowly increase the angle outward until the light passes through the cornea (the clear window at the front of the eye) until the yellow-green glow of the crystalline lens is evident.



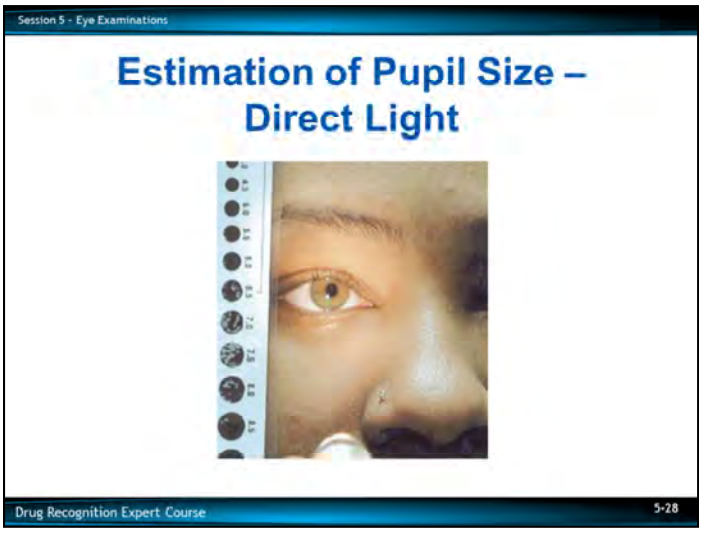
3. Avoid shining the UV light directly into the subject's eye. In low dosages and for short exposure times, the UV light is not harmful to the subject's eye, nor to the evaluator's eyes.

4. Using a DRE pupillometer, estimate the size of the glowing pupil in near total darkness.

5. Conduct the same procedure for the right eye.

Using a UV light to estimate pupil size in the near total darkness lighting condition is an easy, safe, and effective evaluation, especially when assessing subjects with dark eyes. Used properly, there is no potential harm to the subject or the DRE.

Use of the UV light for the near total darkness pupil estimation is not mandatory and does not replace the current covered penlight procedure. If a DRE uses the UV light for the near total darkness estimation, it should be documented in the narrative report.



Estimation of Pupil Size under Direct Light

- From a darkened environment, quickly illuminate the left eye

This can be accomplished by activating the penlight pre-positioned in front of the eye, or by activating the penlight with the light covered and positioned in front of the eye. The objective is to capture an accurate assessment of the reaction to light by minimizing the pupil's exposure to light before the penlight can be directed solely into the eye. ***Demonstrate this.***

- Position the penlight so it illuminates and approximately fills the subject's eye socket

Demonstrate this.

Emphasize the penlight should be positioned so the beam just "fits" the eye socket.

- Hold the penlight in that position for a minimum of 15 seconds
- During the 15 seconds, bring the pupillometer up alongside the left eye
- Find the circle or semi-circle that is closest in size to the pupil

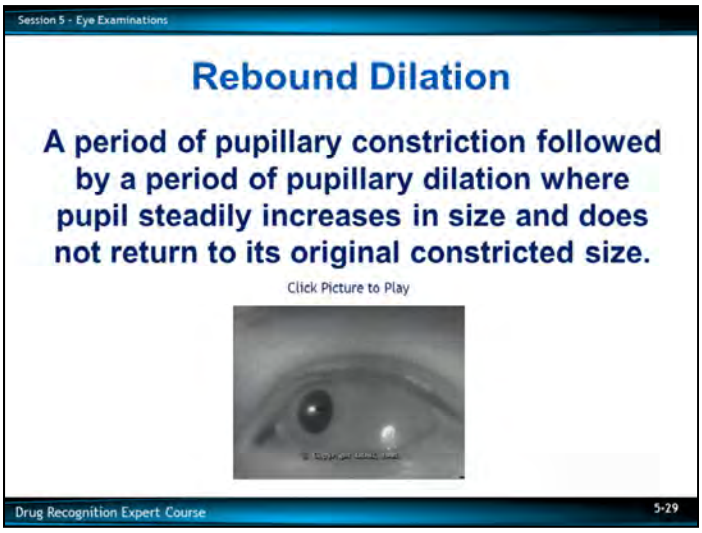
Remind participants to position the penlight so the beam exactly "fits" the eye socket when the beam is brought directly into the eye.

- Repeat this procedure for the subject's right eye

Monitor, coach, and critique the participants' practice.

Allow the practice to continue for only about 2 minutes.

Solicit participants' comments and questions concerning the eye examinations.



Rebound Dilation

Print on dry erase board or easel/easel pad: "REBOUND DILATION."

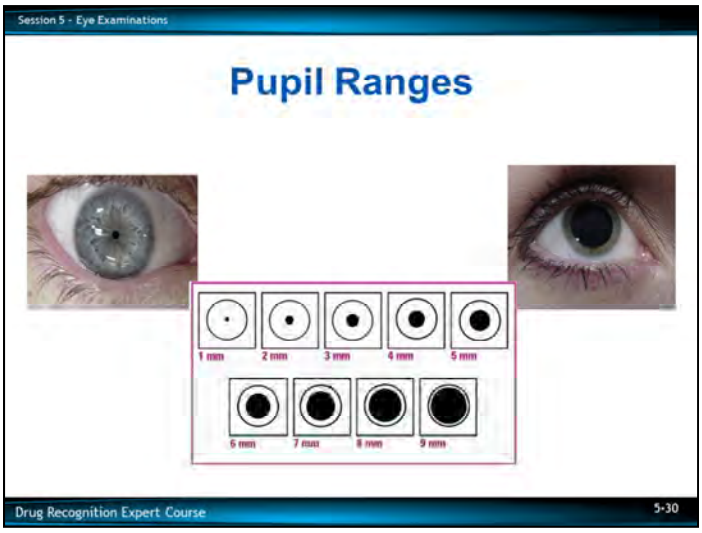
Rebound dilation is defined as a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size.

Point out the DRE will record rebound dilation if observed by recording the constricted or the smallest size and the largest or dilated size, i.e., 3.0 - 4.5 mm.

Example: The pupil is estimated at 8.5mm in near total darkness. Once the penlight is shined into the pupil it constricts to 4.0 mm then steadily dilates to 6.0 mm and remains that diameter while the direct light is shined into the eye.

Rebound dilation has been reported with persons impaired by drugs that cause pupillary dilation. Cannabis is most common. In a 2016 study, nearly 71% of Cannabis-impaired subjects displayed rebound dilation.

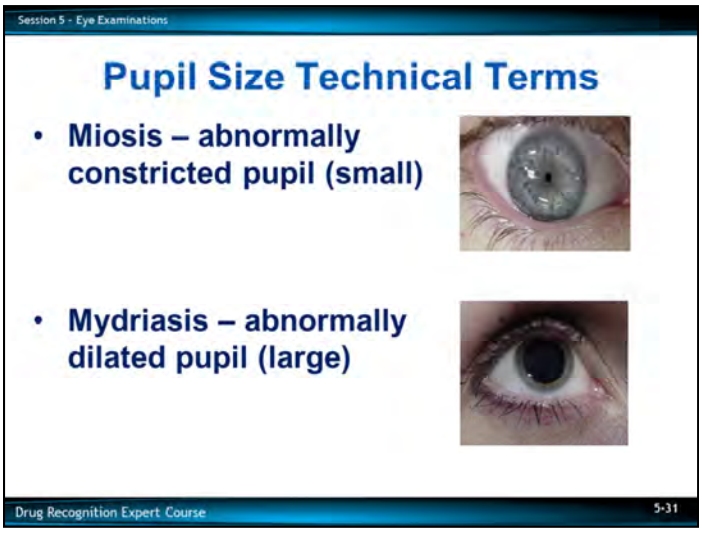
"Drug Recognition Expert (DRE) examination characteristics of cannabis impairment," Rebecca L. Hartman, Jack E. Richman, Charles E. Hayes, Marilyn A. Heustis, Accident Analysis and Prevention, 2016.



Pupil Ranges

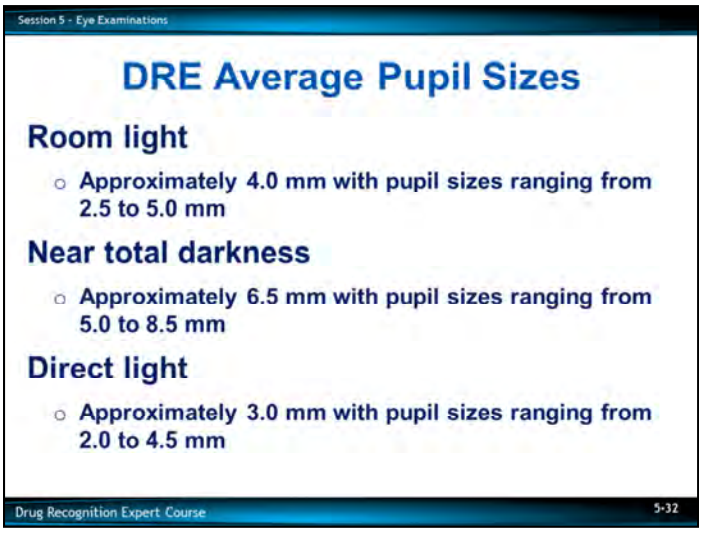
For most people, even under very bright light the pupils will not constrict much below a diameter of 2.0 millimeters (mm) or dilate to a diameter of more than 8.5 mm in near total dark conditions. ***Point out results of studies indicated there are significant differences between the average pupil size ranges in the three test conditions. (Source: "An Evaluation of Pupil Size Standards Used By Police Officers for Detecting Drug Impairment" JAOA, March 2004, Richman, McAndrew, Decker and Mullaney)***

Consequently, the use of three distinct pupil size ranges for each of the different testing conditions may be considered more useful in the evaluation to determine impairment vs. non-impairment.



Pupil Size Technical Terms

Two key technical terms regarding pupil sizes are: Miosis – abnormally small pupil, i.e., constricted; Mydriasis – an abnormally large pupil, i.e., dilated.



DRE Average Pupil Sizes

Room Light

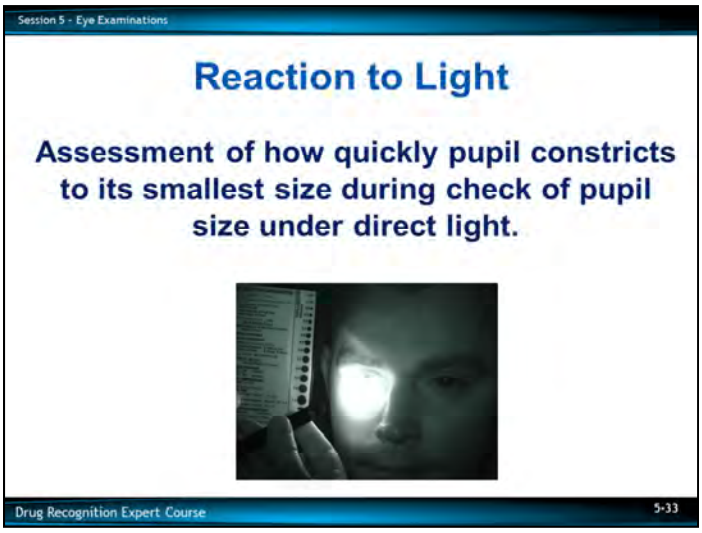
- For a non-impaired person, the average pupil size and range for room light is approximately 4.0 mm with pupil sizes ranging from 2.5 to 5.0 mm

Near Total Darkness

- For a non-impaired person, the average pupil size and range for near total darkness is approximately 6.5 mm with pupil sizes ranging from 5.0 to 8.5 mm

Direct Light

- For a non-impaired person, the average pupil size and range for direct light is approximately 3.0 mm with pupil sizes ranging from 2.0 to 4.5 mm



This is a review of information covered during the DRE Preliminary School.

Reaction to Light

Assessment of how quickly the pupil constricts to its smallest size during the check of pupil size under direct light when the light is first introduced into the subject's eye.

Demonstrate this.

- As you introduce the beam of light directly into the subject's eye, note how the pupil reacts

Demonstrate this.

- Under ordinary conditions, the pupil should react very quickly and constrict noticeably when the light beam strikes the eye

- Under the influence of certain categories of drugs, the pupil's reaction may be slow or there may be no visible reaction at all

For DRE purposes, we consider the pupil's reaction to be slow if it takes more than one second to reach its smallest size.

- Hold the direct light on the subject's eye for a minimum of 15 seconds to assess pupil reaction

- Also check for Rebound Dilation during this 15-second period

- Caution should be used by the officer so as not to move the light beam or allow the bulb to change in light intensity

- When you have completed this process for the left eye, repeat it for the right eye

Participants' initial practice in assessing the pupil's reaction to light.

Have participants work in pairs, checking each others pupil reaction.

Monitor, coach, and critique the participants' practice.

Allow the practice to continue for only about 2 minutes.

C. <u>Demonstrations</u>

Select two participants to come before the class.
Instruct one participant to demonstrate the administration of HGN to the other participant.

- Check for Lack of Smooth Pursuit
- Check for Distinct and Sustained Nystagmus at Maximum Deviation
- Check for an Onset of Nystagmus Prior to 45 Degrees

Coach and critique the participant administrator's performance. Make sure the participant administrator checks both eyes.

Estimation of Angle of Onset

When the participant administrator has completed the HGN test, instruct the participant administrator to draw the participant subject's eye to an angle of 35 degrees. Check the accuracy of this estimate, using the template.
Excuse the two participants and thank them for participating.

Demonstration of VGN and LOC

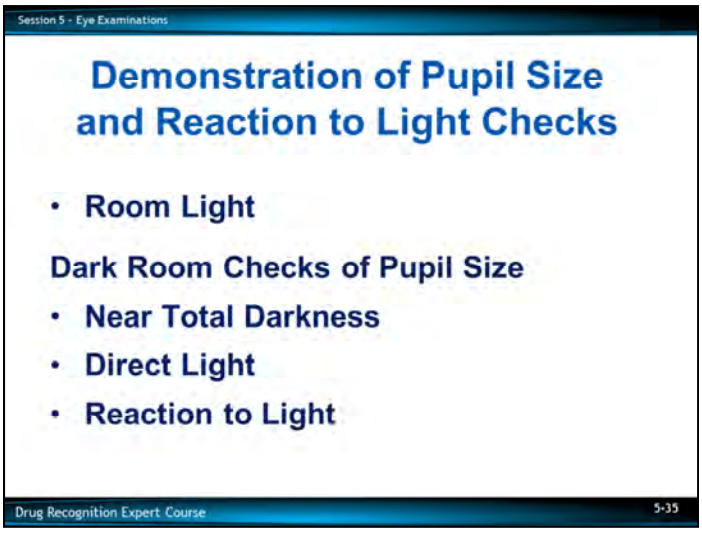
Select two other participants to come before the class.
Instruct one participant to check the other for VGN.
Coach and critique the participant administrator's performance.
Instruct the second participant to check the eyes of the first participant for LOC.
Coach and critique the participant administrator's performance.
Excuse the two participants and thank them for participating.

_____

_____

_____

_____



Demonstration of Pupil Size and Reaction to Light Checks

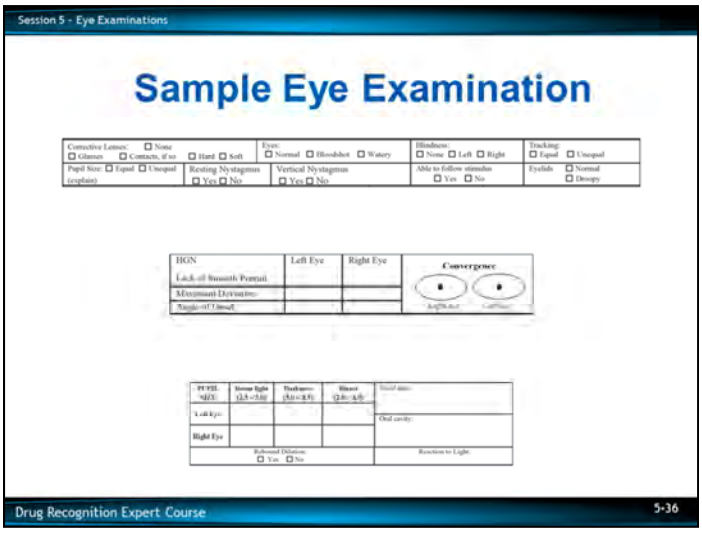
- Room Light

Select two other participants to come before the class.
Instruct one participant to check the other's pupils under Room Light.
Coach and critique the participant administrator's performance.

Dark Room checks of pupil size

- Near Total Darkness
- Direct Light
- Reaction to Light

Instruct the second participant to demonstrate how to perform the Dark Room checks of pupil size.
Coach and critique the participant administrator's performance.
Point out assessment of the pupil's Reaction to Light takes place in conjunction with the Direct Light check.
Excuse the two participants and thank them for participating.
Solicit participants' comments and questions concerning these demonstrations of the eye examinations.



D. Documentation Procedures

Instruct participants to turn to the Standardized Drug Influence Evaluation Form in their manuals or handout forms to the participants.

A brief examination of the eyes is made during the Preliminary Examination.

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial assessment of nystagmus angle of onset

HGN

Emphasize all three checks of the HGN test must be documented for each eye. Remind participants they must indicate the numerical number of the angle of onset and not just check-mark the box. Solicit participants' comments and questions concerning procedures for documenting the eye examinations

VGN

Remind students "Yes" implies VGN was present, "No" implies it was not present.

LOC

Point out it will be necessary to diagram the movement of the eyes.

The dark room eye examinations are documented in a subsequent section of the form.

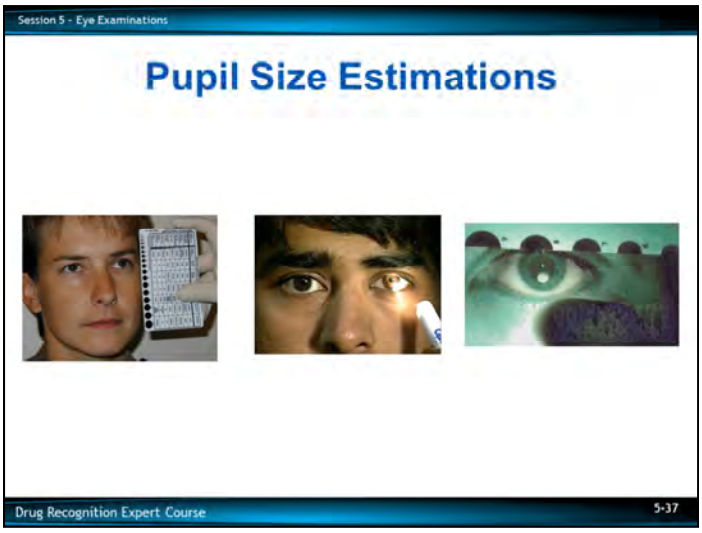
Point out the location of that section. Emphasize all dark room checks of the eyes must be performed and documented independently for each eye. Instruct participants to practice in pairs. Each participant will conduct a complete set of eye examinations on his or her partner. Participants then will "reverse roles."

Preliminary Eye Exams

Tell the participants to record their estimations of their partner's pupil sizes on the Drug Influence Evaluation Form. Monitor, coach, and critique participants' practice.

Eye Exams

Make sure each participant administers a complete series of eye examinations at least once.



Pupil Size Estimations

- Room Light
- Near Total Darkness
- Direct Light

If possible, the training room should be at least somewhat darkened for this final stage of practice.

Reporting out of Pupil Size Estimations

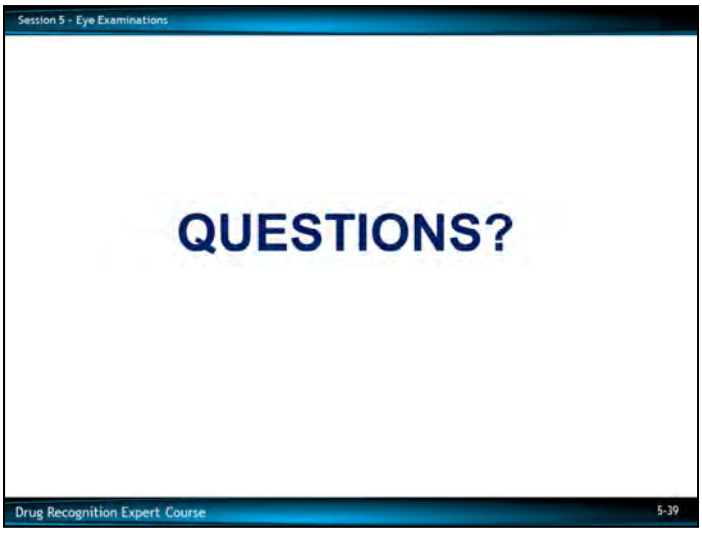
While the participants' practice is still going on, print the matrix at the end of this session on the dry erase board or easel/easel pad.

Tell the participants we will tabulate the pupil sizes of everyone in the class, for each of the three lighting conditions. For simplicity, tell the participants we will tabulate the left eye pupil sizes only.

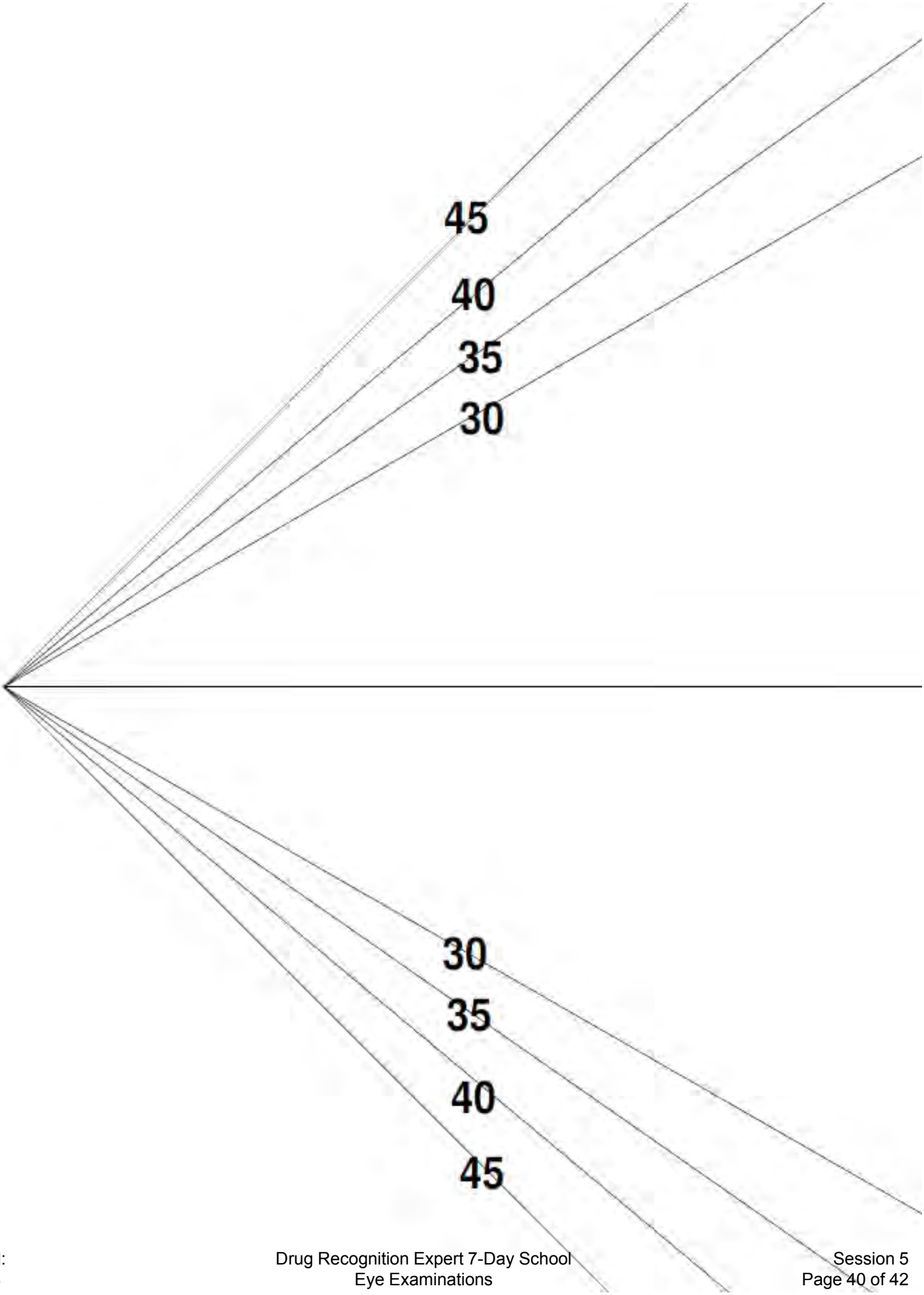
Tabulations
Room Light
Direct the participants' attention to the first column of the matrix.
Say: "Let's concentrate now only on the room light estimations."
Ask: "How many of you found your partners had pupils of 2.0 mm or less in room light?" (Get a show of hands, count them, print the number in the first box of the first column).
Then ask: "How many had partners with a 2.5 mm pupil in room light?" (Count the hands and print the number in the 2nd box).
Continue this until you get to the last box in the 1st column: "How many had partners with pupils of 8.0 mm or larger?" (Count the hands, print the number).
Repeat this process for each of the other two lighting conditions.

Near Total Darkness Tabulation:
Use same process as above.

Direct Light Tabulation:
Make appropriate comments about the number of participants whose pupils are outside the normal range of size under the various lighting levels.



Solicit participants' comments and questions concerning Eye Examinations.


45
40
35
30
30
35
40
45

Pupil Size Chart

Pupil Size	Room Light	Near Total Darkness	Direct Light
2.0 mm			
2.5 mm			
3.0 mm			
3.5 mm			
4.0 mm			
4.5 mm			
5.0 mm			
5.5 mm			
6.0 mm			
6.5 mm			
7.0 mm			
7.5 mm			
8.0 mm and above			

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)

Date Examined / Time /Location	Breath Test: Results:	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?

Time now / Actual	When did you last sleep? How long?	Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
/			

Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No	Are you under the care of a doctor or dentist? ☐ Yes ☐ No

Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:	Coordination:

Speech:	Breath odor:	Face:

Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery	Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal

Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

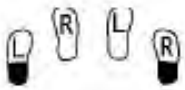
Pulse and Time

1. _____ / _____
2. _____ / _____
3. _____ / _____

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit		
Maximum Deviation		
Angle of Onset		

Convergence

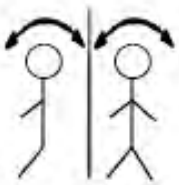
/30 **One Leg Stand** /30



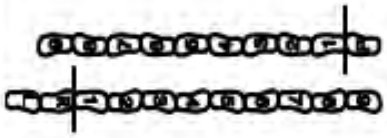
L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance

Approx. Approx.



Walk and Turn Test



Cannot keep balance _____

Starts too soon _____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation _____ estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

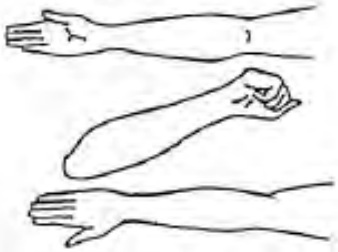
Nasal area:

Oral cavity:

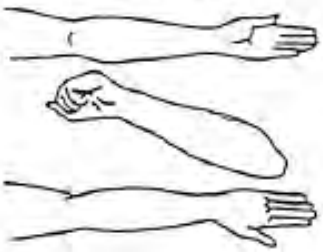
Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM



LEFT ARM



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

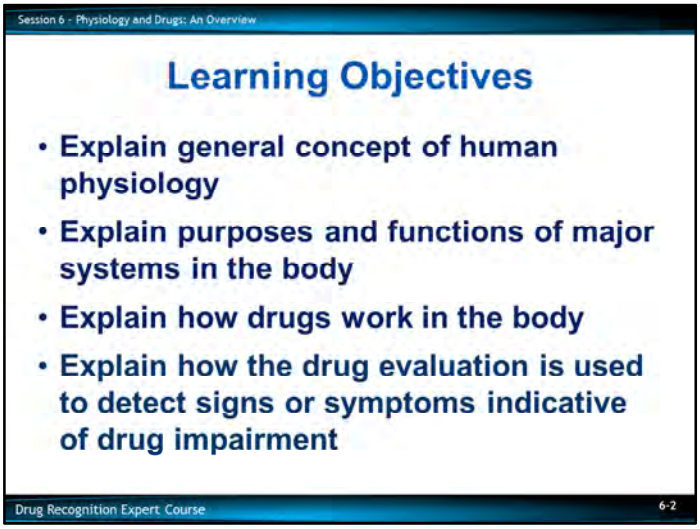
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Session 6 - Physiology and Drugs: An Overview
2 Hours
Session 6
Physiology and Drugs:
An Overview
TSI
NHTSA
Drug Recognition Expert Course
6-2



Briefly review the content, objectives, and activities of this session.

Upon successfully completing this session the participant will be able to:

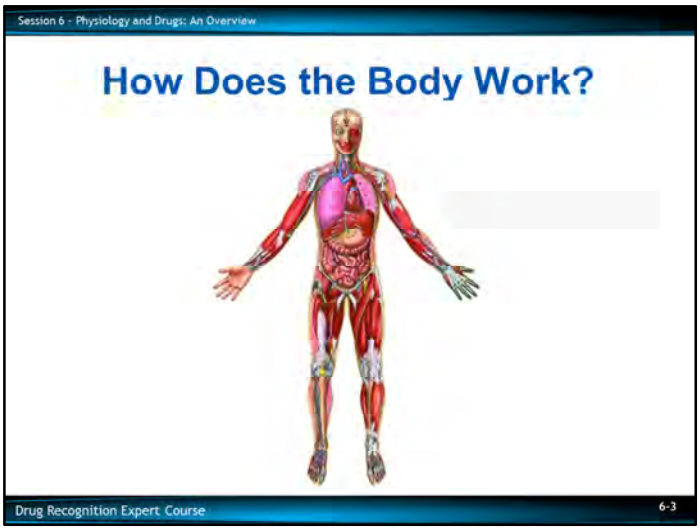
- Explain in layman's terms the general concept of human physiology
- Explain in layman's terms the purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)
- Explain in layman's terms how drugs work in the body
- Explain in general terms how the drug evaluation is used to detect signs and symptoms indicative of drug impairment

CONTENT SEGMENTS

A. Physiology and Drugs: An Overview
B. Body Systems
C. The Concept of Homeostasis
D. A Simplified Concept of the Nervous System
E. How Drugs Work
F. Medical Conditions That May Mimic Drug Impairment

LEARNING ACTIVITIES

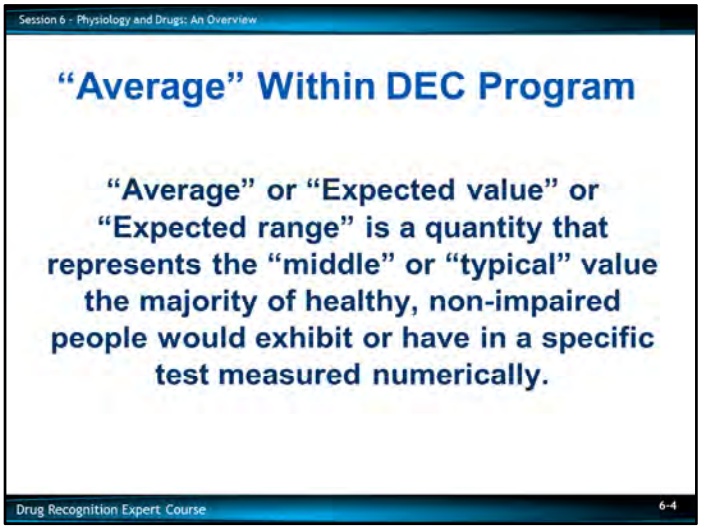
Instructor-Led Presentations
Reading Assignments



A. <u>Physiology and Drugs: An Overview</u>

Before we can understand how drugs work, we must have a basic understanding of how the body works.
Point out it is not necessary to have detailed knowledge of specific functions or medical terminology. Participants will not become medical specialists as a result of this limited overview; however, they should be encouraged to learn as much as possible about human physiology through additional instruction and independent reading.

We will review general concepts of how the body functions in a "normal" or "standard" human.
Point out all human beings are different and a "normal" or "standard" human does not exist. However, experience and scientific studies have produced an average range of values that can be used for comparison purposes.
We will briefly review the primary functions of the body systems <u>relevant to the Drug Evaluation and Classification (DEC) Program.</u>



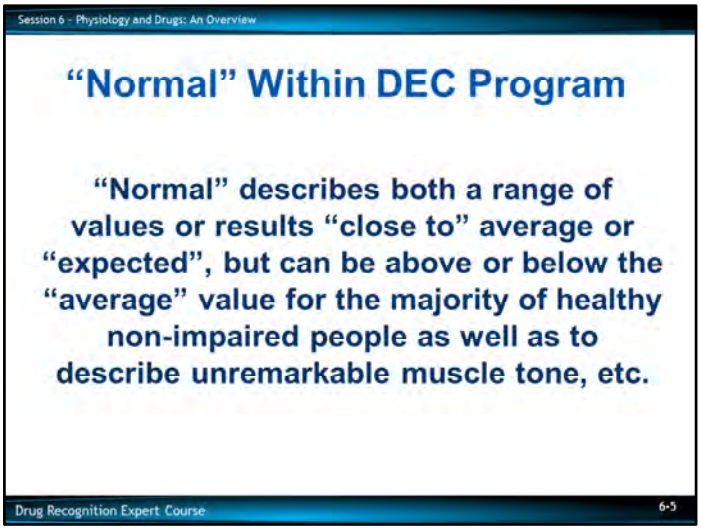
"Normal" or Drug Recognition Expert (DRE) Averages
In the Drug Evaluation and Classification (DEC) Program we use the terms "Normal," "Average," "Average Ranges," "DRE Average Range," or "Expected Range".

- **"Average"** is a quantity that represents the "middle" or "expected value" the majority of healthy, non-impaired people would exhibit or have in a specific test that is measured numerically

- **"Normal"** describes both a range of values or results "close to" average or expected, but can be above or below the "average" or "expected value" for the majority of healthy non-impaired people
  - "Normal" can also be used to describe unremarkable conditions on tests that are not measured numerically such as muscle tone, etc.

- **"Expected Value"** or **"Expected Range"** describes the range or value expected for a healthy, non-impaired person.

Within the DEC Program, "normal" means the same thing as "healthy" or "non-impaired" or within the "DRE average range."



For example, the "Average," or "expected value", for pupil size in near total darkness is 6.5 mm. This means when **ALL** the sizes were measured **using the DRE test protocol** in a large number of pupils in healthy, non-impaired adults, the average pupil size was approximately 6.5 mm while the average range for normal pupil size was 5.0-8.5 mm.

In the DEC Program "normal" or "normals" is commonly used to refer to a result within the DRE average ranges, such as pupil sizes, pulse rate, blood pressure, etc. of a healthy non-impaired person.

When using the term "normal" or "normals" the DRE should understand what these terms refer to. Although the term "normal range" has been historically used in the DEC Program, we now use the term "average range" or "expected range" to provide a better description of what we observe.

To avoid the defense argument of "what is 'normal' for my client?," DREs need to be prepared to explain the meaning and use of the term as it relates to the DEC Program.

A Healthcare Practitioner can determine what is "normal" for a person based on their training, experience, and a combination of additional data. They can also determine this through ordered tests and their results, what has been usual for the person over time, if the specific result is getting better, worse, or staying stable, if the disease process being evaluated is getting better, worse, or staying stable, how abnormal the test result is, and if it may represent an error in the test itself. A DRE does not have any of the above healthcare information available during the time the DRE evaluation is performed.

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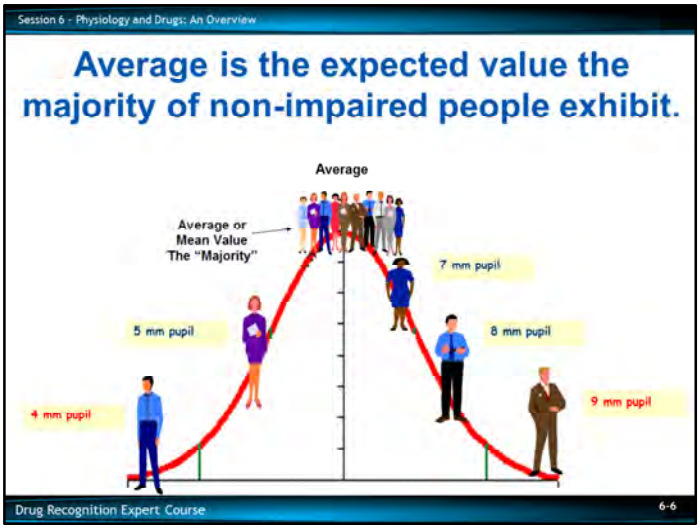


Another way to look at Average versus Normal:

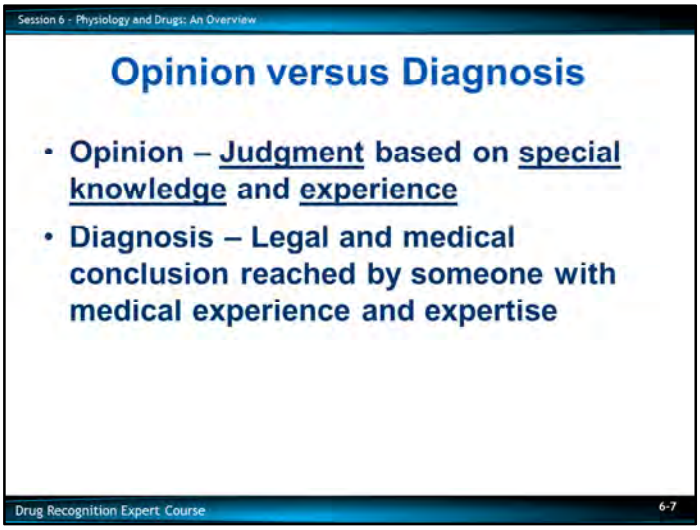
- The *average* length (number) of a pregnancy is 40 weeks
- The *average* length (range) of a pregnancy is 38 to 42 weeks
- If a woman is *two weeks* past her "due date," she is still not necessarily *late*
- Being past the due date is not itself a problem, but:
  - There is a greater risk of problems
  - There may be other observable signs and reported symptoms of potential problems

What DREs Need to Know About "Average"—General Rules:

- The closer the test finding is to the Average value for the majority of healthy, non-impaired people, the more likely the person is not exhibiting impairment in that function

- The farther away from the Average and the closer to the edge of the "Average Range" or "Expected Range" for the majority of healthy, non-impaired people, the more possible the person is going to be exhibiting impairment in that function

- The farther outside the Average Range for the majority of healthy, non-impaired people in the test, the greater the likelihood the person is exhibiting impairment in that function



- An Opinion is a judgment based on special knowledge and experience

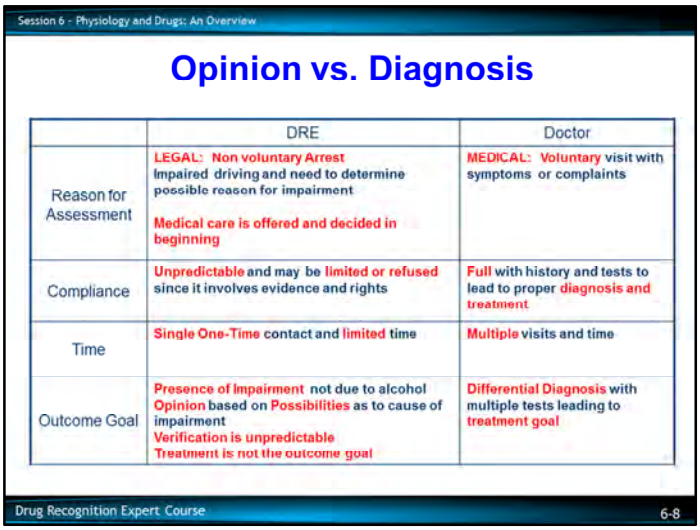
- A Diagnosis is a legal and medical conclusion reached by someone with medical experience and expertise

Stress the fact DREs do NOT make a diagnosis, they render an opinion based on articulable facts.

- DREs do not make a diagnosis

- The DRE's goal is to determine the presence of impairment and the probable cause(s) of the observed impairment

As a DRE, when you complete an evaluation and decide whether the person is impaired, whether the impairment is a result of a medical problem or drugs, and if drugs, what drug category or categories is/are causing the impairment, you are rendering an OPINION. You are NOT making a diagnosis.



Each of the following should be listed and discussed briefly.

REASON FOR ASSESSMENT:
DRE: Non voluntary arrest: Impaired driving and need to determine possible reason for impairment. Medical care is offered and decided in beginning.
Doctor: Voluntary visit with symptoms or complaints.

COMPLIANCE:
DRE: Unpredictable compliance and may be limited or the subject may simply refuse, since it involves rights and evidence.
Doctor: Doctor or medical personnel generally get full compliance, a full history, order tests in order to receive the proper diagnosis and treatment.
DREs do not provide treatment in regards to the evaluation.

TIME:
DRE: A single, one-time contact with limited time.
Doctor: May involve multiple visits and time.

OUTCOME GOAL:
DRE: Presence of impairment, and inconsistent with BAC, the opinion is based on probabilities as to the cause of impairment. Treatment is not the outcome goal.
Doctor: Differential diagnosis leading to multiple tests, leading to the treatment goal(s).
Emphasize the DRE DOES NOT make a diagnosis, he/she forms an opinion.

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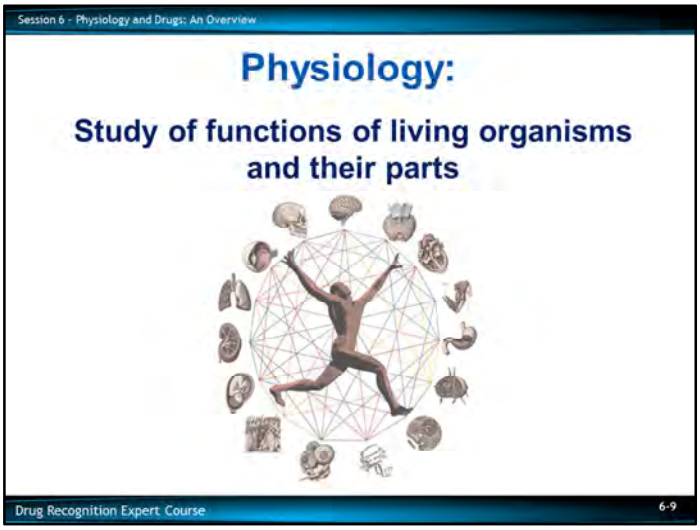
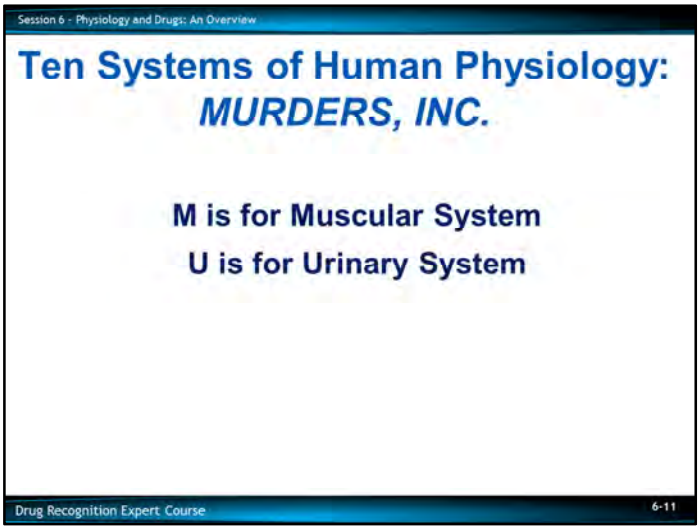


B. <u>Body Systems</u>

For the purposes of this training course, physiology is the study of the functions of living organisms and their parts.

A convenient way of discussing human physiology is to list the ten major systems of the body.
The phrase “MURDERS INC” helps us remember the names of the ten systems.
Each letter stands for the name of one system.
CHANGES in these systems act as the basis for determining IMPAIRMENT.



Muscular System

M stands for the MUSCULAR SYSTEM.
We assess the muscular system in the drug influence evaluation when we test coordination and balance by administering divided attention tests and when we check for muscle rigidity.

The body has three different kinds of muscles.

- The heart or cardiac muscle

- Smooth muscles, which control the body's involuntary operations
  - Examples: Smooth muscles control breathing, the operation of the pyloric valve (a muscle located at the base of the stomach), dilation and constriction of pupils, and all other things we do not consciously control

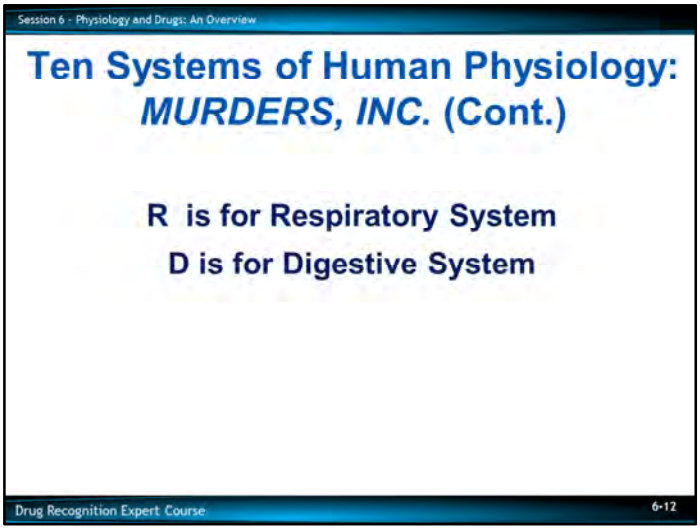
- Striated muscles, which carry out our voluntary movements

All three types of muscles are examined at various stages of the drug influence evaluation.

Urinary System

U is for the URINARY SYSTEM.
Drugs can usually be detected in the urine and collection of a urine specimen or other suitable bodily substance is an important part of the drug influence evaluation.

The system consists of two kidneys, the bladder, ureters connecting the kidneys to the bladder, and the urethra which transports the urine out of the body.
Kidneys filter waste or harmful products, such as drugs and their metabolites, from the blood and dump these waste products into the bladder.



Respiratory System
The first R in "MURDERS INC" stands for the RESPIRATORY SYSTEM.
Some drugs cause the user to breath slowly and shallowly, while others cause rapid breathing.

The major parts of the Respiratory System are the lungs and the diaphragm.

The diaphragm is a smooth muscle that draws the air into the lungs and forces it out.

Lungs take in oxygen and transfer it to the blood and remove carbon dioxide and some other waste products from the blood and expel them into the outside air.
Important clues of drug use, i.e., odors of alcoholic beverages, marijuana, chemicals, etc. may be present on a suspect's breath.

Digestive System
D stands for the DIGESTIVE SYSTEM.

Major components of this system are the tongue, teeth, esophagus, stomach, intestines, liver, and pancreas.

The Digestive System breaks down large particles of food until they are of a size and chemical composition that can be absorbed in the blood.
When drugs are taken orally, they might be retained in the stomach for a while until any food there has been broken down sufficiently to allow passage into the small intestine.

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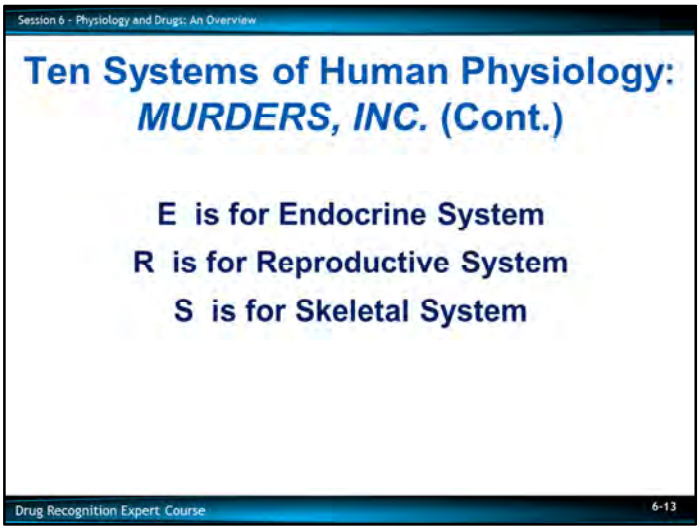


Endocrine System
E is for the ENDOCRINE SYSTEM.

The Endocrine System is made up of a number of different glands that secrete hormones.
INSTRUCTOR FOR YOUR INFORMATION: the glands that make up the Endocrine System include: Thyroid, Parathyroid, Pituitary and Adrenal glands, as well as portions of the pancreas, testes and ovaries.
Print HORMONES on the dry erase board or easel/easel pad.
Hormones are complex chemicals that travel through the blood stream and control or regulate certain body processes.

Some drugs can mimic the effects of certain hormones or can react with the hormones in ways that alter the hormones' effects.

Reproductive System
The second R in "MURDERS INC" stands for the REPRODUCTIVE SYSTEM.

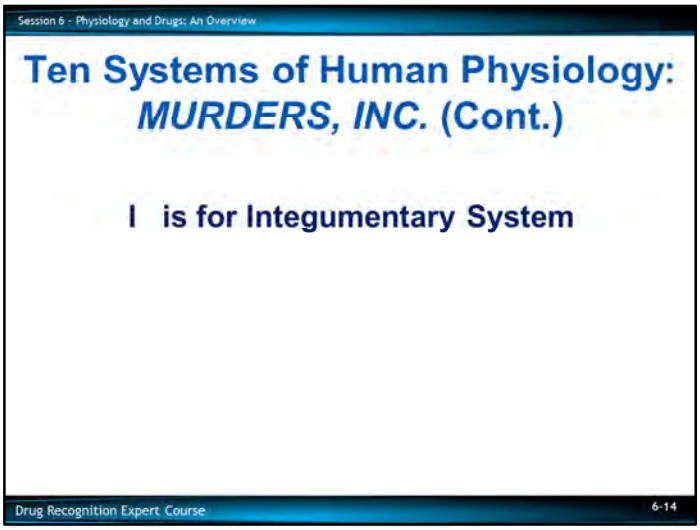
The functions of the reproductive system fall into two categories:
- self-producing (cytogenic)
- hormone producing (endocrinic)

We are primarily concerned with hormone production since the hormones produced by the reproductive system aid the nervous system in its regulatory role.

The Reproductive and Skeletal Systems are the only major components of physiology and are not directly involved in the drug influence evaluation.

Skeletal System
S is for the SKELETAL SYSTEM.

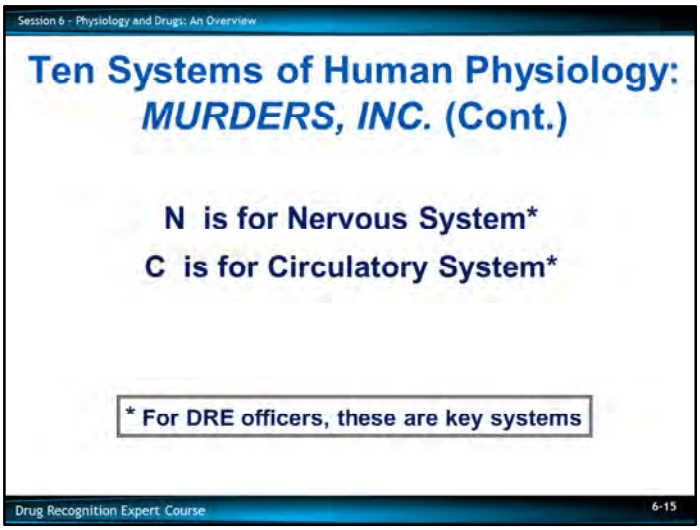
Consists of bones, cartilage, and ligaments. The Skeletal System provides support to the body, permits movement, and forms blood cells.



Integumentary System
The I in "INC" stands for the INTEGUMENTARY SYSTEM.

Consists of the skin, hair, finger nails and toe nails, and accessory structures.
Point out DREs examine the skin for hypodermic injection sites and for sweating, clamminess, and temperature.

The chief functions of the Integumentary System include protection of the body, control of the body temperature, excretion of wastes (i.e., through sweat) and sensory perception.



Nervous System
N is for the NERVOUS SYSTEM.
The Nervous System is one of the most important components of physiology as far as the drug influence evaluation is concerned.

This system consists of the brain, the brain stem, the spinal cord, and the nerves.
Nerves keep the brain informed of changes in the body's external and internal environments.
CLARIFICATION: Nerves carry messages to the brain from the sense organs (eyes, ears, nose, etc., and also from pain sensors).

Nerves also carry messages from the brain to the body's muscles, tissues, and organs.
CLARIFICATION: The brain uses nerves to send messages commanding the heart to beat, the fingers to move, the pupils to dilate, etc.

The nervous system controls, coordinates, and integrates all physiological processes, so normal body functions can be maintained.

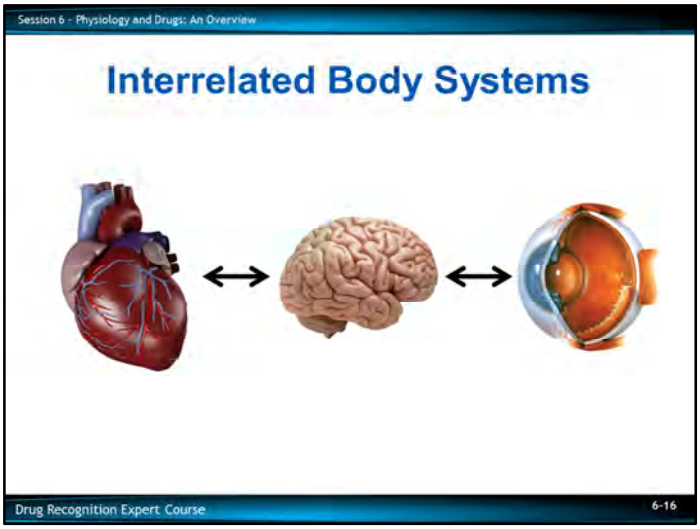
Circulatory System
C is for the CIRCULATORY SYSTEM.
This is another very important component of physiology, as far as the drug influence evaluation is concerned.

For our purposes, the most important parts of the Circulatory System are the heart, the blood vessels (e.g., arteries, veins, capillaries, etc.), and the blood.
Blood is the body's primary transport mechanism: it carries food, water, oxygen, hormones, antibodies, etc. to the body's tissues and organs.

Blood is also primarily responsible for carrying heat throughout the body.

Blood is the main transport mechanism for bringing drugs to the brain.

The heart, of course, pumps the blood and causes it to circulate throughout the body.

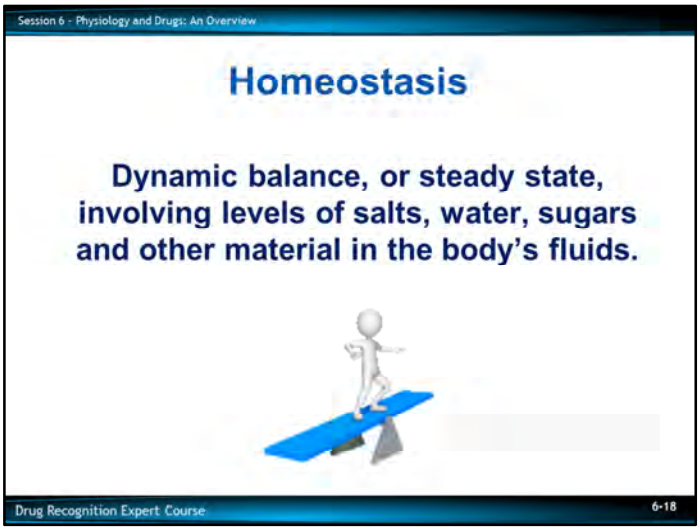


Solicit participants' comments and questions about "MURDERS INC," the ten major systems of human physiology. Much more will be covered about the last two systems (Nervous and Circulatory) later in this session.

All these systems need to work together to maintain a functioning, non-impaired person. This leads to understanding the term "homeostasis", which will be covered in this Session.

The primary focus will be on the Central Nervous System (CNS) and the effects it exhibits on other components examined during the drug influence evaluation. These include:

- Eyes
- Blood Pressure and Pulse
- Balance and Coordination
- Body Temperature



C. <u>The Concept of Homeostasis</u>

Homeostasis is "the dynamic balance, or steady state, involving levels of salts, water, sugars, and other materials in the body's fluids."

The human body is exposed to a constantly changing external environment, which influences the internal environment.

Changes are neutralized by the internal environment – the blood. Oxygen, foods, water, and other substances are constantly leaving bodily fluids to enter cells, while carbon dioxide and other wastes are leaving the cells to enter these fluids.

Yet, the chemical composition of these fluids remains within very narrow limits.

This phenomenon is called homeostasis.

This involves message sending and actions triggered by the balance within the autonomic nervous system (sympathetic and parasympathetic), hormones, and neurotransmitters.
"Homeo" means similar or the same elements and "stasis" means balance. The rhythm of the heart, breathing, constancy of body temperature, and the steady level of blood pressure under specific circumstances or conditions are all manifestations of homeostatic mechanisms at work within the body.
This balance impacts physiological and psychological functions via the Central and Peripheral Nervous systems and neurotransmitters.

Drugs interfere with the homeostatic mechanisms and produce signs and symptoms that can be recognized by a trained DRE.

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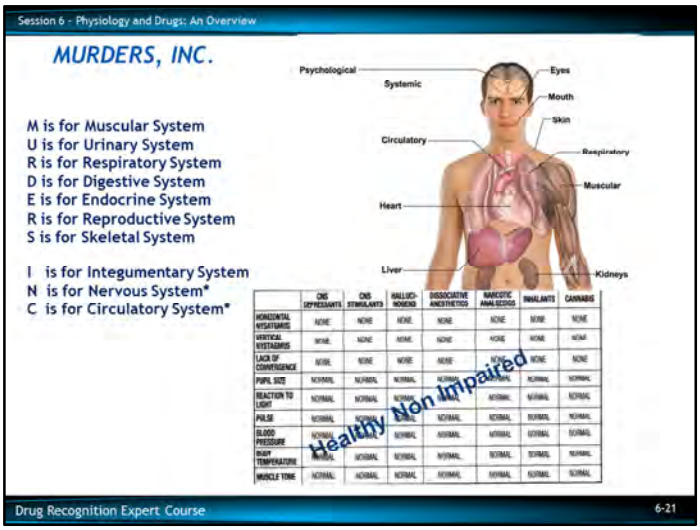
Non-substance-abusing people who are sick have signs and symptoms of being "out of balance." In other words, their homeostasis is "out of balance", and they do not want to experience these effects.

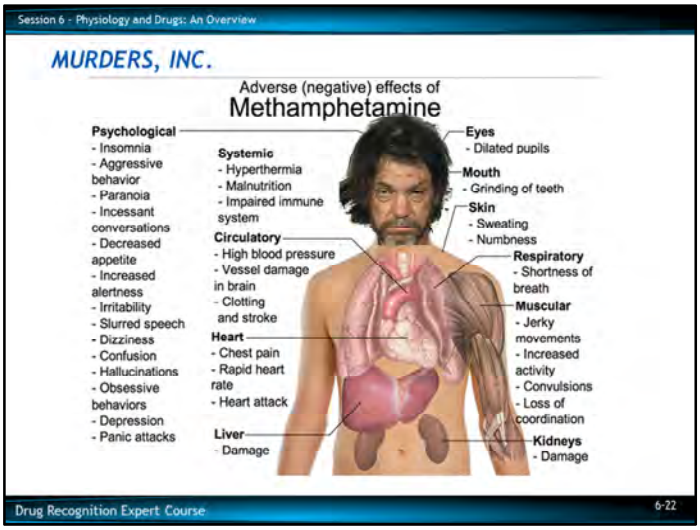
They want to get their homeostasis back "in balance" to feel better ("like usual"), so physicians may prescribe them drugs or medications to help put them in balance.

Drug abusers put themselves "out of balance" in their Nervous System to get "high." They typically show signs of impairment in the drug influence evaluation. In effect, they want to change their consciousness; they WANT to experience these effects.

This is why we NEED TO KNOW physiology and drug effects.

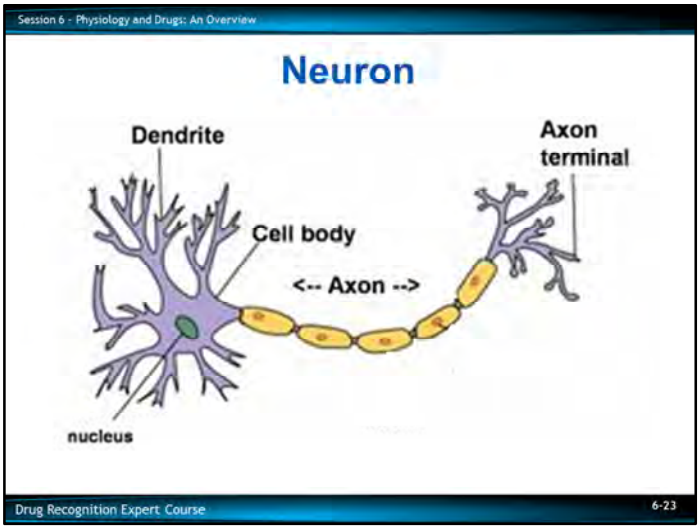


Homeostasis is indicated in the above slide. It represents average (expected) values for the clinical indicators used by the DRE to assist in making an opinion of impairment and medical drug related causes.



In the above slide, the indicators listed are common with persons impaired by a drug category or categories, in this case CNS Stimulants, or perhaps someone experiencing an immediate medical emergency. Medical conditions will be discussed later in this session. Whatever the case, they usually will exhibit indicators of impairment.

Individuals that are impaired exhibit numerous indicators of impairment. In other words, they generally do not exhibit the DRE average range or expected values for the related indicators.



Each neuron, or "wire segment" has three main parts:

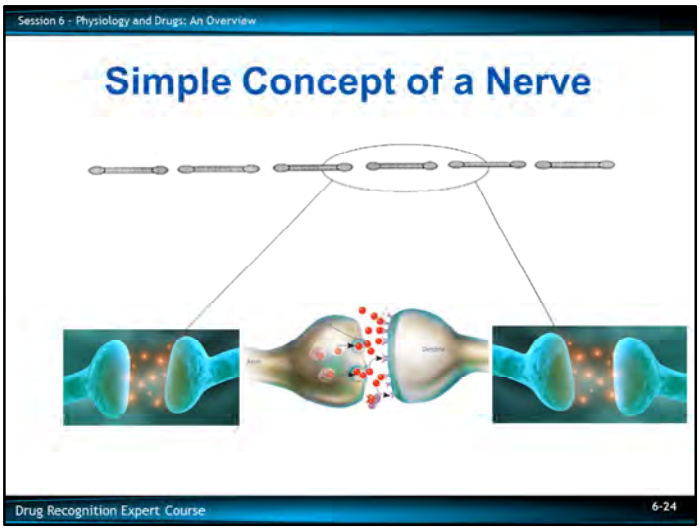
- the cell body
- the axon
- the dendrite

The cell body contains the nucleus, which contains the cell's DNA and is responsible for protein production and packaging.

The axon is the part of the neuron that sends out the neurotransmitter, or chemical messenger. ***Baseball analogy: the Axon would be the "pitcher" of the neurotransmitter and the dendrite is the "catcher" of the neurotransmitter.***

The dendrite is the part that receives the neurotransmitter.

The gap between two neurons is called a synapse, or synaptic gap.
Solicit participants' questions about nerve cells (neurons).

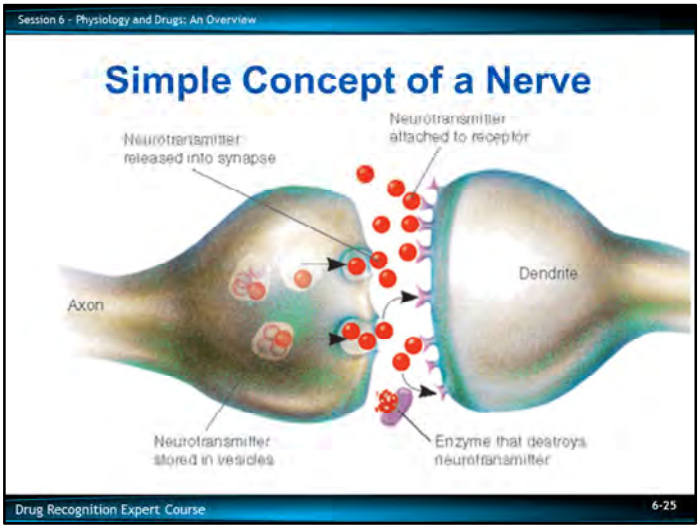


D. <u>A Simplified Concept of the Nervous System</u>

CLARIFICATION: Nerves are often pictured as telephone or telegraph wires.

The nerves that carry messages to and from the brain often are pictured as "wires" that carry electrical signals.

A more accurate, but still simplified concept would envision a nerve as a series of broken wire segments, with the segments separated by short spaces, or gaps.

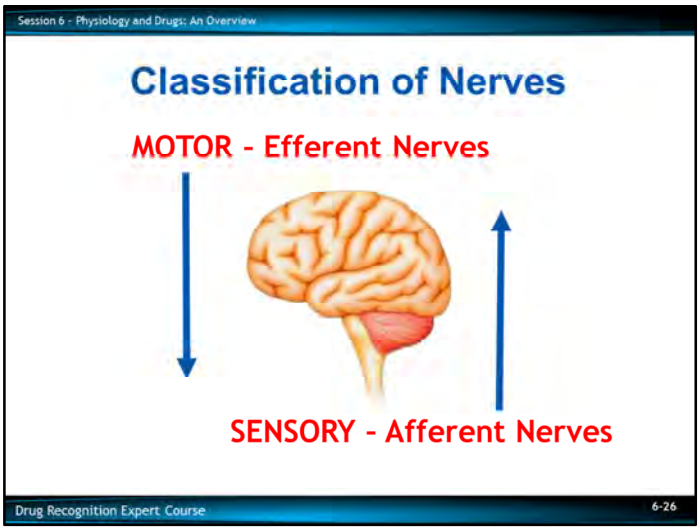


Point to the close up of the gap.
We can imagine messages running along the "wire segments" in much the same manner electrical impulses run along telephone wires.

When the message reaches the end of the "wire segment," it triggers the release of chemicals that flow across the gap and contact the next "wire segment."

When the chemical contacts the next wire segment, it generates an electrical impulse which runs along the wire until it reaches the next gap.

At that gap, the message again triggers the release of chemicals that flow across to the next "wire segment" and the process continues.
This concept of a nerve as a series of separated "wire segments" is not a true physical model. But it does accurately convey the basic idea of message transmission along nerves.
Solicit participants' questions about this concept.



Classification of Nerves
Some nerves carry messages away from the brain, to the body's muscles and organs.

These are called motor, or efferent nerves.

The brain uses motor nerves to send commands to the heart to beat, the lungs to breathe, the muscles to contract or expand, and so forth.

Other nerves carry messages to the brain, i.e., from the eyes, ears, and other senses, from the muscles, etc.

These are called Sensory, or Afferent nerves.

The brain decodes the messages that come along the sensory nerves to monitor the condition of the body and of the outside world.

A fundamental notion: if something interferes with the messages the brain sends along the motor nerves, the brain's control over the heart, the lungs, the muscles, and other organs will be distorted. Another fundamental notion: if something interferes with the messages the brain receives from the sensory nerves, the brain's perception of the outside world and of the body's status will be distorted.

This is basically how drugs work: they interfere with transmission or reception of the messages that travel along nerves.

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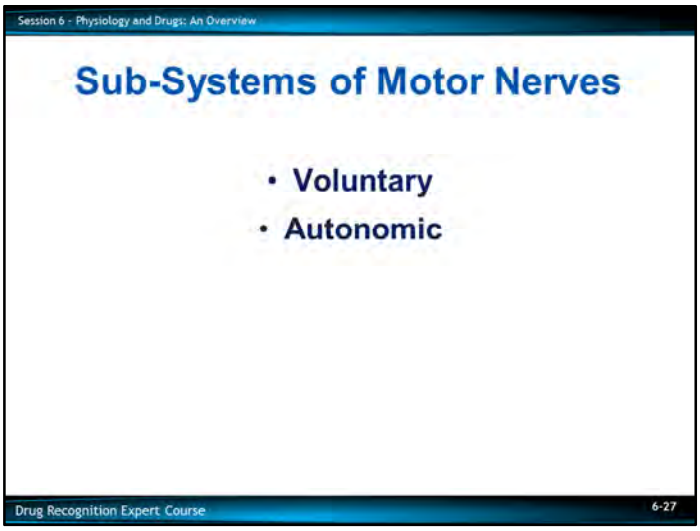


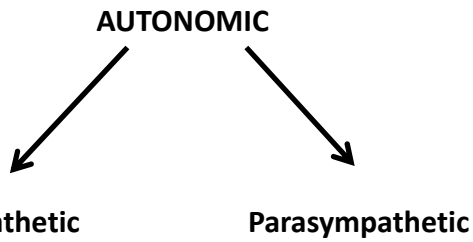
There are two sub-systems of motor nerves:

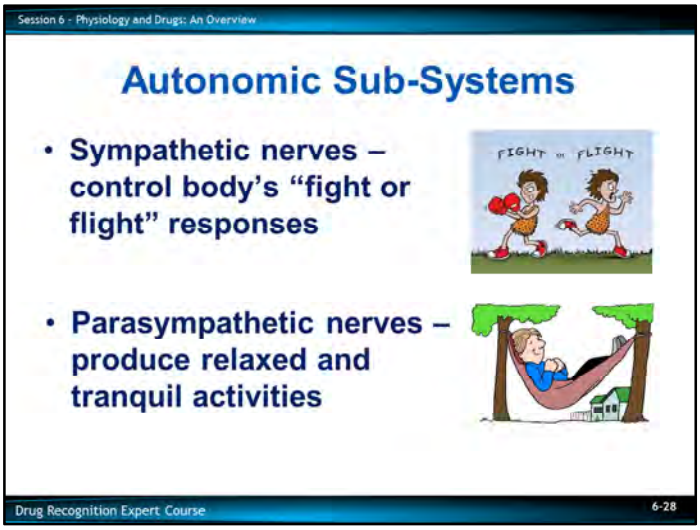
- The voluntary nerves send messages to the striated muscles that we consciously control

- The autonomic nerves send messages to the muscles and organs that we do not consciously control, i.e., smooth muscle and cardiac muscle.

On the dry erase board or easel/easel pad print the word "autonomic," and then draw two lines from the word "autonomic", one line angling down toward the left, the other angling down toward the right.

The Autonomic sub-system is divided into two groups.





- The Sympathetic nerves command the body to react in response to fear, stress, excitement, etc.

CLARIFICATION: Sympathetic nerves control the body's "fight or flight" responses.

Examples: Sympathetic nerves carry the messages that cause the blood pressure to elevate, pupils to dilate, sweat glands to activate, hair to stand on end, heartbeat to increase and strengthen, and blood vessels of the skin to constrict.

- Parasympathetic nerves carry messages that produce relaxed and tranquil activities

Examples: Parasympathetic nerves carry messages that cause the pupils to constrict, heartbeat to slow, peripheral blood vessels to dilate, blood pressure to decrease.

Certain neurotransmitters (i.e., chemical messengers) aid in the transmission of messages along sympathetic and parasympathetic nerves.

Drugs that mimic the neurotransmitter associated with sympathetic nerves are called sympathomimetic drugs.

Write "Sympathomimetic" on the dry erase board or easel/easel pad.

Drugs that mimic neurotransmitters associated with parasympathetic nerves are called parasympathomimetic drugs.

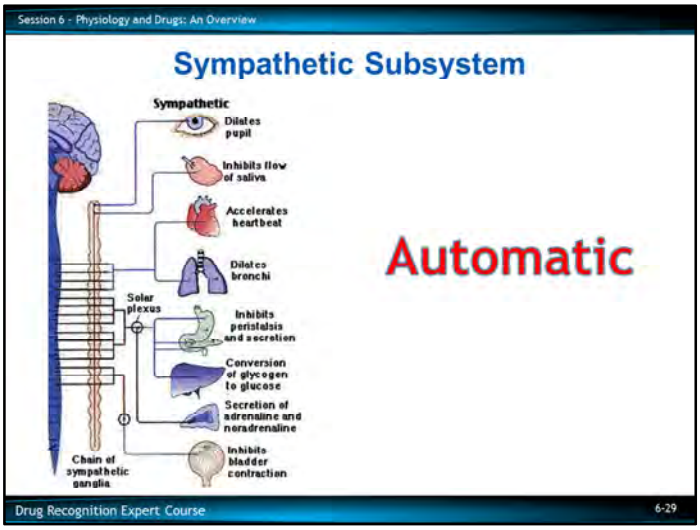
Write "Parasympathomimetic" on the dry erase board or easel/easel pad.

Some drugs mimic the action of these neurotransmitters: when taken into the body. These drugs artificially cause the transmission of messages along sympathetic or parasympathetic nerves.

Sympathomimetic drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

Ask participants to name a category of drugs that would be considered sympathomimetic.

- ***Examples: CNS Stimulants, Hallucinogens, and to some extent Dissociative Anesthetics and Cannabis.***

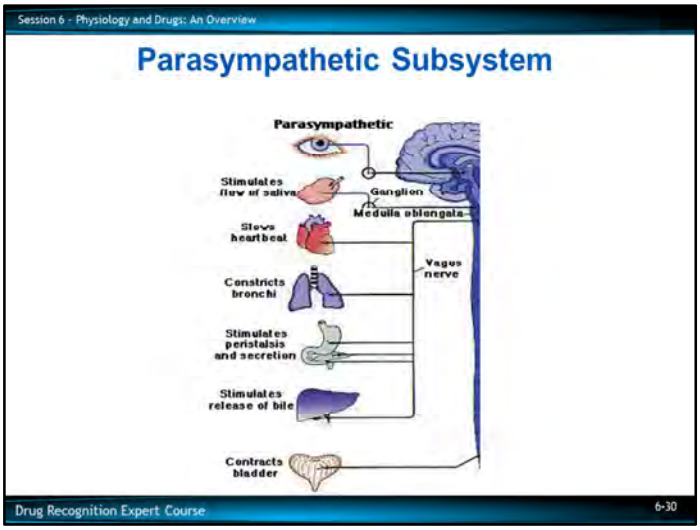


The Sympathetic subsystem of the autonomic nervous system controls the stimulating type effects of the body. This process is automatic.

We can relate this to “adrenaline” as a hormone or “norepinephrine” as a neurotransmitter which tends to speed up the body’s processes. Some of the sympathetic responses include: pupil dilation, inhibits flow of saliva (dry mouth), increased heartbeat, dilates bronchial.

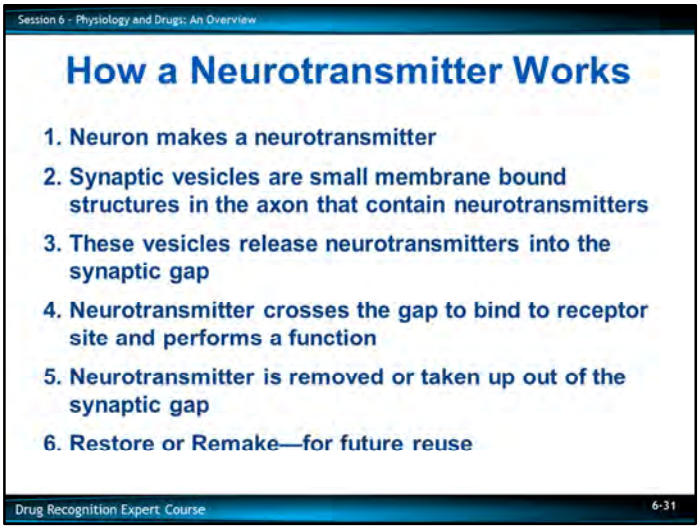
Ask participants to name a drug category that would be considered sympathomimetic.

- ***Example: CNS Stimulants, Hallucinogens, and to some degree Dissociative Anesthetics and Cannabis***



Parasympathetic subsystem of the autonomic nerve system controls the calming-type effects of the body. This results in the transmission of messages that produce lowered blood pressure, drowsiness, etc. Like the Sympathetic subsystem, this process is also automatic. Some of the Parasympathetic responses include: stimulating flow of saliva, slowing heartbeat, and constricting bronchial tubes (slows breathing).

Ask participants to name a drug category that would be considered parasympathomimetic. Examples: Narcotic Analgesics and CNS Depressants.



In our simple model of nerves, each "wire segment" corresponds to a nerve cell, called a neuron. The chemical that flows across the gaps separating neurons is called a neurotransmitter.
Clarification: neurotransmitters are the body's chemical messengers.

The body has a number of different neurotransmitters; each carries a different chemical message.

The sequence of how a neurotransmitter works:

1. The neuron makes a neurotransmitter

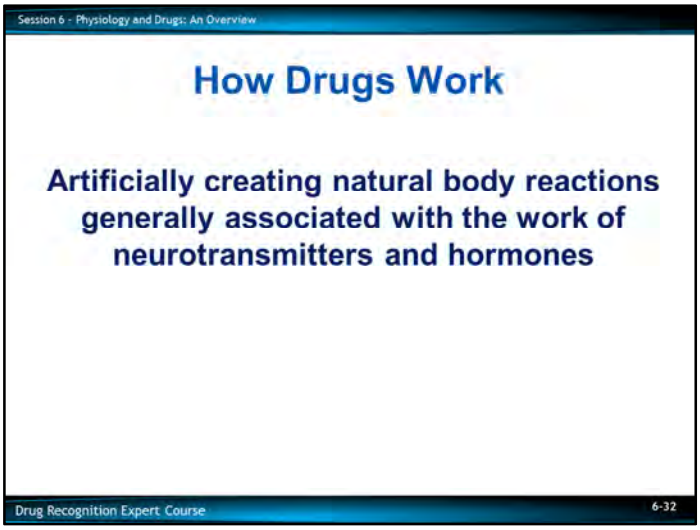
2. Synaptic vesicles are small membrane bound structures in the axon terminals of nerve cells that contain neurotransmitters for storage

3. These vesicles release neurotransmitters into the synaptic gap

4. The neurotransmitter crosses the synaptic gap and binds to a receptor site on the adjacent neuron to cause the receptor to perform a function, usually generating an electrical impulse to continue onward through that neuron

5. Removal and Reuptake—the neurotransmitter is either broken down or taken back up into the originating neuron

6. Restore or Remake—for future reuse



E. <u>How Drugs Work</u>

In very simple terms, drugs work by artificially creating natural body reactions generally associated with the work of neurotransmitters and hormones.

Therapeutic doses of legitimate prescription and over-the-counter drugs are designed to produce mild and carefully-controlled simulations of the natural action of neurotransmitters and hormones. ***Ask participants: What drug do many people take to artificially overcome the drowsiness they feel in the morning?***

Large, abusive doses of drugs may produce greatly exaggerated simulations of the natural action of hormones and neurotransmitters, sometimes with disastrous results.

Example: Cocaine (a sympathomimetic drug) may artificially create a message commanding the heart to beat so rapidly cardiac arrest results.

When a person ingests a drug and artificially simulates the natural action of hormones and neurotransmitters, the body's dynamic balance is disrupted.
Remind participants the body struggles to maintain homeostasis, the dynamic balance of salts, sugars, and other substances.

The body automatically responds to the presence of the drug by producing other hormones and chemicals that can oppose the drug's effects and bring the body back into balance.

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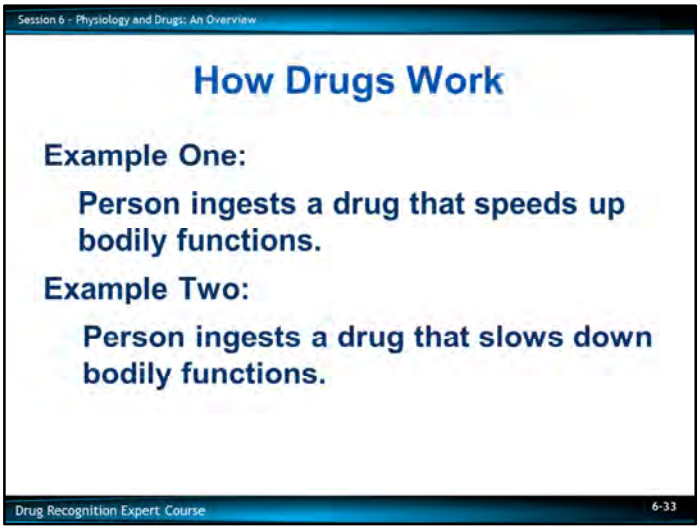


Example Number One
If a person ingests a stimulant drug that mimics neurotransmitters associated with the sympathetic nerves, the body may react by excreting hormones that depress the bodily functions the drug is exciting.

If a person ingested Cocaine, for example, the Cocaine would artificially stimulate the body functions. The body would then produce hormones and neurotransmitters to slow down the body functions to try to maintain homeostasis.

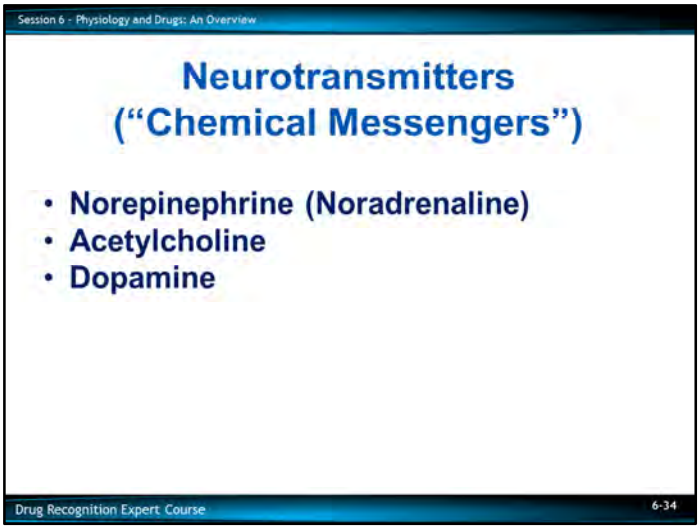
Example Number Two
If a person ingests a drug that depresses some bodily function, the body may pour out one of its natural chemicals that stimulate that same function.

An interesting situation can occur when the drug is no longer psychoactive.

The chemicals produced by the body in an effort to counteract the drug may still be active.

These natural chemicals have exactly the opposite effect on the body the drug had: after all, that is precisely why the body produced those chemicals.

As a result, the person may feel, appear and act in a manner exactly opposite to the way he or she would feel, appear and act when under the influence of the drug.



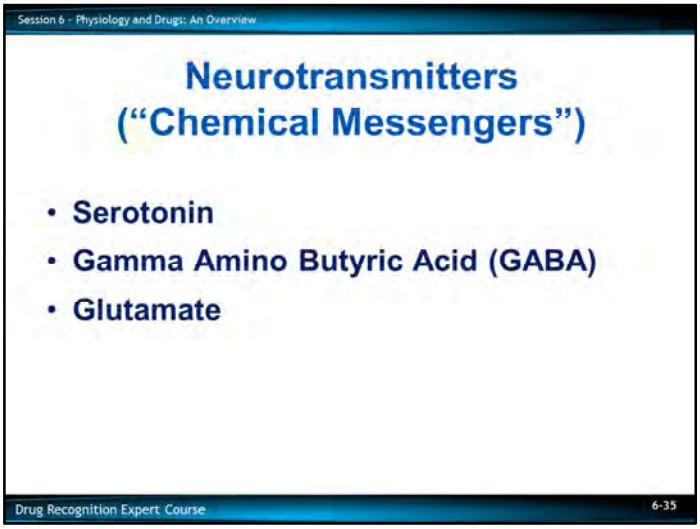
Neurotransmitters
Although there are more than 100 chemicals in the brain, only about two dozen probably are true neurotransmitters.

Among the primary neurotransmitters identified are:
Write these neurotransmitters on the dry erase board or easel/easel pad
- Norepinephrine (also called Noradrenaline)

Point out Norepinephrine is a neurotransmitter that produces effects on the body similar to the effects produced by Adrenaline (a hormone). Many neurotransmitters correspond to hormones that produce similar effects.

- Acetylcholine – Plays a role in muscle control and affects neuromuscular or myoneural junctions
  - Acetylcholine also plays an important role in learning and memory
  - Produced by cholinergic neurons and bind to either nicotinic receptors (named after one of their most potent activators, nicotine, and the reason tobacco is so addictive) or muscarinic receptors

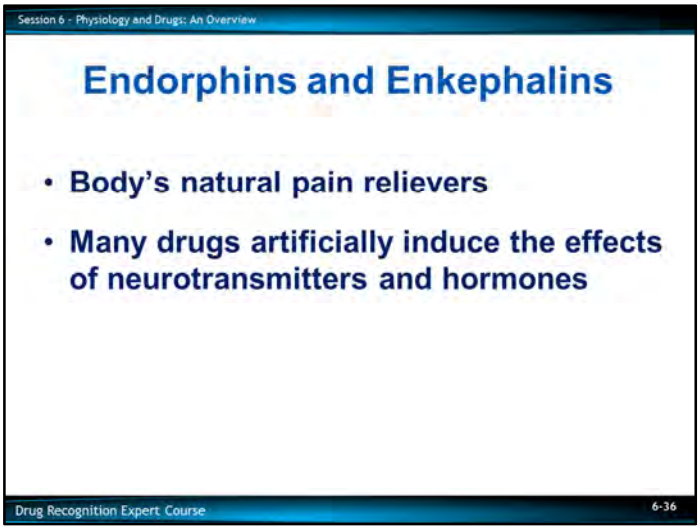
- Dopamine – Plays a role in mood control and is used in treating Parkinson's Disease
  - It is necessary for mental concentration, alertness, high energy, motivation, hunger regulation, and sex drive
  - Dopamine functions in the brain's reward pathway, release making you feel good
  - It is an EXCITATORY neurotransmitter and acts like the "gas pedal" in a car



- Serotonin – A vasoconstrictor, thought to be involved in sleep, wakefulness, and sensory perception
  - Tryptophan is a precursor to Serotonin and has been used to treat insomnia
  - Serotonin is strongly associated with mood — overall state of mind — and deficiency is associated with depression

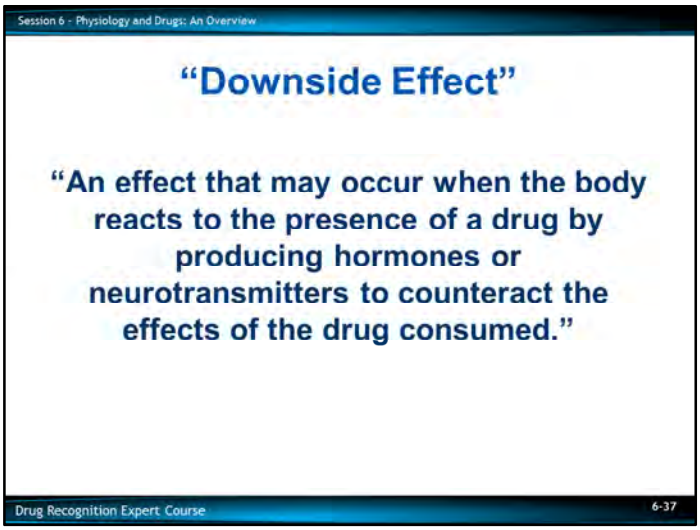
- Gamma Amino Butyric Acid (GABA) – Inhibits various neurotransmitters and also causes a release of growth hormones
  - GABA is the major INHIBITORY neurotransmitter in the brain and acts like the "brake pedal" in a car

- Glutamate – Functions as an "on switch" in the brain and is classified as an excitatory neurotransmitter
  - Glutamate is the most common EXCITATORY neurotransmitter in the brain



Endorphins and Enkephalins
These are the body's natural pain relievers. They may be released in response to influences that may cause pain to the person.

There are many drugs that artificially induce the effects of neurotransmitters and hormones.
Solicit participants' questions and comments about nerves and neurotransmitter.

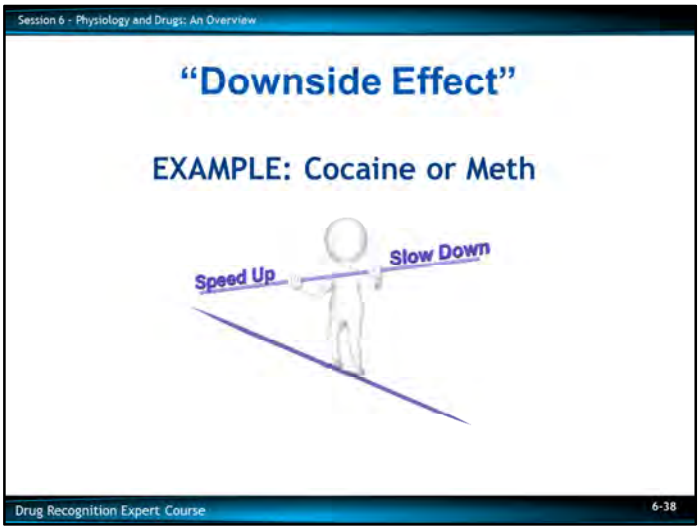


Write "Downside" on the dry erase board or easel/easel pad.
It is not uncommon for a DRE to encounter someone on the "downside."

Definition:
"An effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed."

The neurotransmitters and hormones persist in the body longer than the drug they are responding to, resulting in the demonstration of opposite findings after the drug is gone from the body until the hormones and neurotransmitters are eliminated.
Example: Ask participants if they have ever experienced this situation…After drinking several drinks, they become drowsy, go to bed, and fall asleep quickly. But, after a few hours, when it is still the middle of the night, they suddenly awaken and are wide awake, unable to fall asleep again. What has happened is the alcohol has worn off, but the natural CNS Stimulants the body produced to counteract the alcohol are still around.

We call this situation being on the "downside" of the drug.



One example of the downside effect can be seen with an individual abusing Stimulant drugs, such as Cocaine or Methamphetamine.

Example: with Cocaine (a drug metabolized, or broken down by the body fairly quickly) the user may be exhibiting drowsiness and general depression by the time the DRE is called to the scene.

The concept of "downside" will be especially important to us when we discuss the effects of CNS Stimulants and drug combinations.
Point out persons on the "downside" can be dangerous when trying to operate a motor vehicle. Point out two common examples of "downside" occur with Cocaine and Methamphetamine. Both drugs stimulate the body.

Then the body attempts to "counteract" the Stimulant effects. When the effects of the drug diminish, the results may mimic a Narcotic Analgesic, for example.

This is the body's response to return to homeostasis after the introduction of a drug.

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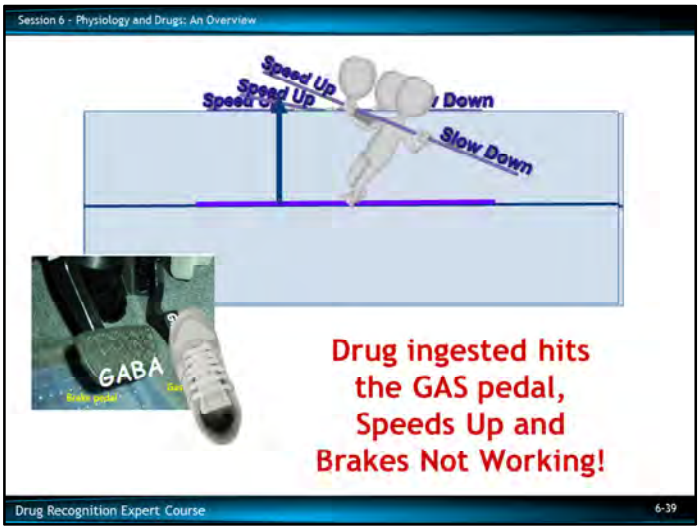
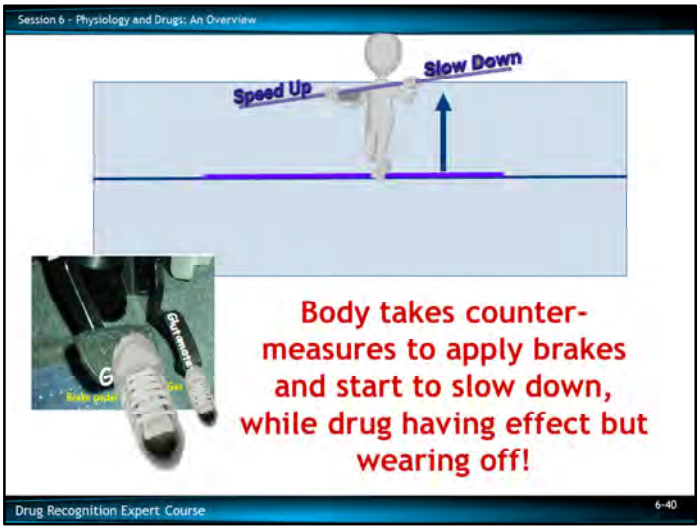
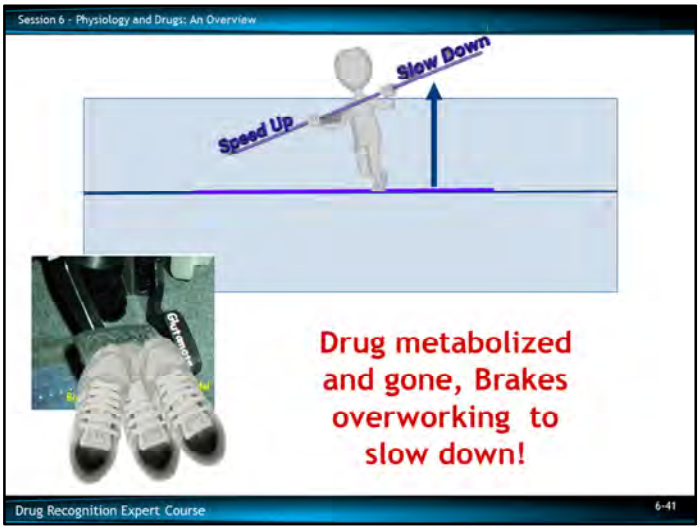


While the drug is present and active in the body—applying the gas pedal in this Stimulant example—the body triggers its systems to apply the brakes to try to regain homeostasis.

This involves engagement of the parasympathetic nervous system to attempt to regulate and slow the sympathetic system, as well as release of inhibitory neurotransmitters and hormones into the blood stream. The hormone system is the slowest to engage and the slowest to disengage.

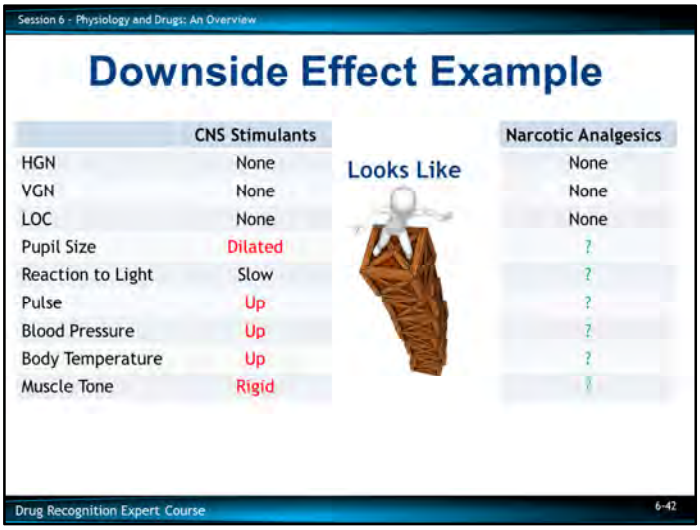


As time passes, the (Stimulant) drug ingested "wears off" by metabolism to inactivate the foreign chemical and prepare it for elimination from the body. This results in a reduced pressure on the gas pedal. While this is occurring, the body's effort at "braking" to counter the Stimulant's pressure on the gas pedal is still ramping up and engaging to try to regain homeostasis.



The Stimulant drug ingested is now essentially eliminated, or its effect has worn off, so there is no pressure on the gas pedal.

The body's attempt at braking to regain homeostasis is now in full swing and is UNOPPOSED, so effects the OPPOSITE of the original drug ingested (Stimulant) can be seen on evaluation (Depressant).



With this example, the downside of CNS Stimulants can mimic **Narcotic Analgesics** and vice versa.

In effect, the drug(s) have worn off, however, the body is still continuing to produce neurotransmitters and hormones that counteract the effects of the drug(s). With the drug(s) now not having an affect on the body, these neurotransmitters and hormones are adversely affecting the body, causing signs and symptoms opposite of those of the prior drug effects. Keep in mind a subject may not exhibit all of the opposite indicators. For example, a person on the "downside" of CNS Stimulants may not have ptosis and/or they may not have facial itching. With drug impairment, the DRE may not observe every indicator of a particular drug category.

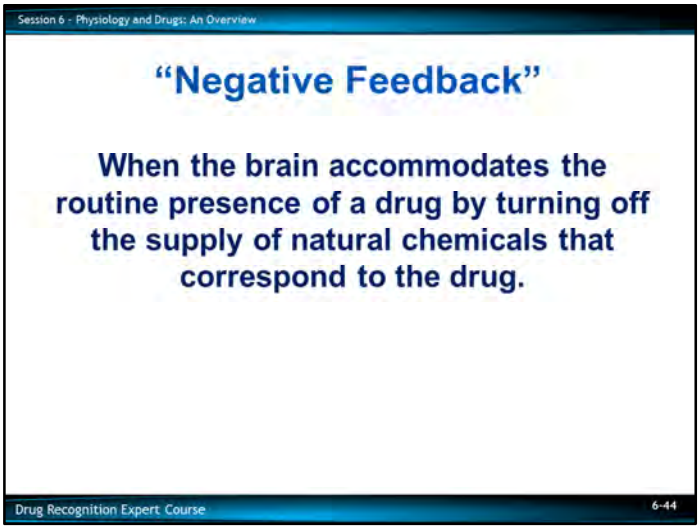
Write "Increased Tolerance" on the dry erase board or easel/easel pad.
Emphasize: Habitual users of drugs may develop tolerance to the drug. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests.
Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e., in the vital signs and eye signs – such as Horizontal Gaze Nystagmus (HGN)).

Physical Dependence
Write "Physical Dependence" on the dry erase board or easel/easel pad.
Another result may be physical dependence, or addiction.
Pose this question to the class: Why do people take drugs? Solicit responses.

In simplest terms, people take drugs because they like the feelings the drugs produce.

The artificial simulation of the natural action of hormones and neurotransmitters appears to permit the user to create any feeling or mood he or she desires.

As time goes on, and negative feedback develops, the user finds he or she can only achieve those feelings and moods if the drug is taken and, if the drug is not taken, the user does not return to a normal, non-drug-using state. He/she feels much worse in the opposite direction of the substance used. So one additional reason for physical dependence or addiction is to PREVENT WITHDRAWAL SYMPTOMS and ALLOW "NORMAL" FUNCTIONING. The habitual user must externally supply some of the drug just to feel like a typical, non-drug-using person would.



Negative Feedback

Write "Negative Feedback" on the dry erase board or easel/easel pad.

Another interesting effect drugs can produce is called Negative Feedback.

Write "The Body Quits Producing the Natural Chemicals" on the dry erase board or easel/easel pad.

By taking the drug, the person artificially simulates the action of certain hormones and/or neurotransmitters.

If the person continues to take the drug, the body may simply cease producing the natural chemicals the drug simulates.

In effect, the body comes to rely on the drug to supply itself with those chemicals.

Example of Negative Feedback: when people regularly use Heroin, Cocaine, or Marijuana, their bodies may cease producing the neurotransmitters and hormones known to be crucial for proper pain relief, stress reduction, mental stability, and motivation.

Point out because of this Negative Feedback, the user becomes dependent on the drug to cope with the stresses and strains of daily life.

One result of this may be increased tolerance to the drug. Since the body isn't producing its own natural chemicals, it can more easily stand the drug.

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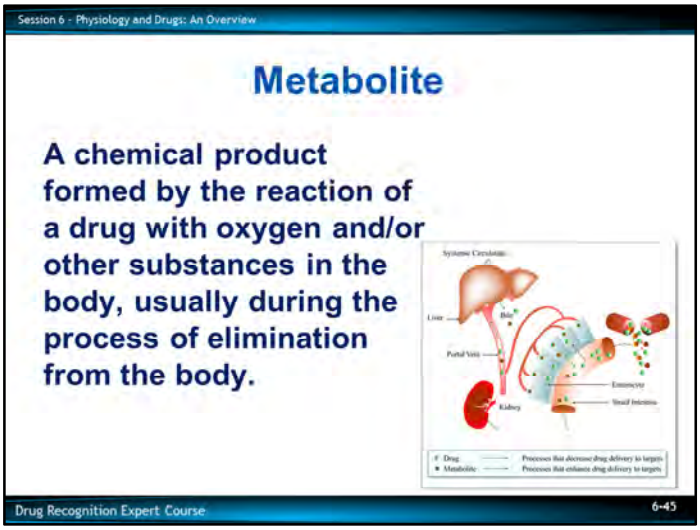

Metabolite

One final concept is important for an understanding of how drugs work.

A metabolite is a product of metabolism which is the chemical changes that take place when the drug reacts with enzymes and other substances in the body.

Write "Metabolite" on the dry erase board or easel/easel pad.

Instructor information: Metabolism is defined as the combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions. There are two basic phases of metabolism: anabolism, the constructive phase during which molecules resulting from the digestive process are built up into complex compounds that form the tissues and organs of the body; and catabolism, the destructive phase during which larger molecules are broken down into simpler substances with the release of energy.

The body uses chemical reactions to break down the drug, and ultimately to eliminate it.

Example: when we drink alcohol, we initiate a series of chemical reactions that ultimately transform the alcohol into harmless carbon dioxide and water.

Sometimes, metabolites of the original drug are themselves drugs, and cause impairment. For example, the body quickly metabolizes Heroin into morphine and it is the morphine that actually produces the effects the heroin user experiences.

Solicit participants' questions and comments about how drugs work.

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F. <u>Medical Conditions That May Mimic Drug Impairment</u>

Certain medical conditions or injuries may cause signs and symptoms similar to those of drug impairment.

There are times when a DRE may encounter situations where a subject arrested for drugged-driving may be suffering from a medical condition that has affected the subject's ability to operate a vehicle safely. If the DRE makes the determination that a possible medical issue is the likely cause of impairment (observable signs and symptoms), the DRE should consider taking the appropriate steps to ensure the subject is referred to the proper medical personnel.

In such cases, the DRE should prepare the DRE drug evaluation report documenting his or her findings and indicating the opinion they support medical impairment as the possible source of the impairment that has affected the subject's ability to operate a vehicle safely. Appropriate discretion should be applied by the arresting officer whether or not an impaired-driving charge is relevant, but the person should receive prompt, formal medical evaluation, if considered appropriate.

Refer participants to the list contained in their manuals.
Point out many of the conditions listed are serious enough to prevent driving:

- Bipolar Disorder (Manic Depression) – a condition characterized by the alteration of manic and depressive states

- Conjunctivitis – inflammation of the conjunctiva

Conjunctivitis is a condition caused by infection, allergy, or irritation of the mucous membrane lining of the eyes, resulting in a "pink eye" appearance. A casual observer might mistake this for the bloodshot conditions associated with Cannabis or alcohol.

- Diabetes – a condition that can result in insulin shock (taking too much insulin) which may produce tremors, increased blood pressure, rapid respiration, lack of coordination, headache, confusion, and seizures

The most common problem with diabetics arises when they take too much insulin, so their blood sugar levels become extremely low. They may be very confused, sweat profusely, and exhibit increased pulse rate and increased blood pressure.

- Head Trauma – normally due to a severe blow or bump to the head

Head trauma may injure the brain and create disorientation, confusion, lack of coordination, slowed responses, and speech impairment.
Point out head trauma may produce disorientation, confusion, unequal pupil size, unequal tracking ability of the eyes, or the drooping of one eyelid while the other remains normal.

- Multiple Sclerosis (MS) – a degenerative muscular disorder

MS is a progressive disease in which the nerve fibers of the brain and spinal cord lose their myelin cover. Some signs and symptoms are abnormal sensations in the face or extremities, weakness, double vision, etc.

- Shock – a sudden or violent disturbance in the mental or emotional faculties

A shock victim may be dazed, uncoordinated, non-responsive.
Other indicators include extremely low blood pressure, fast but weak pulse, dizziness, moist clammy skin, profuse sweating, rapid shallow breathing, blue lips and fingernails.

- Stroke – a medical condition caused by a rupture or obstruction (as if by clot) of an artery of the brain

Point out stroke may produce many of the same indicators as will head trauma. In addition, stroke victims may have pupils markedly different in size and one pupil may exhibit no visible reaction to light while the other reacts normally.
***Point out there will be noticeably a difference in their physical appearance and actions such as drooling and slurred speech*.**

- Others – Carbon Monoxide poisoning, Seizures, Endocrine disorders, Neurological conditions, Psychiatric conditions, and infections

Review physiologic changes that may be mistaken for drug-induced symptoms. For example, strenuous exercise increases heart rate and rate of respiration; surprise, fear, and pain dilate the pupils markedly.

Normal conditions can affect vital signs: Exercise, Excitement, Fear, Anxiety, Depression, Other

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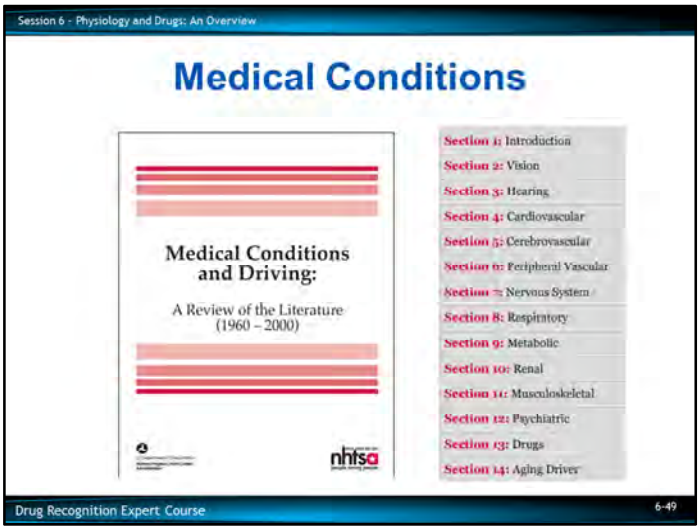


Other Medical Conditions

How many different medical conditions are there? Depending on source, from about 2,500 to 12,000 diseases and conditions!!

An excellent source for medical conditions that impair driving is: *Medical Conditions and Driving: A Review of the Literature (1960-2000).* The National Highway Traffic Safety Administration (NHTSA) has produced this excellent guide reviewing numerous articles and studies on medical conditions and their effects on driving. Although this reference will not allow you to make a determination of which medical condition may be affecting a person, it will give you a good reference for understanding how many medical conditions adversely affect driving.

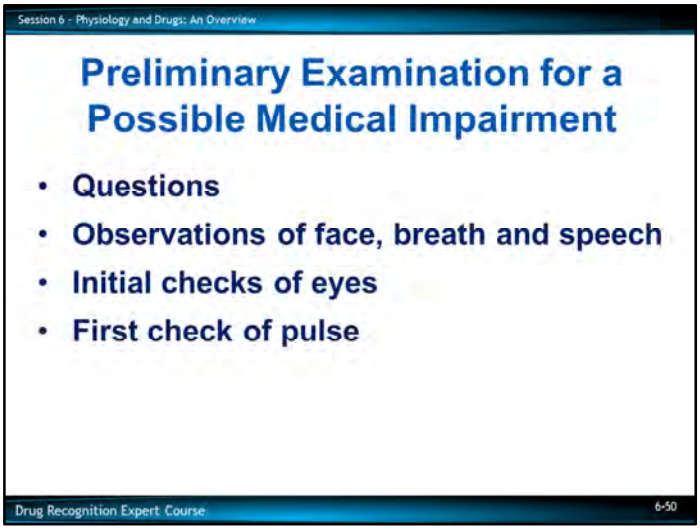
It is recommended the DRE get as much detail when you interview the subject about their medical conditions, the stage of their condition(s), whether it is treated or untreated, if it is in later stages, remission, or under control with medications. Almost all medical conditions present signs suggesting it is polydrug use.

The location of the injury or disease will determine the signs and symptoms — for this reason, we CANNOT generalize a set of specific signs and symptoms for a condition as we do with the Drug Categories. In many injuries or diseases, the effects will be seen primarily on ONE SIDE of the body:

- This is the ONE SIDED (Lateralized) SIGN
- Impairment due to drugs will be seen on BOTH sides

A medical condition will usually not go away in 24 hours as with a drug. It will be present well after the initial stop and arrest. The condition may include INCOMPATIBLE or conflicting signs in the DRE evaluation ("mismatched" signs) — particularly the BACKGROUND (eating, work, hobbies, etc.), following directions, compliance, and time prediction.

The DRE may evaluate a subject in which there is a COMBINED medical condition and drug abuse. People with medical conditions also use drugs, both legally and illegally. BOTH situations can have impairing effects and can be present at the time of the DRE evaluation.

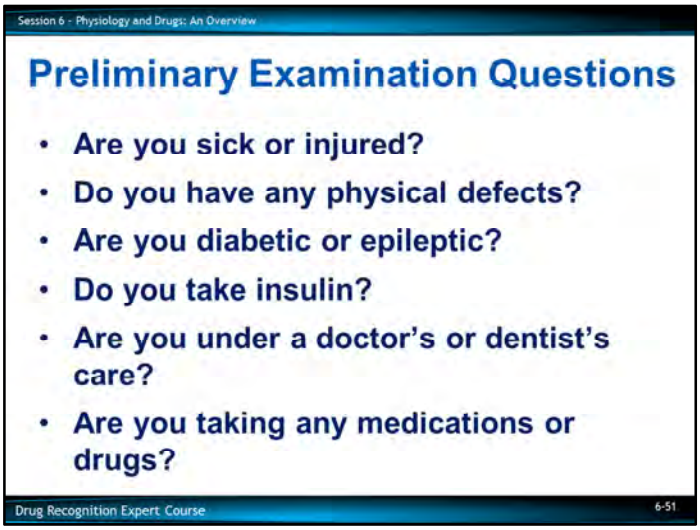


The Preliminary Examination Overview

The preliminary examination consists of:

- Questions
- Observations of face, breath, and speech
- Initial checks of the eyes
- The initial check of the subject's pulse

Point out the pulse check is part of the examination of the subject's vital signs. Pulse is checked three times during the drug influence evaluation for many reasons, including to exclude nervousness as a factor of elevated pulse. This gives a more accurate and reliable pulse.



Preliminary Examination Questions

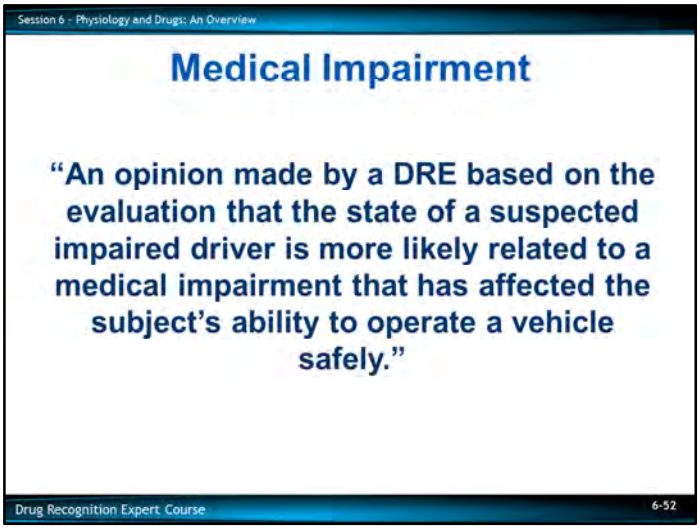
The questions deal with injuries or medical problems the subject may have. They include:

Point out these questions are incorporated into the Drug Influence Evaluation Form, which the participants will use during all of their practice sessions.

Briefly discuss the relevance of each question.

- Are you sick or injured?
- Do you have any physical defects?
- Are you diabetic or epileptic?
- Do you take insulin?
- Are you under a doctor or dentist's care?
- Are you taking any medications or drugs?

It is not only allowable, but recommended the DRE ask more questions related to these areas. This is especially true if the subject answers any of these questions in the affirmative.



DRE Medical Impairment Definition

There are times when a DRE may encounter situations where a subject arrested for drugged-driving may be suffering from a medical condition that has affected the subject's ability to operate a vehicle safely. In other words, the DRE, through his or her evaluation, has eliminated impairing substances as the probable cause of impairment, and while doing so, identified signs and symptoms consistent with a medical issue. Once the DRE makes the determination, the DRE should consider taking appropriate steps to ensure the subject is referred to the proper medical personnel. In such cases, the DRE should prepare the DRE drug evaluation report documenting his or her findings that support an opinion of a DRE medical impairment.

For purposes of DRE and the DEC Program, medical impairment is defined as, **"An opinion made by a DRE based on the evaluation that the state of a suspected impaired driver is more likely related to a medical impairment that has affected the subject's ability to operate a vehicle safely."**

The suggested way to document this type of opinion in Step 11 of the DRE report would be: "It is my opinion as a certified Drug Recognition Expert, that (Subject's name) is unable to operate a vehicle safely due to medical impairment."

DREs and other police officers will at times encounter individuals with mental illness or intellectual/developmental disabilities. These individuals may exhibit signs and symptoms very similar to those of an individual impaired by drugs and/or alcohol. These individuals may also be experiencing coexisting conditions of mental illness with drug impairment. It is important for DREs to make every effort to prevent violent interactions using an array of tools and resources necessary for positive, successful outcomes. Using a strategic approach to interactions with individuals with suspected mental health problems or intellectual/developmental disabilities can ensure officer safety through the DRE interaction.

The International Association of Chiefs of Police (IACP) has a resource entitled, "Improving Officer Response to Persons with Mental Illness and Other Disabilities" that can be accessed at www.theiacp.org/publications. Other recommended Web sites and links for further information that may be beneficial for DREs and other police officers include www.samhsa.gov, www.nami.org, www.citiinternational.org, www.mentalhealthfirstaid.org/cs, ww.ncmhr.org, or www.nasmhpd.org/index.aspx.

G. <u>Summary</u>

Briefly review main points of the lesson.

Basic understanding of how the body works is necessary to:

- Understand the general concept of human physiology
- Understand purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)

Emphasize research in drug intoxication and the interaction with neurotransmitters is in its infancy.

This limited overview will not qualify participants as medical specialists. The knowledge gained during this session must be supplemented by additional reading and/or instruction. The body of knowledge in this area is being constantly expanded.

Point out the best response to questions regarding bodily functions and or specific drug interactions may be "I don't know. I conducted a series of examinations and documented my observations. Based on my training and experience the results of my observations are consistent with those produced by persons impaired by _____."

The body maintains homeostasis (equilibrium) by constantly adjusting to changes in the external and internal environment:

Point out the body functions as a total unit in an integrated and coordinated manner.

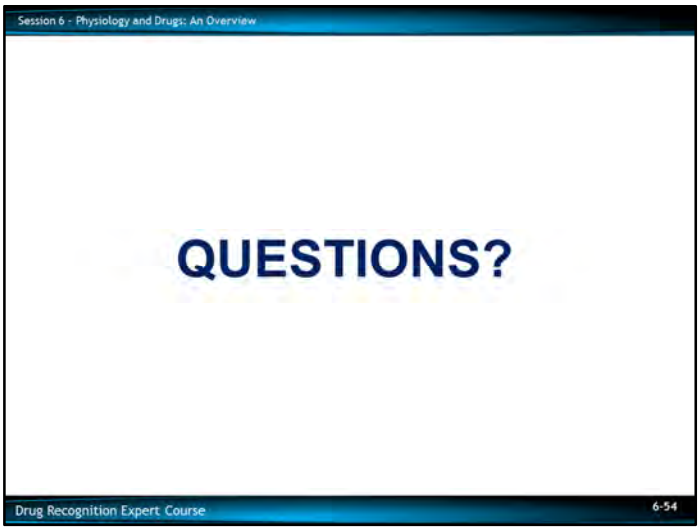
When drugs are introduced into the body this process comes into play. When drugs interact in the body they tend to:

- speed things up, or slow things down, or confuse signals, or block signals
- some combination of the above

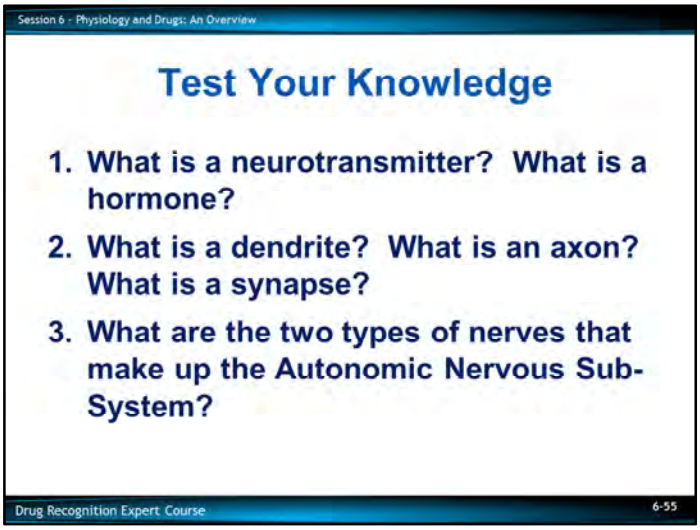
Point out this is a very simplistic overview of how drugs work.

The effects of drugs can be detected and/or observed in the drug influence evaluation.

Remind the participants detailed instructions on procedures and expected results of the drug influence evaluations will be covered in following sessions. Solicit and answer participants' questions.



Solicit participants' comments and questions concerning Physiology and Drugs : An Overview.



Test Your Knowledge

1. What is a neurotransmitter? What is a hormone?

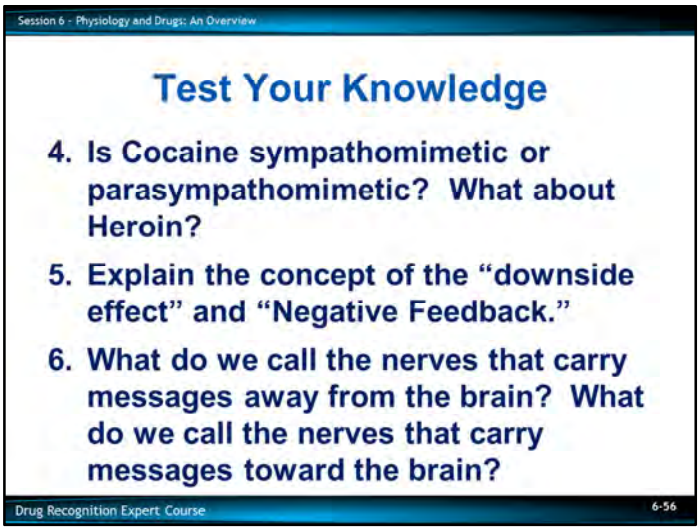
A neurotransmitter is a chemical that passes from the axon of one nerve cell to the dendrite of the next cell and carry messages across the gap between the two nerve cells.
Hormones are chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and they aid in the regulation of numerous body processes.

2. What is a dendrite? What is an axon? What is a synapse?

The dendrite is the part of a neuron (nerve cell) that receives a neurotransmitter.
The axon is the part of a neuron (nerve cell) that sends out a neurotransmitter.
The synapse is the gap or space between two neurons (nerve cell).

3. What are the two types of nerves that make up the Autonomic Nervous Sub-System?

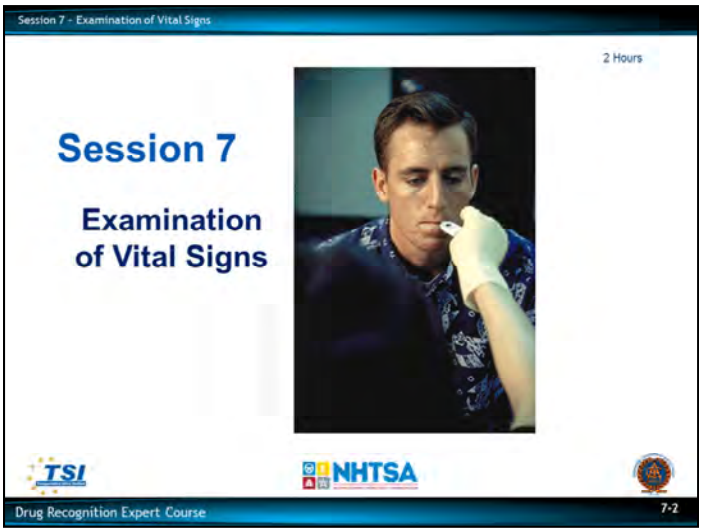
Sympathetic Nerves and Parasympathetic Nerves

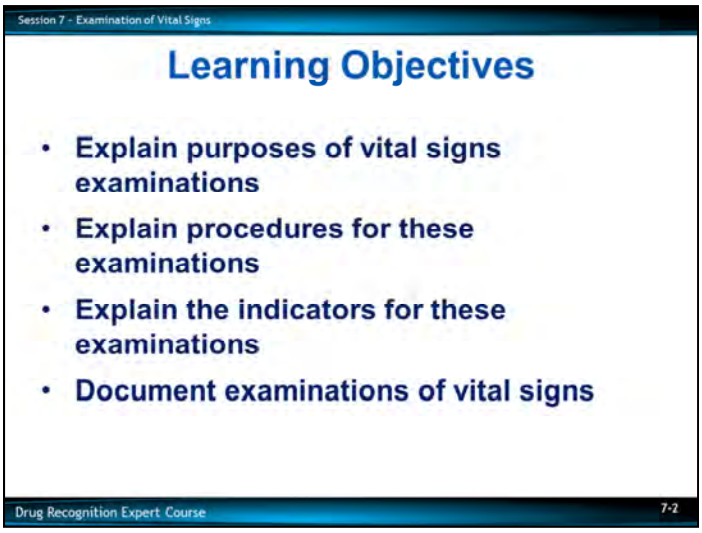


4. Is Cocaine sympathomimetic or parasympathomimetic? What about Heroin?
Cocaine is a sympathomimetic drug. Heroin is a parasympathomimetic drug.

5. Explain the concept of the "downside effect." Explain the concept of "Negative Feedback."
Downside effect occurs when the body reacts to the presence of a drug by releasing neurotransmitters and hormones to counteract the effects of the drug consumed to return to homeostasis.
Negative Feedback occurs when the brain becomes accustomed to the presence of drugs and stops producing the natural chemicals that correspond to the drug.

6. What do we call the nerves that carry messages away from the brain? What do we call the nerves that carry messages toward the brain?
The nerves that carry messages away from the brain are called the Motor Nerves, or the Efferent Nerves.
The nerves that carry messages toward the brain are called the Sensory Nerves, or the Afferent Nerves.


Session 7 - Examination of Vital Signs
2 Hours
Session 7
Examination of Vital Signs
TSI
NHTSA
Drug Recognition Expert Course
7-2



Briefly review the content, objectives, and activities of this session.

Upon successfully completing this session the participant will be able to:

- Explain the purposes of the various vital signs examinations in the drug influence evaluation procedure
- Explain the administrative procedures for these examinations
- Explain the indicators obtained from these examinations
- Document the examinations of vital signs accurately and completely

CONTENT SEGMENTS

A. Purpose of the Examinations
B. Procedures and Clues
C. Demonstrations
D. Documentation Procedures
E. Practice

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Participant-Led Demonstrations
Participants' Hands-On Practice
Reading Assignments

A. <u>Purposes of the Examinations</u>

The vital signs relevant to the drug influence evaluation include:
Point out these vital signs on the wall chart.

- Pulse Rate
- Blood Pressure
- Temperature

Different types of drugs affect these vital signs in different ways.

Certain drugs tend to "speed up" the body and elevate these vital signs.
Clarification:

- Pulse may quicken
- Blood pressure may rise
- Temperature may rise

Other drugs tend to "slow down" the body and lower these vital signs.
Clarification:

- Pulse may slow
- Blood pressure may drop
- Temperature may drop

Systematic examination of the vital signs gives us much useful information concerning the possible presence or absence of various categories of drugs.

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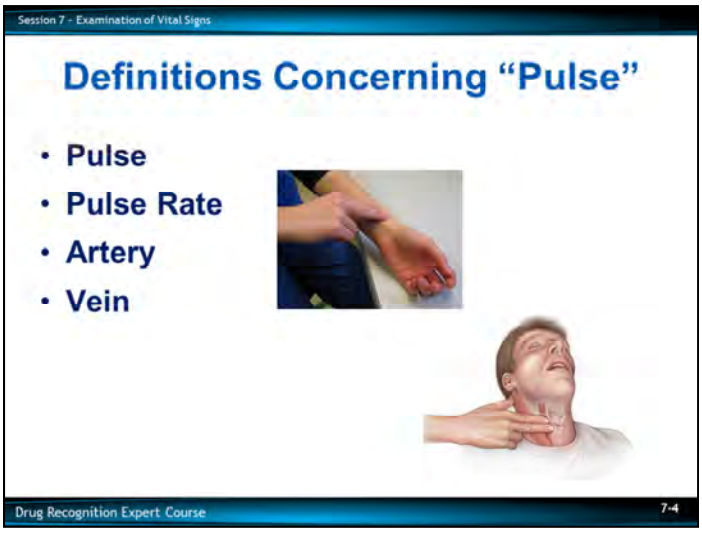


B. <u>Procedures and Clues</u>

- Pulse: The rhythmic dilation and relaxation of an artery that results from the beating of the heart
- Pulse Rate: The number of pulsations in an artery per minute
- Artery: A strong, elastic blood vessel that carries blood from the heart to the body tissues
- Vein: A blood vessel that carries blood back to the heart from the body tissues

Measurement of Pulse Rate

Point out pulse rate is equal to the number of contractions of the heart per minute.

For your information: technically speaking, pulse rate is not quite the same thing as heart beat rate. There are rare and very serious conditions that could cause the heart to beat so weakly it is unable to force blood through some or all arteries. In that case, there might be no discernable pulse even though the heart is beating. But with a normal, healthy heart, pulse rate will equal heart beat rate.

- An artery is a strong, elastic blood vessel that carries blood from the heart to the body tissues
- A vein is a blood vessel that carries blood back to the heart from the body tissues
- When the heart contracts, it squeezes blood out of its chambers into the arteries
- The surging blood causes the arteries to expand
- By placing your fingers on the skin next to an artery and pressing down, you can feel the artery expand as the blood surges through

Emphasize: the "surge" can be felt as the blood is squeezed from the heart through an artery. The pulse cannot be felt in a vein.

By keeping your fingers on the artery and counting the number of pulses that occur in one minute, you will measure the pulse rate.

Demonstrate this, by holding your fingers on your own radial artery.

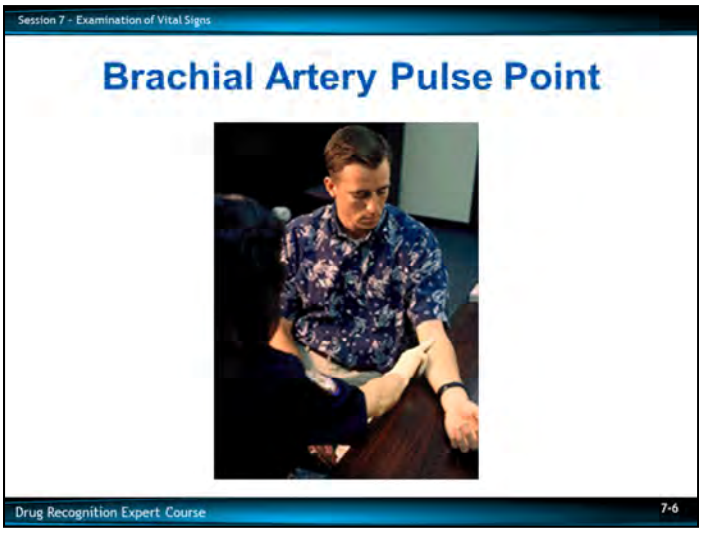
Pulse is easy to measure, once you locate an artery close to the surface of the skin.

Radial Artery Pulse Point
One convenient pulse point involves the radial artery.

The radial artery can be located in or near the natural crease of the wrist on the side of the wrist next to the thumb.
Hold your left hand out.
Point to the radial artery pulse point on your own wrist.
Demonstrate this.

Place the tips of your right hand's index finger and middle finger into the crease of your wrist and exert a slight pressure.
Demonstrate this.

You should be able to feel the pulse in your radial artery.
Point out the DRE can have the subject position his/her palm up or down for this examination and the DRE should use a position that will best permit an accurate measurement.
Ask participants whether they can feel their pulses. Coach any participants who have difficulty in locating the pulse.

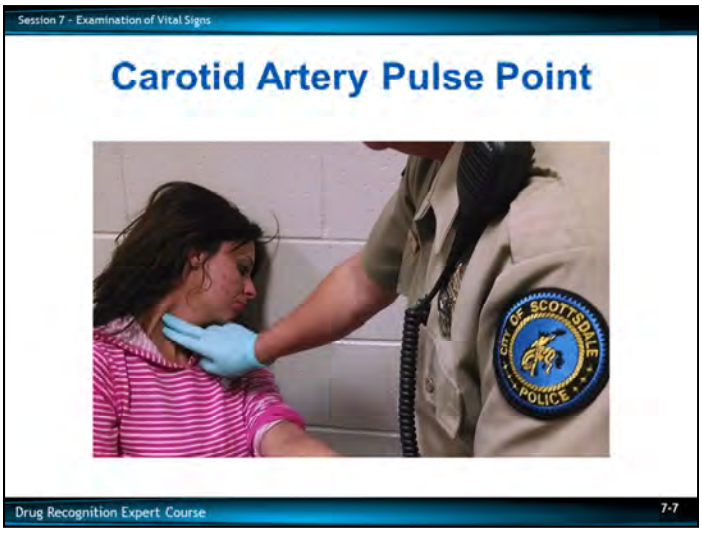


Brachial Artery Pulse Point
Another pulse point involves the brachial artery.

The brachial artery can be located in the crook of the arm, halfway between the center of the arm and the side of the arm closest to the body.
Point to the brachial artery pulse point in your own arm.
Instruct participants to roll up their sleeves, if necessary, to expose their brachial artery pulse points.
Hold your left hand out with the palm up.
Demonstrate this.

Place the tips of your right hand's index and middle fingers into the crook of your left arm, close to the body, and exert a slight pressure.
Demonstrate this.

You should be able to feel the pulse in your brachial artery.
Ask participants whether they can feel their pulses. Coach any participants who have difficulty locating the pulse.

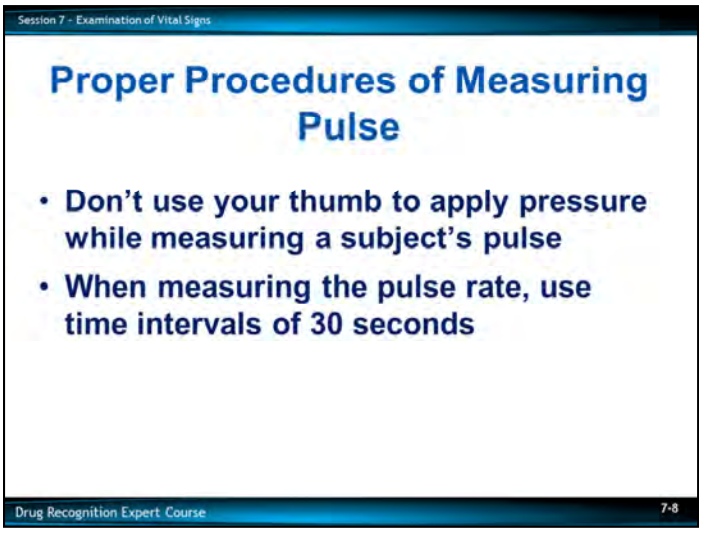


Carotid Artery Pulse Point
Another pulse point involves the carotid artery.

The carotid artery can be located in the neck, on either side of the center of the throat.
Point out the carotid artery pulse point on your own neck.

Place the tips of your right hand's index and middle fingers alongside the right side of the center of your throat.
Demonstrate this.

You should be able to feel the pulse in your carotid artery.
Ask participants whether they can feel their pulses. Coach any participants who have difficulty locating the pulse.



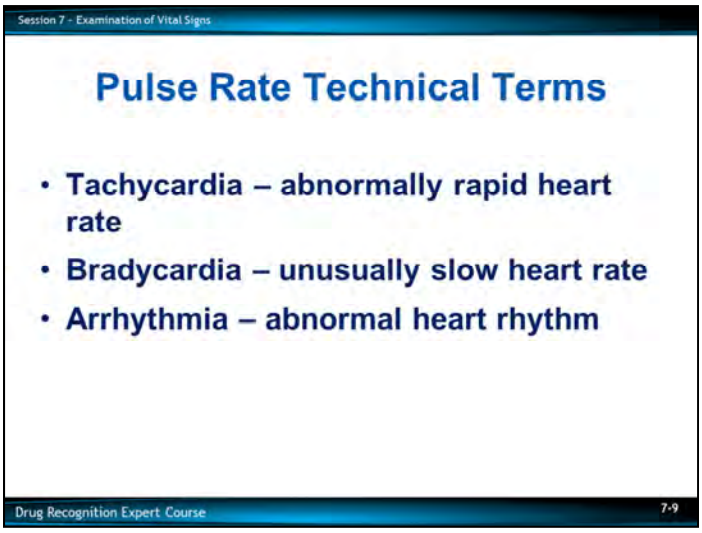
Proper Procedures of Measuring Pulse

- Don't use your thumb to apply pressure while measuring a subject's pulse

Point out there is an artery located in the thumb close to the surface of the skin. If you apply pressure with the thumb, you may wind up measuring your own pulse when you think you are measuring the subject's.

- If you use the carotid artery pulse point, don't apply pressure to both sides of the center of the throat: this can cut off the supply of blood to the brain

- When measuring the pulse rate, use time intervals of 30 seconds



Some Technical Terms Associated with Pulse Rate

- Tachycardia: abnormally rapid heart rate
- Bradycardia: unusually slow heart rate
- Arrhythmia: abnormal heart rhythm

Participants' Initial Practice at Measuring Pulse Rate

Instruct participants to work in pairs, taking turns measuring each other's pulse.

Tell participants to record on paper their partner's pulse rate.

Monitor, coach, and critique the participants' practice.

Allow the practice to continue for only about 5 minutes.

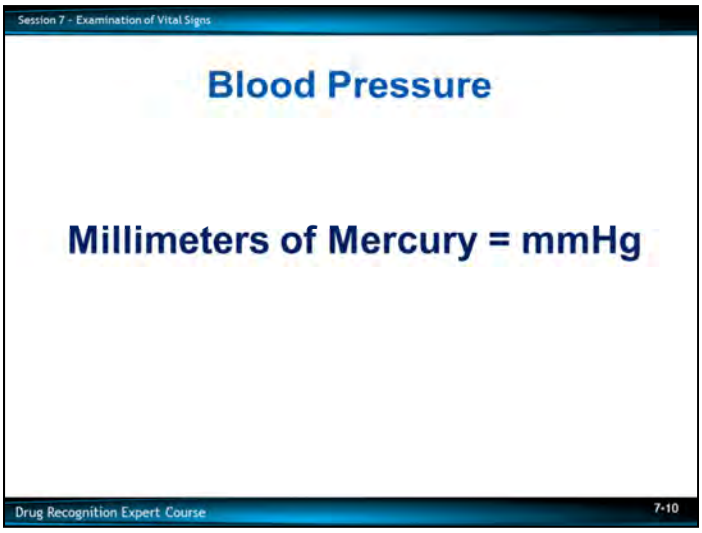
PRINT the following lists on the dry erase board or easel/easel pad.

50 or less	***76-78***
52-54	***80-82***
56-58	***84-86***
60-62	***88-90***
64-66	***92-94***
68-70	***96-98***
72-74	***100 or more***

TABULATE the numbers of participants whose pulse rates were in each of the listed intervals.

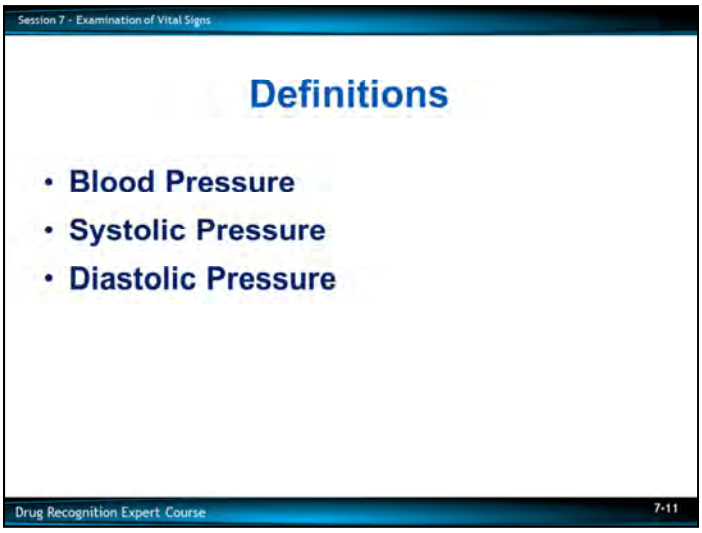
Point out there is a wide variation in human pulse rates.

Point out the DRE average range or expected range for pulse rate is 60-90 beats per minute.



Example: a blood pressure of 120 means the blood is pressing on the walls of the artery with enough force to push liquid mercury 120 millimeters (mm) up a glass tube.

We commonly abbreviate "millimeters of mercury" as mmHg.
Write "mmHg" on the dry erase board or easel/easel pad.
For your information: "Hg" is the chemical symbol for the element Mercury. It comes from Hydrargyrum, the Latin word for Mercury.



Measurement of Blood Pressure

- Blood Pressure is the force the circulating blood exerts on the walls of the arteries
- Blood pressure is measured in millimeters of mercury
- Blood Pressure changes constantly as the heart contracts and relaxes
- Blood Pressure reaches its maximum as the heart contracts and sends the blood surging through the arteries
  - This is called the systolic pressure
- Blood Pressure reaches its minimum when the heart is fully expanded
  - This is called the diastolic pressure
- It is always necessary to measure and record both the systolic and diastolic blood pressure

Memory aid:

- ***Systolic: "S" for "Superior"***
- ***Diastolic: "D" for "Down"***

Remind participants "systolic" is the higher number, "diastolic" the lower number.

Sphygmomanometer
The device used for measuring blood pressure is called a sphygmomanometer.

The sphygmomanometer has a special cuff that can be wrapped around the subject's arm and inflated with air pressure.
Exhibit a sphygmomanometer.
Select a participant to come before the class. Have the participant sit in a chair facing the class and roll up a sleeve (if necessary) to expose a bicep.
Advise participants to check for birth control implants in the upper arm. If the subject has an implant or has a Dialysis Fistula (enlarged vein procedure), blood pressure should be taken on the opposite arm and documented.

As the pressure in the cuff increases, the cuff squeezes tightly on the arm.

Wrap the cuff around the participant volunteer's arm and inflate it.

When the pressure gets high enough, it will squeeze the artery completely shut.
Ask the participant volunteer whether they can feel the pressure of the cuff.

Blood will cease flowing through the brachial artery. And, since the brachial artery "feeds" the radial artery, blood will also cease flowing through the radial artery.

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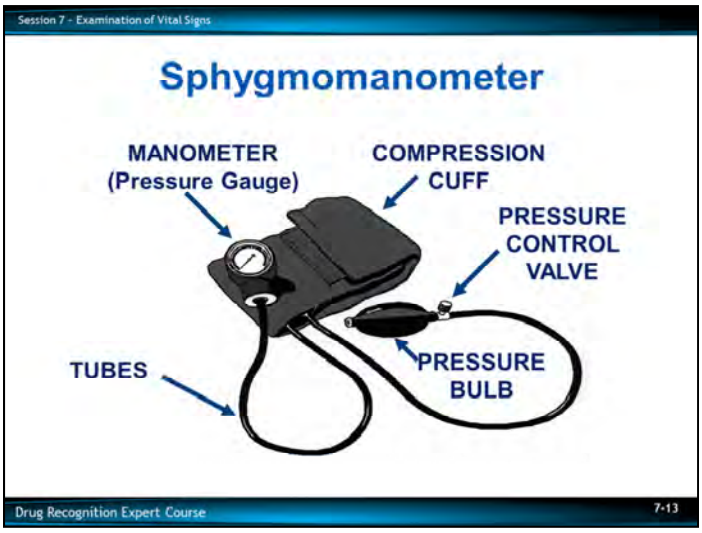


Familiarization with the Sphygmomanometer

Hand out stethoscopes and sphygmomanometers. (One per each participant is desirable. At minimum, there should be one for every four participants.)

The compression cuff contains an inflatable rubber bladder.

Point out components of the sphygmomanometer on the slide.

Point out blood pressure cuffs come in three sizes: child, adult, and extra large, depending on the size of the bladder.

A tube connects the bladder to the manometer, or pressure gauge.

Clarification: the manometer displays the air pressure inside the bladder. In the DEC Program, we use an aneroid (without fluid) pressure gauge.

Another tube connects the bladder to the pressure bulb, which can be squeezed to inflate the bladder.

The pressure control valve permits inflation of the bladder and regulates the rate at which the bladder is deflated.

To inflate the bladder, the pressure control valve must be twisted all the way to the right.

Demonstrate this.

When the valve is twisted all the way to the right, air can be pumped into the bladder, but no air can escape from the bladder.

To deflate the bladder, twist the valve to the left.

The more the valve is twisted to the left, the faster the bladder will deflate.

Ask participants: "What artery is located in the crook of the arm?" (Point to that location on the participant volunteer's arm.)
If we slowly release the air in the cuff, the pressure on the arm and on the artery will start to drop.

Release the pressure in the cuff on the participant volunteer's arm.

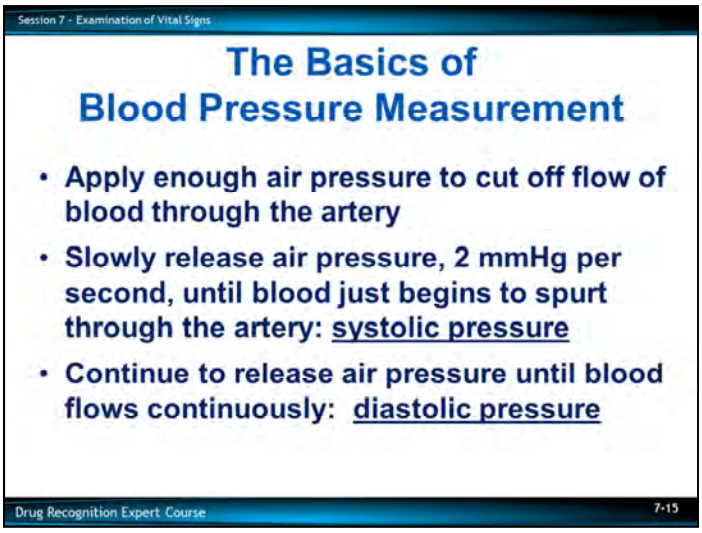
Eventually, the pressure will drop enough so blood will once again start to flow through the artery.
Ask participants: "How far must the pressure in the cuff drop before the blood can start to squeeze through the artery?"

Blood will start flowing in the artery once the pressure inside the artery equals the pressure outside the artery.

The two pressures will become equal when the air pressure in the cuff drops down to the systolic pressure.

When that happens, blood will spurt through the artery each time the heart contracts.

Ask participants: "What would happen if we allowed the pressure in the cuff to drop down to the systolic level and held the air pressure at that level?"
Point out the blood would spurt through the artery each time the heart contracted, but would cease flowing when the heart expanded.
Ask participants: "How far down must the air pressure in the cuff drop before the blood will flow through the artery continuously?"
Once the air pressure in the cuff drops down to the diastolic level, the blood will flow continuously through the artery.



Overview of Procedures for Measuring Blood Pressure
Apply enough air pressure to the cuff to cut off the flow of blood through the artery.
Demonstrate, using the participant volunteer (apply pressure to the cuff).

Slowly release the pressure in the cuff.
Slowly release the air pressure until the blood just begins to spurt through the artery: that level will be the systolic pressure.
Continue to release the air pressure until the blood flows continuously through the artery: that level will be the diastolic pressure.

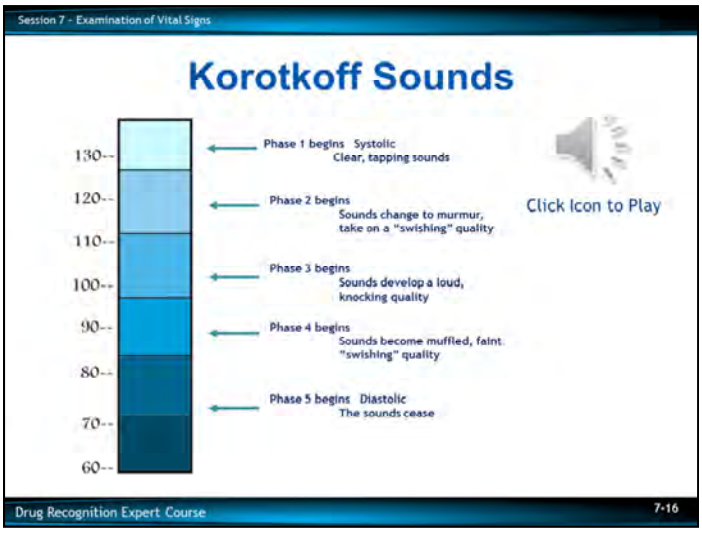
Ask participants:
"How can we tell when the blood starts to spurt through the artery?"
"How can we tell when the blood is flowing continuously through the artery?"
We can listen to the spurting blood, using a stethoscope.
Exhibit a stethoscope

Apply the stethoscope to the skin directly above the artery.
Demonstrate, using the participant volunteer.

Apply pressure to the cuff, enough to cut off the flow of blood.
When no blood is flowing through the artery, we hear nothing through the stethoscope.
Inflate the cuff on the participant volunteer's arm.
Slowly release the air from the cuff, letting the pressure start to drop.
Release the air in the cuff.
When we drop to the systolic pressure, we start to hear a spurting sound.
Inform participants this begins as a clear, tapping sound.

As we continue to allow the air pressure to drop, the surges of blood become steadily longer.
Inform participants the sounds take on a swishing quality, and become fainter.

When we drop to the diastolic pressure, the blood flows steadily and all sounds cease.
Excuse the participant volunteer and thank them for participating.



Korotkoff Sounds

The sounds we listen to are called Korotkoff Sounds. They are divided into 5 phases:

The next slide contains a sound clip of the Korotkoff sounds.

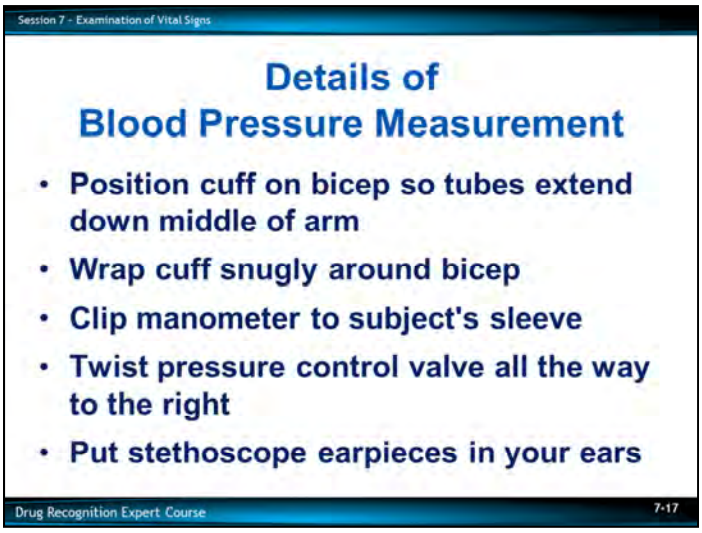
- Phase 1 – the first appearance of clear, tapping sounds that gradually increase in intensity

Point out the beginning of Phase 1 corresponds to the systolic pressure.

- Phase 2 – the sounds change to a murmur and take on a swishing quality
- Phase 3 – the sounds develop a loud, knocking quality (not quite as clear as the Phase 1 sounds)
- Phase 4 – the sounds become muffled and again have a faint swishing quality
- Phase 5 – the sounds cease

Point out the beginning of Phase 5 corresponds to the diastolic pressure.

On the following slide, click on the speaker icon to play the Korotkoff Sounds.



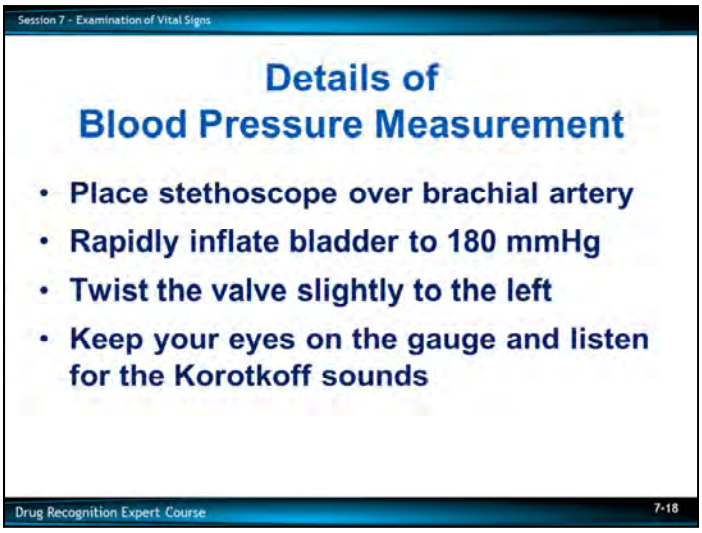
Details of Blood Pressure Measurement

Select a participant to serve as a blood pressure subject. Demonstrate the procedures using the participant.

If it proves difficult to hear the Korotkoff sounds, simply have the subject elevate the arm and squeeze the fist several times, to drain the arm: the Korotkoff sounds louder.

The manometer (pressure gauge) may be clipped on the subject's sleeve, so it is readily viewable.

Twist the pressure control valve all the way to the right.



Put the stethoscope earpieces in your ears.

Make sure the earpieces are turned forward, i.e., toward the nose.

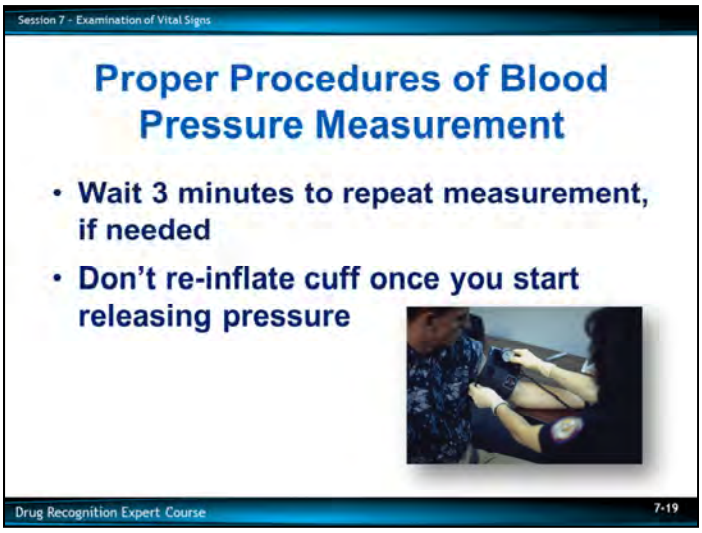
Place the diaphragm or bell of the stethoscope over the brachial artery.

Rapidly inflate the bladder to a pressure of approximately 180/200 mmHg.
Point out, if the subject's blood pressure is very elevated, it may be necessary to inflate the bladder to a higher pressure.

Twist the pressure control valve slightly to the left to release the pressure slowly.
Emphasize the need to release the pressure slowly. If the pressure drops too fast, the needle will sweep down the gauge too quickly to be read accurately.

The pressure should be released at a speed that takes one full second for the needle to move a single gradation (i.e., 2 millimeters of mercury) on the gauge.

Keep your eyes on the gauge and listen for the Korotkoff sounds.
Point out the needle on the pressure gauge generally will "bounce" slightly when blood starts to spurt through the artery.
Excuse the participant and thank him or her for participating. Solicit participants' questions concerning these procedures.
Remind students for DRE purposes, the average ranges or expected ranges of blood pressure are:
Systolic: 120 – 140
Diastolic: 70 – 90
Emphasize people can have significantly different blood pressures: there is wide variation in human blood pressure.

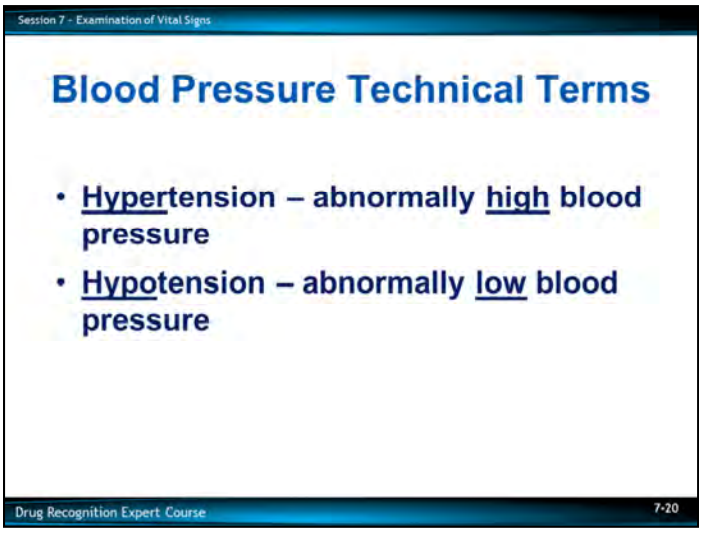


Proper Procedures of Blood Pressure Measurement

If you inflate the bladder and then need to repeat the measurement, wait at least three minutes to allow the subject's artery's to return to normal.

- Do wait 3 minutes to repeat the measurement if a second measurement is needed
- Don't re-inflate cuff once you start releasing the pressure

Point out: DREs primarily use manual sphygmomanometers that have only even numbered markings on the manometer. Even numbers that best represent the systolic and diastolic readings should be documented. Odd number readings would indicate an electronic digital monitor was used, which is not the recommended blood pressure measuring device for DRE purposes.



Some Technical Terms Associated with Blood Pressure

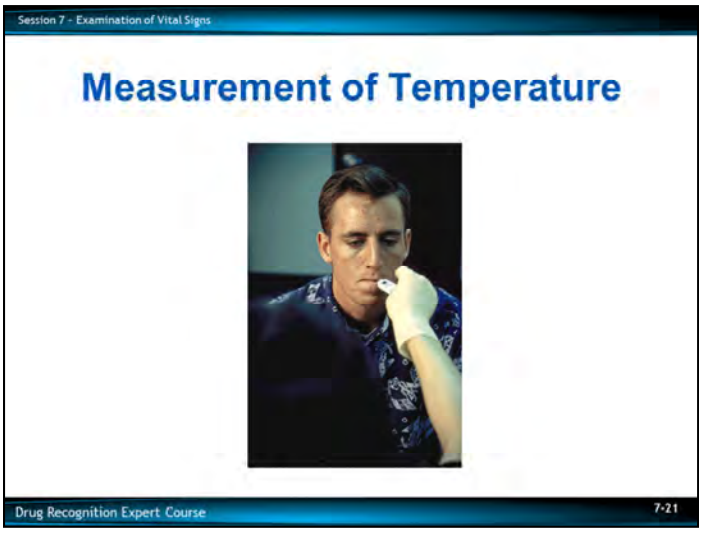
- Hypertension: abnormally high blood pressure
- Hypotension: abnormally low blood pressure

Participants Initial Practice at Measuring Blood Pressure

If at least one sphygmomanometer and stethoscope are available for every two participants, instruct participants to practice in pairs. Otherwise, assign participants to practice in teams of 3 or 4 members. Monitor, coach, and critique the participants' practice.

Allow this practice to continue for only about 10 minutes. If a dual hearing training stethoscope is available, this would be a good opportunity for instructors to check on how the students do in detecting the blood pressure measurements.

Remind participants when they measure and record blood pressure it is not necessary to use the symbols "mmHg." Simply record the numbers.



Measurement of Temperature

Body temperature is measured using a oral digital thermometer.

Exhibit this.

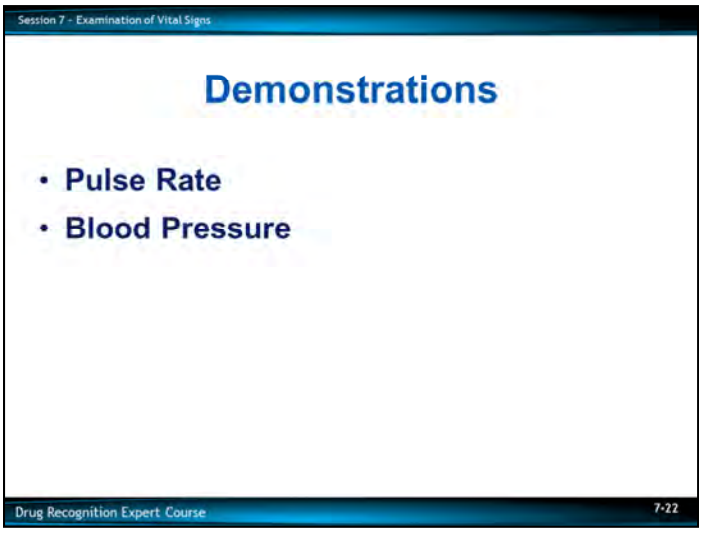
Inform participants a digital thermometer with plastic sleeves is used for this measurement.

Point out when measuring temperature, ensure the thermometer remains under the subject's tongue.

DREs should also try to refrain from letting the subject drink hot or cold fluids immediately prior to measuring temperature.

Make sure a fresh disposable mouthpiece is used each time.

Solicit participants' comments and questions concerning this overview of procedures and cues.



C. <u>Demonstrations</u>

Pulse Rate Measurement
Select two participants to come before the class.

Radial Artery Pulse Point
Instruct the first participant to measure the second participant's pulse using the radial artery pulse point. (Simultaneously, the instructor should measure the subject's pulse using a carotid artery pulse point).

Carotid Artery Pulse Point
Instruct the second participant to measure the first participant's pulse using the carotid artery pulse point. (Simultaneously, the instructor should measure the subject's pulse using a radial artery pulse point).
Excuse the two participants and thank them for participating.

Blood Pressure Measurement
Select two other participants to come before the class.
Instruct the first participant to measure the second participant's blood pressure.
Have the participants reverse roles.
Excuse the two participants and thank them for participating.

D. <u>Documentation Procedures</u>
Review the sections of the Drug Influence Evaluation Form used to record vital signs measurements.

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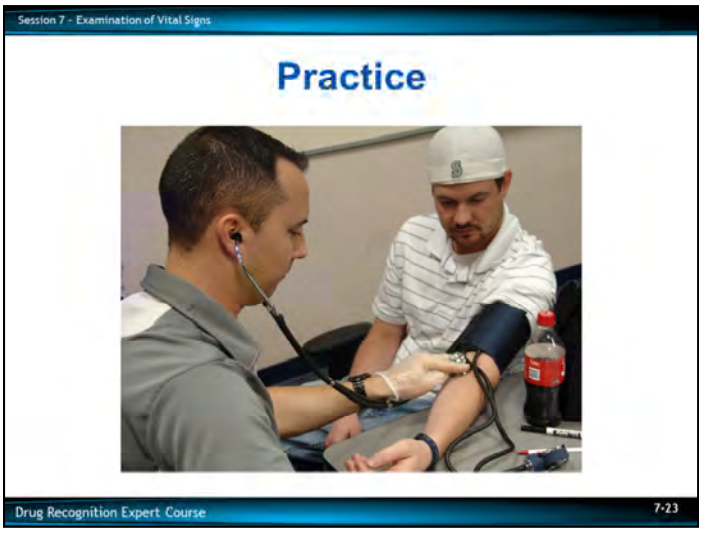
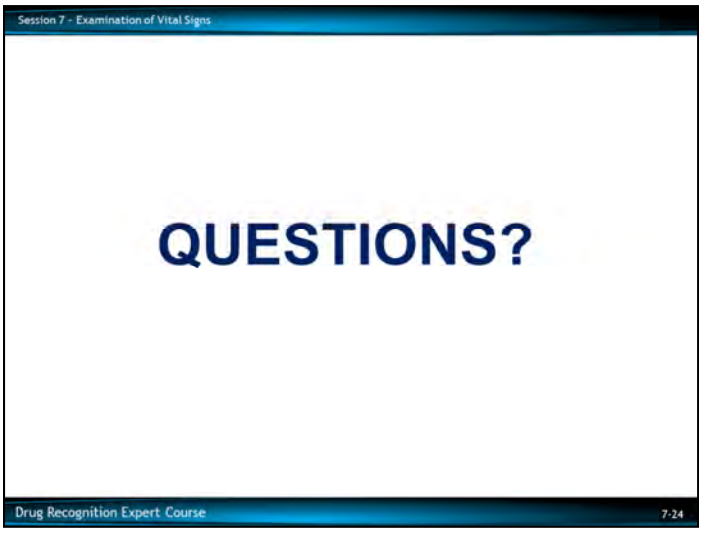


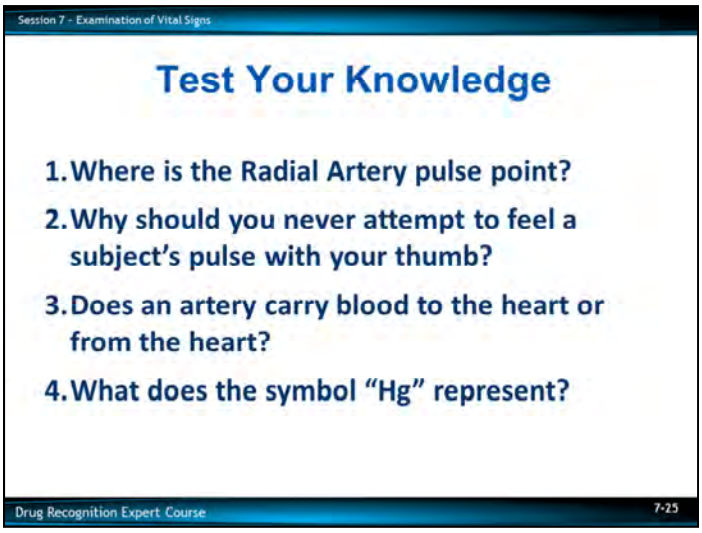
E. <u>Practice</u>

Instruct participants to practice in teams of 2 – 4 members, taking in turns measuring each other's vital signs.

Monitor, coach, and critique the participants' practice.



Solicit participants' questions and comments about the Examination of Vital Signs.



Test Your Knowledge

1. Where is the Radial Artery pulse point?

Crease of the wrist

2. Why should you never attempt to feel a subject's pulse with your thumb?

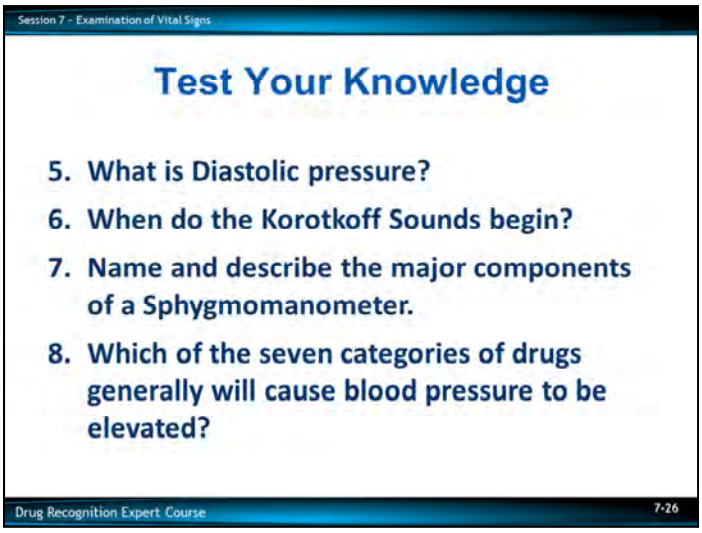
You can mistakenly measure your own pulse

3. Does an artery carry blood to the heart or from the heart?

Away from the heart

4. What does the symbol "Hg" represent?

Mercury (Hydrargyrum)

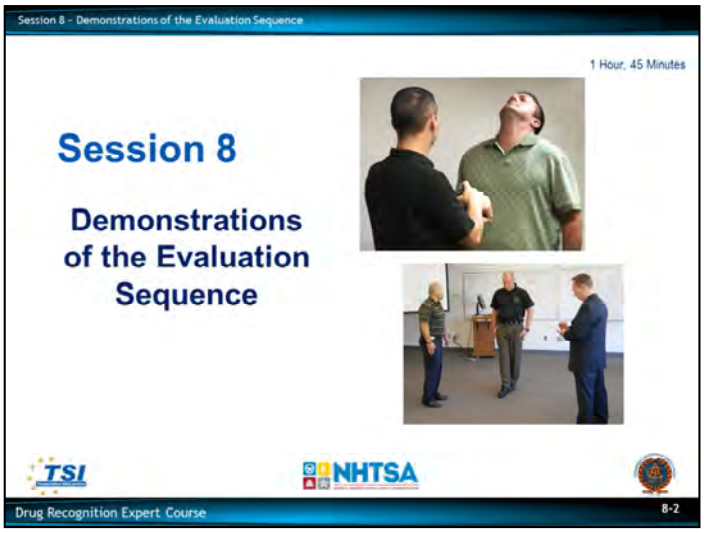


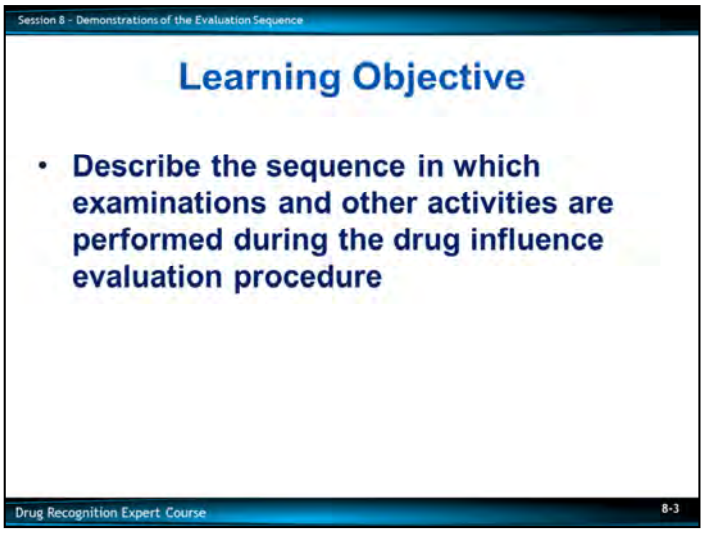
5. What is Diastolic pressure?
The pressure when the heart relaxes

6. When do the Korotkoff Sounds begin?
At the systolic level when the blood begins to spurt through the brachial artery.

7. Name and describe the major components of a Sphygmomanometer.
Compression cuff, Pressure bulb, Manometer, Pressure control valve, Tubes

8. Which of the seven categories of drugs generally will cause blood pressure to be elevated?
CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Inhalants, Cannabis


Session 8 – Demonstrations of the Evaluation Sequence
1 Hour, 45 Minutes
Session 8
Demonstrations of the Evaluation Sequence
TSI
NHTSA
Drug Recognition Expert Course
8-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session the student will be able to:

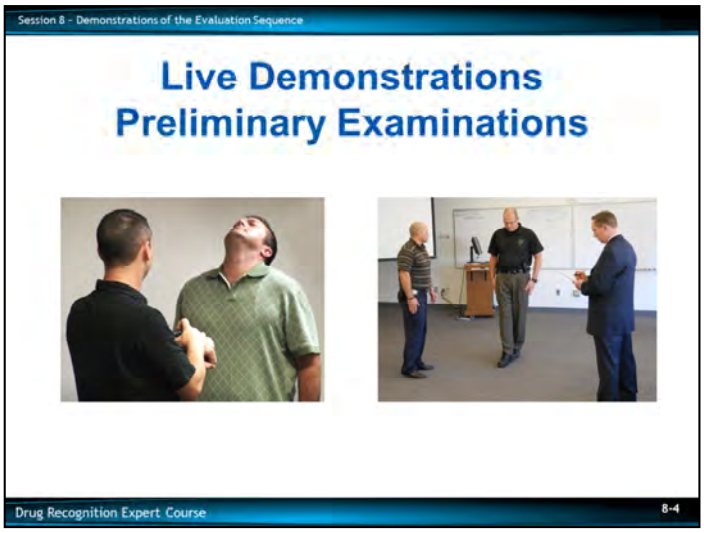
- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

CONTENT SEGMENTS

A. Live Demonstrations
B. Video Demonstrations

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Video Presentations
Reading Assignments



A. <u>Live Demonstrations</u>

For these live demonstrations, participants must be grouped into teams of not more than 12 members. Each team must be taken to a separate classroom. At least two instructors must work with each team. This is to ensure all participants have the opportunity for a close and detailed observation of the demonstrations.
Instructors should conduct at least two complete demonstrations of the evaluation sequence, articulating each step in the process.
Instruct participants to follow along with copies of the drug influence evaluation form.
Hand out a 12-Step checklist to the participants if needed.

Preliminary Examinations
Select a participant or one of the volunteer drinkers for Session 12 (prior to drinking) to serve as the "subject" for the preliminary examination.
Preliminary eye checks:
- Equal Tracking
- Equal Pupil Size
- Resting Nystagmus
- Blindness
- Eyelids

Ask each question, exactly as it should be asked, during an actual preliminary examination.
Explain the kinds of indicators and other evidence that may be gleaned during the preliminary examination.
Ensure participant examiner checks:
- ***The participant-subject's eyes for tracking, equal pupil size, resting nystagmus, and eyelid condition.***
- ***The participant-subject's pulse.***

***Solicit participants' comments or questions about the preliminary exa*mination.**
Excuse participant-subject and thank him/her for participating in the demonstration.

Eye Examinations.

Select another participant or <u>a volunteer drinker</u> to serve as the "subject" for the eye* examinations, *which will include:

- Horizontal Gaze Nystagmus (HGN); Vertical Gaze Nystagmus (VGN); Lack of Convergence (LOC)

Conduct a complete demonstration of an eye examination.
Explain the kinds of clues and other evidence that may be seen during the eye examinations.
Solicit participants' comments or questions about the eye examinations.
Excuse the participant and thank him or her for participating in the demonstration.

Psychophysical Tests.

Select another participant or a volunteer drinker to serve as the "subject" for the psychophysical tests, which include:

- Modified Romberg Balance (MRB); Walk and Turn (WAT); One Leg Stand (OLS); Finger to Nose (FTN)

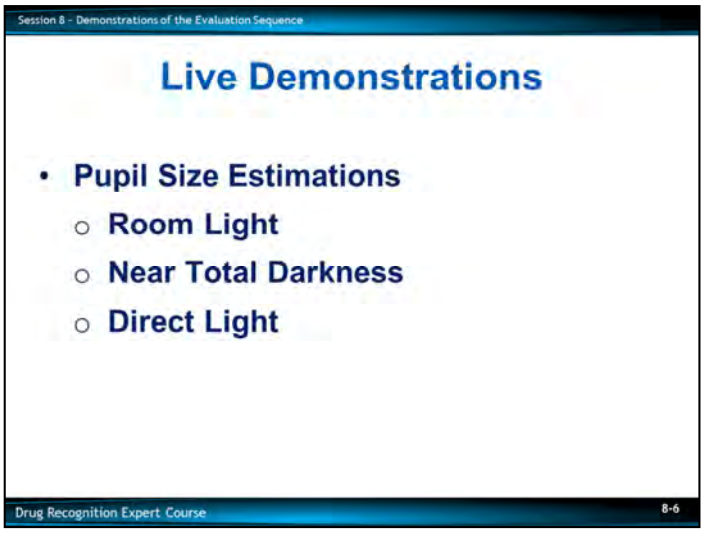
Conduct a complete set of psychophysical tests on the participant-subject.
Explain the kinds of indicators and other evidence that may be gleaned during the psychophysical tests.
Solicit participants' comments or questions about the psychophysical tests.
Excuse the participant-subject and thank them for participating in the demonstration.

Vital Signs Examinations

***Select another participant to serve as the "subject" for the vital signs examinations, which* include:**

- Blood Pressure
- Temperature
- Second Check of Pulse

Conduct a complete set of vital signs examinations on the participant-subject.
Explain the kinds of indicators and other evidence that may be gleaned during the vital signs examinations.
Solicit participants' comments or questions about the vital signs examinations.
Excuse the participant subject and thank them for participating in the demonstration.



Dark Room Examinations

Select another participant to serve as the "subject" for the dark room examination.

Pupil Size Estimations:

- Room light
- Near Total Darkness
- Direct light

Point out this portion of the drug influence evaluation procedure is to be carried out in a darkened room. However, this demonstration will be conducted in normal room light so that all participants can observe the proper procedures for using the penlight.
Conduct a complete set of "dark room" examinations on the participant-subject.
Explain the kinds of indicators and other evidence that may be gleaned during the dark room examinations.
Reaction to Light
Point out checks of the oral and nasal cavities actually are part of the examination for signs of ingestion.

Check of Nasal Area

Check of Oral Cavity
Solicit participants' comments or questions about the dark room examinations.
Excuse the participant-subject and thank them for participating in the demonstration.

Examination for Muscle Tone and Injection Sites and Third Check for Pulse.
Select another participant to serve as the "subject" for this portion of the examination.
Point out Heroin is not the only drug that abusers inject: "puncture marks" in the skin may also be found on the arms (and elsewhere) of abusers of several other drugs.
Explain how to check for injection sites and muscle rigidity on the participant-subject.
Solicit participants' comments or questions about this portion of the examination.
Excuse the participant-subject and thank them for participating in the demonstration.

Subject Interview

Explain the statements and admissions and other evidence that may be gleaned during the subject interview.

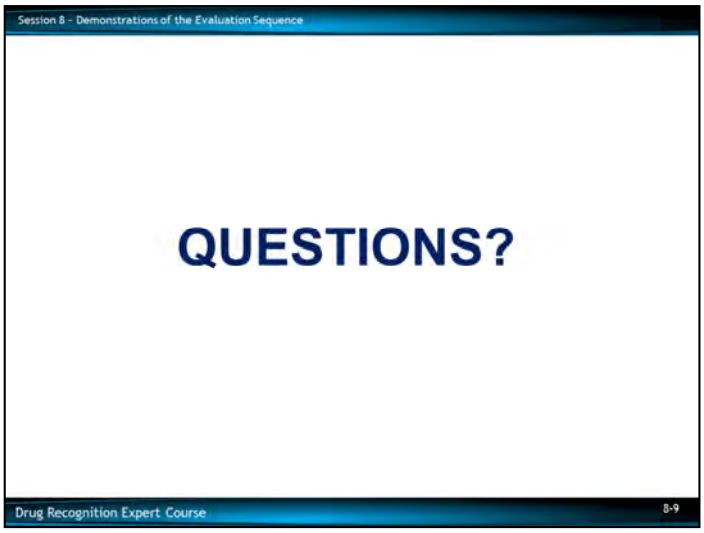
- Statements made by subject
- Behavior during entire evaluation

Give examples of typical statements or behaviors of drug-impaired subjects.

Solicit participants' comments or questions about the subject interview.

Opinion of the Evaluator

Point out participants subsequently will learn the clues and indicators of the various categories of drugs.



Solicit participants' comments and questions concerning the entire drug influence evaluation procedure.
Be sure to conduct at least two complete live demonstrations of the drug influence evaluation procedure.
Review of the 12-Step Process
Show the video on the 12-Step Process as a review if time permits.

International Association of Chiefs of Police

Drug Evaluation and Classification Program

Drug Influence Evaluation Checklist

_____ 1. Breath alcohol test

_____ 2. Interview of arresting officer

_____ 3. Preliminary examination and first pulse
(Note: Gloves must be worn from this point on.)

_____ 4. Eye examinations

_____ 5. Divided attention tests:

- _____ Modified Romberg Balance
- _____ Walk and Turn
- _____ One Leg Stand
- _____ Finger to Nose

_____ 6. Vital signs and second pulse

_____ 7. Dark room examinations and ingestion examination

_____ 8. Check for muscle tone

_____ 9. Check for injection sites and third pulse

_____ 10. Interrogation, statements, and other observations

_____ 11. Opinion of evaluator

_____ 12. Toxicological examination

DRUG INFLUENCE EVALUATION

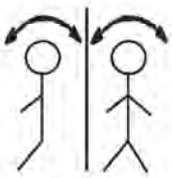
Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle)	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time /Location / /	Breath Test: Test Refused ☐ Results: Instrument #:		Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today? When?		What have you been drinking? How much?	Time of last drink?
Time now/ Actual /	When did you last sleep? How long?		Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No		Are you under the care of a doctor or dentist? ☐ Yes ☐ No	
Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:		Coordination:	
Speech:	Breath odor:		Face:	
Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery		Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal
Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

Pulse and Time 1. ____ / ____ 2. ____ / ____ 3. ____ /	HGN	Left Eye	Right Eye	**Convergence** Right eye Left eye
	Lack of Smooth Pursuit			
	Maximum Deviation			
	Angle of Onset			

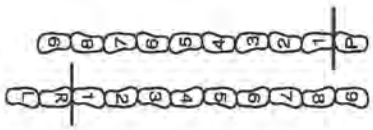
/30 **One Leg Stand** /30

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance
Approx. Approx.



Walk and Turn Test

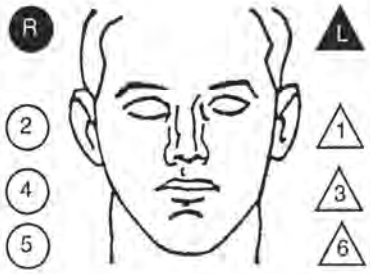


Cannot keep balance ____
Starts too soon ____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation ____estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

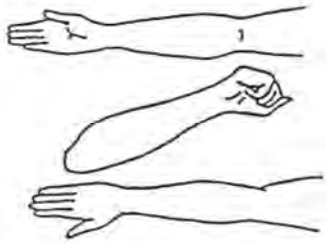
Nasal area:

Oral cavity:

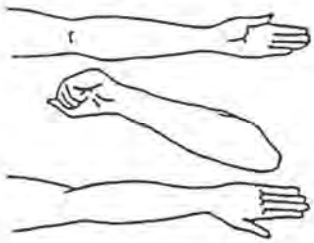
Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM



LEFT ARM



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid
Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:

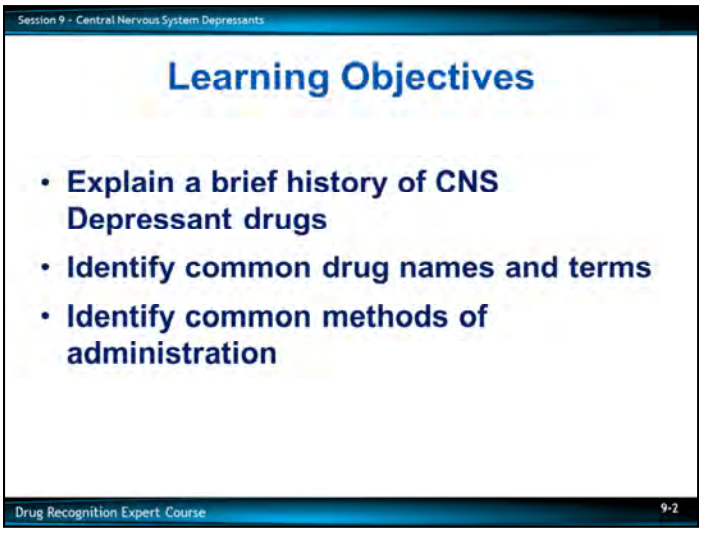
☐ Subject refused entire evaluation
☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

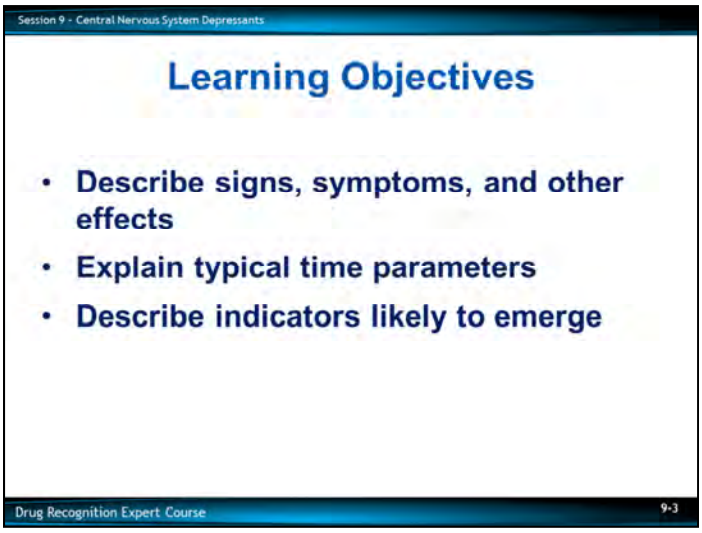
Session 9 - Central Nervous System Depressants
1 Hour, 45 Minutes
Session 9
Central Nervous System Depressants
Rohypnol
TSI
NHTSA
Drug Recognition Expert Course
9-2



***Briefly review the objectives, content, and activities of this session*.**

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of the Central Nervous System (CNS) Depressant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category



- Describe the symptoms, observable signs, and other effects associated with this category
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- List the clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs.

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects
C. Onset and Duration of Effects
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Reading Assignments
Video Presentations
Slide Presentations

Ask this question: "What is the single most commonly-abused drug?"

A. Overview of the Category

CNS Depressants

CNS Depressants slow down the operations of the brain.

Point out other common names for CNS Depressants are "downers" and "sedative-hypnotics."

- Depressants first affect those areas of the brain that control a person's conscious, voluntary actions such as judgment, inhibitions, and reaction time

- As the dose is increased, depressants begin to affect the parts of the brain that control the body's automatic processes, heartbeat, respiration, etc.

The CNS Depressant category includes the single most commonly-abused drug in America.

- Alcohol has been used and abused since prehistoric times
- Alcohol and its effects are familiar to most people
- Alcohol is a model for the CNS Depressant category
  - With some exceptions, all depressants produce effects quite similar to the effects of alcohol

Point out the remainder of the session will focus on the non-alcohol CNS depressants.

Chloral Hydrate

Non-alcohol CNS Depressants have been around for more than 150 years.

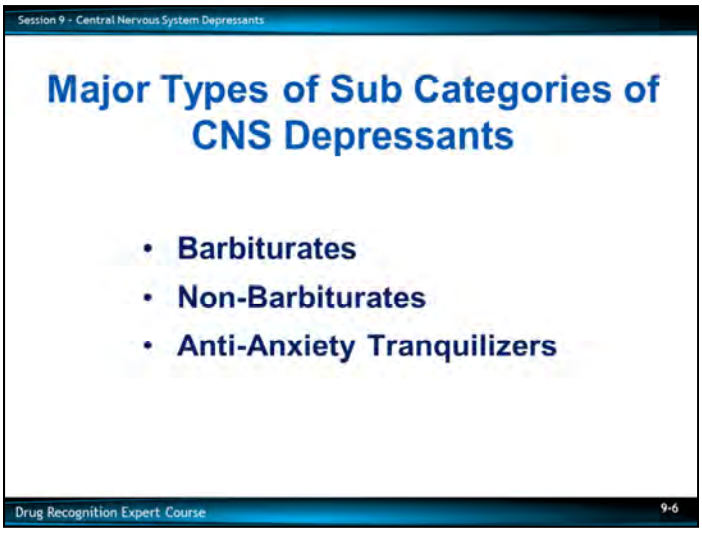
The first non-alcohol CNS Depressant was Chloral Hydrate.

It was developed in 1832 and utilized clinically in 1869.

Chloral Hydrate was derived from alcohol.

Chloral Hydrate is still produced and, but not widely, prescribed today. It is a sedative used in the short-term treatment of insomnia and to relieve anxiety and induce sleep before surgery.

"Noctec" is a registered brand name of Chloral Hydrate.



Sub Categories of CNS Depressants
There are six major subcategories of CNS Depressants other than alcohol.
Barbiturates

More than 250 different barbiturates have been produced; of these, about 50 have been accepted for medical use.

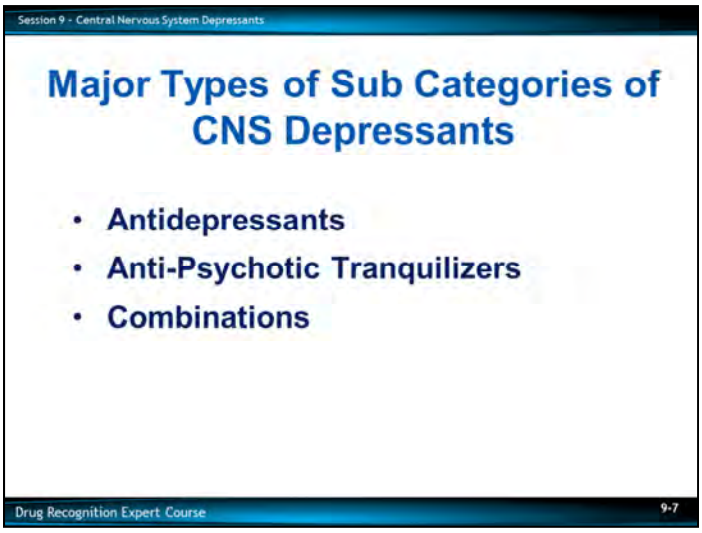
- Derivatives of Barbituric Acid
- First produced in 1864
- Very common in use and abuse today

Non-Barbiturates
Chloral Hydrate belongs to the non-barbiturate subcategory.

- Synthetic compounds with a variety of chemical structures
- Prescribed to help with some of the unintended side effects of barbiturates including sleepiness or drowsiness
- Still produce physical and psychological dependence

Anti-Anxiety Tranquilizers
The Anti-Anxiety Tranquilizers are also known as the "minor tranquilizers." They include the group of drugs known as the "Benzodiazepines" examples of which are Valium, Xanax, and Librium.

- First produced in 1950
- In very wide spread use
- Frequently abused



Antidepressants

Point out it is not a contradiction to call one subcategory of CNS Depressants the Antidepressants. It is psychological depression that they are "anti."

Sometimes called the "mood elevators."

Point out some Antidepressants can produce effects which may mimic many of the signs associated with CNS Stimulants.

Anti-Psychotic Tranquilizers

***Point out the Anti-Psychotic Tranquilizers are generally more powerful than the Anti-Anxiety Tranquilizers*.**

Sometimes called the "major tranquilizers."

Anti-psychotic tranquilizers were first introduced in the early 1950's. They provide a way to manage schizophrenia and other mental disorders and allow psychiatric patients to be released from hospitals and to lead fairly normal lives.

The most familiar Anti-Psychotic Tranquilizer is "Thorazine."

Combinations

This subcategory includes a small class of depressants involving various combinations of the other five subcategories.

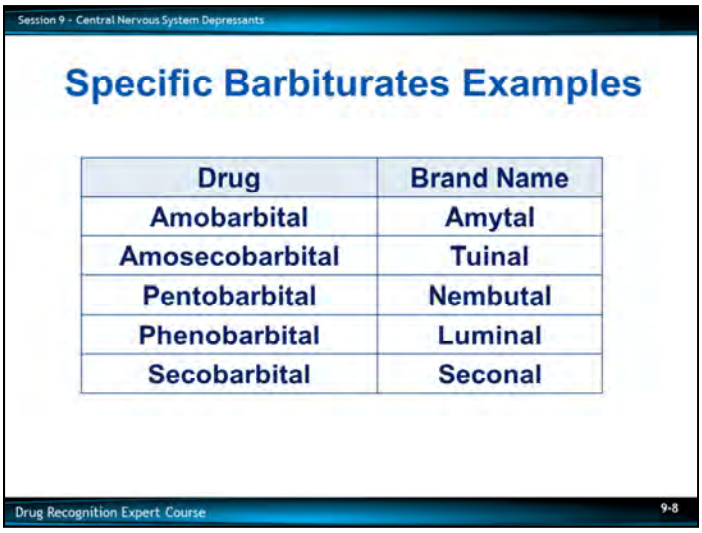
Briefly review these examples.

Emphasize participants are not expected to memorize the names of these various CNS Depressants. But, if they see the names, they should be able to recognize them as depressants.

_____

_____

_____



Refer participants to DEA Intelligence Report – Drug/Slang Code Words, May, 2017. This can be found in the "PDF Attachments" folder on the instructor's thumb drive.

The Barbiturates

- Amobarbital (Trade name "Amytal")

Point out this is a barbiturate derivative of intermediate duration of action first prepared in 1924. Used as a sedative or hypnotic.

- Amosecobarbital (Trade name "Tuinal")

Point out this is a combination containing amobarbital sodium and secobarbital sodium, Used for short-term treatment of insomnia and to relieve anxiety, including anxiety before surgery.

This is a combination of Amobarbital and Secobarbital.

- Pentobarbital (Trade name "Nembutal") (Street names "Yellows"; "Yellow Jackets")

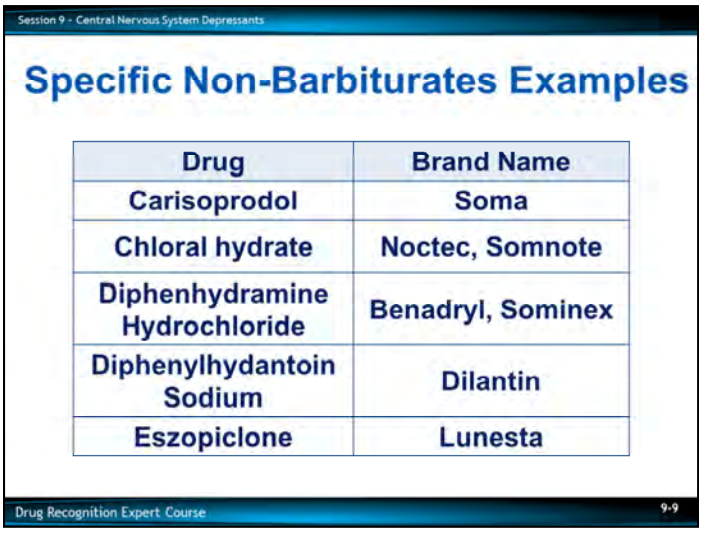
Point out this is a short-acting barbiturate used clinically as a sedative-hypnotic agent.

- Phenobarbital (Includes Luminal and other trade names)

A barbiturate derivative that has been used as a daytime sedative and anticonvulsant since 1912. Often times found in combination with bronchodilators, vasodilators, analgesics, and anticholinergic agents.
According to the "Physician's Guide to Psychoactive Drugs." 1 ounce of 80 proof alcohol is equivalent to about 15 milligrams of Phenobarbital.

- Secobarbital (Trade name "Seconal")

Point out it is a barbiturate derivative of short duration used as either a sedative or hypnotic.



If available, display slides of these various drugs.

The Non-Barbiturates

Point out one of the primary medical uses for the Non-Barbiturates is the treatment of insomnia. The absence of street names implies only that illicitly-manufactured versions of these drugs are not common. The legally-manufactured versions are abused, however.

- Carisoprodol (Trade name "Soma")

Point out this is a carbamate derivative first synthesized in 1959. Used clinically as a muscle relaxant and sedative.

- Chloral Hydrate (Trade names "Noctec" and "Somnote")

Point out this first appeared in 1832 and utilized clinically in 1869. It was once a very popular hypnotic agent, it is now used relatively infrequently.

- Diphenhydramine Hydrochloride (Trade names "Benadryl"; "Sominex"; and "Nytol")

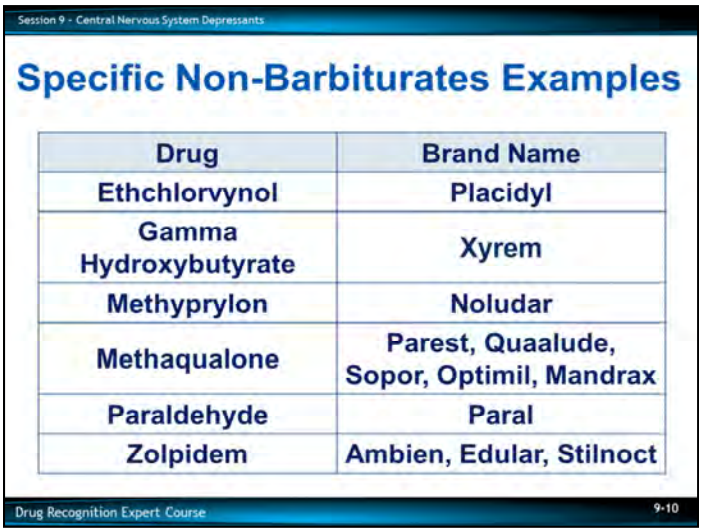
Point out this is one of the first effective antihistamine agents discovered. Also used for its sedative and antiemetic effects.

- Diphenylhydantoin Sodium (Trade name "Dilantin")

Point out this is used primarily for most forms of epilepsy

- Eszopiclone (Trade names "Eszopiclone", "Estorra" and "Lunesta")

Point out this has been used clinically since 2001 as a sedative-hypnotic drug.



- Ethchlorvynol (Trade name "Placidyl")

Point out this is an acetylenic alcohol first used as a sedative and hypnotic in 1955.

- Gamma Hydroxybutyrate (Street name "GHB"; "Liquid X"; "1,4-Butanediol")

Point out this was originally used as an anesthetic and hypnotic agent. No longer legally produced in the U.S. GHB except in the form of Sodium Oxybate and is the only legally-prescribed GHB in the U.S. It is produced under the trade name of Xyrem.

- Methaqualone (Trade names "Parest"; "Quaalude"; "Sopor"; "Optimil"; "Mandrax")

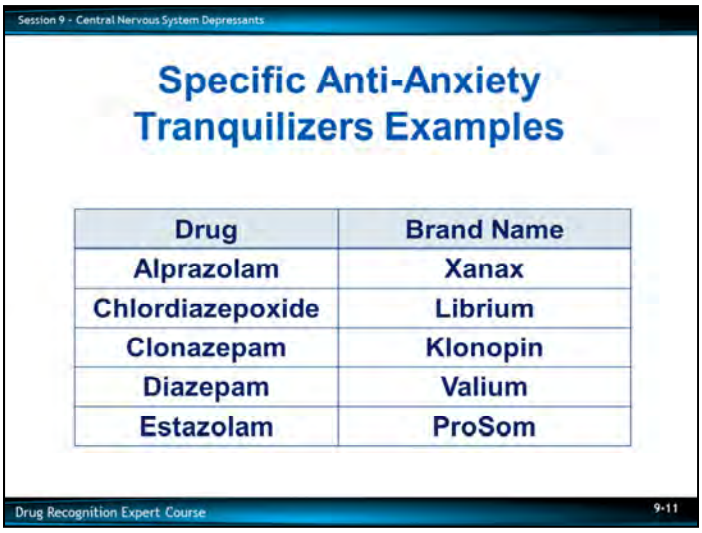
Point out this is a quinazoline derivative synthesized in 1951 and found clinically effective as a sedative and hypnotic. Removed from the U.S. market in 1984.
Mention Methaqualone continues to be pharmaceutically manufactured in Mexico, trade name "Mandrax."

- Paraldehyde (Trade name "Paral")

Point out this was first used therapeutically in 1882 as a sedative or hypnotic when administered in low doses.

- Zolpidem (Trade names "Ambien", "Edluar" and "Stilnoct")

Point out this is an imidazopyridine derivative used since 1986 in European countries and since 1993 in the U.S. as a hypnotic agent. Available in normal-release or extended-release tablets. Intended for once-nightly consumption at a dose of 5-12.5 mg for short-term treatment of insomnia.



If available, display slides of these various drugs.

The Anti-Anxiety Tranquilizers

- Alprazolam (Trade names "Xanax", "Niravam")

Point out this is has been used clinically since 1976 as a short-acting antidepressant and anxiolytic agent.

- Chlordiazepoxide (Trade name "Librium")

Point out this is considered the prototype of the benzodiazepine class of sedative-hypnotic drugs. Used as an anti-anxiety agent or hypnotic since 1960.

- Clonazepam (Trade name "Klonopin")

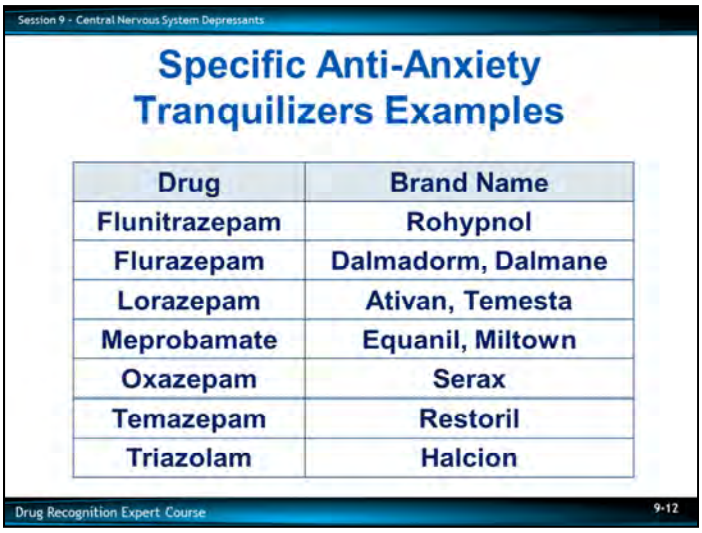
Point out this was approved as an anticonvulsant in 1975 and considered a potent sedative.

- Diazepam (Trade name "Valium")

Point out this was the second benzodiazepine derivative approved in U.S. for human use in 1963. Frequently employed as an anti-anxiety agent, muscle relaxant, or anticonvulsant.

- Estazolam (Trade name "ProSom")

Point out this is similar to alprazolam and triazolam. Classified as an intermediate-acting benzodiazepine hypnotic.



- Flunitrazepam (Trade name "Rohypnol")

Point out this is available in numerous European countries since 1965 for use as a hypnotic and anesthetic agent.

- Flurazepam (Trade names Dalmadorm", "Dalmane")

Point out this was first introduced in 1970's as a benzodiazepine derivative with hypnotic efficacy.

- Lorazepam (Trade names "Ativan" and "Temesta")

Point out this is structurally related to oxazepam and temazepam. Used clinically since 1971 as an anti-anxiety agent.

- Meprobamate (Trade names "Equanil", "Miltown")

Point out this was introduced in 1955 for clinical use. Frequently employed as a sedative, anti-anxiety agent, and muscle relaxant.

- Oxazepam (Trade name "Serax")

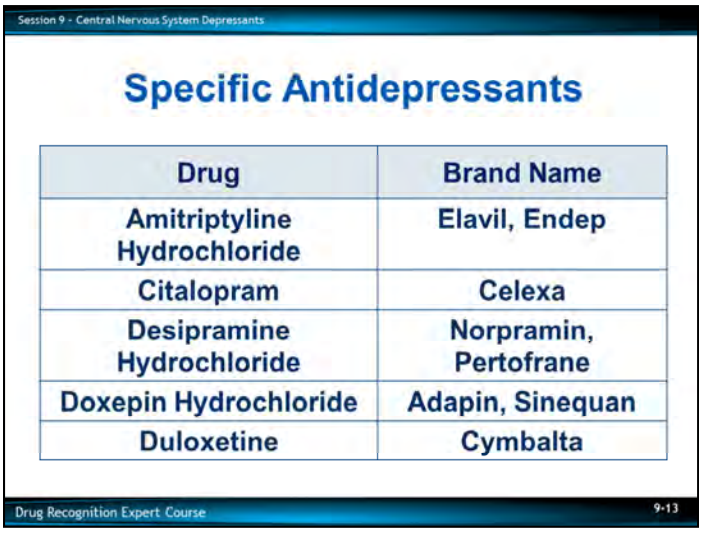
Point out this a benzodiazepine derivative that has been used clinically as an anti-anxiety agent since 1965. It is a metabolite of diazepam, nordiazepam, prazepam and temazepam.

- Temazepam (Trade name "Restoril")

Point out this has been clinically used as a hypnotic drug since 1979.

- Triazolam (Trade name "Halcion")

Point out this a hypnotic agent structurally related to Alprazolam and Estazolam used for short-term management of insomnia since 1978.



The Antidepressants

- Amitriptyline Hydrochloride (Trade names "Elavil"; "Endep")

Point out this a tricyclic antidepressant that affects chemicals in the brain that may become unbalanced and used to treat symptoms of depression.

- Citalopram (Trade name "Celexa")

Point out this a Selective Serotonin Reuptake Inhibitor (SSRI) used to treat depression.

- Desipramine Hydrocholoride (Trade names "Norpramin"; "Pertofrane")

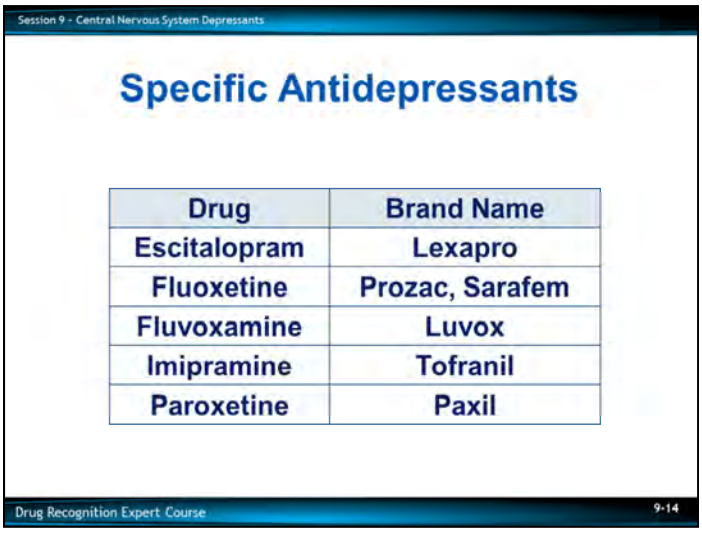
Point out this a tricyclic antidepressant used to treat symptoms of depression.

- Doxepin Hydrochloride (Trade names "Adapin"; "Sinequan")

Point out this is used to treat symptoms of depression and/or anxiety associated with alcoholism, psychiatric conditions, or manic-depressive conditions.

- Duloxetine (Trade name "Cymbalta")

Point out this a Selective Serotonin and Norepinephrine Reuptake Inhibitor antidepressant (SSNRI) used to treat major depressive disorder and general anxiety disorder.



- Escitalopram (Trade name "Lexapro")

Point out this is a SSRI used to treat anxiety in adults and major depressive disorder in adults.

- Fluoxetine (Trade names "Prozac"; "Sarafem")

Point out this is a SSRI antidepressant used to treat panic, anxiety, or obsessive-compulsive symptoms.

- Fluvoxamine (Trade name "Luvox")

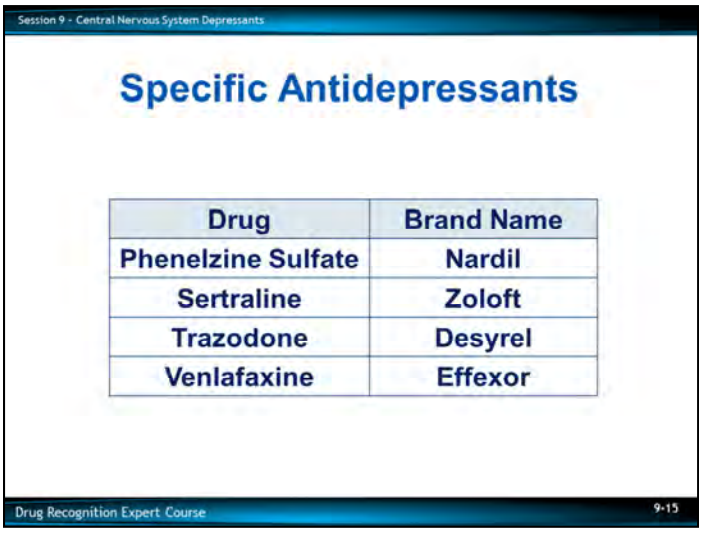
Point out this is a SSRI used to treat social anxiety disorder (social phobia) or obsessive-compulsive disorders.

- Imipramine (Trade name "Tofranil")

Point out this is a tricyclic antidepressant used to treat symptoms of depression.

- Paroxetine (Trade name "Paxil")

Point out this is a SSRI used to treat depression, obsessive-compulsive disorder, anxiety disorders, post-traumatic stress disorder (PTSD).



- Phenelzine Sulfate (Trade name "Nardil")

Point out this is a Monoamine Oxidase Inhibitor (MAOI) used to treat symptoms of depression that may include feelings of sadness, fear, anxiety, or worry about physical health (hypochondria).

- Sertraline (Trade name "Zoloft")

Point out this is a SSRI used to treat the causes of depression, panic, anxiety, or obsessive-compulsive symptoms.

- Trazodone (Trade name "Desyrel")

Point out this increases the activity of Serotonin in the brain and is used to treat depression. It may also be used for relief of certain anxiety disorders.

- Venlafaxine (Trade name "Effexor")

Point out this is a SSNRI used to treat major depressive disorder, anxiety, and panic attack.

Antidepressants Exceptions

Some antidepressants may cause an elevated pulse rate and pupil dilation. Antidepressants may also cause dry mouth, sore throat, blurred vision, urinary retention, muscle twitching, restlessness, and increased anxiety.

The Anti-Psychotic Tranquilizers

- Aripiprazole (Trade name "Abilify")

Point out this drug is used clinically to treat severe depression. It is also used for bipolar disorder and schizophrenia.

- Chlorpromazine (Trade name "Thorazine")

Point out this is used clinically as an antipsychotic agent since 1952.

- Droperidol (Trade name "Inapsine")

Point out this is structurally related to haloperidol and used clinically as a neuroleptic.

- Haloperidol (Trade name "Haldol")

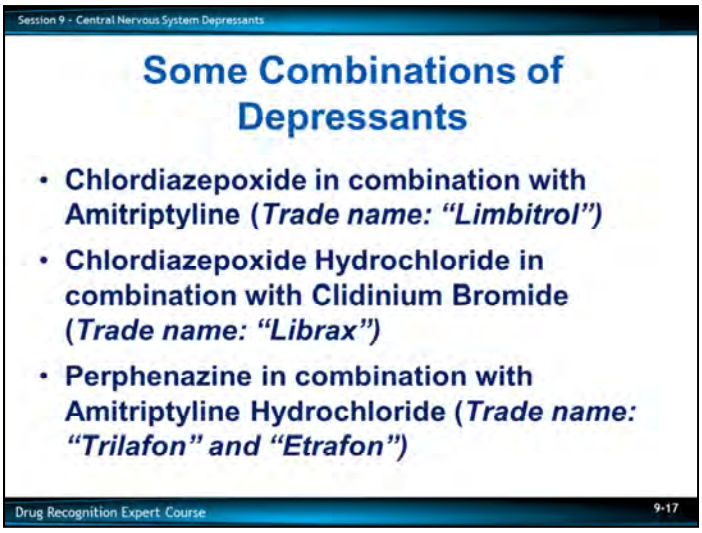
Point out this is first marketed in the U.S. in 1967 as an antipsychotic agent.

- Lithium Carbonate (Trade name "Lithane")

Point out this has been used since 1949 as an effective treatment for certain forms of mania and endogenous depression.

- Quetiapine (Trade name "Seroquel")

Point out this drug is used clinically for bipolar disorder and schizophrenia.



The Combinations

- Chlordiazepoxide in combination with Amitriptyline (trade name "Limbitrol")

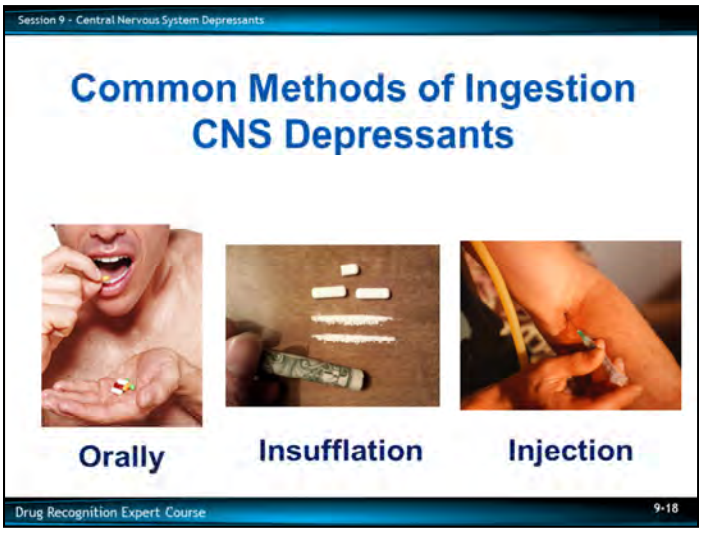
Point out "Limbitrol" is a combination of an anti-anxiety tranquilizer and an antidepressant.

- Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide (Trade name "Librax")

Point out "Librax" is a combination of a Benzodiazepine and an anti-spasmodic used to relax the muscles in the stomach walls.

- Perphenazine in combination with Amitriptyline Hydrochloride (Trade name "Trilafon" and "Etrafon")

Point out "Trilafon" is a combination of an anti-psychotic tranquilizer and an antidepressant.



Common Methods of Ingestion of CNS Depressants

- Most common and easiest method is orally
- There are reports of subjects crushing Xanax and Soma tablets, snorting the powder and getting an effect
  - This method results in a slow, but long, absorption process producing depressant symptoms for some time
- Some abusers prefer to use intravenous injection for Barbiturates
- Some abusers experience a “flash” or “rush” from intravenous injection of Barbiturates they do not experience from oral ingestion

The injection paraphernalia used for Barbiturates are very similar to those used for Heroin. Examples:

- Spoon, for heating and dissolving the Barbiturate
- Cotton, for filtering the solution when drawing it into the needle
- Hypodermic syringe
- Tourniquet

However, the Barbiturate abuser will use a larger hypodermic needle because the barbiturate solution is thicker than the heroin solution.
Mention the "gauge" of a hypodermic needle indicates the width of the needle's inside diameter. The smaller the number, the larger the needle. For example, a 16 gauge needle is larger in diameter than a 20 gauge needle.

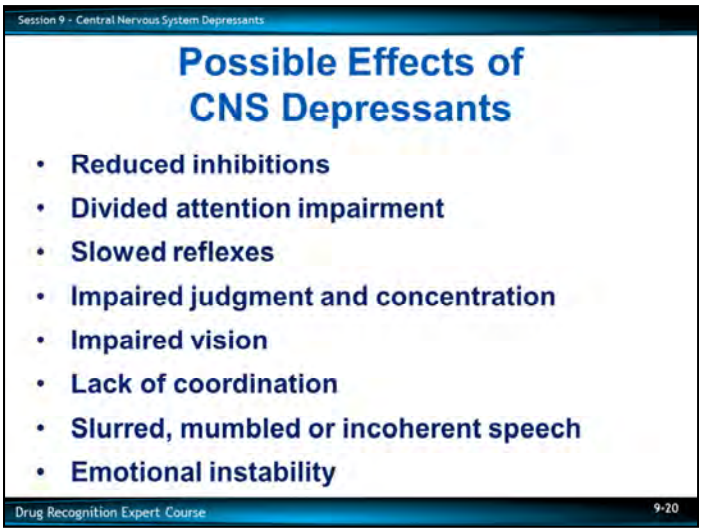
The injection sites on the skin of a Barbiturate abuser appear quite different from those of a Heroin addict. For example, large swelling, about the size of a quarter or fifty cent piece, will frequently appear at the Barbiturate injection site.
Point out these effects result from the skin's reaction to the high alkaline content of the Barbiturate solution.

Necrosis may occur: i.e., a decaying of the body's tissue at the injection site.
If available, display a slide showing ulcerated injection sites.

The dead tissue may begin to separate from the living tissue producing ulcerations.
Point out these ulcerations resemble burns placed on the skin by the tip of a cigarette.

The Barbiturate user who injects the drug usually will not display the same type of track marks as the heroin addict who uses repeated injections along the same vein.

Barbiturate abusers often will inject in parts of the body other than the forearm and will commonly exhibit the characteristic swellings at random locations on the extremities.
Solicit participants' questions and comments about the overview of CNS Depressants.



B. <u>Possible Effects</u>

CNS Depressants produce impairments of the human mind and body that essentially mirror alcohol impairment.

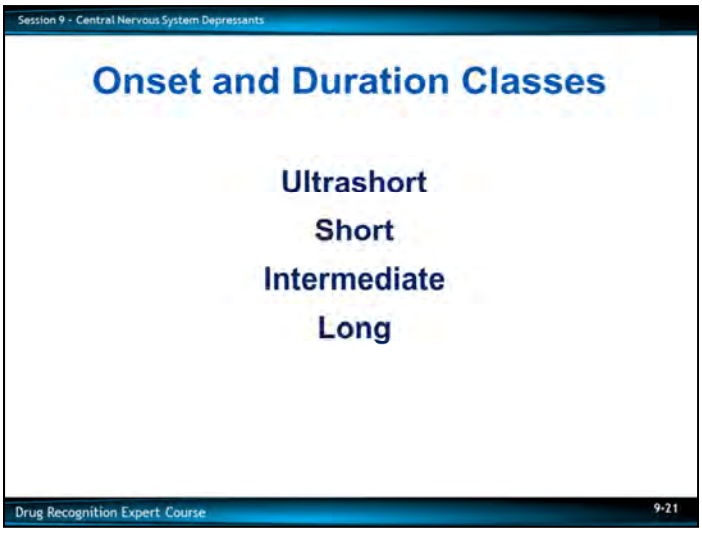
Point out these effects will not necessarily appear in a predictable sequence as dose increases.

- Reduced social inhibitions
- Divided attention impairment
  - Clarification: impede the person's ability to concentrate on more than one thing at a time
- Slowed reflexes
- Impaired judgment and concentration
- Impaired vision
  - Ability to focus eyes may be impaired; "double vision" may develop (Diplopia)
- Lack of coordination
- Slurred, mumbled, or incoherent speech
- Produce a variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying without provocation, etc.

Emphasize: the extent to which a CNS Depressant user will exhibit these effects will depend, in part, on the user's tolerance to these drugs. Persons habituated to a drug often won't exhibit its effects as clearly as will a novice user.

Generally speaking, a person under the influence of CNS Depressants will look and act drunk.

Solicit participants' questions and comments concerning possible effects of CNS Depressants.



Selectively reveal.

C. <u>Onset and Duration Effects</u>

Depressant drugs can be grouped loosely into four classes based on how quickly they take effect and how long their effects last.

Ask participants: "Why is there little or no street abuse of the ultrashort CNS Depressants?"
Solicit responses.
Guide respondents to bring out the point abusers seek drugs that will produce reasonably long-lasting effects. Effects that last for only a few minutes aren't attractive or satisfying to most drug abusers.

Ultrashort:

- Very fast acting, very brief effects
- Take effect in a matter of seconds
- Effects last only a few minutes
- Very rarely are the "drugs of choice" for drug abusers

Ultrashort depressants are sometimes used at the beginning of a surgical operation, in conjunction with an inhaled anesthetic.

- Clarification: to provide a momentary sedation to ease the patient's anxiety and allow for the proper administration of the anesthetic

- Psychiatrists sometimes use ultrashort depressants at the beginning of a session, to reduce the client's inhibitions and foster a free and open communication

An example of an ultra short depressant is Brevital Sodium (Methohexital), which is a rapid, injectable barbiturate anesthetic mainly used in hospital settings.

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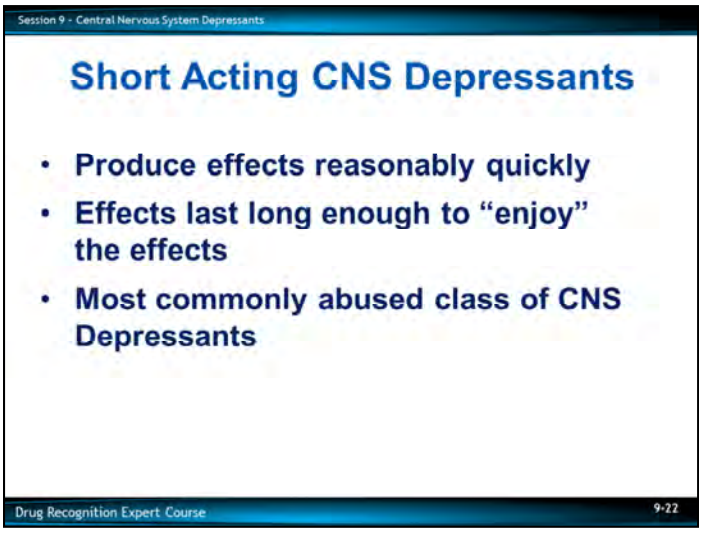
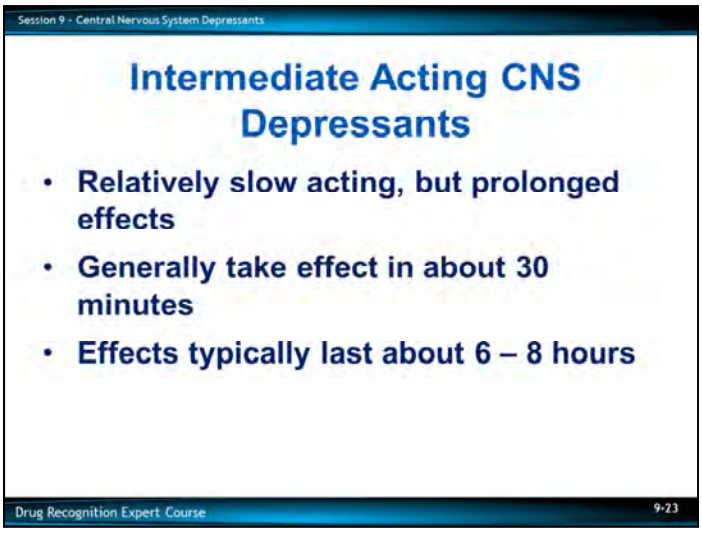


Short Acting
Short: fairly fast acting; effects last for approximately 4 hours.
Point out short acting depressants are attractive to many drug abusers because:

- They produce effects reasonably quickly
- The effects last long enough to "enjoy" the effects
- Generally takes effect in 10 to 15 minutes
- This is the most commonly abused class of CNS Depressants

Short Acting Depressants frequently are prescribed as a treatment for insomnia. They also may be used as a pre-anesthetic medication to calm a patient prior to surgery.

A common example of a short acting Depressant, Secobarbital, Brand name "Seconal."

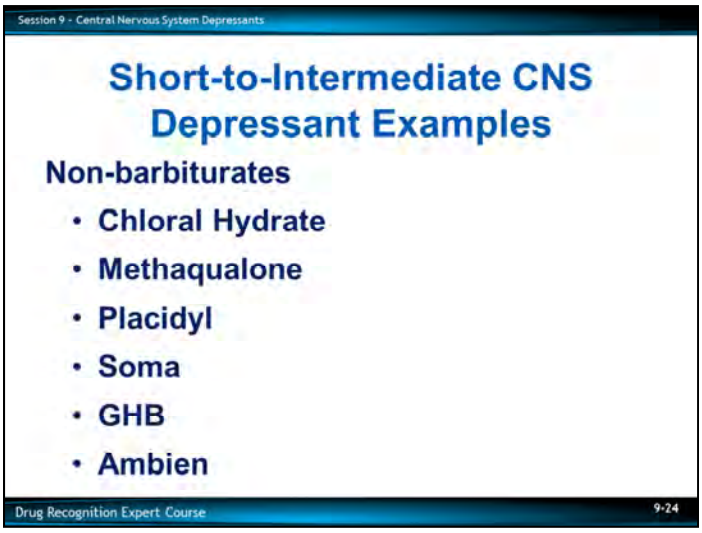


Intermediate Acting

Intermediate: relatively slow acting, but prolonged effects.

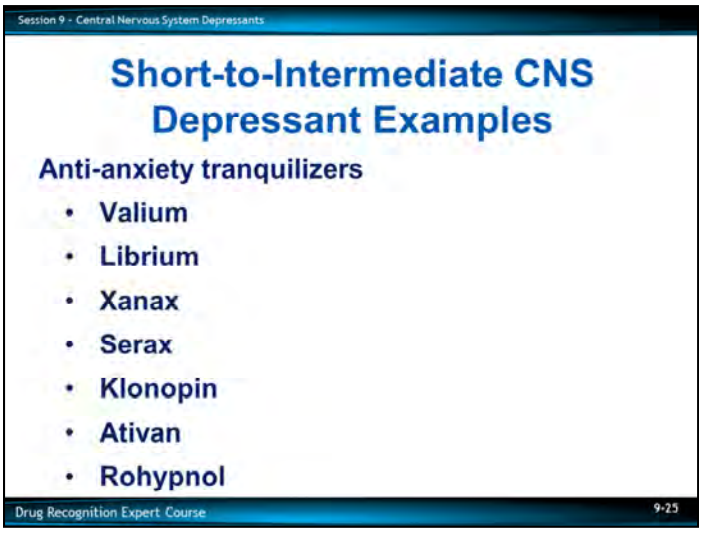
Point out Tuinal is a combination of a fast acting drug (10-20 minutes onset, due to the Secobarbital) with prolonged effects (up to 8 hours, due to the Amobarbital).

- Generally take effect in about 30 minutes
- Effects typically last about 6 – 8 hours
- Fairly often abused, especially by users who desire a longer lasting state of intoxication
    - Medical use of this class of drugs is similar to that of short acting Depressants (i.e., treat insomnia, etc.)
    - Common example of an intermediate Depressant: Amobarbital, brand name “Amytal”



Non-Barbiturates

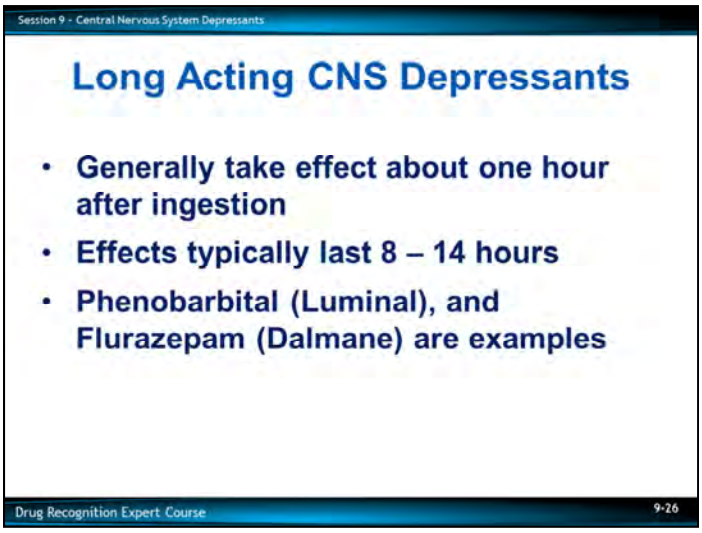
- Chloral Hydrate ("Mickey Finn") (Noctec)
- Methaqualone (Quaalude) ("Ludes")
  - Removed from U.S. market in 1984
  - Mainly produced illicitly
- Placidyl (Ethchlorvynol)
- Soma (Carisoprodol)
- GHB (Gamma Hydroxybutyrate)
- Ambien (Zolpidem)



Anti-Anxiety Tranquilizers

- Valium (Diazepam)
- Librium (Chlordiazepoxide)
- Xanax (Alprazolam)
- Serax (Oxazepam)
- Klonopin (Clonazepam)
- Ativan (Lorazepam)
- Rohypnol (Flunitrazepam)

Point out Rohypnol is currently not legally manufactured in the United States and is illegal to possess. However, it is legally manufactured and prescribed in other countries along with GHB. It is known as one of the "date rape" drugs.



Long Acting: delayed but long lasting effects.

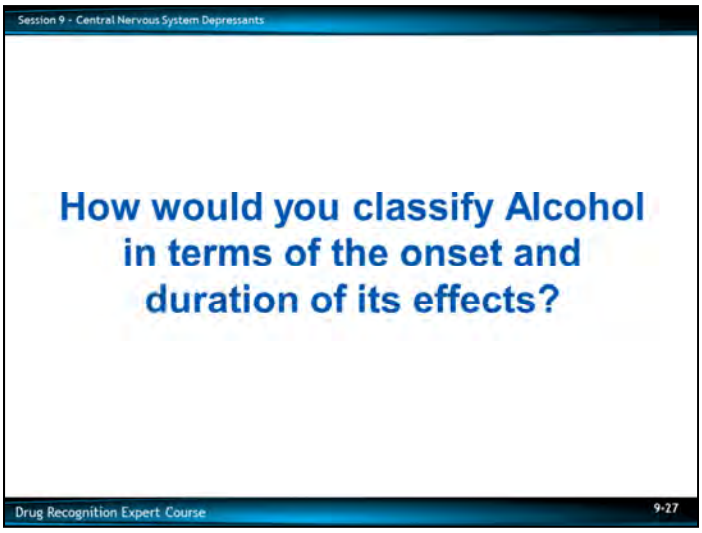
Ask participants: "Why don't drug abusers usually prefer the long acting depressants?"

- Generally take effect about one hour after ingestion
- Effects typically last 8 – 14 hours
- Generally not the "drugs of choice" for abusers, however, some people will abuse the long acting Depressants if the more popular short and intermediate types are not readily available

Long acting Depressants are used medically in the control of epilepsy and of other conditions that can cause convulsions.

They can also be used to provide continuing sedation to patients suffering from extreme anxiety.

Two examples of a long acting depressant are Phenobarbital (Luminal) and Flurazepam (Dalmane), both used primarily as a daytime sedative and anticonvulsant.



Alcohol as a Specific Example

Ask participants: "How would you classify Alcohol in terms of the onset and duration of its effects?"

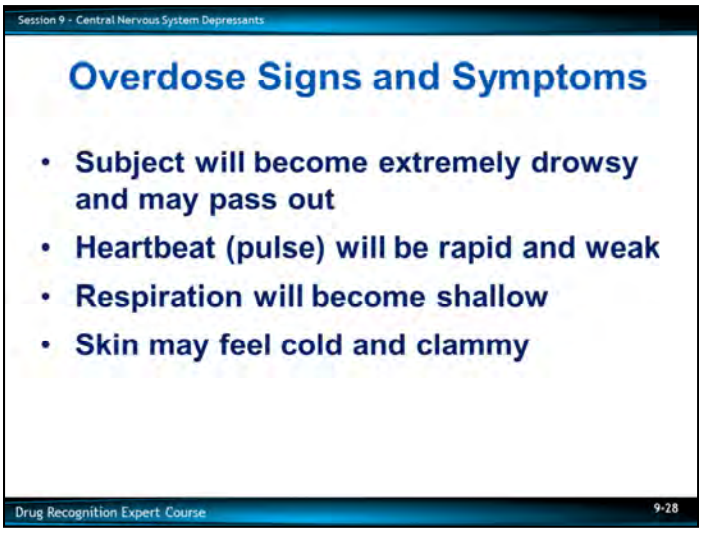
Probe question: Suppose an average person drank two shots of whiskey. How long would it be before he or she started to feel the effects? (Solicit responses).

Probe question: How long would the average person continue to feel the effects of those two shots? (Solicit responses)

Guide participants toward the conclusion that Alcohol would be classified as a short or short to intermediate depressant.

Point out these are frequently abused CNS Depressants, but they are not the only depressants that are abused.

Solicit participants' questions and comments about the onset and duration of effects of CNS Depressants.

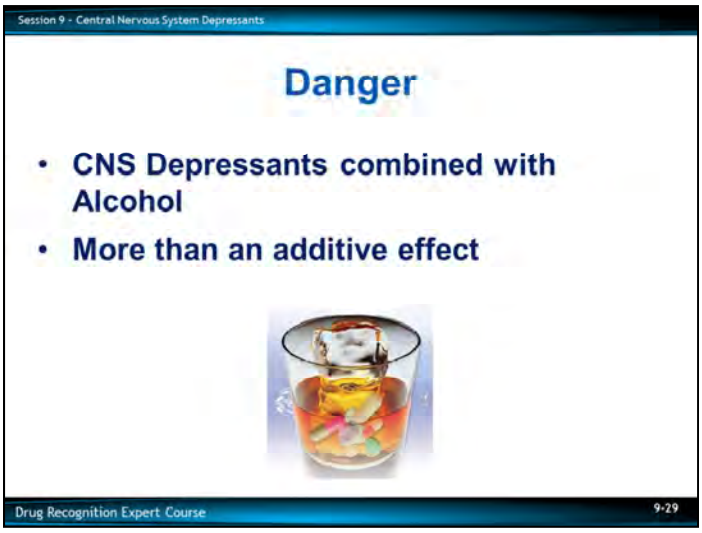


D. <u>Overdose Signs and Symptoms</u>

Overdoses of the CNS Depressants produce symptoms essentially identical to those of alcohol overdoses.

- Subject will become extremely drowsy and may pass out
- The heartbeat (pulse) will be rapid and weak
- Respiration will become shallow
- Skin may feel cold and clammy
- One major danger with CNS Depressant overdoses is death from respiratory failure
- A sufficiently high dose of CNS Depressant will suppress the portions of the brain that control respiration

This situation only rarely occurs from alcohol intoxication: usually, a drinker will pass out before he or she consumes enough alcohol to suppress respiration completely. With other depressants, it is relatively easy to take a fatal overdose.



Point out CNS Depressants are often used as a means of suicide.

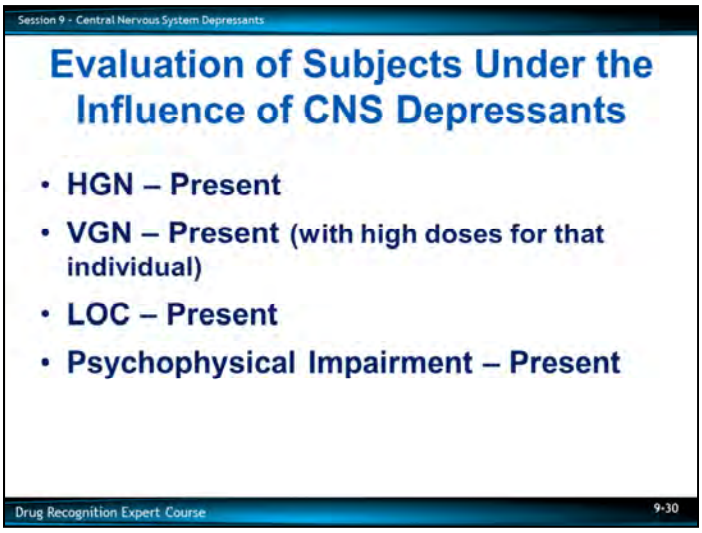
Another major danger with CNS Depressants occurs when they are combined with alcohol.

- Clarification: the combination of alcohol and certain other CNS Depressants may produce an effect greater than the sum of the effects of the two drugs independently
  - There is at least an additive effect when alcohol and another depressant are taken together

With many CNS Depressants, there may be more than an additive effect. Coroners have reported a number of cases in which neither the alcohol level nor the depressant level independently would have been close to a fatal dose.

It is not possible to predict how great of an effect will occur when alcohol is mixed with another depressant. However, it is clear the combination is always risky.

Solicit participants' questions and comments concerning overdose signs and symptoms of CNS Depressants.



E. <u>Expected Results of the Evaluation</u>

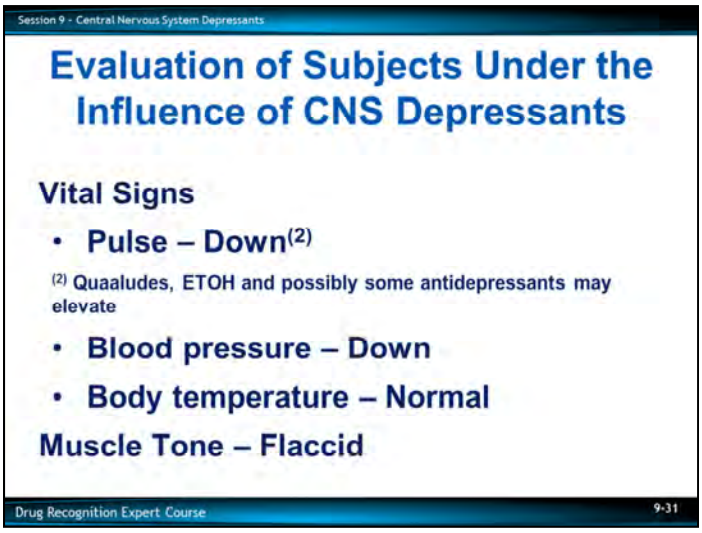
Observable Evidence of Impairment
Point out if a person is under the influence of a combination of alcohol and some other CNS Depressant, the onset angle of HGN will not be consistent with the person's BAC; in other words, the eyes will start to jerk earlier than would be expected due to the alcohol alone.
Horizontal Gaze Nystagmus (HGN) will be present with subjects under the influence of CNS Depressants.

Vertical Gaze Nystagmus (VGN) may be present, with high doses, of depressants for that individual.

Lack of Convergence (LOC) will be present with subjects under the influence of CNS Depressants.

Performance on Modified Romberg Balance (MRB), Walk and Turn (WAT), One Leg Stand (OLS), and

Finger to Nose (FTN) tests will be similar to that of subjects impaired by alcohol.
Point out subject's perception of time (on MRB) may be slowed, i.e., may estimate "30 seconds" after more than 30 seconds has elapsed.



Vital Signs

- Pulse will be Down [2]

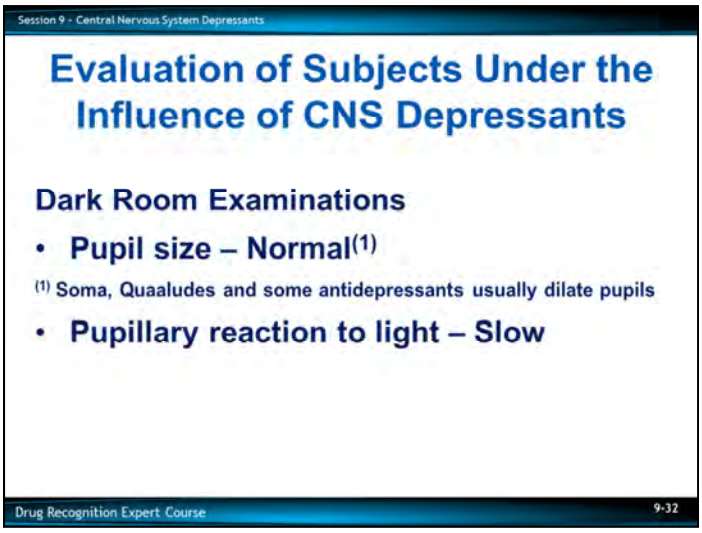
Ask students if the Pulse will be down with all CNS Depressants. Solicit their responses and then point out the Footnote (2)

- [2] Quaaludes, ETOH and possibly some antidepressants may elevate
- Blood pressure will be Down
- Body temperature generally will be in the Normal Range (98.6 plus or minus one degree)

Point out "normal" refers to body temperature generally being in the DRE average ranges.

Muscle Tone

- Muscle tone will be Flaccid



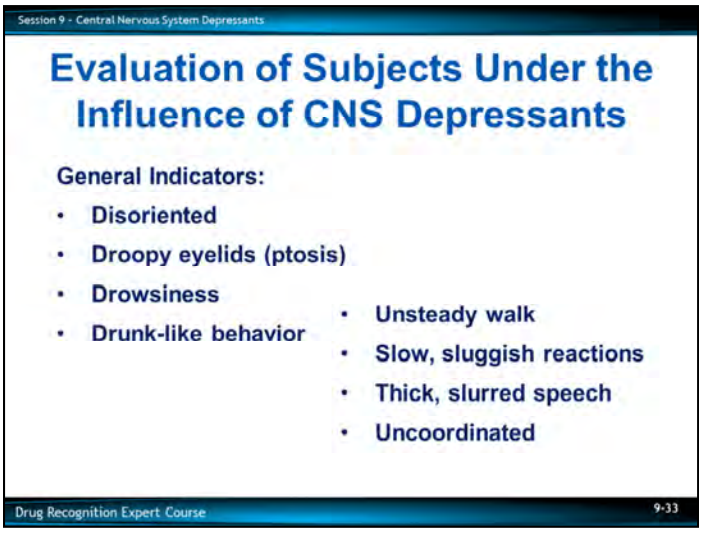
Dark Room Examinations

- Pupil sizes will generally be normal

Point out "normal" refers to pupil size generally being in the DRE average ranges.

Ask the students if the pupil size will be normal with all CNS Depressants. Solicit their responses and then point out the foot note (1) to the students.

- (1) Soma, Quaaludes and some antidepressants usually dilate pupils
- Pupillary reaction to light will be slowed



General Indicators

- Disoriented
- Droopy eyelids (ptosis)
- Drowsiness
- Drunk-like behavior
- Unsteady walk
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated

NOTE:

- With Methaqualone, pulse will be elevated and body tremors may be evident
- Quaaludes, Alcohol, and some antidepressants elevate the pulse
- Soma, Quaaludes, and some antidepressants usually dilate pupils

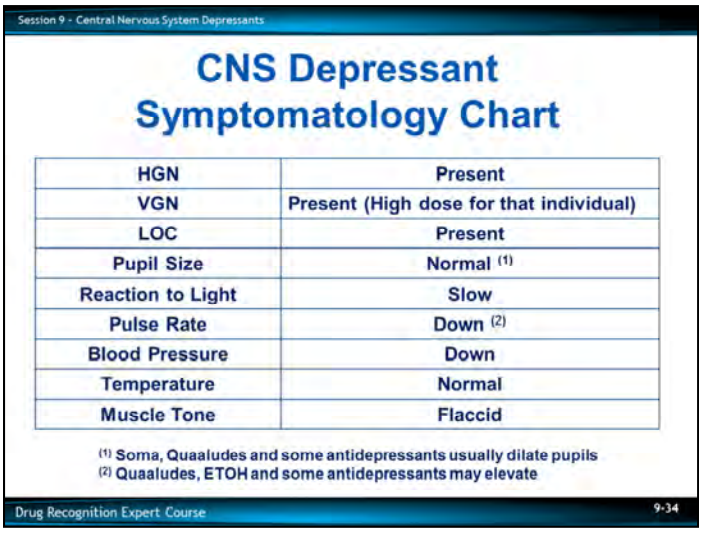
Emphasize speech may also be incoherent. Analogy: drunken behavior without the odor of alcoholic beverages.

But remind participants: subjects may have consumed alcohol and some other CNS Depressant. Hence, odor of alcoholic beverage may also be present.

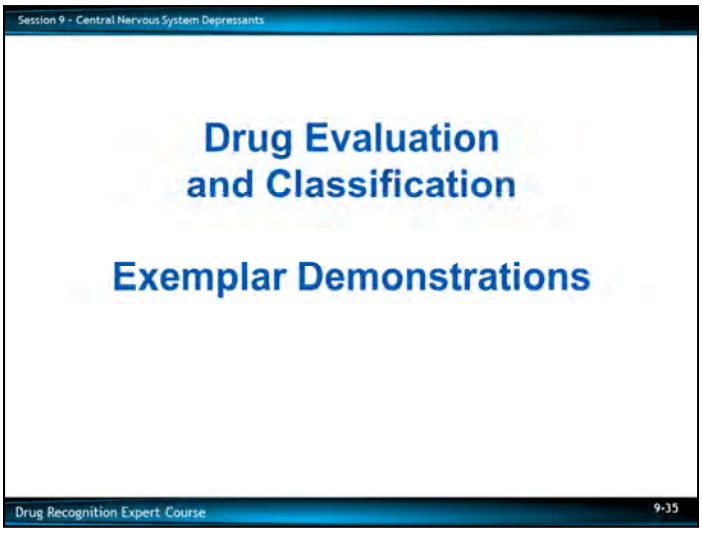
Antidepressant Exceptions:

- As a reminder, some Antidepressants may cause elevated pulse rate and pupil dilation

Antidepressants may cause sore throat, dry mouth, blurred vision, urinary retention, muscle tremors, restlessness, and increased anxiety.



Point out "Normal" references refer to the DEC Program averages for those specific examinations, such as pupil size, pulse rate, temperature, reaction to light, etc.

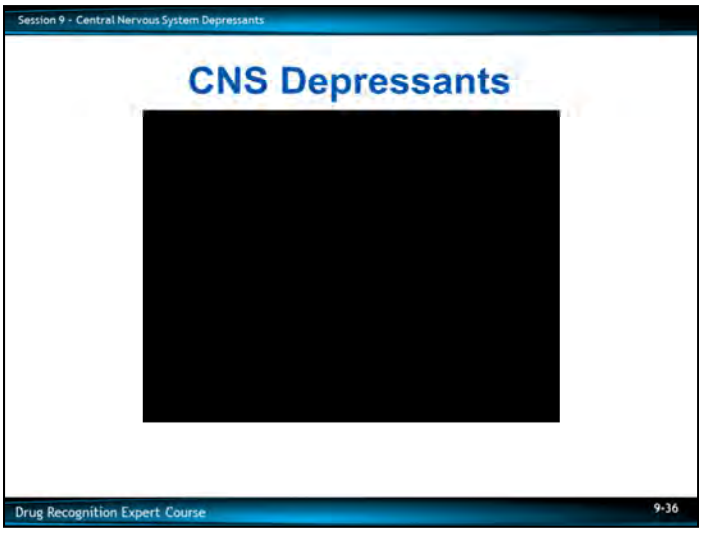


F. <u>Classification Exemplars</u>

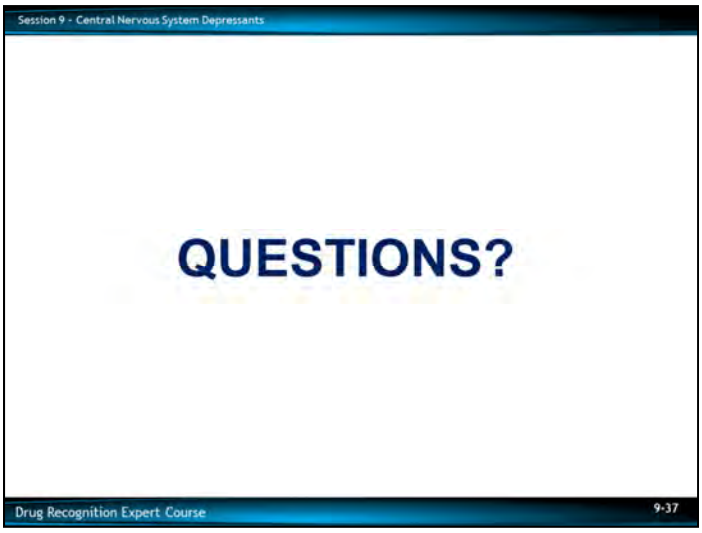
Refer students to the exemplars found at the end of Session 9 of their Participant Manuals.
Point out the exemplars are examples and serve as a guide.

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE**.**

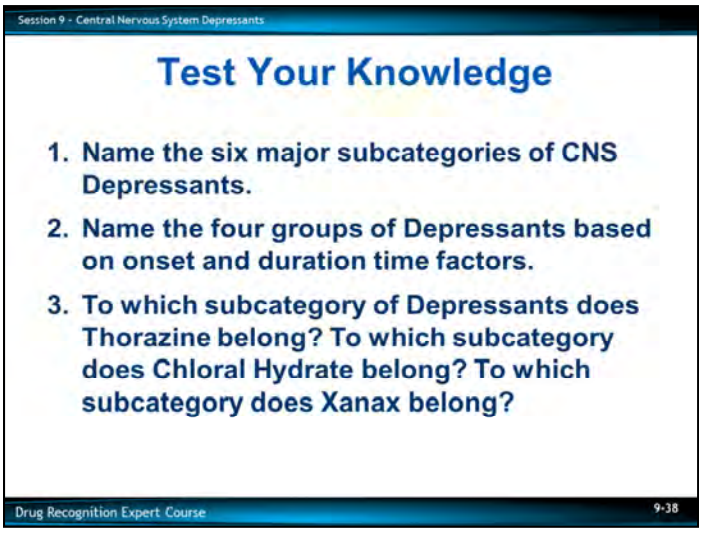
Relate the items on the exemplars to the CNS Depressant Symptomatology Chart.



Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a CNS Depressant.
(Approximately 24 minutes).
Relate behavior and observations to the CNS Depressant Symptomatology Chart.
Solicit students' questions or suggestions concerning Expected Results of the Evaluation of subjects under the influence of Depressants.



Solicit participants' comments and questions concerning Central Nervous System Depressants.



Test Your Knowledge

1. Name the six major subcategories of CNS Depressants.

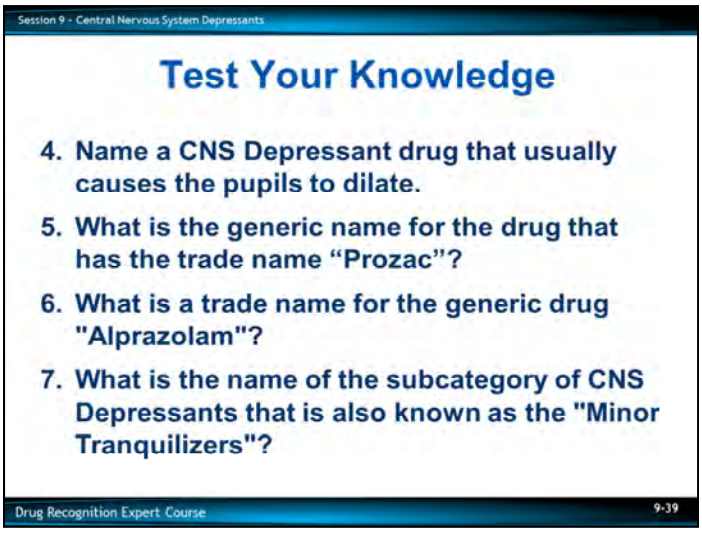
Barbiturates, Non-barbiturates, Anti-Anxiety Tranquilizers, Antidepressants, Anti-Psychotic Tranquilizers, Combinations

2. Name the four groups of Depressants based on onset and duration time factors.

Ultra short, Short, Intermediate, Long

3. To which subcategory of Depressants does Thorazine belong? To which subcategory does Chloral Hydrate belong? To which subcategory does Xanax belong?

Anti-Psychotic Tranquilizers, Non-barbiturates, Anti-Anxiety Tranquilizers



4. Name a CNS Depressant drug that usually causes the pupils to dilate.
Soma or Methaqualone

5. What is the generic name for the drug that has the trade name “Prozac”?
Fluoxetine

6. What is a trade name for the generic drug "Alprazolam"?
Xanax

7. What is the name of the subcategory of CNS Depressants that is also known as the "Minor Tranquilizers"?
Anti-Anxiety Tranquilizers

DRUG INFLUENCE EVALUATION

Evaluator: Officer Bradley Johnson	DRE #: 22607	Rolling Log #: 17-08-155	Evaluator's Agency: Manheim PD	Case # / Session: 17-445788 / IX-#1
Recorder/Witness: Trooper Craig Johnson, PA SP State	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: PA State Police	
Arrestee's Name (Last, First, Middle): Ludes, Lucy	Date of Birth: 04/12/82	Sex: F	Race: W	Arresting Officer (Name, ID#): Trooper Frank Cichra #13886
Date Examined / Time /Location: 08/06/17 0145 Harrisburg SP Barracks	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 22445	Chemical Test: Oral Fluid ☐	Urine ☐ Blood ☒ Test or tests refused ☐

Miranda Warning Given Given by: Tpr Cichra	☒ Yes ☐ No	What have you eaten today? Soup	When? About 4 pm	What have you been drinking? How much? Nothing	N/A
Time of last drink? N/A					

Time now/ Actual "midnight"/0150	When did you last sleep? Last night	How long? 6-7 hours	Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No			

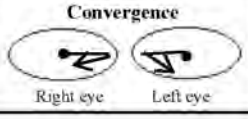
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No	Are you under the care of a doctor or dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☒ Yes ☐ No "Some pills from my brother"	Attitude: Cooperative	Coordination: Poor, Staggering
Speech: Slurred at times	Breath odor: Normal	Face: Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☐ Yes ☒ No	Eyelids ☒ Normal ☐ Droopy

Pulse/ Time		HGN	Left Eye	Right Eye
1.	56 / 0202	Lack of Smooth Pursuit	Present	Present
2.	58 / 0218	Maximum Deviation	Present	Present
3.	58 / 0240	Angle of Onset	35	35

Convergence



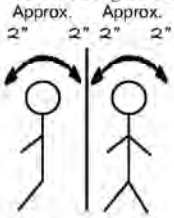
Right eye Left eye

22/30 **One Leg Stand** 25/30

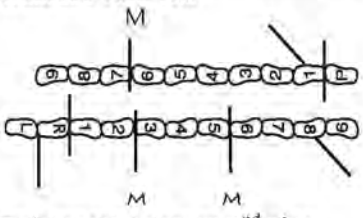
L	R	
All	All	Sways while balancing
✓	✓	Uses arms to balance
✓	✓	Hopping
✓	✓	Puts foot down

Modified Romberg Balance

Approx. 2" Approx. 2" 2" 2"



Walk and Turn Test



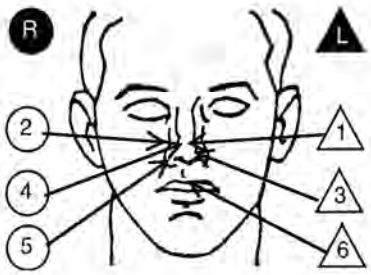
Took two extra steps on 2nd nine steps

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking		
Misses heel-toe	✓✓	✓
Steps off line	✓	✓
Uses arms	✓✓	✓
Actual steps taken	9	11

Time Estimation 46 estimated as 30 seconds	Describe turn: Staggered, took five steps	Cannot do test (explain): N/A	Type of footwear: Lace-up athletic shoes

Finger to Nose

(Draw lines to spots touched)



Slow hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.0	6.0	3.5
Right Eye	4.0	6.0	3.5

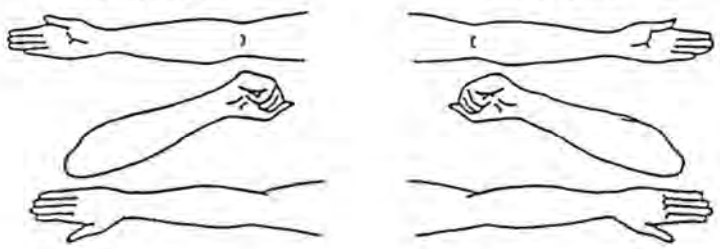
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature	Muscle Tone	Comments
110 / 66	98.2 °F	☐ Normal ☒ Flaccid ☐ Rigid	

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
Don't know. Something brother gave me.	A couple of pills	About 10 pm	At my brother's house

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
08/06/17 / 0015	0130	0145	0300	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

DRE/Officer's Signature: *Bradley Johnson* | Reviewed/approved by / date: | DRE# 22607

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☒ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Ludes, Lucy

1. **Location:** The drug influence evaluation was conducted in the Interview Room at the Harrisburg State Police Barracks in Harrisburg, PA. The floor surface is smooth tile and free of obstructions. The room is well illuminated and has adequate lighting for conducting the evaluation. The darkroom examinations were conducted inside a restroom at that location.

2. **Witnesses:** Trooper Craig Johnson of the Pennsylvania State Police was observed and recorded the entire evaluation.

3. **Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival with the results of 0.00 and 0.00 BAC.

4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Trooper Frank Cichra of the PA State Police for a drug evaluation. I contacted Trooper Cichra at the Harrisburg Barracks where it was determined he had stopped the suspect on Interstate 283 for driving 40 mph and in violation of the minimum speed limit. While speaking with the suspect, Trooper Cichra noted that she was disoriented and exhibited drunk-like behavior. However, Trooper Cichra did not detect an odor of an alcoholic beverage on her breath. Trooper Cichra determined that the suspect did not have any injuries or physical problems. He administered SFSTs at roadside and observed all six clues of Horizontal Gaze Nystagmus (HGN), four clues on the Walk and Turn (W&T) test, and three clues on the One Leg Stand (OLS) test. According to Trooper Cichra, the suspect appeared intoxicated and displayed poor balance and coordination throughout the contact and several times used the side of her vehicle to steady herself. She told Trooper Cichra that she was not drunk, just tired. Trooper Cichra arrested the suspect for DWI, and transported her to the Harrisburg Barracks for breath testing. After obtaining a .00 BAC result, Trooper Cichra requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room of the Harrisburg Barracks. She appeared cooperative, but was non-responsive at times. Her speech was slurred, her face appeared normal, and there was no odor of an alcoholic beverage on her breath. Her eyes were watery, and her eyelids appeared to be droopy. When she tried to walk, she staggered and several times used the wall to steady herself. I introduced myself and advised her that I had been requested to conduct a drug evaluation and asked if she would consent to the evaluation. She responded, "Okay, but I'm not drunk. I'm just really tired." I asked if she had been advised of her Miranda rights and she said, "Yes. When I got arrested. But I don't why. I'm not drunk." I noted that the suspect was wearing blue jeans, a Steelers tee-shirt, and white lace-up athletic shoes without socks.

6. **Medical Problems and Treatment:** Ludes stated she had no injuries or physical problems and none were mentioned or observed during the evaluation. She stated she was not under the care of a physician or dentist, was not diabetic or epileptic, and did not take insulin. She stated she had been having some anxiety issues due to a break-up with her boyfriend and had taken some pills she got from her brother. When asked what kind of pills they were, she did not know, but said they made her "a little sleepy."

7. **Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each one was explained and demonstrated to the suspect. She indicated she understood the instructions and agreed to do the tests. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During test, the suspect's time estimation was slow, estimating 30 seconds in 46 seconds. She had a front to back sway of approximately two inches in each direction, as well as a side to side sway of approximately two inches in each direction.

Walk and Turn: For this test, a line in the tile flooring was used. The suspect lost her balance one time during the instructions stage. She also attempted to start the test too soon one time. During the walking stage, she missed heel to toe two times on the first nine steps, and one time on the second nine steps. She stepped off the line once in each direction, raised her arms for balance twice on the first nine steps and once on the second nine steps. She also took an incorrect number of steps, taking eleven steps instead of nine as directed. During the turn, she staggered and required five steps to regain her balance and resume the test.

One Leg Stand: Per DRE protocol, this test was conducted twice, once standing on the left foot and once standing on the right foot. When attempting to stand on her left foot, she swayed while balancing throughout the test, used her arms to balance once, hopped once, and put her foot down at count 1,020. She counted slowly and reaching 1,022 in 30 seconds. While attempting to stand on her right foot, she swayed while balancing throughout the test, used her arms to balance once, hopped, and put her foot down at 1,007. She counted to 1,025 at the conclusion of the 30 seconds.

Finger to Nose: During this test, the suspect displayed slow hand and arm movements. She did not touch the tip of her nose with the tip of her index finger as directed on any of the six attempts.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The suspect exhibited all six clues of HGN, with an angle of onset of approximately 35 degrees. Vertical Gaze Nystagmus was not detected. She was not able to converge her eyes as instructed. During the pupil size examinations, the suspect's pupils were estimated at 4.0 mm in both eyes in Room Light, 6.0 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All three estimates were within the DRE average range. Rebound dilation was not present. She had a slow reaction to light.

   Vital Signs: Her pulse rates were checked three times during the evaluation: 1) at 0202 hours - 56 beats per minute (bpm); 2) at 0218 hours - 58 bpm; and 3) at 0240 hours it was 58 bpm. All three were below the DRE average range of 60 - 90 bpm. Her blood pressure was measured at 110/66, which was also below the DRE average ranges. Her body temperature was measured at 98.2°, which was within the DRE average range. Her muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. No indicators of injection sites were observed.

10. **Suspect's Statements:** Trooper Cichra advised the suspect of her Miranda rights and she agreed to waive her rights and answer questions. She stated she had received a couple of pills from her brother to help her with some anxiety issues she was having. She stated she had taken them at about 10 pm (approximately two hours before arrest). She stated she took the pills at her brother's house and that they made her tired. She was unable to provide the name of the medication.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Ludes is under the influence of a CNS Depressant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** After the evaluation, Trooper Cichra transported the suspect to the Pinnacle Health Hospital in Harrisburg where a blood sample was collected at 0335 hours. Trooper Cichra submitted the blood sample as evidence pending analysis by the PA State Laboratory.

13. **Miscellaneous:** Refer to Trooper Cichra's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case # Session IX-#2
Officer Russ Kenney	9296	17-03-55	Milford PD	17-2235

Recorder/Witness	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency
Sgt Wesley Stought OH SP		Ohio State Patrol

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Downers, Dudley R.	04/02/86	M	W	Trooper Christopher Ellison #22367

Date Examined / Time /Location	Breath Test: Test Refused ☐	Chemical Test: Urine ☐ Blood ☒
03/16/17/2130 /Clermont Office	Results: 0.00 Instrument #: 44612	Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given Given by: Tpr Ellison	☒ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?
		Ham sandwich & chips 6 pm	Water N/A	N/A

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
11pm / 2135	Last night About 7 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☒ Yes ☐ No Sleeping pills	Cooperative	Poor, Unsteady

Speech:	Breath odor:	Face:
Slurred, Thick	Normal	Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

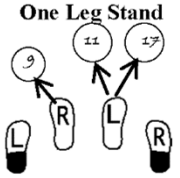
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☐ Yes ☒ No	Eyelids ☒ Normal ☐ Droopy

Pulse/Time	HGN	Left Eye	Right Eye
1. 54 / 2145	Lack of Smooth Pursuit	Present	Present
2. 52 / 2155	Maximum Deviation	Present	Present
3. 54 / 2210	Angle of Onset	30	30

Convergence

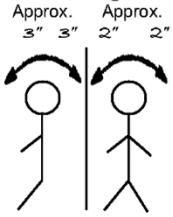
Right eye Left eye

25/30 **One Leg Stand** 24/30

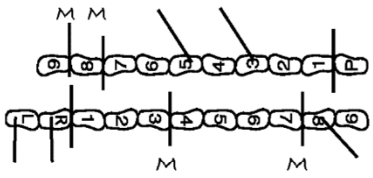


Modified Romberg Balance

Approx. 3" 3" Approx. 2" 2"



Walk and Turn Test



Slow, deliberate steps

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking		
Misses heel-toe	✓✓	✓✓
Steps off line	✓	✓✓
Uses arms	✓✓	✓✓
Actual steps taken	9	9

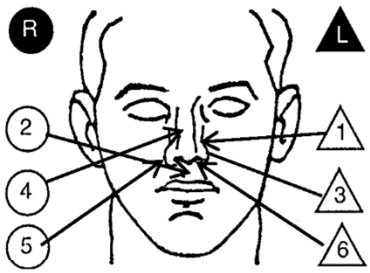
L	R	
1	All	Sways while balancing
1	1	Uses arms to balance
0	0	Hopping
1	2	Puts foot down

Counted slowly

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
38 estimated as 30 seconds	Lost balance	N/A	Lace-up shoes

Finger to Nose

(Draw lines to spots touched)



Slow hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	3.5
Right Eye	4.5	6.5	3.5

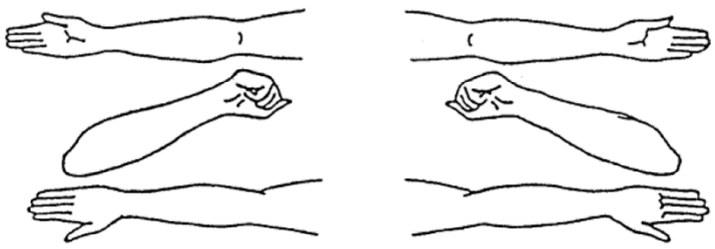
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
118/58	98.0 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
Some medicine to help me sleep	1 pill	About 9 pm	At work

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
03/16/17 / 2020	2055	2130	2230	

DRE/Officer's Signature: Russ Kenney	Reviewed/approved by / date:	DRE# 9296

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☒ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Downers, Dudley R.

1. **Location:** The drug evaluation was conducted in the Interview Room at the Clermont Ohio State Highway Patrol Office. The surface in the Interview Room was level and free of obstructions, and there was adequate lighting for conducting the evaluation. The darkroom examinations were conducted inside the staff restroom.

2. **Witnesses:** Sergeant Wes Stought of the Ohio State Patrol observed and recorded the evaluation.

3. **Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival with a 0.00% result.

4. **Notification and Interview of the Arresting Officer:** I was off duty and contacted by the OHP Dispatch Center and requested to conduct a drug evaluation for Trooper Ellison. I responded to the Clermont Ohio HP Office and contacted Trooper Ellison. It was determined he had stopped the suspect for failure to maintain a single lane of travel on I-275. When Trooper Ellison contacted the suspect, he appeared to be impaired, but there was no detectable odor of an alcoholic beverage on his breath. The suspect had poor balance and slow, unsteady movements. Trooper Ellison administered SFSTs at roadside and observed all six clues of Horizontal Gaze Nystagmus (HGN) along with severe divided attention impairment during the Walk and Turn (W&T) and One Leg Stand (OLS) tests. According to Trooper Ellison, the suspect had just left work and was on his way home. The suspect admitted taking a pill to help him sleep prior to leaving work. Trooper Ellison arrested the suspect for OVI and transported him to Clermont OHP Office for processing. After obtaining a 0.00 breath test, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the OHP Office. He was cooperative, but at times was slow to respond to questions. His speech was slurred and thick. There was no odor of an alcoholic beverage on his breath. His eyes appeared normal and his pupils appeared to be equal in size. When standing, the suspect swayed noticeably, and when walking, he was unstable and often used a nearby chair to steady himself. I introduced myself and requested that the suspect complete a drug influence evaluation, which he agreed to do. I asked if he recalled his Miranda rights being given to him by Trooper Ellison, which he indicated he did. He agreed to answer my questions. The suspect was wearing blue dress pants, a plaid long-sleeve shirt and black dress shoes.

6. **Medical Problems and Treatment:** The suspect indicated that he did not have any physical or medical problems. During the evaluation, none were mentioned or observed. He admitted to being "just tired."

7. **Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each test was explained and demonstrated to the suspect. After each demonstration, the suspect indicated he understood the instructions and agreed to do the tests, which included the following:

   Modified Romberg Balance: During this test, the suspect had a slow time estimation, estimating 30 seconds in 38 seconds. During the time estimation, he had a front to back sway of approximately three inches in each direction, and a side to side sway of approximately two inches in each direction.

Walk and Turn: A line on the floor was used for this test. The suspect lost his balance two times during the instructions stage. During the walking stage, the suspect missed heel to toe two times on the first nine steps and two times on the second nine steps. He also stepped off the line once during the first nine steps and twice on the second nine steps. He also raised his arms for balance twice during each of the nine steps. When attempting the turn, the suspect lost his balance. Throughout thetest, the suspect took slow, deliberate steps. He was wearing lace-up dress shoes and was given the opportunity to remove them. However, he wanted to leave them on for the test.

One Leg Stand: This test was conducted twice, once with the suspect standing on his left foot and once standing on his right foot. When standing on his left foot, the suspect swayed while balancing, used his arms for balance once, and put his foot down at count 1,009. He counted slowly, reaching 1,025 at the conclusion of the 30 seconds. While standing on his right foot, the suspect swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 1,011 and at 1,017. He counted to 1,024 at the conclusion of the 30 seconds.

Finger to Nose: During this test, the suspect displayed slow hand and arm movements. He failed to touch the tip of his nose with the tip of his index finger as instructed on all six attempts. On one attempt (#2), he missed his nose entirely and touched his upper lip.

8. **Clinical Indicators of Impairment:**

   Eyes Signs: The suspect exhibited all six clues of HGN with an angle of onset of approximately 30 degrees. Vertical Gaze Nystagmus was not present. He was unable to converge his eyes as instructed. During the pupil size examinations, his pupils were estimated at 4.5 mm in both eyes in Room Light, 6.5 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All were within the DRE average ranges for the lighting levels. Rebound dilation was not present. The suspect had a slow reaction to light.

   Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were 54 beats per minute (bpm), 52 bpm, and 54 bpm. All three were below the DRE average range of 60-90 bpm. His blood pressure was measured at 118/58, which was below the DRE average range. His body temperature was measured at 98.0°, which is within the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. There were no indicators of injection sites observed.

10. **Suspect's Statements:** Trooper Ellison advised Downers of his Miranda rights and he agreed to waive his rights and answer questions. He stated he had taken a sleeping pill to help him sleep at "around 9 pm" when he left work. The suspect mentioned numerous times how sleepy and tired he was.

11. **DRE's Opinion:** It is my opinion as certified Drug Recognition Expert that Downers is under the influence of a CNS Depressant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A blood sample was collected from the suspect at 2300 hours. The blood draw was witnessed by Trooper Ellison, who submitted it into evidence pending delivery to the state crime laboratory for analysis.

13. **Miscellaneous:** Downers was disoriented with the time throughout the evaluation. At the beginning of the evaluation he believed it was 11 pm (actual time was 2130), and he thought he had taken his sleeping pill at 9 pm. He was arrested at 2020 hours. Refer to Trooper Ellison's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator: Sergeant Elicer Ayala	DRE #: 11472	Rolling Log #: 17-09-35	Evaluator's Agency: New Jerey State Police	Case # / Session: 17-88972 IX-#3
Recorder/Witness: Sgt. Michael Gibson New	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: West Long Branch PD	
Arrestee's Name (Last, First, Middle): Flynn, Mickey	Date of Birth: 03/11/80	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Jeffrey Hanlon #14172
Date Examined / Time /Location: 09/06/17 1910 West Long	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 12010	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: Given by: Ofc Hanlon	☒ Yes ☐ No	What have you eaten today? When? Cheeseburger & fries 6	What have you been drinking? How much? Diet Coke N/A	Time of last drink? N/A
Time now/ Actual: 7:30 PM / 1915	When did you last sleep? How long? Last night 4-5 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No	
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No	Are you under the care of a doctor or dentist? ☒ Yes ☐ No Dr. Smith (for stress)		
Are you taking any medication or drugs? ☒ Yes ☐ No Xanax	Attitude: Cooperative	Coordination: Poor, Slow		
Speech: Slurred, Thick at times	Breath odor: Normal	Face: Normal		
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal	
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus: ☐ Yes ☒ No	Vertical Nystagmus: ☐ Yes ☒ No	Able to follow stimulus: ☐ Yes ☒ No	Eyelids: ☐ Normal ☒ Droopy

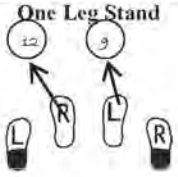
Pulse/Time

1. 54 / 1930
2. 58 / 1942
3. 56 / 2000

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	40	40

Convergence — Right eye / Left eye

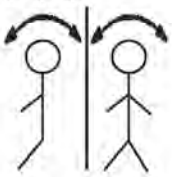
25/30 **One Leg Stand** 24/30



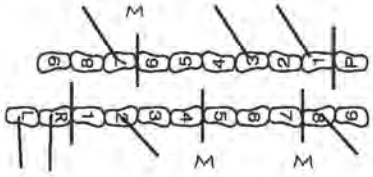
L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
✓	✓	Puts foot down

Modified Romberg Balance

Approx. 3" 3" 3" 3" Approx.



Walk and Turn Test



Slow steps throughout

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking		
Misses heel-toe	✓✓	✓
Steps off line	✓✓	✓✓✓
Uses arms	✓✓✓	✓✓✓
Actual steps taken	9	9

Time Estimation: 50 estimated as 30 seconds

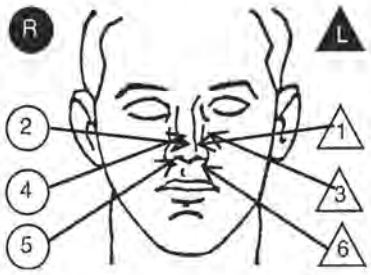
Describe turn: Lost balance

Cannot do test (explain): N/A

Type of footwear: Slip-on dress shoes

Finger to Nose

(Draw lines to spots touched)



Swayed forward. Slow movements.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.0	6.5	2.5
Right Eye	4.0	6.5	2.5

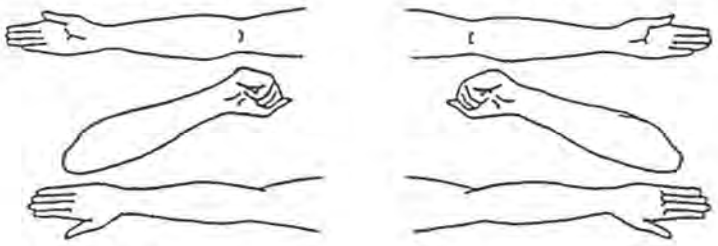
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
106 / 68	98.0 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Just some Xanax"	"One or two. Can't	6 pm	McDonald's

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
09/06/17 / 1820	1845	1910	2020	

DRE/Officer's Signature: Elicer Ayala

Reviewed/approved by / date:

DRE# 11472

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant	
☐ Medical	☒ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis	

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Flynn, Mickey

1. **Location:** The drug evaluation was conducted in the Interview Room at West Long Branch Police Department. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and have a title floor with no obstructions.

2. **Witnesses:** Sergeant Michael Gibson of the New Jersey State Police observed and recorded the drug evaluation. Arresting officer, Officer Jeffrey Hanlon observed the psychophysical tests.

3. **Breath Alcohol Test:** A breath test was administered to the suspect by Officer Hanlon at 1835 hours. The result of the breath test was a 0.00.

4. **Notification and Interview of the Arresting Officer:** While on duty and part of a special DWI enforcement operation in the Monmouth County area, I was requested to contact Officer Hanlon for a drug evaluation. Upon my arrival to the Long Branch Police Department, Officer Hanlon advised he had located the suspect's vehicle stopped partially in the southbound lane of Cedar Avenue. The suspect was slumped over the steering wheel and appeared to be unconscious. Further investigation revealed the suspect had been operating the vehicle. After determining that the suspect was not injured and not experiencing a medical emergency, Officer Hanlon conducted a DUI investigation, which included administering SFSTs to the suspect. According to Officer Hanlon, the suspect exhibited six clues of Horizontal Gaze Nystagmus (HGN), four clues on the Walk and Turn (W&T) test, and three clues on the One Leg Stand (OLS) test. The suspect was arrested for DUI and transported to the West Long Branch PD. Based upon the breath test results, Officer Hanlon requested a DRE to assist with the investigation. According to Officer Hanlon, the suspect stated several times that he was not drunk and admitted taking a medication for stress.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Long Branch PD where he was slumped over in a chair and had a "drunk-like" appearance. He was cooperative and was answering questions. His speech was slurred and thick. His coordination was poor and his movements were unusually slow. I introduced myself to the suspect and informed him that I had been requested to conduct a drug evaluation, which he agreed to do, by stating, "Well, okay. I'm not drunk. You know that don't you?" He was slow to respond to my questions. His pupils appeared normal in size, and his eyelids were droopy. I confirmed that the suspect had been advised of his Miranda rights and the suspect agreed to answer my questions. I noted that the suspect was wearing dress pants, an opened collared dress shirt and black slip-on dress shoes. He advised me that he had just gotten off work and was on his way home, and had a very stressful day at work.

6. **Medical Problems and Treatment:** The suspect was asked about any injuries or physical defects. He stated he was seeing a doctor for treatment of stress. He stated he was taking a medication that sometimes made him very tired. He stated he did not have any other physical or medical problems, and none were mentioned or observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed he understood the instructions and agreed to do the tests. The following tests were administered:

   Modified Romberg Balance: During this test, Flynn's time estimation was slow as he estimated 30 seconds in 50 seconds. When asked how he had estimated the 30 seconds, he stated, "I just tried to count in my head." During the test, the suspect had a side to side and front to back sway of approximately three inches in each direction.

Walk and Turn: For this test, a line on the tile floor was used. The suspect lost his balance two times during the instructions stage. During the walking stage, he missed heel to toe two times on the first nine steps and once on the second nine steps. He also stepped off the line twice during the first nine steps and three times on the second nine steps. He raised his arms for balance three times on each set of nine steps. He made an improper turn losing his balance and staggering to the right. Throughout the test, the suspect took slow steps. He was given the opportunity to remove his shoes prior to the test and he preferred to keep them on.

One Leg Stand: This test was conducted twice, once standing on the left foot and once standing on the right foot. While standing on his left foot, the suspect swayed while balancing, used his arms for balance once, and put his foot down at count 1,012. The suspect reached 1,025 when the test was stopped after 30 seconds. While standing on his right foot, the suspect swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 1,009. The suspect reached 1,024 when the test was stopped after 30 seconds. After the test was completed, he staggered to the right and used the wall to balance himself.

Finger to Nose: During this test, the suspect swayed forward on each attempt. He failed to touch the tip of his nose with the tip of his index finger as directed all six attempts. His arm and hand movements were slow and deliberate, and he searched for the tip of his nose on all the attempts.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The suspect displayed all six clues of HGN with an angle of onset of approximately 40 degrees. Vertical Gaze Nystagmus was not present. He was not able to converge his eyes as instructed. During the pupil size examinations, his pupils were estimated at 4.0 mm in both eyes in Room Light, 6.5 mm in both eyes in Near Total Darkness, 2.5 mm in both eyes in Direct Light. All were within the DRE average ranges. Rebound dilation was not present. He had a slow reaction to light.

   Vital Signs: The suspect's pulse rates were checked three times during the evaluation with the following results: 54 beats per minute (bpm) at 1930, 58 bpm at 1942 hours, and 56 bpm at 2000 hours. All three were below the DRE average range of 60-90 bpm. His blood pressure was measured at 106/68, which was below the DRE average range. His body temperature was 98.0 degrees, which is in the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal area and oral cavity were clear and there were no indicators of injection sites.

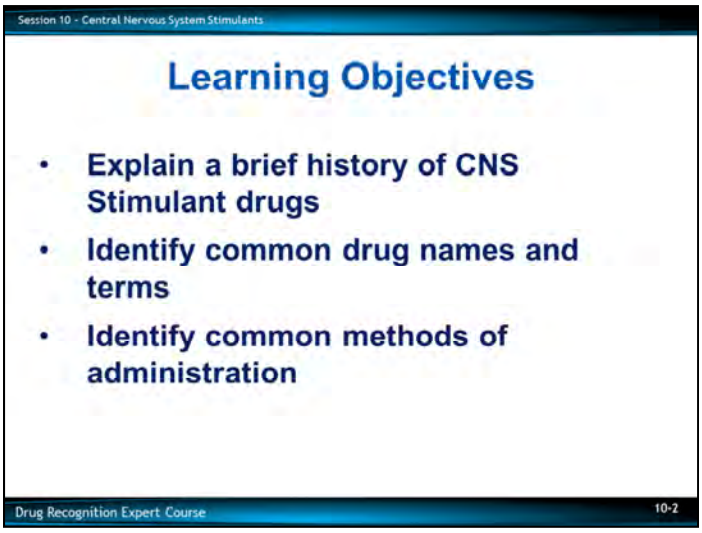
10. **Suspect's Statements:** Officer Hanlon advised the suspect of his Miranda rights when arrested and he agreed to waive his rights and answer questions. He stated he had taken Xanax several times during the day for stress, but could not recall how many he had taken. He thought he took the last one when he stopped for a meal at McDonald's around 6 pm while on his way home.

11. **DREs Opinion:** It is my opinion as a certified Drug Recognition Expert that Flynn is under the influence of a CNS Depressant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect by Officer Hanlon and was submitted into evidence for laboratory testing.

13. **Miscellaneous:** According to drugs.com, Xanax (Alprazolam) is a benzodiazepine used to treat anxiety and panic disorders, and anxiety caused by depression. Warnings concerning this drug include "Because of its CNS depressant effects, patients receiving Xanax should be cautioned against engaging in hazardous occupations or activities requiring complete mental alertness such as operating machinery or driving a motor vehicle."

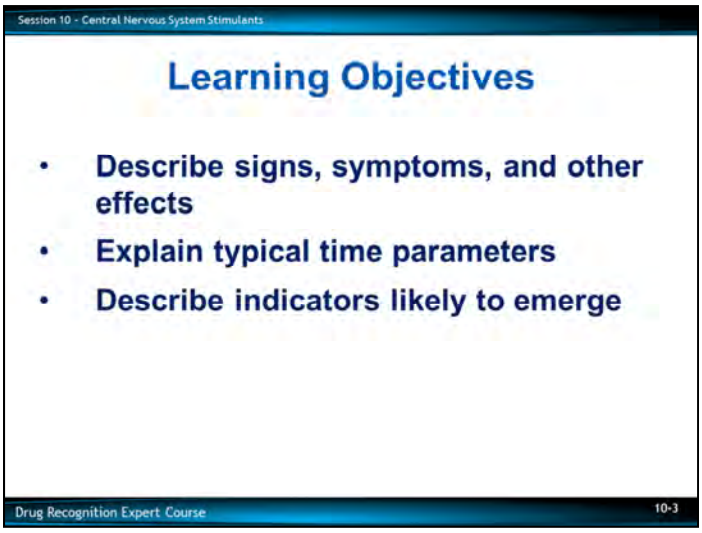
Session 10 - Central Nervous System Stimulants
1 Hour, 45 Minutes
Session 10
Central Nervous System Stimulants
TSI
NHTSA
Drug Recognition Expert Course
10-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session the participant will be able to:

- Explain a brief history of the Central Nervous System (CNS) Stimulant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category



- Describe the symptoms, observable signs, and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects
C. Onset and Duration Effects
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Review of the DEC Program Exemplars
Reading Assignments
Video Presentations
Slide Presentations

A. <u>Overview of the Category</u>

CNS Stimulants speed up the operation of the Central Nervous System.

- "Speed Up" does not mean "improve"

They accelerate the heart rate and many other processes of the body. For that reason, they have also been referred to as "Uppers."

Although there is a great difference in strength, all stimulants increase the chemical and electrical activity in the central nervous system. Stimulants boost energy, raise the heart rate and blood pressure, increase respiration, and reduce appetite.

Legal stimulants can be prescribed for Attention Deficit Hyperactivity Disorder (ADHD), weight loss, and narcolepsy.

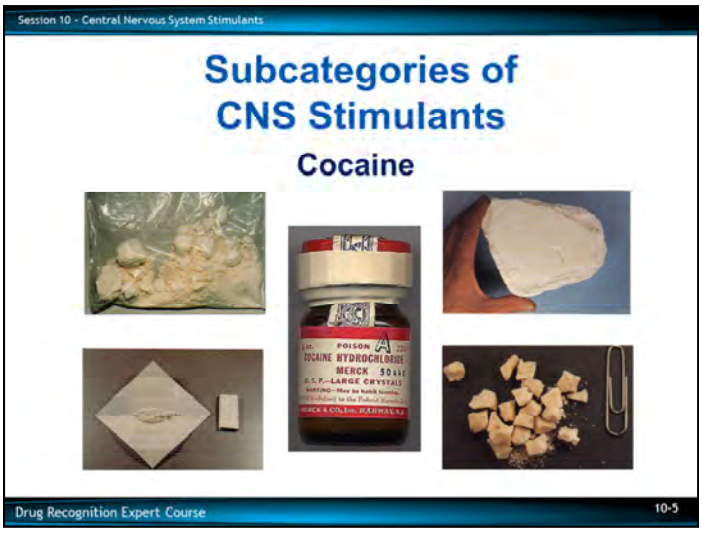
Some commonly-abused CNS Stimulants include:

- Cocaine (Crack) – Naturally derived from the leaves of the coca plant. "Crack" is the street name given to Cocaine that has been processed from Cocaine Hydrochloride
- Amphetamines – Includes many prescription drugs such as Adderall, Dexedrine, and Ritalin
- Methamphetamine – Illegally-produced drug, with the exception of Desoxyn, which is a prescription drug used to treat narcolepsy and ADHD
- Caffeine, Herbal Ecstasy, Ephedrine, Pseudoephedrine, and various energy drinks

Emphasize abuse of CNS Stimulants does not make the brain work "better" or "smarter." Rather, they induce the brain to cause many of the body's organs to work harder, but not better.

- The "speeding up" results in increased heartbeat, pulse, respiration, blood pressure, and temperature
  - All of these effects can lead to physical harm to the stimulant user
- However, Robert Louis Stevenson wrote "The Strange Case of Dr. Jekyll and Mr. Hyde" while under the influence of Cocaine
  - He wrote 60,000 words in six days

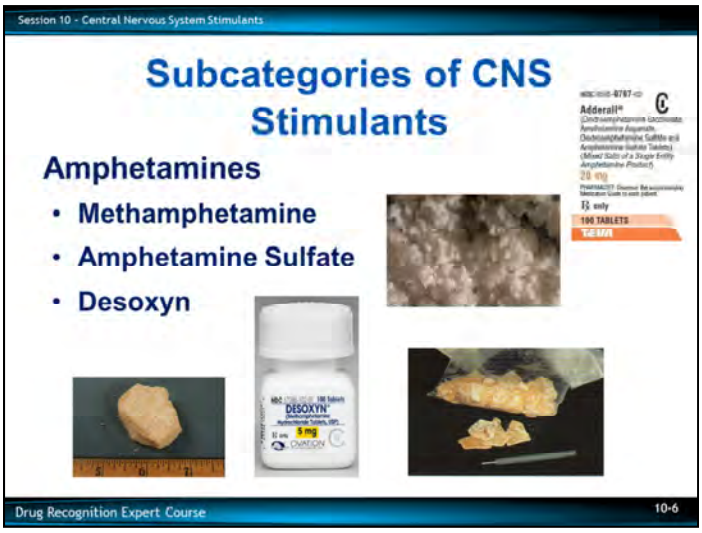
The "speeding up" also produces nervousness, irritability, and an inability to concentrate or think clearly. These psychological effects can lead to unpredictable and bizarre behavior by the stimulant user.



Subcategories of CNS Stimulants
There are three major subcategories of CNS Stimulants.

Refer participants to DEA Intelligence Report – Drug/Slang Code Words, May, 2017. This can be found in the "PDF Attachments" folder on the instructor's thumb drive.

Cocaine

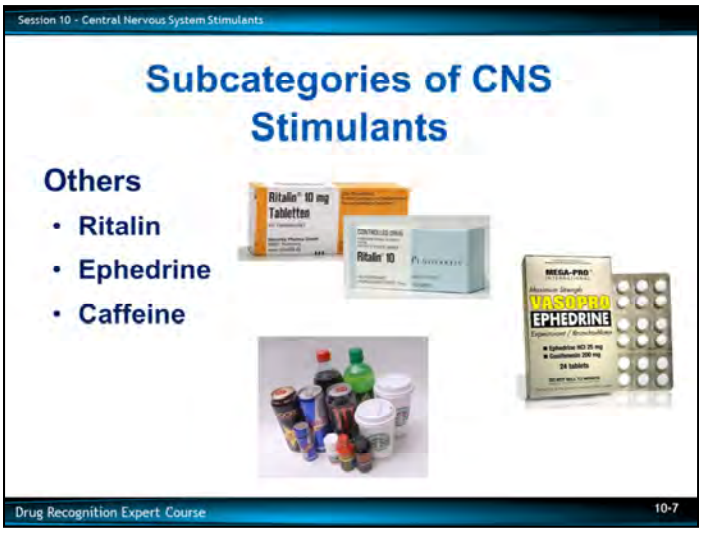


Amphetamines

Amphetamines include a large number of individual drugs.

Examples:

- Methamphetamine
- Amphetamine Sulfate
- Desoxyn
  - Also includes (d-Methamphetamine) (d-Desoxyephedrine) and Methedrine
  - Desoxyn was first developed in 1919 and has been used clinically since 1930
    - Mainly used for the treatment of obesity, narcolepsy, and attention disorder



Others

There are many "other" CNS Stimulants (i.e., non-Cocaine and non-Amphetamines); the ones listed on the visual are only a few of those.

- Ritalin (Methylphenidate Hydrochloride)
  - Also brand names of Concerta, Daytrana
  - Used in the treatment of depression, narcolepsy, and ADHD
  - Ephedrine –(Primatene, Quadrinal)
  - Can be found in some naturally-occurring plants such as the Chinese herb Ma Huang
  - Used as a nasal decongestant and bronchodilator
  - Contained in numerous over-the-counter (OTC) supplements and energy products

- Caffeine
  - Contained in coffee and numerous energy drinks
  - Some "Monster drinks" contain as much as 240 milligrams of Caffeine
  - Can be fatal at about 10 grams

We will focus on Cocaine and Amphetamines because they are the most widely abused CNS Stimulants. But, the participants should be aware there are many other stimulant drugs.

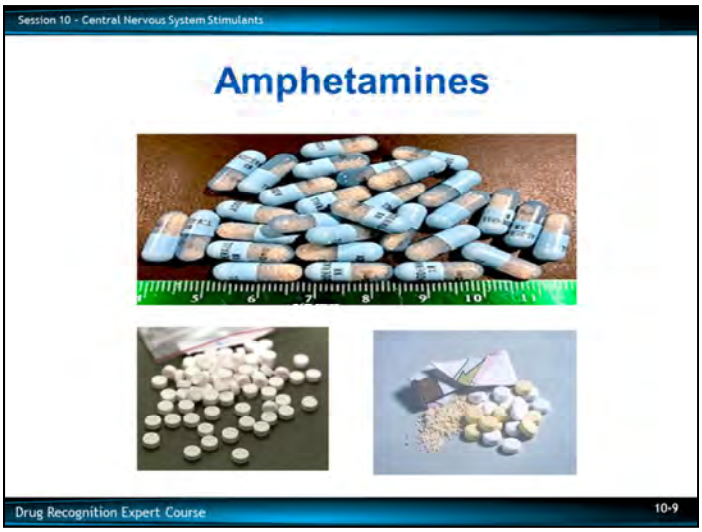
Cocaine
Coca plant: Scientific name "Erythroxylon Coca."

Cocaine derives from the Coca plant.

- The plant is native to South America
- Cocaine is made from the leaves of the Coca plant

Emphasize the Coca plant should not be confused with the Cocoa plant from which chocolate is made.

- Archaeological evidence indicates natives of Peru chewed coca leaves 5,000 years ago
- Sigmund Freud personally experimented with Cocaine for approximately 3 years
- Small quantities of Cocaine originally were included in the formula of Coca Cola
- Use of Cocaine in products such as Coca Cola was outlawed by the Pure Food and Drug Law of 1906



Amphetamines
Amphetamines were first synthesized near the end of the 19th Century.

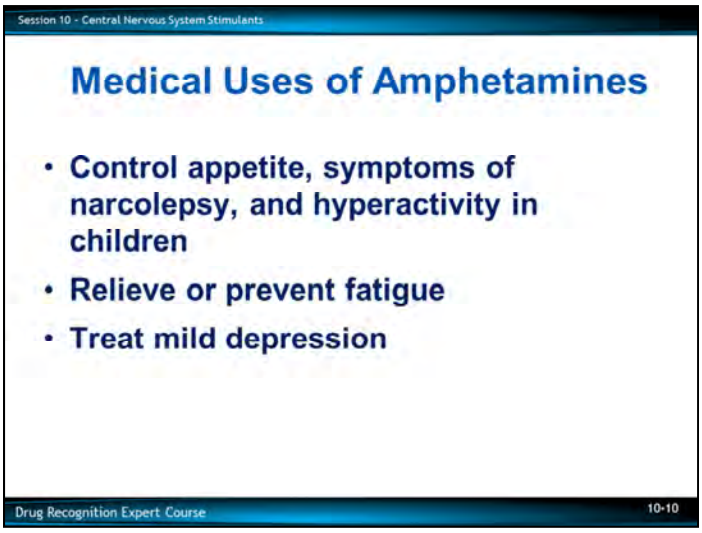
The first use of Amphetamines for medical purposes began in the 1920's.
Initial medical application was to treat colds.

- Amphetamines cause the nasal membranes to shrink
- This gives temporary relief from stuffy nasal passages

Much more effective drugs have been developed to treat cold symptoms.

Amphetamines were prescribed for the treatment of narcolepsy and Attention Deficit Hyperactivity Disorder (ADHD).

Amphetamine use grew rapidly when Amphetamines were distributed to soldiers during World War II.
Amphetamines are no longer prescribed as cold remedies. In 1971, Amphetamines were scheduled in the United States and prescriptions became required for possession.



Present-day medical purposes for Amphetamines include:

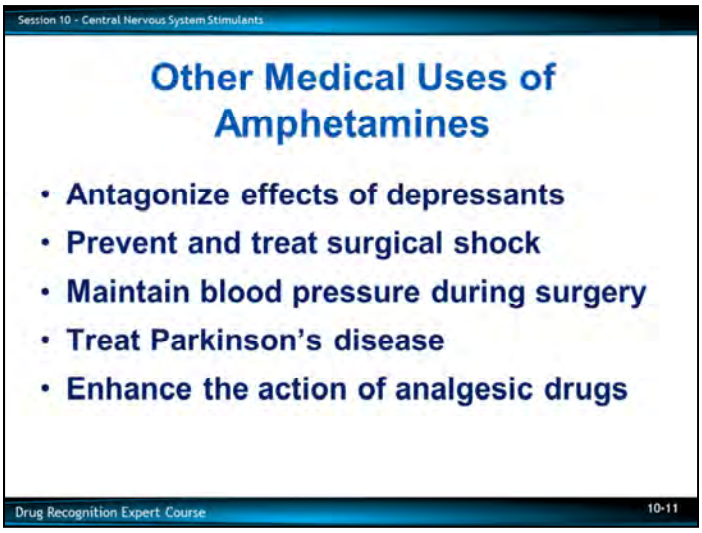
- Control appetite
  - Many OTC appetite control products contain CNS Stimulants as their active ingredient

- Control symptoms of narcolepsy
  - Narcolepsy is an extremely rare disorder that causes the individual to fall asleep compulsively, often several hundred times per day

- Control certain hyperactive behavioral disorders
  - Example: Ritalin is commonly prescribed for children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) or similar disorders

- Relieve or prevent fatigue to allow persons to perform essential tasks of long duration
  - The U.S. Air Force previously gave pilots Amphetamines to keep them alert on long flights
  - Amphetamines have also had other short term military applications

- Treat mild depression



- Antagonize the effects of depressant drugs

Remind participants two drugs are antagonistic when the signs and symptoms of one are opposite to the signs and symptoms of the other.

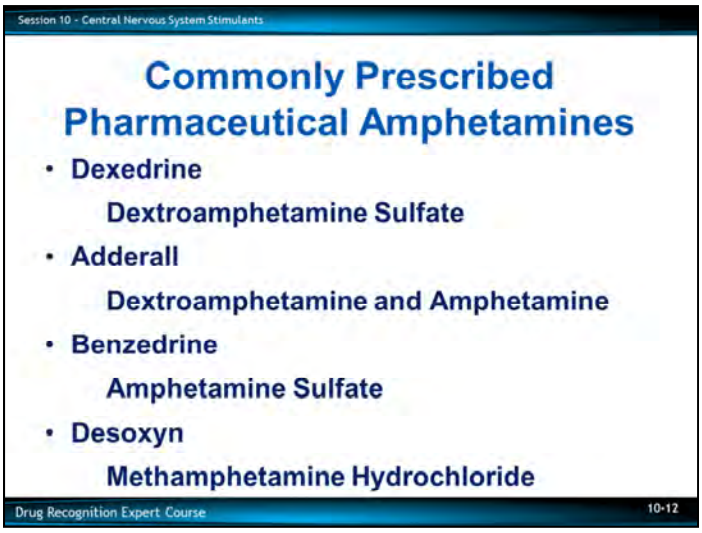
- Prevent and treat surgical shock
- Maintain blood pressure during surgery
- Treat Parkinson's Disease

Parkinson's Disease: a form of paralysis characterized by muscular rigidity, tremor, and weakness.

- Enhance the action of certain analgesic (pain killer) drugs

D-amphetamine and methylphenidate have enhanced the analgesic effects of opioids along with countering some of the drowsiness associated with opioid medications.
Source: "Potentiation of opioid analgesia by pyschostimulant drugs: a review," S. Dala and R. Melzack, Journal of Pain and Symptom Management, October 1998.

Numerous pharmaceutical companies manufacture Amphetamines for these purposes.



Examples of common pharmaceutical Amphetamines:

- Dexedrine (Dextroamphetamine Sulfate) used to treat narcolepsy, hyperkinetic behavior, and for weight control

Point out Dexedrine probably is the most commonly prescribed Amphetamine.

- Adderall (Combination of Dextroamphetamine and Amphetamine Sulfate) is used for the treatment of ADHD and narcolepsy

- Benzedrine (Amphetamine Sulfate) is used to treat narcolepsy, hyperkinetic behavior, and weight problems

- Desoxyn (Methamphetamine Hydrochloride, also known as Desoxyephedrine) is used in weight reduction

Large quantities of Amphetamines are also illegally manufactured in this country.
If available, display slides of illicitly-manufactured methamphetamine.

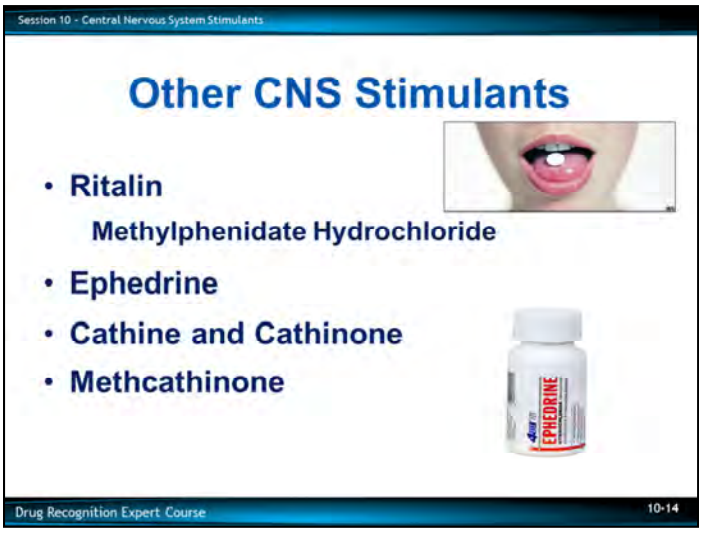
The most commonly abused illicit Amphetamine is Methamphetamine.

Methamphetamine Hydrochloride is a white to light brown crystalline powder or clear chunky crystals resembling ice. Methamphetamine base is a liquid.

The majority of street Methamphetamine is produced in Clandestine laboratories.
Note: Clandestine production normally involves the reduction of l-Ephedrine or d-Seudoephedrine over red phosphorus with Hydroiodic Acid, or reduction with Sodium or Lithium in condensed liquid ammonia.

Medicinally, forms of Methamphetamine can be used in the treatment of:
- Narcolepsy
- ADHD

Methamphetamine is also known as Methedrine or Methamphetamine Hydrochloride. Its more common street names are “Speed,” “Crank,” “Ice,” “Crystal,” “Meth,” and “Water.”



Other CNS Stimulants
There are some other CNS Stimulants, apart from Cocaine or Amphetamines.
Ritalin
If available, display slides of Ritalin.

Ritalin is a manufactured, non-Amphetamine CNS Stimulant:
Ask participants if they know of any children for whom Ritalin has been prescribed.

- Generic name Methylphenidate Hydrochloride

- Used to treat mild depression, hyperkinetic behavior, narcolepsy, and drug-induced lethargy produced by CNS Depressants

- Has many of the basic clinical effects of Amphetamine

Remind participants we will focus on Cocaine and Amphetamines for our discussion of CNS Stimulants and their effects.

Ephedrine is a licitly-manufactured stimulant primarily used as a nasal decongestant and bronchodilator. It can also be found in herbal preparations and numerous OTC substances.

Cathine and Cathinone are the two psychoactive chemicals derived from the Khat plant. It originates from the sub-Sahara regions of Africa. Also known as “Cat.”

Methcathinone is illicitly manufactured from common household chemicals. Effects are very similar to Methamphetamine.

_____

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Other CNS Stimulants

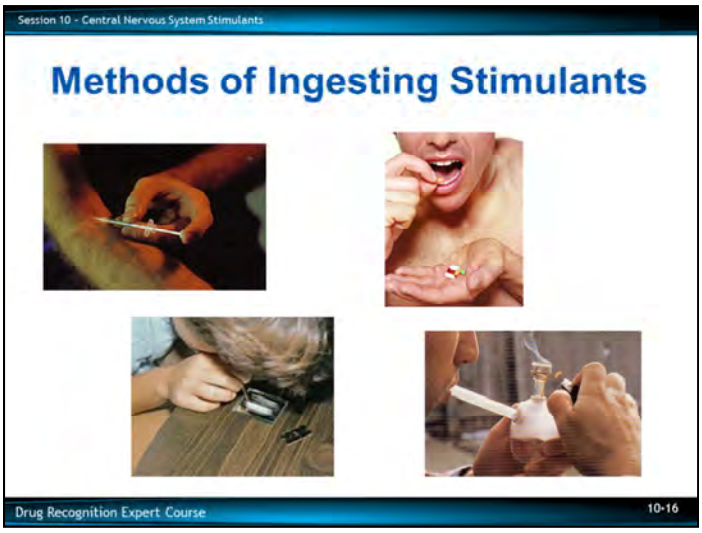
Energy Drink Phenomenon

In the 1980's, the marketing and use of energy drinks changed dramatically with the advent of Red Bull. With 80 mg of Caffeine, Red Bull contains more than twice the amount of Caffeine found in a 12-ounce can of Coca-Cola (35 mg), but less than 8 ounces of brewed coffee. In addition to high levels of Caffeine, many energy drinks contain Taurine, Ginseng, Guarana, Glucose, and other Caffeine-like chemicals.

The abuse of energy drinks has been implicated in numerous hospital admissions and impaired-driving cases. In large quantities, the effects can mirror the effects of other CNS Stimulants. ***There are many types and brands of energy drinks. Two, Red Bull and Monster, account for approximately 80% of the energy drink market.***

OTC Stimulants

Legal CNS Stimulants are often used to boost performance, especially among athletes and students and are available OTC. Besides high-Caffeine energy drinks, there are many abused OTC stimulants which include Ephedra (Ma Huang) and Ephedrine. Ma Huang is a Chinese herb that comes from the Ephedra bush. The active ingredients are Ephedrine (a bronchodilator) and Pseudoephedrine (a nasal decongestant). Ephedra and Ephedrine are commonly used in many legal OTC medications and diet medications.



Common Methods of Ingestion of CNS Stimulants
There are a variety of ways in which the different CNS Stimulants may be ingested.

Cocaine is commonly insufflated (snorted), smoked, injected, and taken orally.
In order to be smoked, a pure form of Cocaine is required.

- Much of the Cocaine sold in this country is mixed with other materials or chemically bonded to other elements

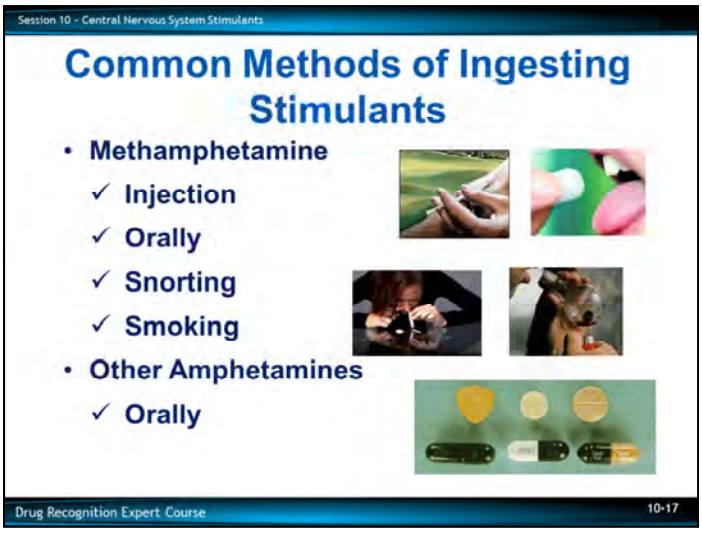
- Various chemical processes can be used to "free" the Cocaine from other elements and impurities

- One such process produces pure Cocaine in the form of small chunks

- These chunks are known as "Crack" or "Rock Cocaine"

The term "Crack" derives from the cracking sound produced when the chunks are burned for smoking.

- Legally-manufactured Amphetamines are taken orally, in the form of tablets, capsules, and liquid elixirs



- Illicitly-manufactured Methamphetamine most commonly is injected or smoked but sometimes may be snorted or taken orally

Bruising is often seen around a Methamphetamine injection site.

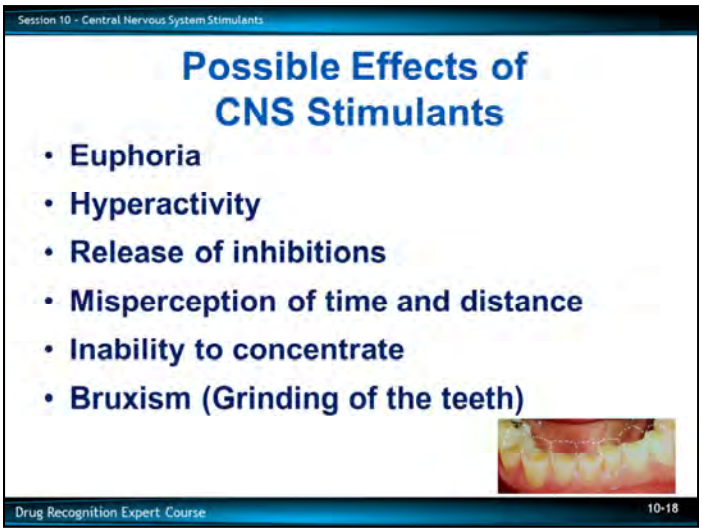
- The smokable forms of Methamphetamine are known as "Crystal Meth" or "Ice"
  - They contain the same active chemical compound as powdered Methamphetamine, but undergo a re-crystallization process in which some impurities are removed

"Ice" is a clear crystal similar in appearance to rock candy, crushed ice, or broken glass.

"Crystal Meth" is generally a colorless form of D-Methamphetamine resembling shiny blue-white rocks or fragments of glass. ***Source: Drug Identification Bible 2014-2015***

- Amphetamine Sulfate usually is produced in tablet form (called "Mini Bennies") and is taken orally

Solicit participant questions and comments about the overview of CNS Stimulants.



B. <u>Possible Effects</u>

Cocaine, Amphetamines, and most stimulants produce euphoria, a feeling or state of intense excitement and happiness.

- A feeling of super strength and absolute self-confidence may also be present
- With Cocaine, but not with Amphetamines, there is an anesthetic effect and the dulling of pain may contribute to the euphoria

CNS Stimulant users tend to become hyperactive, indicated by nervousness, extreme talkativeness, an inability to sit still, and users may grind their teeth (which is called Bruxism).

CNS Stimulants tend to release inhibitions allowing users to commit acts they normally would avoid. CNS Stimulant users misperceive time and distance.

- Example: to the subject, time seems to be speeded up so two hours may seem like two minutes

Persons under the influence of CNS Stimulants become easily confused and lose the ability to concentrate or to think clearly for any length of time.
This lack of concentration makes it very difficult for the user to perform divided attention tests successfully.
Solicit participants' questions and comments concerning possible effects of CNS Stimulants.

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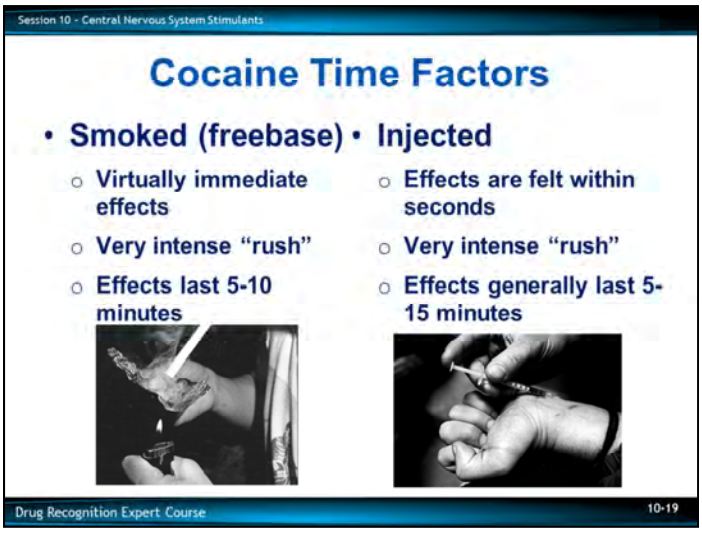

C. <u>Onset and Duration of Effects</u>

The onset and duration of effects are quite different for Cocaine as compared to Amphetamines.

- Generally speaking, Cocaine's effects are much briefer than are Amphetamine's
- The time parameters of Cocaine vary with the method of ingestion

Cocaine: Smoked

When Cocaine is smoked, or "freebased," the drug goes immediately to the lungs and is absorbed into the blood stream very rapidly.

- The smoker begins to feel the effects of the Cocaine virtually immediately
- The "rush" or euphoria is reported to be very intense
- However, the euphoric effect only last 5 – 10 minutes after the Cocaine is smoked

Cocaine: Injected

When Cocaine is injected, the drug is passed directly to the blood stream, where it is carried swiftly to the brain.

- The effects are felt within seconds
- The onset of effects is very intense

Injection sites will be discussed in Narcotic Analgesics

- The effects generally last 5 - 15 minutes

Source: "Disposition of Toxic Drugs and Chemicals in Man", 9th Edition, R. Baselt

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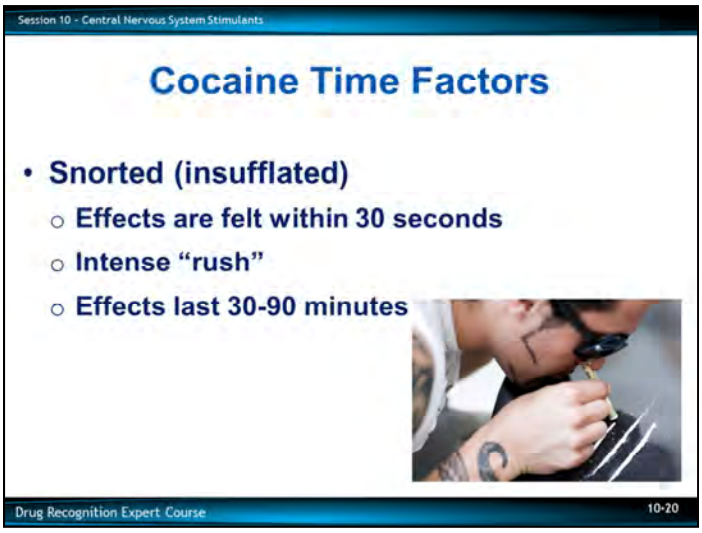
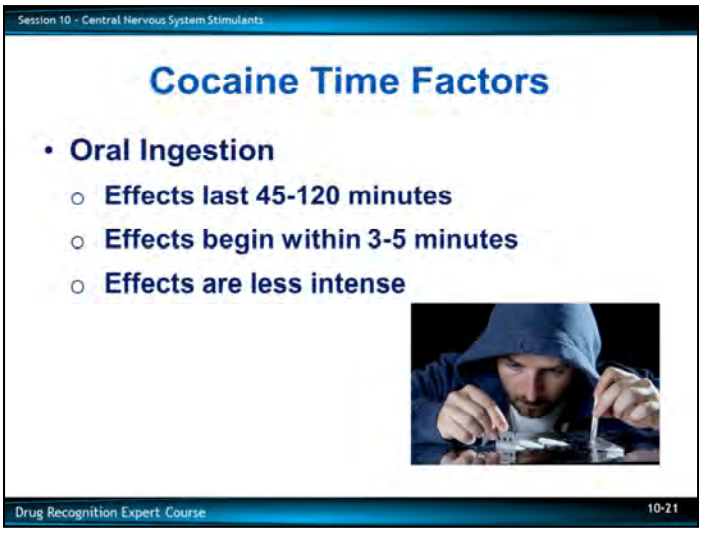


Cocaine: Snorted

When Cocaine is snorted (insufflated), the onset of effects is not quite as rapid as with smoking or injecting.

Snorting remains a very popular method of ingesting Cocaine.

- The user typically feels the onset of effects within 30 seconds after snorting the drug
- Although the "rush" occurs, it is not quite as intense as it is when the Cocaine is smoked or injected
- The effects from snorting usually last from 30 – 90 minutes



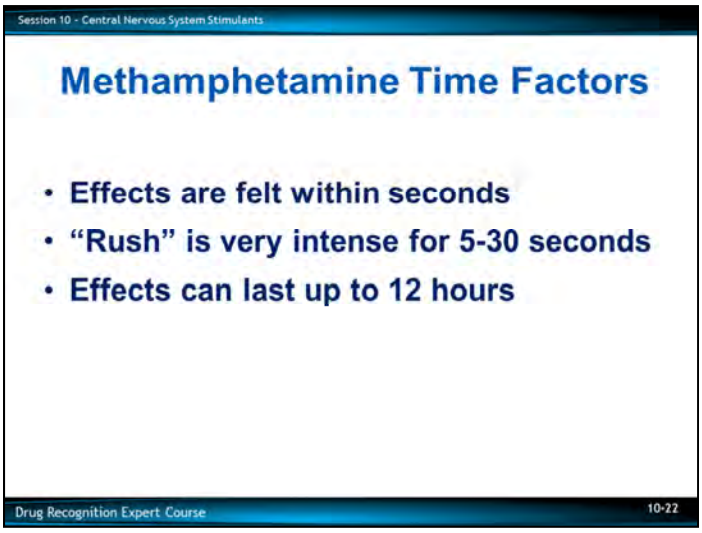
Cocaine: Oral Ingestion

- Oral ingestion of Cocaine usually is the least preferred method
- The effects of Cocaine taken orally may last from 45 – 120 minutes
- The user generally does not begin to feel the effects for 3 – 5 minutes
- The effects are not as intense as they are with other methods of ingestion
- However, the effects may last 15 – 30 minutes longer than with other methods

With all methods of ingestion, the duration of Cocaine's effects tend to be briefer than the effects of most other drugs.

It is very possible a Cocaine user may not be examined by a DRE until at least 30 minutes following the use of the drug. Often, much more time will have elapsed. For this reason, Cocaine use may be difficult to ascertain from the drug evaluation.

- As the effects wear off, it becomes very difficult to observe evidence of impairment
- If the subject is not evaluated by a DRE fairly soon after the subject has been apprehended, the DRE may not uncover evidence of the CNS Stimulant



Methamphetamine: Injected

When Methamphetamine is injected, the initial effects are very similar to the injection of Cocaine.

- The user begins to feel the effects within a few seconds
- The "rush" is very intense and lasts at a high level of intensity for 5 – 30 seconds
- Unlike Cocaine, Methamphetamine's effects are longer and may last up to 12 hours after injection

Methamphetamine: Smoked

- When Methamphetamine is smoked, the rush is very intense
- The user stays "high" for 4 – 8 hours with residual effects lasting up to 12 hours

Source: Drugs and Human Performance Fact Sheets, NHTSA (2014)

Methamphetamine: Snorted and Orally

When taken orally the onset of effects is delayed, the rush is much less intense, and the effects last longer.

Source: DEA (http://www.justice.gov/dea/druginfo/drug_data_sheets/Methamphetamine.pdf)

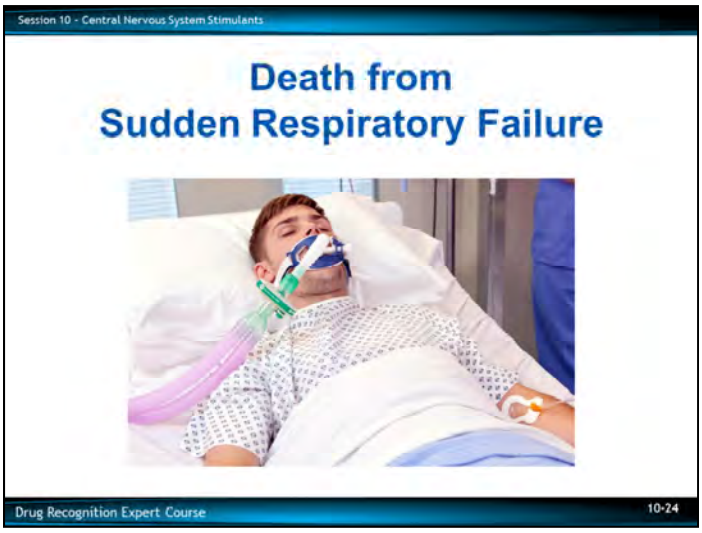
Solicit participants' comments and questions concerning time parameters of Cocaine and Methamphetamine.

D. <u>Overdose Signs and Symptoms</u>

Overdose of Cocaine or Amphetamines can cause the pleasurable effects to turn into panic and often violent behavior. If the overdose is caused by Cocaine, it is commonly referred to as Cocaine Psychosis or Cocaine Delirium.

Write on dry erase board or easel/easel pad "Cocaine Psychosis or Cocaine Delirium."

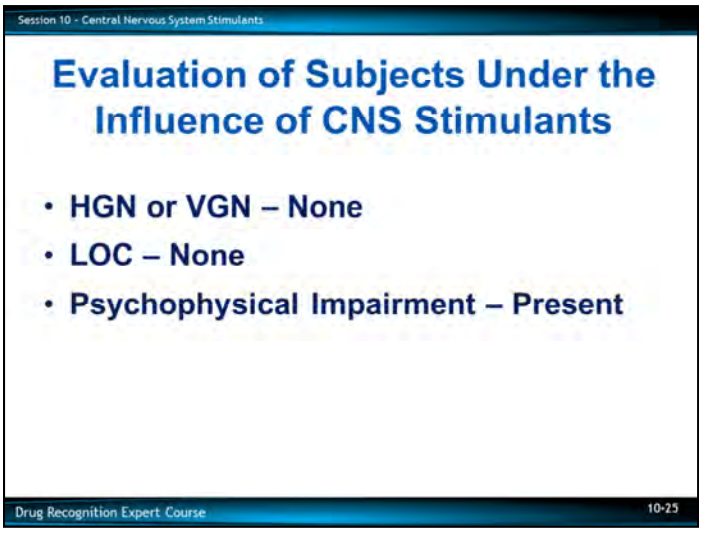
- Subject may suffer convulsions, faint, or pass into a coma
- Heartbeat (pulse) will increase, possibly dramatically
- Hallucinations may occur
  - Example: The feeling that bugs are crawling under the skin is also known as "Coke Bugs"
  - The medical term for this condition is formication



- Death can occur from sudden respiratory failure, or from heart arrhythmia, leading to cardiac arrest

- Another danger is subjects may attempt to treat CNS Stimulant overdoses with Barbiturates, possibly leading to overdose of CNS Depressants

Emphasize it is important officers are aware of this to avoid custody deaths.
Solicit participants' comments and questions concerning overdoses of CNS Stimulants.



E. <u>Expected Results of the Evaluation</u>

Observable Evidence of Impairment

- Horizontal Gaze Nystagmus (HGN) will not be present with subjects under the influence of CNS Stimulants
- Vertical Gaze Nystagmus (VGN) will not be present
- Lack of Convergence (LOC) will not be evident
- Performance on Modified Romberg Balance (MRB) should be impaired

CNS Stimulants impair the user's perception of time, so the subject's estimate of 30 seconds on the Modified Romberg Balance test may be sped up.

- Performance on Walk and Turn (WAT) may be impaired due to the subject's hyperactivity and inability to concentrate
  - Example: subject may start too soon on the WAT and may tend to walk fast, thus losing balance or missing heel-to-toe

- Performance on the One Leg Stand (OLS) may be impaired due to the subject's hyperactivity
  - Example: subject may also count very rapidly on the OLS test

- Performance on the Finger to Nose (FTN) test should be impaired
  - His or her finger movements may be abrupt, jerky, and inaccurate

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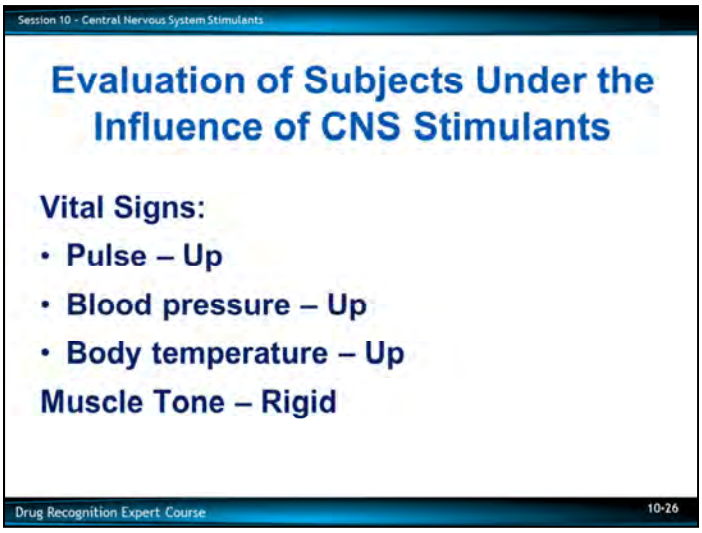
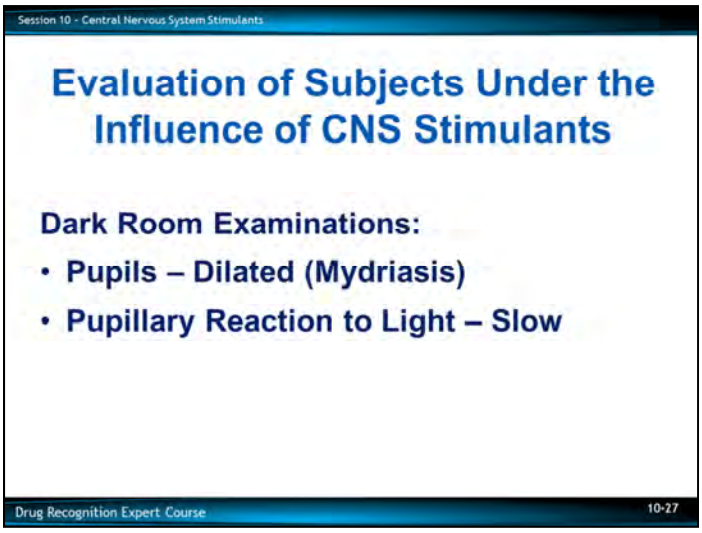


Vital Signs

- Pulse generally will be increased
- Blood pressure will generally be elevated
- Body temperature generally will be elevated

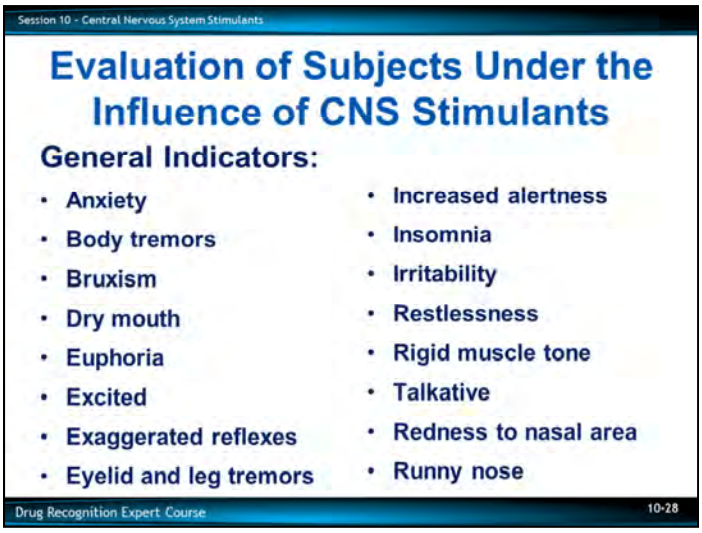
Muscle Tone

- Muscle tone will be Rigid



Dark Room Examinations

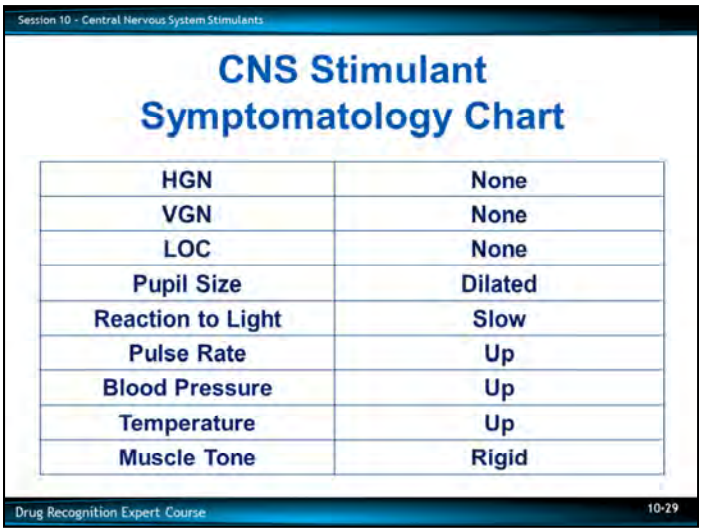
- Pupils generally will be dilated
- The technical term for "dilated pupils" is Mydriasis
- Pupil reaction to light generally will be slow
- Rebound Dilation may be observed

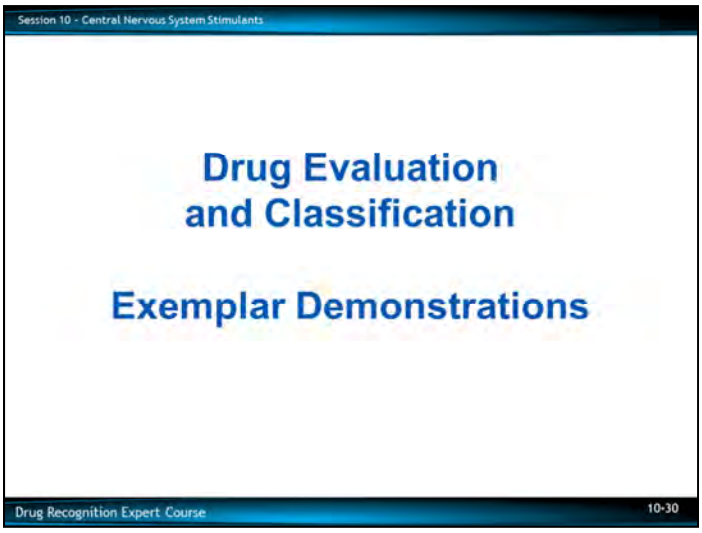


General Indicators

- Anxiety
- Body tremors
- Bruxism (grinding teeth)
- Dry mouth
- Euphoria
- Excited
- Exaggerated reflexes
- Eyelid and leg tremors
- Increased alertness
- Insomnia
- Irritability
- Restlessness
- Rigid muscle tone
- Talkative
- Redness to nasal area
- Runny nose

Mention indicators associated with the nasal area may be evident if the subject is in the habit of snorting Cocaine, Methamphetamine, Heroin, other opioids, Benzos, and diet pills.


Session 10 - Central Nervous System Stimulants
CNS Stimulant Symptomatology Chart
HGN None
VGN None
LOC None
Pupil Size Dilated
Reaction to Light Slow
Pulse Rate Up
Blood Pressure Up
Temperature Up
Muscle Tone Rigid
Drug Recognition Expert Course
10-29

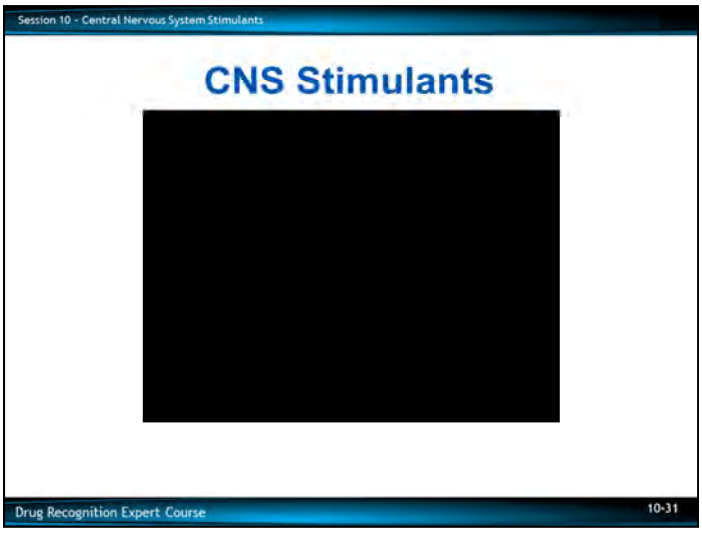


F. <u>Classification Exemplars</u>

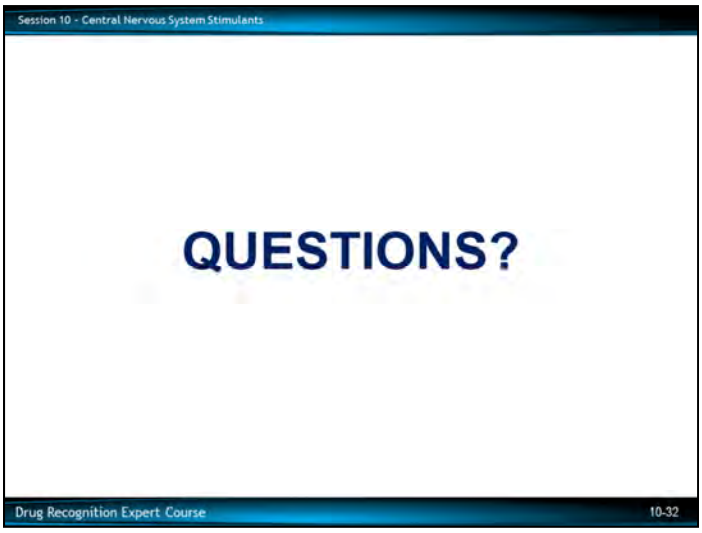
Refer students to the exemplars found at the end of Session 10 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

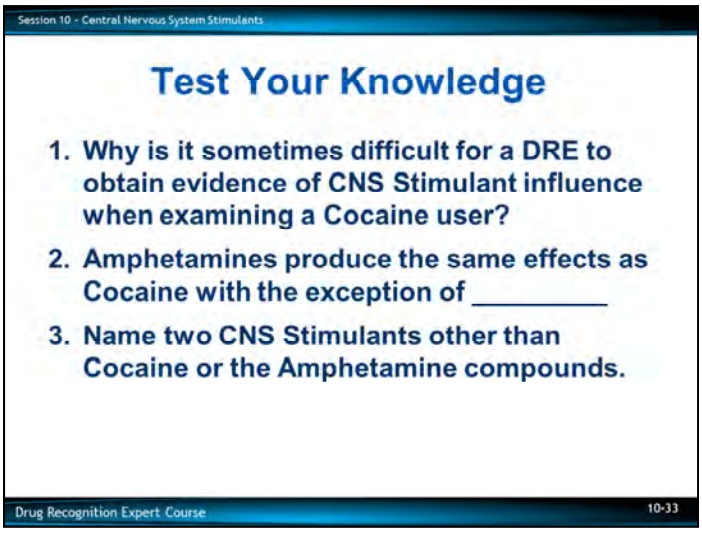
Relate the items on the exemplars to the CNS Stimulant Symptomatology Chart.



Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a CNS Stimulants.
(Approximately 24 minutes).



Solicit participants' questions or comments concerning expected results of the evaluation of subjects under the influence of CNS Stimulants.



Test Your Knowledge

1. Why is it sometimes difficult for a DRE to obtain evidence of CNS Stimulant influence when examining a Cocaine user?

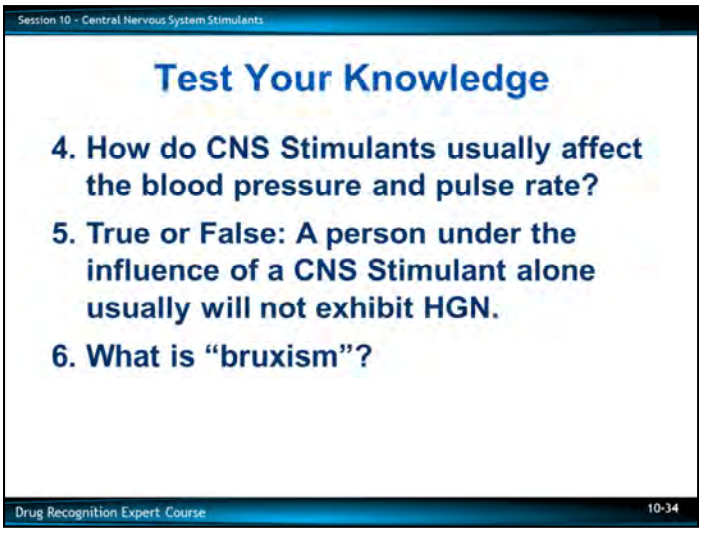
Cocaine, in general, is a fairly fast-acting, but short duration drug. When smoked, the user feels a "rush," or very intense euphoria, but the effects only continue for 5 – 10 minutes. When injected, the effects begin quickly but generally only last 5 – 15 minutes.

2. Amphetamines produce the same effects as Cocaine with the exception of _____

Anesthesia

3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.

Ritalin and Ephedrine, Methcathinone or Cathinone



4. How do CNS Stimulants usually affect the blood pressure and pulse rate?
CNS Stimulants usually elevate both blood pressure and pulse rate.

5. True or False: A person under the influence of a CNS Stimulant alone usually will not exhibit HGN?
True

6. What is "bruxism"?
Grinding the teeth. This behavior is often seen in persons who are under the influence of Cocaine or other CNS Stimulants.

DRUG INFLUENCE EVALUATION

Evaluator: Trooper Scott Kedenburg	DRE #: 16507	Rolling Log #: 17-02-080	Evaluator's Agency: New York State Police	Case #: Session X-1
Recorder/Witness: Deputy Brandon Flickner, LCSO	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Wyoming County SO	
Arrestee's Name (Last, First, Middle): Rocke, Crystal	Date of Birth: 07/10/87	Sex: F / Race: W	Arresting Officer (Name, ID#): Deputy Aaron Chase #25141	
Date Examined / Time /Location: 02/08/17 / 2235 / Wyoming SO	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given / Given by: Dep Chase	☒ Yes ☐ No	What have you eaten today? "Couple of candy bars"	When? 8 pm	What have you been drinking? How much? "Just some water" N/A / Time of last drink? About 2 pm
Time now/ Actual: 2100 / 2245	When did you last sleep? Yesterday	How long? 2-3 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No "Nothing man" (Laughed)	Attitude: Cooperative/ animated		Coordination: Jerky/exaggerated	
Speech: Talkative, dry mouth, excited	Breath odor: Rancid		Face: Acne, open sores	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1. 102 / 0225
2. 106 / 0230
3. 104 / 0232

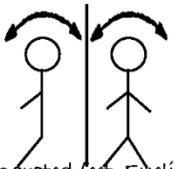
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence

Right eye / Left eye

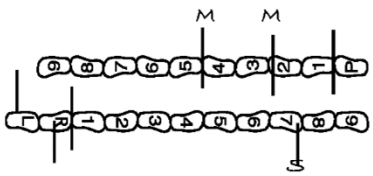
Modified Romberg Balance

Approx. 3" 3" / Approx. 3" 3"



Separated feet. Eyelid and body tremors

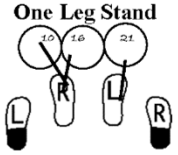
Walk and Turn Test



Quick steps. Rigid movements

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon	✓✓	
Stops walking	✓	
Misses heel-toe		✓✓
Steps off line		
Raises arms	✓✓	✓
Actual steps taken	9	9

/30 **One Leg Stand** /30



Failed to look at raised foot.

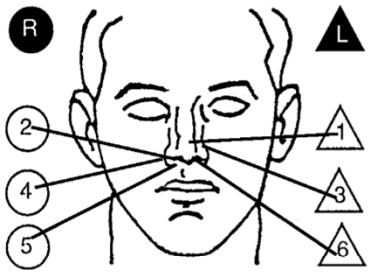
L	R	
All	All	Sways while balancing
All		Uses arms to balance
		Hopping
		Puts foot down

Jerky movements. Body and leg tremors. Raised arms throughout the test

Time Estimation: 12 estimated as 30 seconds	Describe turn: Quick/spun around	Cannot do test (explain): N/A	Type of footwear: Socks

Finger to Nose

(Draw lines to spots touched)



Rapid/jerky movements Eyelid tremors

2-3" circular sway

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.5	9.0	6.0
Right Eye	7.5	9.0	6.0

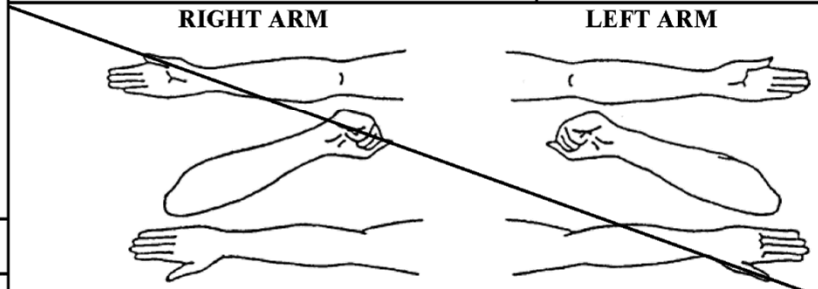
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



None observed

Blood Pressure: 150 / 102	Temperature: 99.8 °F		
Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid	Comments:		
What drugs or medications have you been using? "Methamphetamine"	How much? "Don't remember"	Time of use? "Week ago, maybe"	Where were the drugs used? (Location) N/A
Date / Time of arrest: 02/08/17 / 2140	Time DRE was notified: 2215	Evaluation start time: 2230	Evaluation completion time: 2330
Officer's Signature: Scott Kedenburg	Reviewed/approved by / date:		DRE # 16507

☐ Subject refused entire evaluation

☐ Subject stopped participating during evaluation

Opinion of Evaluator:

☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant

☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Rocke, Crystal

1. **Location:** The drug evaluation was conducted in the booking room at the Wyoming County Jail. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated and have a smooth concrete floor with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Deputy Brandon Flickner from the Livingston County S.O. The arresting officer, Deputy Aaron Chase from the Wyoming County S.O. witnessed the psychophysical tests.

3. **Breath Alcohol Test:** The suspect provided a breath test to the arresting office prior to my arrival. The result of the breath test was 0.00%.

4. **Notification and Interview of the Arresting Officer:** On 2/8/17 at approximately 2215, I was dispatched to conduct a drug evaluation at the Wyoming County Jail. After arriving, I met with Deputy Chase who advised me that he had stopped the suspect's vehicle for exceeding the speed limit on Highway 19. Deputy Chase also stated that the suspect was operating her vehicle during hours of darkness without headlights. During the personal contact, Deputy Chase did not detect an odor of an alcoholic beverage on the suspect's breath. However, he did notice that she had fast and jerky movements, and was very animated, restless and excited. Her pupils were dilated and she appeared to be sweating despite the cool weather. Deputy Chase also noticed that her speech was repetitive and rapid. The suspect consented to doing the SFSTs and Deputy Chase administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no clues of HGN, four clues on the W&T, and three clues on the OLS. After the SFSTs, Deputy Chase placed the suspect under arrest for DWI, and transported her to the county jail for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking room inside the jail. She was seated and was continuously rocking back and forth in her chair. She was tapping both of her feet with sporadic head and body "twitching." She was wearing jeans, a black tee-shirt, and white, soiled socks. Her clothing was soiled and she appeared to have poor personal hygiene. Her pupils appeared to be dilated. I introduced myself and asked if she would consent to a drug evaluation. She stated, "Sure, whatever." I asked the suspect if Deputy Chase had informed her of her Miranda rights and she confirmed that he had. The suspect displayed moderate acne with open sores on her face. She told me that she was not under the care of doctor or dentist and did not have any injuries. She denied consuming any medications or drugs. I noticed her breath was rancid. Bruxism was also present. As we conversed, she continuously displayed sporadic jerky movements with her head, arms, and legs. She advised that she was not blind in either eye and did not wear corrective lenses. She stated that she last slept yesterday for approximately 2 – 3 hours and has difficulty sleeping. She indicated that she had not ate much, admitting to a couple of candy bars earlier in the day.

6. **Medical Problems and Treatment:** The suspect indicated she did not have any injuries or physical problems. None were observed or reported during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: While performing this test, the suspect had an approximate three-inch front to back and side to side sway. She also had eyelid and body tremors. During the test, she separated her feet and tapped her right foot. Her time estimation was fast, estimating 30 seconds in 12 seconds.

   Walk & Turn: During this test, a painted line of the floor was used. The suspect stepped out of the instruction position twice. Twice she started the test before instructed to do so. During the walking stage, she walked rapidly with a straight legged manner. She stopped walking between steps seven and eight. She made an improper turn by making a quick turn to the left, spinning around. Twice the suspect raised both arms approximately eight-inches away from her sides. On the second nine steps, the suspect missed heel-to-toe between counts two and three and four and five. She also raised both arms near shoulder level between steps seven and nine during the return.

   One Leg Stand: On this test, when the suspect raised her right foot, she had a continuous side to side sway. She also raised both arms for balance throughout the test. The suspect put her foot down on counts 1,010 and 1,016. She also had jerky movements with body and leg tremors and failed to look at feet throughout most of the test. When the suspect raised her left foot, she immediately started hopping from counts 1,001 to 1010. She again had a continuous side to side sway. She also raised both arms for balance from count 1,020 through 1,042 when the test was stopped. The suspect put her foot down on count 1,021, and had jerky movements with body and leg tremors. The suspect's counting was quick, reach 1,040 while raising her right foot and 1,042 when raising her right foot.

Finger to Nose: While attempting this test, the suspect missed the tip of her nose with the tip of her index finger as instructed on all attempts except for attempt #2. She also displayed a continuous 2 to 3-inch circular sway, and had rapid/jerky movements with eyelid tremors.

8. **Clinical Indicators of Impairment:**

Eyes Signs: The suspect exhibited equal tracking, had equal pupil size and did not exhibit resting nystagmus. HGN and Vertical Gaze Nystagmus was not present, and her eyes were able to converge. The suspect's pupil sizes were estimated in three lighting levels; Room Light, Near Total Darkness, and in Direct Light. All three estimations, 7.5 mm in Room light, 9.0 mm in Near Total darkness, and 6.0 mm in Direct Light, were above the DRE average ranges for the lighting levels. Her pupillary reaction was slow and she did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated at 102, 106, and 104 beats per minute (BPM). All three were above the DRE average range. Additionally, her blood pressure of 150/102 mmHg, and her body temperature of 99.8 degrees Fahrenheit, were elevated and above the DRE average ranges.

9. **Signs of Ingestion:** The suspect's nasal area was clear and there were no indictors of injection sites on her arms and hands.

10. **Suspect's Statements:** The suspect indicated she was relatively healthy. She stated she has not seen a doctor in years. She initially denied consuming any medications or drugs, but later stated she had used methamphetamine about a week ago. She was adamant in her denial regarding any recent drug use.

11. **DRE's Opinion:** It is my opinion as certified Drug Recognition Expert that the suspect is under the influence of a Central Nervous System Stimulant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** Rocke provided a blood sample at 2352 hours. The blood sample was submitted as evidence pending analysis by the State Crime Laboratory.

13. **Miscellaneous:** An inventory search of the suspect's jacket found in her vehicle, revealed a clear plastic packet containing a white crystalline powder. The suspect denied that the powder substance belonged to her and said her boyfriend must of have put it in her jacket. The substance was seized and was submitted as evidence and will be forwarded to the crime laboratory for testing.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Officer J. Mark Mims	14840	17-08-022	Florence PD	17-7752 (Session X-2)

Recorder/Witness	Crash	Arresting Officer's Agency
Christopher Kendall, SCCJA	☐ Fatal ☐ Injury ☐ Property ☒ None	South Carolina HP

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Tweeker, Ira	08/24/78	M	W	Trooper Brian Bryson #19850

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 14330	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
08/23/17 / 2317 / Florence PD			

Miranda Warning Given / Given by: Tpr. Bryson	☒ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		Cold Cereal	1100 am	Red Bull & Water	2 cans	4 hrs ago

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
0100 / 2318	Two days ago	5 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Cooperative / Restless	Quick, Unsteady

Speech:	Breath odor:	Face:
Talkative	Bad breath	Red, Sweaty

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

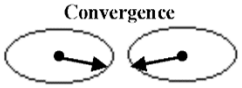
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1. 106 / 2322
2. 108 / 2334
3. 108 / 2349

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

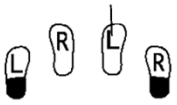
Convergence



Right eye Left eye

38/30 **One Leg Stand** 41/30

18

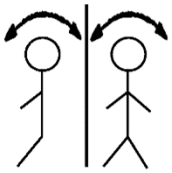


L	R	
1	1	Sways while balancing
1	All	Uses arms to balance
		Hopping
	1	Puts foot down

Jerky movements. Fast count

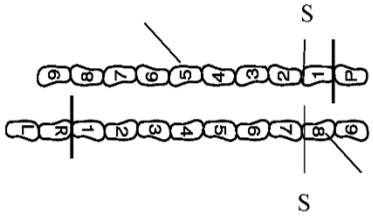
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Body tremors

Walk and Turn Test



Quick/choppy steps

Cannot keep balance

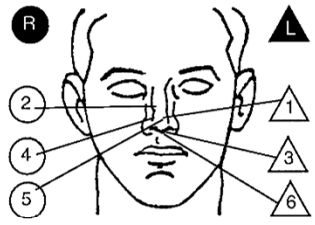
Starts too soon 1

	1st Nine	2nd Nine
Stops walking	1	1
Misses heel-toe		
Steps off line	1	1
Raises arms	1	1
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
20 estimated as 30 seconds	Stiff legged spin around in one motion	N/A	Slip-on shoes

Finger to Nose

(Draw lines to spots touched)



Jerky hand and arm movements. Eyelid and body tremors throughout.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	9.0	6.0
Right Eye	6.5	9.0	6.0

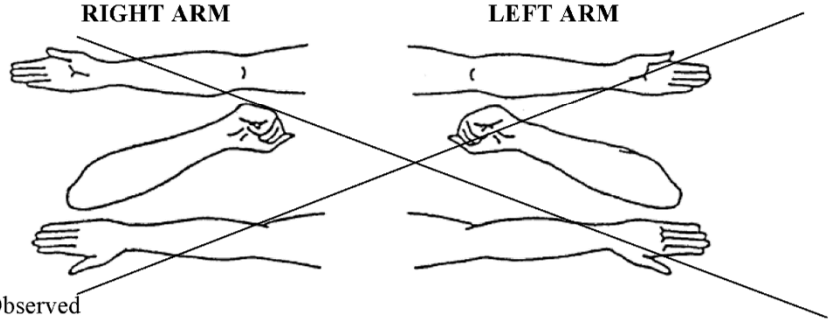
Nasal area: Red / No hair right nostril

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



None Observed

Blood Pressure	Temperature
148 / 100	99.8 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing for 4-5 months"	"Nothing bro"	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during
08/23/17 / 2255	2255	2315	08/24/17 0015	

Officer's Signature: *Mark Mims*	Reviewed/approved by / date:	DRE # 14840

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Tweeker, Ira

1. **Location:** The evaluation was conducted in the Interview Room at Florence Police Department. The dark room examinations were conducted in a storage room next to the Interview Room. Both areas have adequate lighting for conducting a drug evaluation and have tile flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by DRE State Coordinator Christopher Kendall from the South Carolina Criminal Justice Academy. The arresting officer, Trooper Brian Bryson witnessed the dark room examinations.

3. **Breath Alcohol Test:** The suspect was given a breath test by Trooper Bryson prior to my arrival with a 0.00% result.

4. **Notification and Interview of the Arresting Officer:** On 8/23/17 at approximately 2255 hours, I was dispatched to conduct a drug evaluation at the Florence Police Department. Upon arrival, I met with Trooper Bryson of the South Carolina Highway Patrol. Trooper Bryson advised me that he had stopped the suspect's vehicle for fail to drive within single lane of travel and failure to signal on I-20 near the 141B exist. Trooper Bryson stated he observed a small bindle (plastic baggie) with a white powdery substance on the passenger floor board of the suspect's vehicle. When asked about it, the suspect stated the "meth" belonged to his wife. Trooper Bryson told me that the suspect's pupils were dilated and he was very talkative. According to Trooper Bryson, the suspect's movements were abrupt and he appeared disoriented and excited. When asked about using meth, the suspect told Trooper Bryson that he had not used in the past six months. During the personal contact, Trooper Bryson did not detect an odor of an alcoholic beverage coming from the suspect's breath. According to Trooper Bryson, the suspect consented to roadside SFSTs. Trooper Bryson administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS), and the Modified Romberg Balance (MRB) tests. He reported observing no HGN clues, three clues on the W&T, and three clues on the OLS. The MRB test revealed that the suspect had a fast time estimation with body tremors and a jerky side-to-side sway. At the conclusion of the SFSTs, Trooper Bryson arrested the suspect for DWI and transported him to the Florence PD for processing.

5. **Initial Interview of the Suspect:** I first observed the suspect in the Florence PD Interview Room. He was seated and was fidgety acting. He was talking about his marriage and repeatedly saying he wanted to leave town. He was dressed in shorts, a button-up short-sleeve shirt, and slip-on brown canvas shoes. He had bad body odor and his breath was rancid smelling. His pupils appeared to be dilated. I introduced myself and asked if he would consent to a drug evaluation. He looked at me and stated, "Okay man. Yeah, whatever." The suspect was cooperative, but restless acting. I asked if he had any medical conditions, injuries, or physical defects, and he stated, "No, sir. I'm just really upset." The suspect told me that he last slept two days ago for approximately five hours. When I asked why, he told me it was due to his problems with his wife. He told he was not using any medications or drugs. When asked when he last ate, he stated he had eaten a waffle at the Waffle House around 11:00 am earlier in the day. He also told me he quit drinking alcohol about three years ago, and now drinks a lot of coffee and energy drinks.

6. **Medical Problems and Treatment:** The suspect indicated that he had no injuries or physical defects. None were mentioned or observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Prior to asking the suspect to perform the psychophysical tests, each one was explained and demonstrated to the suspect. The suspect indicated he understood the instructions prior to each attempt. The following tests were administered to the suspect:

   Modified Romberg Balance: During this test, the suspect had an approximate 3" front to back and side to side sway. He also had pronounced body tremors. His time estimation was fast, estimating 30 seconds in 20 seconds. I asked how he had estimated the 30 seconds, he stated, "I did one-Mississippi, two-Mississippi."

Walk & Turn: For this test, a line on the tile floor was used. The suspect had a rigid stance, and started the test before instructed to do so. Once he began the walking stage, he took quick and choppy steps. He also raised his arms near shoulder level throughout the test. He failed to look at his feet while walking, and had to be reminded several times to look at his feet. On the first nine steps, he stepped off the line once and stopped while walking once. The suspect made an improper turn by spinning around in one motion. On the second nine steps, the suspect stepped off the line once and stopped while walking once.

One Leg Stand: During this test, when the suspect raised his right foot, he had a continuous jerky side to side sway. He raised both his arms for balance from counts 1,003 to 1,018. His counting was fast, and he had leg tremors. He also failed to look at his raised foot from counts 1,020 to 1,038 when the test was stopped at 30 seconds. When he raised his left foot, the suspect again had a continuous jerky side to side sway. He also raised both his arms for balance for the duration of the test. He again counted quickly and had leg tremors. He put his foot down once at count 1,018.

Finger to Nose: While attempting this test, the suspect failed to touch the tip of his nose with the tip of his index finger as directed on four of the six attempts, missing on attempts 1, 2, 4, and 5. Throughout this test, the suspect's hand and arm movements were quick and jerky, and he displayed body and eyelid tremors.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. No HGN clues or Vertical Gaze Nystagmus were present, and his eyes were able to converge. The suspect's pupils were dilated in all three lighting levels. They were estimated at 6.5 mm in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness, and 6.0 mm in both eyes in Direct Light. All three were above the DRE average ranges for the three lighting levels. The suspect's pupillary reaction was slow, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated throughout the evaluation at 106, 108, and 108 beats per minute (bpm) and were above the DRE average ranges. Additionally, his blood pressure and body temperature were elevated and above the DRE average ranges. His blood pressure was checked at 148/100 mmHg, and his body temperature was checked at 99.8 degrees Fahrenheit. The suspect's muscle tone was rigid.

9. **Signs of Ingestion:** The suspect had no injection sites on either arm. His oral cavity was clear. However, his right nostril was red with no hair. His left nostril appeared to be normal.

10. **Suspect's Statements:** The suspect denied consuming drugs. He told me he had not used any drugs in the past four to five months. He said that his wife uses meth, and he has been trying to "stay clean." When I confronted him about his impairment, he stated, "I've used nothing, bro." When I asked him about the substance located in the vehicle, he stated, "I told the other officer, that belongs to my wife. It's not mine."

11. **DRE's Opinion:** It is my opinion as a Drug Recognition Expert that the suspect is under the influence of a Central Nervous System Stimulant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample, which was forwarded to the state crime laboratory pending toxicology testing.

13. **Miscellaneous:** A field test was performed on the substance located in the suspect's vehicle. The test was positive for methamphetamine and will be sent to the crime lab for testing.

DRUG INFLUENCE EVALUATION

Evaluator: Officer Jeramey Peters	DRE #: 12368	Rolling Log #: 17-09-076	Evaluator's Agency: Auburn Hills PD	Case #: 17-10170 (Session X-3)
Recorder/Witness: Officer Wes Evans, Grand Blanc Township	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Michigan State Police	
Arrestee's Name (Last, First, Middle): Crank, Christy	Date of Birth: 10/09/85	Sex: F	Race: W	Arresting Officer (Name, ID#): Trooper Troy Meder #18754
Date Examined / Time /Location: 9/29/17 0130 Auburn Hills PD	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 90914	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

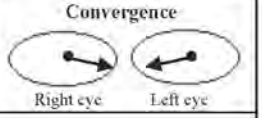
Miranda Warning Given Given by: Tpr. Meder	☒ Yes ☐ No	What have you eaten today? Nothing	When?	What have you been drinking? How much? Soda 12 oz / Time of last drink? 09/28 / 2200
Time now/ Actual 0100 / 0135	When did you last sleep? Yesterday	How long? 3-4 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Irritated		Coordination: Functional / Enhanced	
Speech: Rapid	Breath odor: Normal		Face: Pale / Sweaty and red sores	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

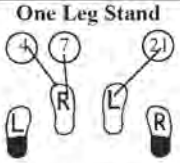
1.	102	0150
2.	98	0210
3.	98	0230

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence

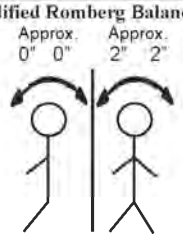


36/30 **One Leg Stand** 38/30



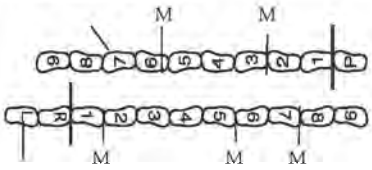
Jerky movements with leg tremors/raised arms throughout the test / circular sway

Modified Romberg Balance



Body tremors

Walk and Turn Test



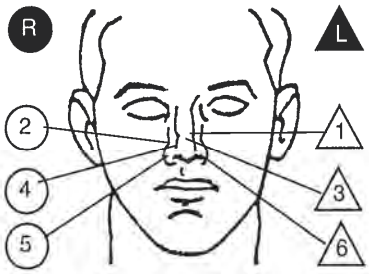
Poor balance and leg tremors – jerky movements/failed to look at feet/raised arms throughout the test

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓✓	
Stops walking		
Misses heel-toe	✓✓✓	✓✓
Steps off line		✓
Raises arms	✓	✓
Actual steps taken	9	9

L.	R.	
All	All	Sways while balancing
All	All	Uses arms to balance
		Hopping
✓✓	✓	Puts foot down

Time Estimation 18 estimated as 30 seconds	Describe turn: Stopped walking and spun around	Cannot do test (explain): N/A	Type of footwear: Running Shoes

Finger to Nose
(Draw lines to spots touched)



Used pad of finger on attempts 1, 2, and 6

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.0	9.5	6.0
Right Eye	7.0	9.5	6.0

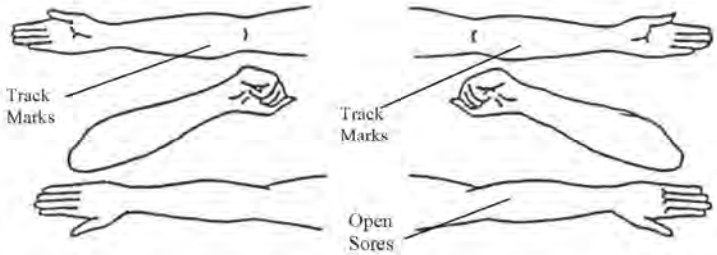
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Blood Pressure: 158 / 96	Temperature: 99.0 °F
Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid	
Comments:	

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
Meth and Cocaine	Can't remember	Four days ago	Residence

Date / Time of arrest: 9/29/17 / 0015	Time DRE was notified: 0015	Evaluation start time: 0130	Evaluation completion time: 0250	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
Officer's Signature: Jeramey Peters	Reviewed/approved by / date:			DRE# 12364

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☒ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Crank, Christy

1. **Location:** The evaluation was conducted in the Interview Room at Auburn Hills Police Department. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated and have smooth tile flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Officer Wes Evans of the Grand Blanc Township Police Department. The arresting officer, Trooper Troy Meder, of the Michigan State Police witnessed the darkroom examinations.

3. **Breath Alcohol Test:** The suspect's breath test was administered by Trooper Meder prior to my arrival. The result was 0.00% BAC.

4. **Notification and Interview of the Arresting Officer:** On 09/27/17 at approximately 0015, I was dispatched to conduct a drug evaluation at the Auburn Hills Police Department. Upon arrival, I met with the arresting officer, Trooper Meder of the Michigan State Police. He advised that he stopped the suspect (Christy Crank) for speeding and failure to drive within a single traffic lane on Interstate 75. During the personal contact, Trooper Meder did not detect an odor of an alcoholic beverage on the suspect's breath, but observed that she had quick and jerky movements when retrieving her driver's license. He also noted that she had facial perspiration and dilated pupils. She was wearing a short-sleeved shirt and he noticed what appeared to injection marks on her left arm. While talking to the suspect, she was very animated and her speech was fast, and she had a dry mouth. According to Trooper Meder, the suspect consented to SFSTs at roadside. Trooper Meder administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS) tests, and also administered the Finger to Nose (FTN) test. No HGN clues were observed, but six clues on the W&T and three clues on the OLS were observed. He indicated that the suspect had difficulty with the FTN test, and had quick, jerky movements. Trooper Meder arrested the suspect for DWI and after obtaining a 0.00 BAC on the breath test, requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Auburn Hills PD. She was seated in a chair at the table and appeared very restless. She displayed poor personal hygiene and her appearance was disheveled. There were fresh and older track marks on both of her arms with red and open sores in several areas. Her pupils appeared dilated and her speech was rapid. She was wearing black shorts with pink leggings, a blue tee-shirt, and flat soled shoes. I introduced myself and asked if she would consent to a drug evaluation. She stated, "Yeah, I guess so." She was cooperative, but at times seemed irritated. I asked the suspect if she was informed of her Miranda rights and she indicated she had. I asked the suspect if she had any injuries or physical defects, which she replied "Nope, none." She stated she was not under the care of a doctor or dentist. She told me that she had not eaten anything today and only ingested a can of soda (Mountain Dew). She denied consuming any medications or drugs. When asked when she last slept, she stated, "Yesterday." I asked her for how many hours and she stated, "About 3 or 4 hours because of stress." The suspect told me she was stressed because she had lost her job. I asked why she lost her job, she responded with, "It's none of your business." At times, the suspect was grinding her teeth (bruxism).

6. **Medical Problems and Treatment:** No medical problems were reported by the suspect and none were observed or detected during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. Several times I had repeat my instructions to ensure she understood them. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: The suspect had an approximate two-inch side to side sway. Tremors were observed in both legs. Her time estimation was fast, estimating 30 seconds in 18 seconds. I asked her how she had estimated the 30 seconds and she said, "I think I just counted."

Walk and Turn: For this test, a line on the tile floor was used. The suspect stepped out of the instruction position with her right foot and twice started the test before instructed to do so. During the walking stage, she had poor balance and leg tremors were present. The suspect missed heel to toe on steps two, six, and seven on the first nine steps. She made an improper turn by stopping and spinning to her left. On the second nine steps, the suspect missed heel to toe on steps three and six. She also stepped off the line on step eight. She also raised both arms approximately six-inches from her sides throughout the test and failed to look at her feet while walking.

One Leg Stand: During this test, when the suspect raised her right foot, she had an approximate three-inch circular sway. She also raised both arms, approximately six-inches for balance throughout the entire test. The suspect put her foot down on counts 1,004 and 1,007. Leg tremors with jerky movements were observed throughout the test. When the suspect raised her right foot, an approximate three-inch circular sway was observed. She also raised both arms approximately six-inches to maintain her balance. She put her foot down at 1,021. She again had body and leg tremors throughout the test.

Finger to Nose: While performing this test, the suspect missed the tip of her nose with the tip of her index finger on all six attempts. She also used the pad of her finger on attempts one, two, and six. On attempt five, she initially raised her left hand then corrected and used her right hand as instructed. During the test, eyelid tremors, and jerky movements were present.

8. **Clinical Indicators of Impairment:**
Eye Signs: The suspect exhibited equal tracking, had equal pupil size and did not exhibit resting nystagmus. No clues of HGN or Vertical Gaze Nystagmus were observed and her eyes were able to converge. The suspect's pupils were examined in three different lighting conditions. In Room Light, her pupils were estimated at 7.0 mm. In Near Total Darkness, her pupils were estimated at 8.5 mm, and in Direct Light, her pupils were estimated at 6.0 mm. All three estimates were above the DRE average ranges for the lighting conditions. Her pupillary reaction was slow and she did not exhibit rebound dilation.
Vital Signs: The suspect's pulse rates were elevated throughout the evaluation, at 102, 98, and 98 beats per minute. All three were above the DRE average range. Additionally, her blood pressure of 158/96 was elevated and above the DRE average range. Her body temperature was above the DRE average range, measured at 100 degrees Fahrenheit using an oral thermometer. She did indicate that she was hot and complained about the heat several times during the evaluation.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear; however, there were multiple track marks on the inside of both arms. She also had multiple open and red sores on her arms. When asked about the marks and sores, she advised that she was very upset and nervous, and has been scratching herself a lot.

10. **Suspect's Statements:** I the suspect about drug use. At first, she denied using drugs but later admitted she used methamphetamine four days ago. She denied using any methamphetamine within the last 12 hours. She stated, "I use, but I'm always nervous like this."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Central Nervous System Stimulant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect voluntarily submitted to providing a blood sample, which was collected at 0312 hours. The blood sample was entered into evidence by Trooper Meder and will be forwarded to the state crime laboratory for analysis.

13. **Miscellaneous:** During an inventory search of the suspect's vehicle prior to towing, Trooper Meder located several used syringes under the seat and in the side door compartment.

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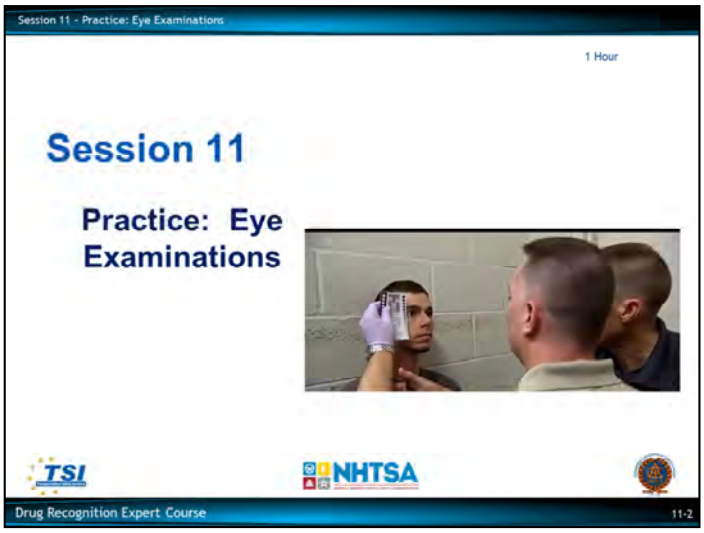
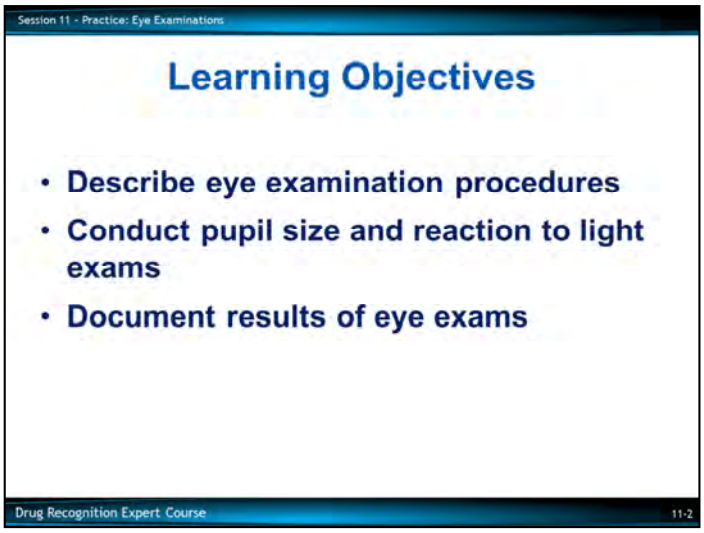

Session 11 - Practice: Eye Examinations
1 Hour
Session 11
Practice: Eye Examinations
TSI
NHTSA
Drug Recognition Expert Course
11-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

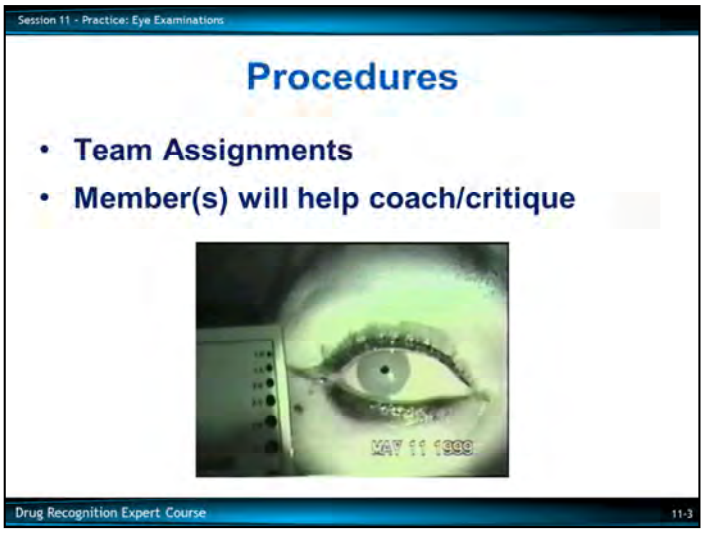
- Describe the eye examination procedures
- Conduct examinations of pupil size and reaction to light under both lighted and darkened room conditions
- Document the results of the eye examinations

CONTENT SEGMENTS

A. Procedures for this Session
B. Room Light Examinations
C. Dark Room Examinations

LEARNING ACTIVITIES

Instructor-Led Presentations
Participants' Hands-On Practice
Instructor-Led Coaching
Participant-Led Coaching



A. <u>Procedures for this Session</u>

Team Assignments

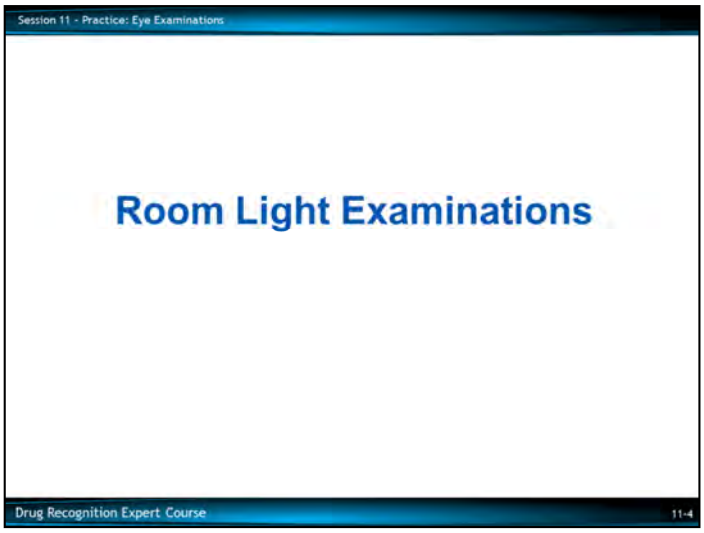
- Participants will work in three- or four-member teams

Make team assignments.

- At any given time, one member of the team will be engaged in conducting and recording eye examinations of another member

- The remaining member(s) will help coach and critique the participant who is conducting the examinations

Emphasize participants can help each other learn by pointing out errors of omission or commission.



Participants will record their estimations using Eye Examinations Data Sheet. There are copies of the Eye Examination Data Sheet in the Participant Manual.

B. <u>Room Light Examinations</u>

Pupil Size Estimation

- Pupil size estimation under room light

OPTIONAL: For training purposes only, instructors may have students practice their direct light skills in room light prior to progressing to the dark room portion of this exercise. During an actual evaluation, DREs will conduct the direct light examination from within the near total darkness environment.
Monitor teams and coach participants as necessary and appropriate.
When the first participant completes the two estimations, have the team members exchange roles. Continue this process.

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)

Terminate this segment after 20 minutes or after each participant has twice served as a test administrator (whichever comes first).
Offer appropriate comments and observations about the participant's performance.

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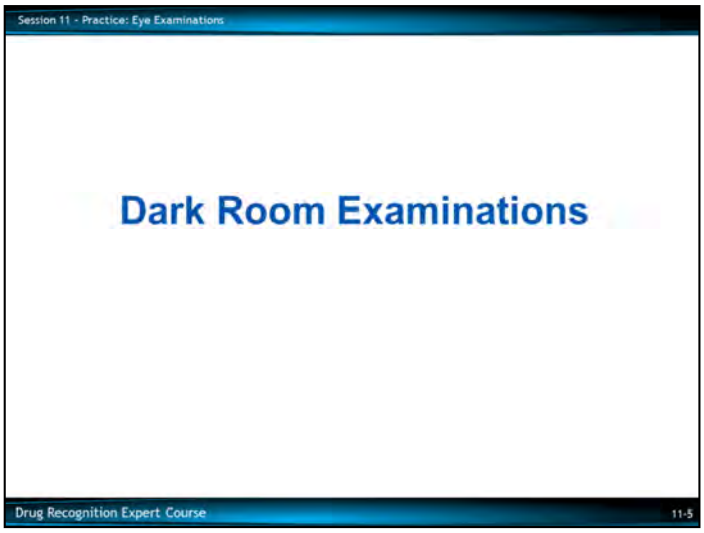

C. <u>Dark Room Examinations</u>

Pupil Size Estimation

- Pupil size estimation under near total darkness
- Pupil reaction and size estimation under direct light

This exercise should be conducted in a dark room, similar to one used for an evaluation.
Allow participants approximately 90 seconds for the eyes to adapt to the darkened conditions.
Monitor teams and coach participants as necessary and appropriate.
When the first participant completes the two checks, have the team members exchange roles. Continue this process.

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)

Terminate this segment after 25 minutes or after each participant has twice served as a test administrator (whichever comes first).
Offer appropriate comments and observations about the participants' performance.

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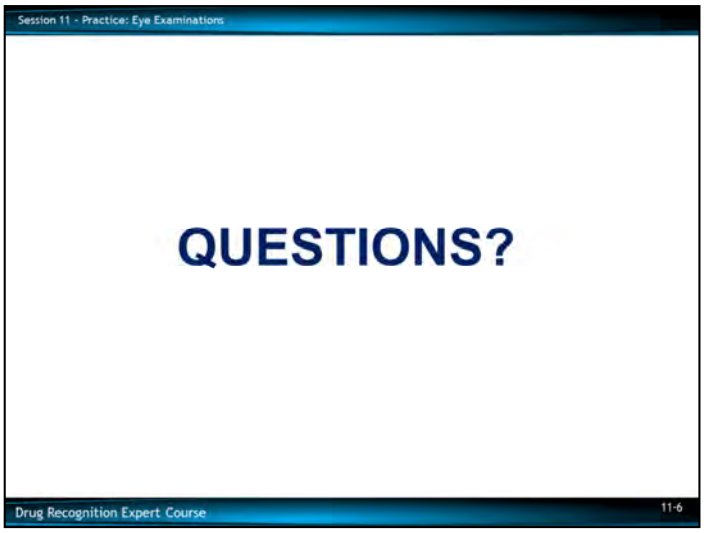

Solicit participants' comments concerning the practice session.

EYE EXAMINATIONS DATA SHEET

Subject: _____ Left Right Room Light NTD Direct Light Reaction _____	Subject: _____ Left Right Room Light NTD Direct Light Reaction _____	Subject: _____ Left Right Room Light NTD Direct Light Reaction _____
Subject: _____ Left Right Room Light NTD Direct Light Reaction _____	Subject: _____ Left Right Room Light NTD Direct Light Reaction _____	Subject: _____ Left Right Room Light NTD Direct Light Reaction _____

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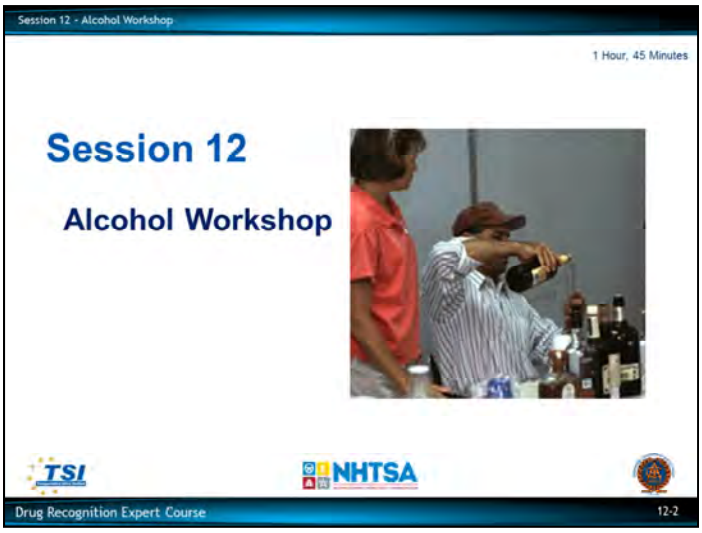
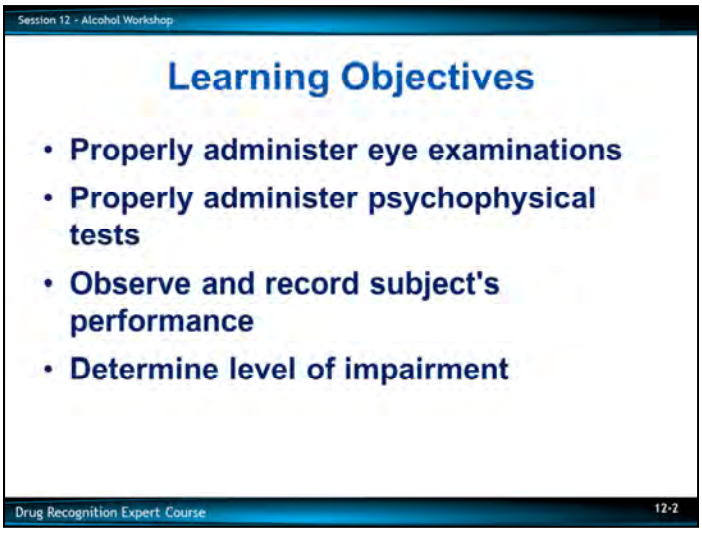

Session 12 - Alcohol Workshop
1 Hour, 45 Minutes
Session 12
Alcohol Workshop
TSI
NHTSA
Drug Recognition Expert Course
12-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

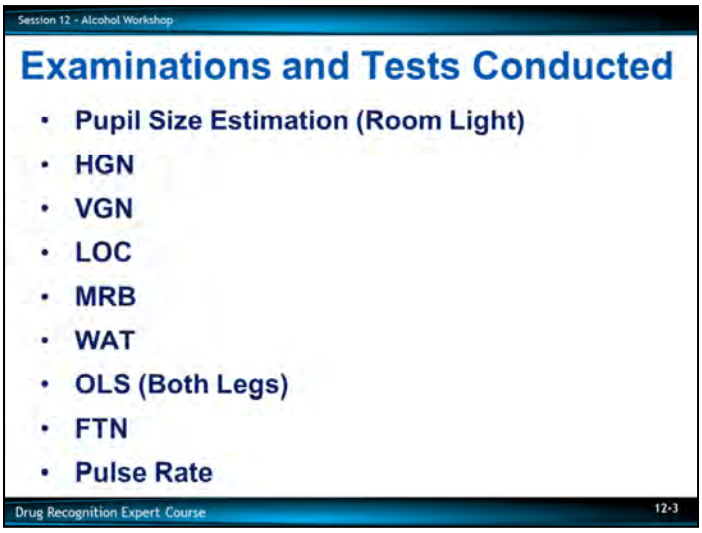
- Properly administer the eye examinations used in the drug influence evaluation procedure
- Properly administer psychophysical tests used in the drug influence evaluation procedure
- Observe and record the subject's performance on the preliminary examinations and psychophysical tests
- Determine the level of impairment based on the results of the subject's eye examinations and psychophysical tests

CONTENT SEGMENTS

A. Procedures
B. Hands-On Practice
C. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Participant-Led Practice
Instructor Discussion



A. <u>Procedures</u>

Participants will work in three- or four-member teams during this session.
Make team assignments.
Each team will administer tests to each volunteer.

The preliminary examinations and psychophysical tests include:

- Pupil Size Estimation (Room Light)
- Horizontal Gaze Nystagmus (HGN)
- Vertical Gaze Nystagmus (VGN)
- Lack of Convergence (LOC)
- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS) (both legs)
- Finger to Nose (FTN)
- Pulse Rate

For the drug influence evaluation, it is important to estimate Angle of Onset for HGN and relate it to Blood Alcohol Concentration (BAC).
Results/observations of all tests will be recorded on the Drug Evaluation Report form.
Point out copies of the report form are in the Participant Manual.
Each team will need one report form for each volunteer.

_____

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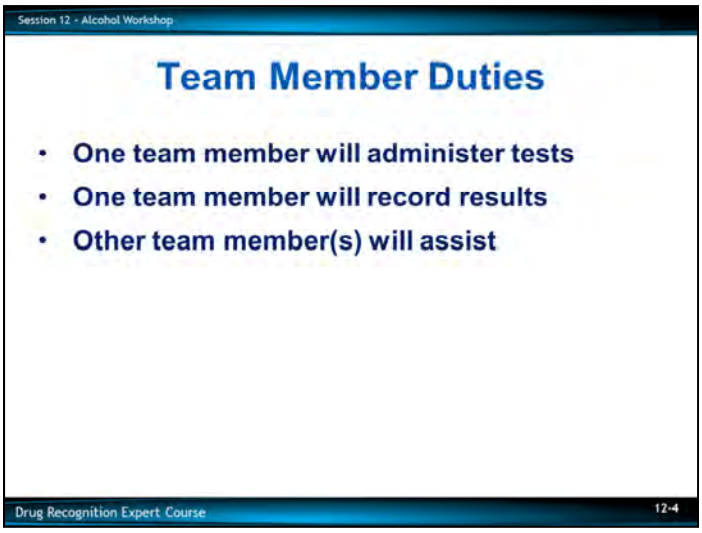


For each volunteer, team members should perform the following duties:

- ***One team member will administer the tests to the volunteer***
- ***One team member will record the results on the report form***
- ***The other team member(s) will assist the test administrator in observing the volunteer's performance on the tests***

Emphasize team members will take turns performing the various duties as they deal with the different volunteers.

Some volunteers will have BACs above 0.10, others will have lower BACs. Each group will collectively estimate the BAC of each volunteer they evaluate.

The following safety precautions will be strictly enforced:

- No weapons will be present
- Volunteers will not be left unattended at any time

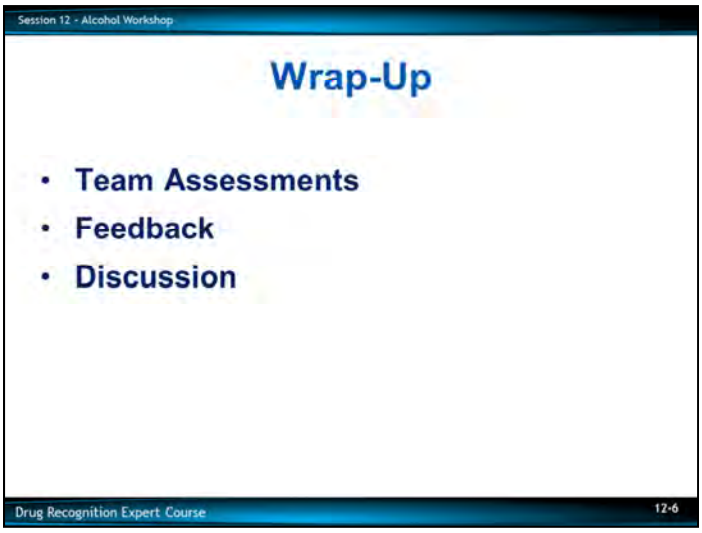
Solicit participant's questions concerning the procedures for the Alcohol Workshop.

B. <u>Hands-On Practice</u>

Test Administration

Test recording:

- ***Monitor teams as they test the volunteers***
- ***Make sure each participant takes at least one turn as a test administrator***
- ***Coach participants, as necessary, to improve their performance as test administrators***
- ***Terminate the hands on practice after 75 minutes or after each team has tested 5 volunteers (whichever occurs first)***



C. <u>Session Wrap-Up</u>

Record teams' assessments of each volunteer's probable BAC status on the dry erase board or easel/easel pad (see next page for a sample dry erase board array).

Feedback of Teams' Assessments

Ask each team briefly to describe the evidence that led the members to their conclusions about a particular volunteer's BAC.

Record each volunteer's actual BAC on the dry erase board array.

Feedback of Volunteers' BACs

Make appropriate comments concerning teams' assessment of the volunteers' BACs. These comments should take into account such factors as absorption and elimination rates, differences in tolerance to alcohol, volunteers' medical conditions, etc.

Discussion

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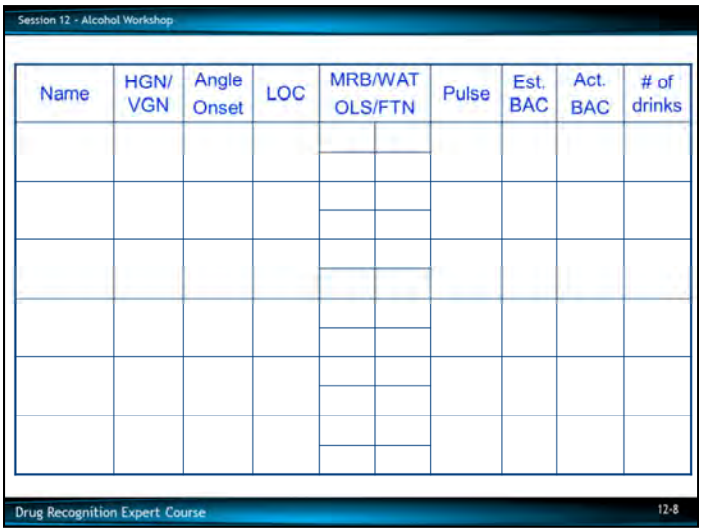
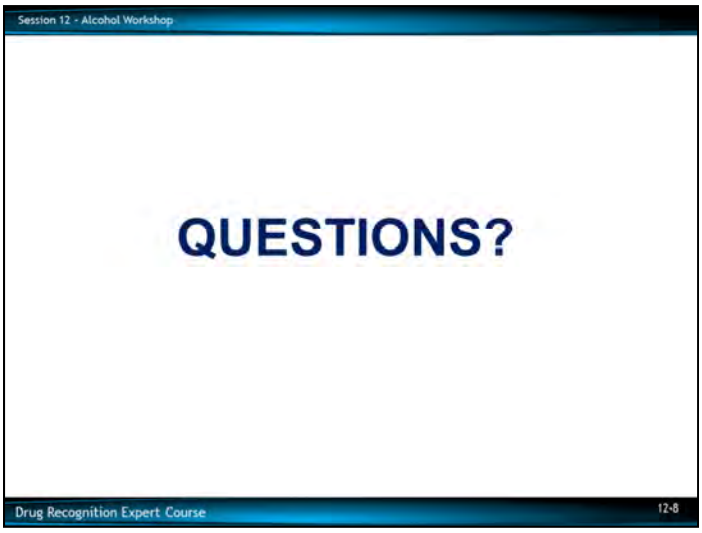

Session 12 - Alcohol Workshop
Name
HGN/ VGN
Angle Onset
LOC
MRB/WAT OLS/FTN
Pulse
Est. BAC
Act. BAC
# of drinks
Drug Recognition Expert Course
12-8



Solicit participants' comments or questions concerning the Alcohol Workshop.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)

Date Examined / Time /Location / /	Breath Test: Results:	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?

Time now/ Actual /	When did you last sleep? How long?	Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No

Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No	Are you under the care of a doctor or dentist? ☐ Yes ☐ No

Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:	Coordination:

Speech:	Breath odor:	Face:

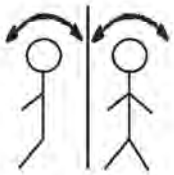
Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery	Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal

Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

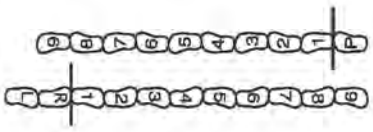
Pulse and Time	HGN	Left Eye	Right Eye	Convergence
1. ____ / ____	Lack of Smooth Pursuit			Right eye Left eye
2. ____ / ____	Maximum Deviation			
3. /	Angle of Onset			

/30 **One Leg Stand** /30

Modified Romberg Balance
Approx. Approx.



Walk and Turn Test



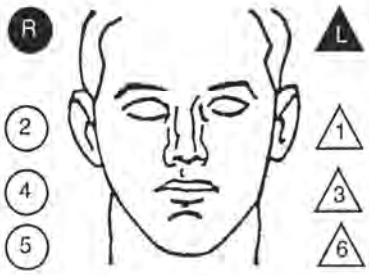
Cannot keep balance _____
Starts too soon _____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Time Estimation ____estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

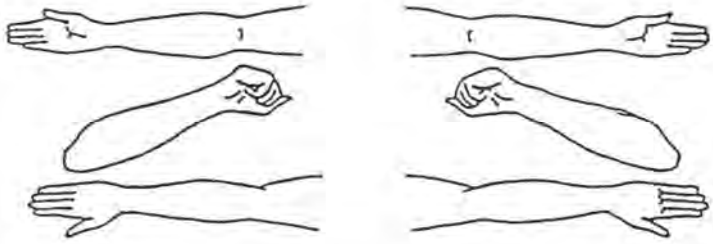
Nasal area:

Oral cavity:

Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM **LEFT ARM**



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

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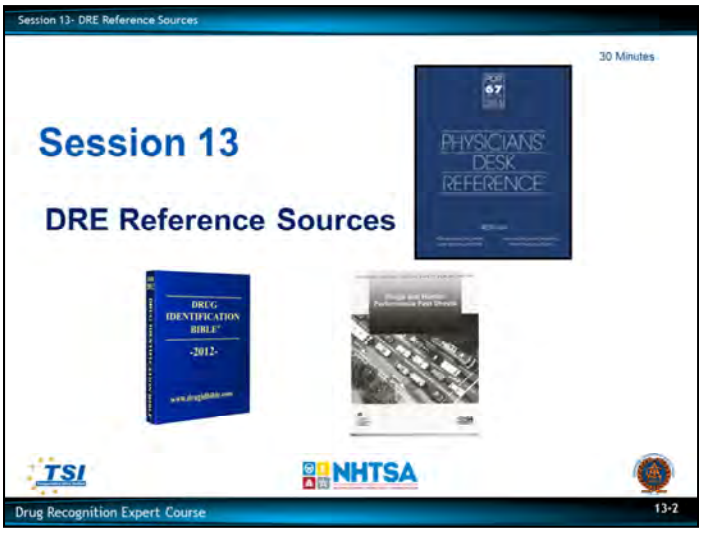
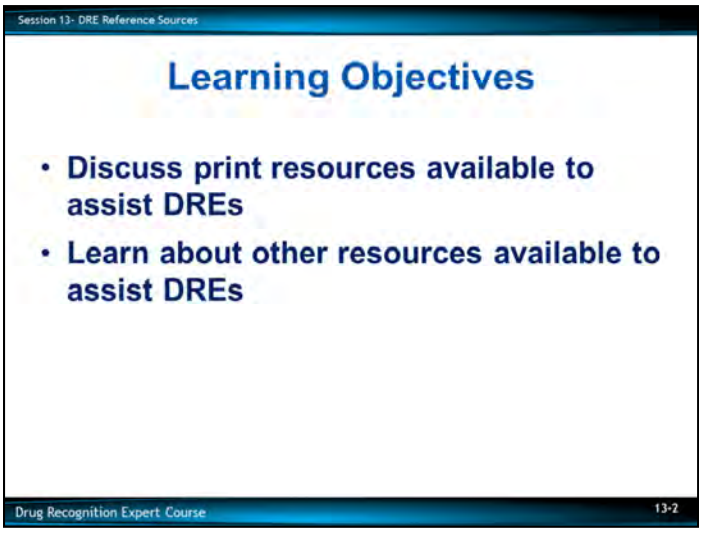

Session 13- DRE Reference Sources
30 Minutes
Session 13
DRE Reference Sources
PHYSICIANS DESK REFERENCE
DRUG IDENTIFICATION BIBLE
-2012-
TSI
NHTSA
Drug Recognition Expert Course
13-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing the session, the participant will be able to:

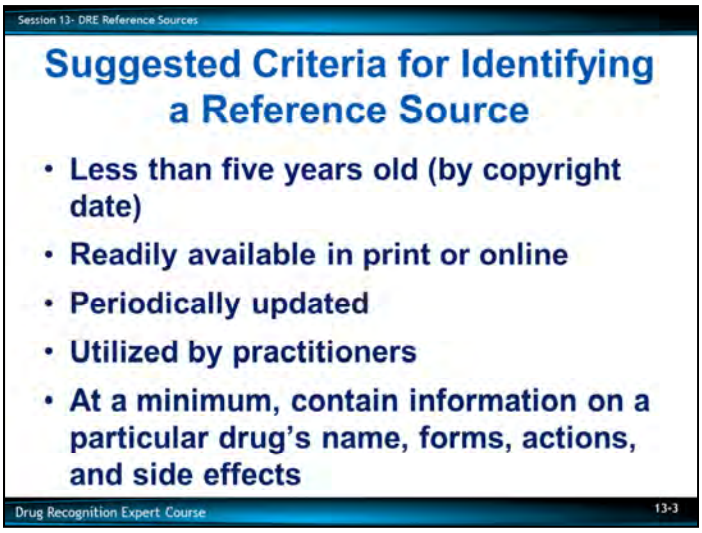
- Discuss print resources available to assist Drug Recognition Experts (DREs)
- Learn about other resources available to assist DREs

CONTENT SEGMENTS

A. Resources Available

LEARNING ACTIVITIES

Instructor-Led Presentation

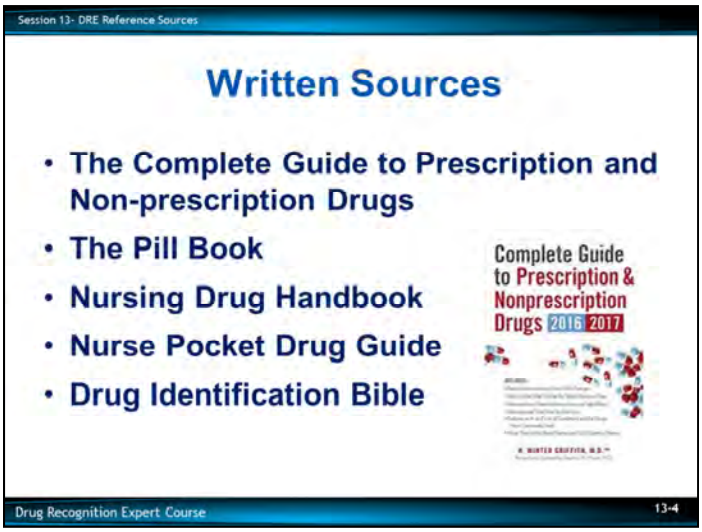


A. <u>Resources Available</u>

Suggested criteria to identify a Drug Reference Source
When selecting an acceptable drug reference, DRE's should consult references that meet the below criteria:

- Be less than five years old (by copyright date)
- Be readily available in print or online
- Be periodically updated
- Be utilized by practitioners in the scientific and healthcare fields
- At a minimum, contain information on a particular drug's:
  - Trade (brand), generic, and alternate common names
  - Available forms (liquid, pill, injectable, etc.)
  - Pharmacologic/therapeutic actions (as used clinically, both "on" and "off" label)
  - Adverse reactions and side effects

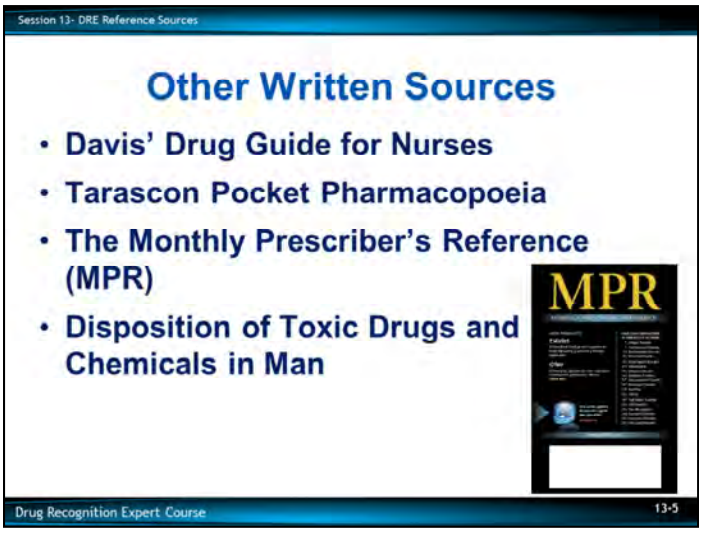
The reason for this is to keep from consulting outdated and inaccurate references.



Acceptable resources may be in-print, electronic, or a combination.

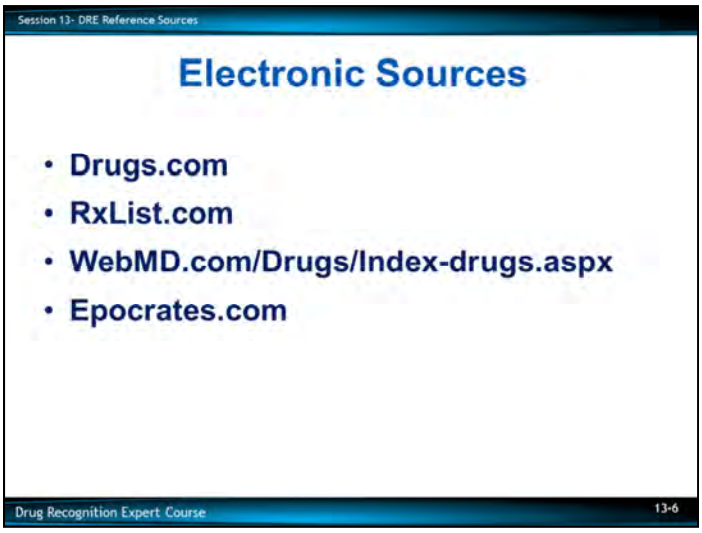
Acceptable written examples include:

- The Complete Guide to Prescription and Non-prescription Drugs
- The Pill Book
- Nursing Drug Handbook
- Nurse Pocket Drug Guide
- Drug Identification Bible (available at: http://www.drugidbible.com)



Acceptable written examples include:

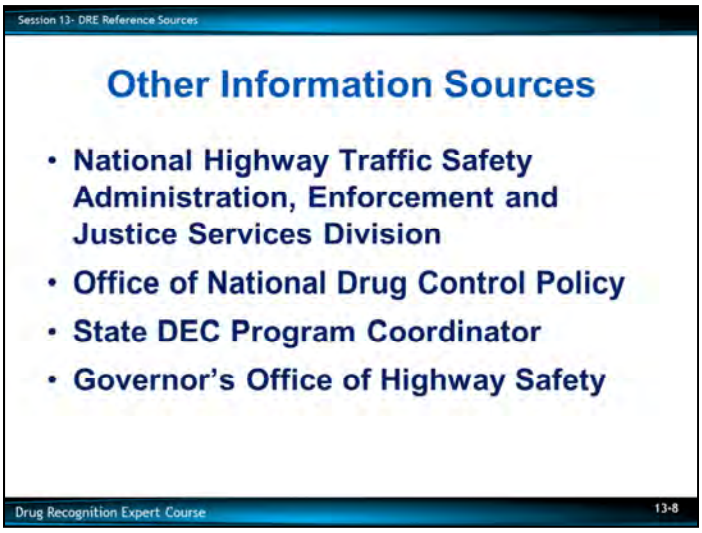
- Davis' Drug Guide for Nurses
- Tarascon Pocket Pharmacopoeia (for those with some pharmacology education)
- The Monthly Prescriber's Reference (MPR)
- Disposition of Toxic Drugs and Chemicals in Man ***(Source: Randall C. Baselt. Biomedical Publications)***
- DEA Intelligence Report – Drug Slang Code Words (see attachment at end of this Session)



Acceptable electronic examples include:

- Drugs.com
- RxList.com
- WebMD.com/Drugs/Index-drugs.aspx
- Eprocrates.com

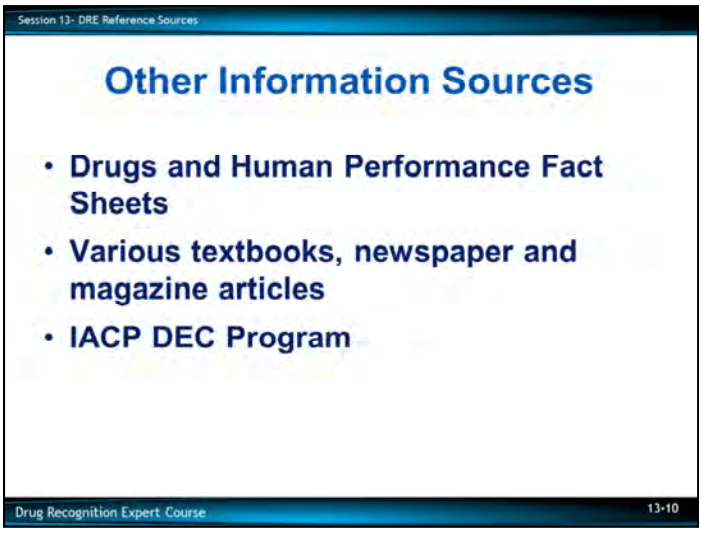
- iMeds – Medical Reference for Android
- Monthly Prescriber's Reference (MPR)
- PDR.net
- www.streetdrugs.org
- info@streetdrugs.org



Other Information Sources

- National Highway Traffic Safety Administration (NHTSA), Enforcement and Justice Services (EJS) Division, Washington, D.C.
- Office of National Drug Control Policy (ONDCP)
- State Drug Evaluation and Classification (DEC) Program Coordinator
- Governor's Office of Highway Safety (GOHS)

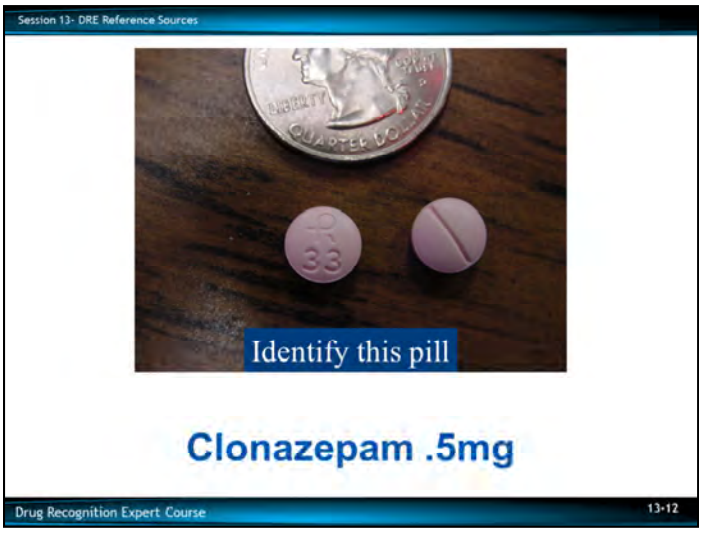
- The National Traffic Law Center (NTLC)
  - NTLC is part of the American Prosecutors Research Institute (APRI)
- The National Sobriety Testing Resource Center http://dredata.nhtsa.gov
- Poison control center (www.aapcc.org)
- Medical dictionaries



- Drugs and Human Performance Fact Sheets
  - ***Produced by U.S. DOT-NHTSA, Report No. DOT 809 725, April 2014***
- Newspaper and magazine articles on drugs and drug-impaired driving, including counter-culture magazines such as "High Times"
- Software programs such as Pharmacists, Body Works, Mosby's Medical Dictionary and other programs are available on disks and CDs
- Various resources are available through online services and the Internet

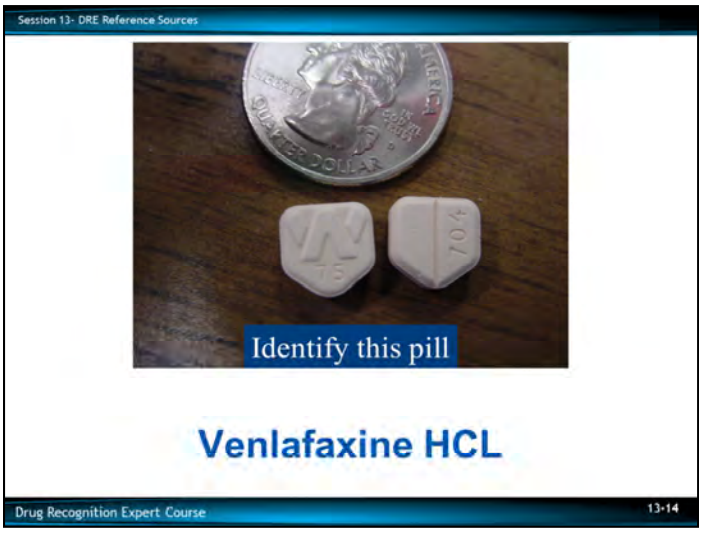
The International Association of Chiefs of Police (IACP) DEC Program website is http://www.decp.org.
Discuss some other useful and reliable texts known to you.

Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.

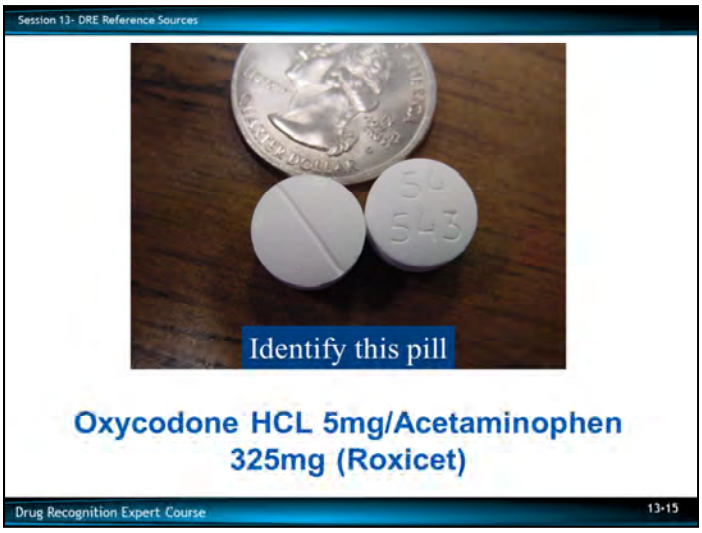


Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.

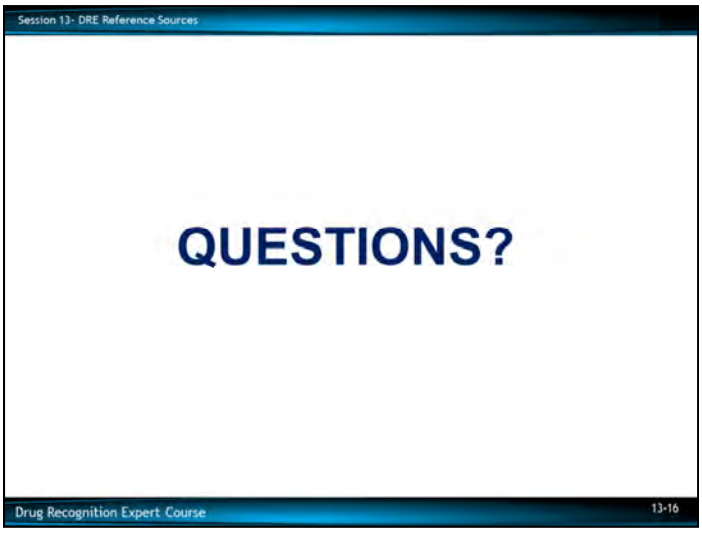
Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.



Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.



Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.



Solicit participants' comments or questions concerning Reference Sources.

COMPARISON OF DRE SYMPTOMATOLOGY
WITH CROSS SECTION OF DRUG SYMPTOMATOLOGY SOURCES

CNS DEPRESSANTS:

DRE Symptomatology:

Nystagmus
Decreased blood pressure
Disoriented
Thick slurred speech
Decreased pulse
Uncoordinated
Sluggish
Drunk-like appearance

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, Barbiturates, pages 546-547:

Nystagmus
Difficulty in visual
Vertigo
Positive Romberg sign
Dysmetria
Sluggishness
Slowness, slurring of speech
Poor memory
Emotional lability
Strabismus
Accommodation
Gait ataxia
Hypotonia
Diplopia
Difficulty in thinking
Poor comprehension
Faulty judgement

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 8 Ed. 1997.

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. P.19.

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 36: barbiturates effects like alcohol (staggering, poor motor control).

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 11: sedative hypnotics same as alcohol and other depressants

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 72: Benzodiazepines same as barbiturate effects; pages 247; 292):

Barbiturates:

Nystagmus
Depressed blood pressure
Incoordination
Depressed pulse
Diminished concentration
Decreased reaction time

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988), p. 135.

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 159

Maladaptive behavioral changes, e.g., disinhibition of sexual or aggressive impulses, mood lability, impaired judgment, impaired social or occupational functioning.

Slurred speech
Unsteady gait
Incoordination
Impairment in attention or memory

CNS STIMULANTS:
DRE Symptomatology:
Dilated pupils
Increased temperature
Body tremors
Excited
Talkative
Anxiety
Redness to nasal area
Loss of appetite
Increased alertness
Increased pulse rate
Increased blood pressure
Restlessness
Euphoric
Exaggerated reflexes
Grinding teeth
Runny nose
Insomnia

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, Cocaine 551-554

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, Amphetamines, Page 634:

Mild influence:
Mydriasis
Restlessness
Irritability
Tremor
Diaphoresis
Nausea
Pallor
Hyperreflexia
Talkativeness
Insomnia
Flushing
Combativeness
Vomiting
Dry mucous membranes

Moderate:
Hyperactivity
Hypertension
Tachycardia
Chest discomfort
Abdominal pain
Mild temperature
Repetitive behavior
Panic reactions
Confusion
Tachypnea
Premature ventricular contraction
Vomiting
Profuser diaphoresis
Elevation
Impulsivity
Hallucinations

Serious:
Delirium
Hyperreflexia
Hypotension
Marked Hypertension/Tachycardia
Convulsions
Coma

Cocaine, page 650-659

Early Stimulation:

Euphoria
Excitement
Irritable behavior
Sudden headache
Vomiting
Twitching of small muscles
Tremor
Cocaine psychosis
Elevation of pulse
Garrulity
Apprehension
Mydriasis
Nausea
Dizziness
Tics
Jerks
Hallucinations
Increased respiration

Advanced:

Convulsions
Decreased consciousness
Hyperreflexia
Increased pulse and blood pressure

Later Stages:

Hypotension
Dyspnea et al
Hypothermia

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1992, pages 120-123:

Amphetamines and cocaine (CNSS):

Dilation of pupils
Slight tremor
Agitation
Increased blood pressure
Restlessness
Possibly hallucinations

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 99:

CNSS cause:

Dilation of pupils
Elevation of blood pressure
Increased body temperature
Rapid heart rate
Tremor in hands
Restlessness

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 25, 121:

Amphetamine:

Dilation of pupils
Blood pressure
Teeth grinding
Tremors
Increase heart rate
Flushing
Dry mouth
Lack of coordination

pages 64, 100, 121:

Dilation of pupils
Increased temperature
Increased heartbeat
Similar to amphetamine

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), pages 8 and 10

Cocaine and Amphetamine:

Dilated pupils
Increased blood pressure
Agitation tremors
Increased pulse
Vasoconstriction
Increased temperature

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 29

Amphetamines:

Pupil dilation (Mydriasis)
Elevated blood pressure
Talkative
Restless
Tremors
Teeth grinding (Bruxism)
Illogical, loose thoughts
Increased pulse rate
Hyperactive
Irritable
Anorexia
Urinary retention
Fidgety, jerky, random motions

Page 295: Cocaine:

Dilated pupils
Increased blood pressure
Hyperpyrexia
Tachycardia
Vasoconstriction

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988) page 142:

Amphetamine:

Increased pulse
Possibly increased temperature
General increase in psychomotor activity
Increased blood pressure
Increased wakefulness

page 145: Cocaine

Mydriasis (dilated pupils)
Euphoria
May cause psychosis
Agitation

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 142.

Cocaine:

Maladaptive behavioral changes, e.g., euphoria, fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

Pupillary dilation
Elevated blood pressure
Nausea or vomiting
Tachycardia
Perspiration or chills
Visual or tactile hallucinations

Amphetamine:
Maladaptive behavioral changes, e.g., fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

Pupillary dilation
Elevated blood pressure
Nausea or vomiting
Tachycardia
Perspiration or chills

HALLUCINOGENS:
DRE Symptomatology:

Dilated pupils
Increased blood pressure
Dazed appearance
Synesthesia
Paranoia
Nausea
Difficulty in speech
Poor perception of time/distance
Increased pulse rate
Increased temperature
Body tremors
Hallucinations
Uncoordinated
Disoriented
Perspiring

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, LSD and Related Drugs, page 564

Pupillary dilation
Tachycardia
Tremor
Piloerection
Increased body temperature
Hyper vigilance
Loss of boundaries
Increased blood pressure
Hyperreflexia
Nausea
Muscular weakness
Hallucinations
Synesthesia

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, LSD, pages 667-669:

Pupillary dilation
Increased body temperature
Weakness
Hyperreflexia
Hallucinations
Poor judgment
Increased heart rate
Piloerection
Tremor
Ataxia
Depersonalization
Mood swings

A Primer of Drug Action, Julien, Robert M.; W. H. Freeman and Company, New York, 1992

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 page 160:

Dilated pupils
Increased awareness
Sensory input
Flushed face
Increased blood pressure
Faltered body images
Fine tremor
Increased body temperature

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, Inc New York (1984), pages 100; 115 120, 153):

Hallucinogens:

Dilated pupils
Increased blood pressure
Profuse perspiration
Hallucinations
Increased heart rate
Increased temperature
Loss of appetite

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 218:

LSD:

Ataxia
Hyperreflexia
Tachycardia
High blood pressure
Incoordination

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Plenum Medical Book Company, New York (1988)

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 145.

Maladaptive behavioral changes, e.g., marked anxiety or depression, ideas of reference, fear of losing one's mind, paranoid ideation, impaired judgment, impaired social or occupational functioning.

Perceptual changes occurring in a state of full wakefulness and alertness, e.g., subjective intensification of perceptions, depersonalization, derealization, illusions, hallucinations, Synesthesia

Pupillary dilation
Sweating
Blurring of vision
Incoordination
Tachycardia
Palpitations
Tremors

DISSOCIATIVE ANESTHETICS (PHENCYCLIDINE)

DRE Symptomatology:

Nystagmus
Increased blood pressure
Perspiring
Blank stare
"Moon walking"
Incomplete responses
Repetitive speech
Cyclic behavior
Hallucinations
Increased pulse
Increased temperature
Warm to the touch
Early onset of nystagmus
Difficulty in speech
Repetitive response
Increased pain threshold
Confused, agitated
Possibly violent and combative

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, PCP, page 565-567

Nystagmus
Elevated blood pressure
Staggering gait
Numbness of extremities
Muscular rigidity
Drowsiness
Repetitive movements
Elevated heart rate
Feeling of intoxication
Slurred speech
Sweaty
Blank stare
Hostile behavior

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, PCP 768-777:

Nystagmus
Depressed light reflexes
Diminished pain
Tremors
Slurred speech
Increased pulse rate
Amnesia
Body image distortion
Depersonalization
Hallucinations
Miosis
Blurred vision
Ataxia
Muscle weakness
Drowsiness
Increased blood pressure
Anxiety/agitation
Euphoria
Disordered thought processes

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, page 262:

PCP
Increased blood pressure
Disinhibition
Muscle rigidity
Delirium excitement
Hallucinations
Speech difficulty
Elevated blood pressure
Blank stare
Mood swings
Agitation
Disorientation
Analgesia
Pain tolerance

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 p. 178

Sweating
Fever convulsions
Muscle rigidity
Increased blood pressure

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 100, 208:

PCP:
Nystagmus
Increased pulse rate
Increased blood pressure
Flushing

Mood swings
Changes in body awareness
Violent behavior
Hallucinations
Speech difficulties
Decreased responsiveness

Drug Abuse and Dependence, Grinspoon, Lester, M.D.; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 25:

PCP:

Body image distortions
Nystagmus
Loss of muscle control
Memory loss drooling
Increased blood pressure
Muscle rigidity
Incoherent speech
Blank stare

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989) page 296:

PCP:

Nystagmus
Hallucination
Loss of motor control
Automated speech
Nystagmus at rest
Disorientation
Extreme agitation
Disassociation from Environment

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D. Ph.D.D Plenum Medical Book Company, New York (1988), page 156:

PCP:

Ataxia
Muscular hypertonicity
Ptosis
HGN, VGN, and Rotary Nystagmus
Mood swings
Tremors
Hyperreflexia
Tachycardia
Elevated blood pressure

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 155.

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, impulsiveness, unpredictability, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

VGN or HGN
Numbness or diminished responsiveness to pain
Dysarthria (slurred speech)
Seizures
Increased blood pressure or heart rate
Ataxia
Muscle rigidity
Hyperacusis

NARCOTICS:

DRE symptomatology:

Constricted pupils
Decreased blood pressure
Ptosis (droopy eyelids)
Drowsiness
Low, raspy speech
Facial itching
Fresh puncture marks
Decreased pulse rate
Decreased temperature
"on the nod"
Depressed reflexes
Dry mouth
Euphoria

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, Opiods page 541-545

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Heroin, pages 702-703. See also Methadone, Demerol, etc.

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997:

Morphine:

Constructed pupils
Drowsiness
Mental clouding
Depressed respiration
Euphoria
Decreased blood pressure
Dysphoria
Sedation
Analgesia

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed., Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989
Decrease pain (p.6)

Encyclopedia of Drug Abuse, O'Brien, Robert, Cohen, Sydney. M.D. Facts on File, INC New York (1984) page 100, 120, 123, 124:

Narcotics:

Constricted pupils
Analgesia
Euphoria
Reduced heart rate
Depressed appetite
Going "on the nod"

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 14:

Narcotics:

Constricted pupils
Dreamy state
Euphoria
"nodding off"
Pain suppression

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989) page 293 – 294:

Miosis (constricted pupils)
Hypothermia (decreased temperature)
Drowsiness lethargy
Flaccid muscle tone
Analgesia
Bradycardia (decreased heart beat)
Euphoria/dysphoria
Confusion
Depressed respiration

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988), page 132

Miosis (constricted pupils)
Itching
Low blood pressure
Flushing sweating

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 152.

Maladaptive behavioral changes, e.g., initial euphoria followed by apathy, dysphoria, psychomotor retardation, impaired judgment, impaired social or occupational functioning.
Pupillary constriction
Slurred speech
Drowsiness
Impairment in attention or memory

INHALANTS: (Toluene)
DRE symptomatology:
Nystagmus
Increased blood pressure
Odor on mouth
Slurred speech
Increased pulse rate
Residue around nose
Nausea disorientation
Confusion

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, Inhalants, page 567

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. P. 185

Decreased inhibitions
Drowsiness
Sneezing runny nose
Floating sensation
Light sensitivity

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984)

Lowered inhibitions
Incoordination confusion
Nausea
Restlessness
Disorientation
Impaired judgment

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), pages 265, 272, 297: Toluene:

Nystagmus
Tremors cerebellar
Rambling speech
Tremors
Narcotic analgesics
Euphoric mood
Ataxia
Irritability
Light headedness
CNS depression that mimics ataxia
Blank stare

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988)

Brief euphoria
CNS depression (volatile solvents/toluene)
Dizziness
Giddy intoxication, similar to alcohol
Vertigo

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 149.

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, apathy, impaired judgment, impaired social or occupational functioning.

Nystagmus
Incoordination
Unsteady gait
Depressed reflexes
Tremor generalized muscle
Stupor or coma
Euphoria
Dizziness
Slurred speech
Lethargy
Psychomotor retardation
Blurred vision or diplopia
Weakness

CANNABIS

DRE Symptomatology:

Dilated pupils
Odor of Marijuana
Body tremors
Relaxed inhibitions
Impaired perception of time and distance
Paranoia
Debris in mouth
Eyelid tremors
Increased appetite
Disorientation

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A,; Goodman, I.; MacMillan Publishing Co. 1985, Cannabis, pages 559-561

Euphoria
Temporal disintegration
Information processing impairment
Dry mouth
Short term memory impairment
Balance and stance impairment
Increased hunger
Additive to alcohol

Lower doses affects perception, impairing well beyond when subject subjectively feels effects; alters all information processing; relatively simple motor skills unaffected
High doses:
Anxiety
Increased systolic blood
Hallucinations
Increased heart rate
Pressure
Simple motor skills affected

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Cannabis, page 678-681

Euphoria
Temporal distortion (time slows)
Loss of short term memory
Stimulated appetite
Motor coordination impairment
Relaxation
Systematic thinking impaired
Dry mouth
Impairment of motor tasks and reaction times requires higher dosages

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, Marijuana

Increased blood pressure
Dry mouth
Altered sensory perception

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 145:

Cannabis:
Red Eye
Relaxation
Increased heart rate
Time distortion
Impairment in ability to do multi-step tasks
Decrease level of motor coordination
Euphoria
Dry mouth
Possibly nystagmus
Short term memory
Tremors

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 100, 120:

Marijuana:
Red eye
Time and space distortions
Increased heart rate
Increased appetite
Increased heart beat
Dryness of mouth and throat
Increased pulse rate

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990).page 19:

Marijuana:

Increased appetite
Bloodshot eyes
Agitation
Hallucinations
Faster heartbeat
Confusion
Incoordination

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 296:

Cannabis:

Red Eye
Pleasant relaxation
Slowed time
Apathy
Problems with motor coordination
Increased appetite
Intensification of sensations
Passivity
Tachycardia (increased heart rate)

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988), page 147:

Cannabis:

Red Eye
Changes in time sense
Memory
Coordination
Balance and stance
Increased hunger
Short-term memory loss
Dry mouth
Tachycardia (rapid heartbeat)
Elevated systolic pressure affected

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 140.

Maladaptive behavioral changes, e.g., euphoria anxiety, suspiciousness, or paranoid ideation, sensation of slowed time, impaired judgment, social withdrawal.

Red Eye
Tachycardia (rapid heart)
Increased appetite
Dry mouth

LACK OF CONVERGENCE:

Clinical Procedures for Ocular Examination, Kurtz and Carlson; McGraw-Hill Medical, 3rd Edition, September 26, 2003.

A Recognized Clinical Trial of Treatment for Convergence Insufficiency in Children, Scheiman, Cotter, Cooper, et al, Arch Ophthalmology, Jan 2005.

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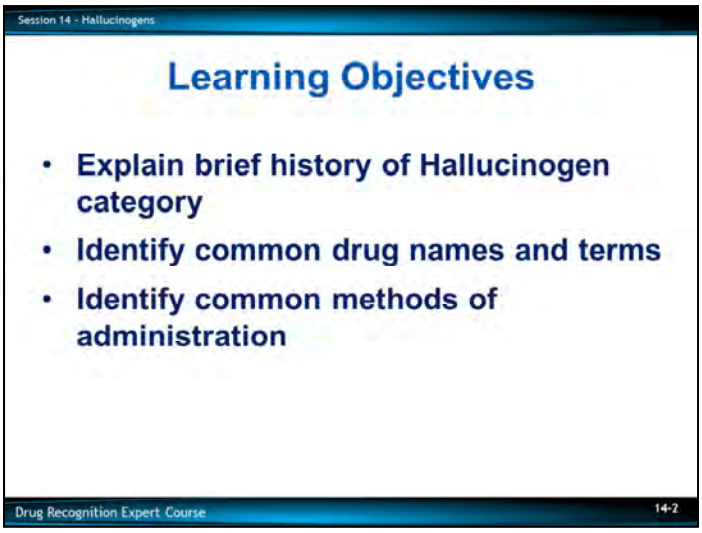
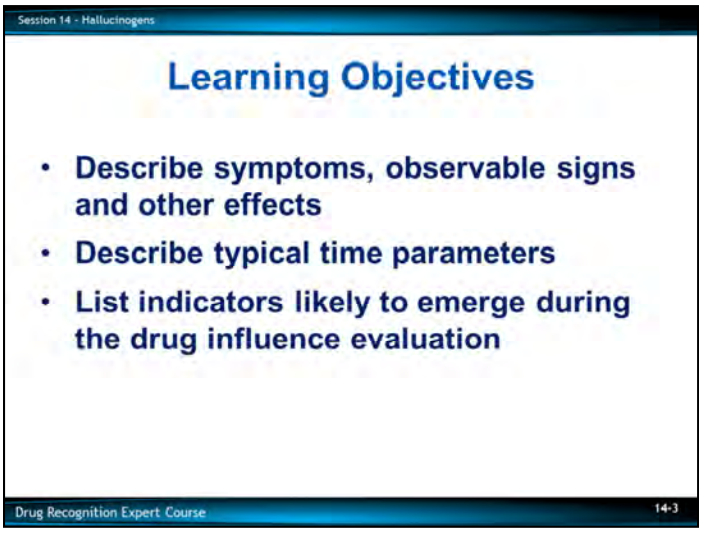
Session 14 - Hallucinogens
1 Hour, 45 Minutes
Session 14
Hallucinogens
TSI
NHTSA
Drug Recognition Expert Course
14-2



Briefly review the objectives, content and activities of this session.

Upon successfully completing this session the participant will be able to:

- Explain a brief history of the Hallucinogen category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category



- Describe the symptoms, observable signs and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects
C. Onset and Duration Effects
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentations
Slide Presentations
Review of DEC Program Exemplars

A. <u>Overview of the Category</u>

Hallucinogens are drugs that affect a person's perceptions, sensations, thinking, self-awareness, and emotions.

The word "Hallucinogen" means something that causes hallucinations. Definition from <u>The Random House College Dictionary</u> (Revised Edition, 1980).

A hallucination is a sensory experience of something that does not exist outside the mind.

Seeing, hearing, smelling, tasting, or feeling something that isn't really there.

Having distorted sensory perceptions so things look, sound, smell, etc. differently than they really are.

Hallucinogenic drugs many times produce what are called <u>pseudo-hallucinations</u>: i.e., the user typically is aware what he or she is seeing, hearing, smelling, etc. isn't real, but is a product of the drug. This is not always the case. However, some users may believe their experience is real. ***Emphasize the fact that although the user knows the hallucinations aren't real doesn't make those hallucinations any less dangerous if they occur while driving.***

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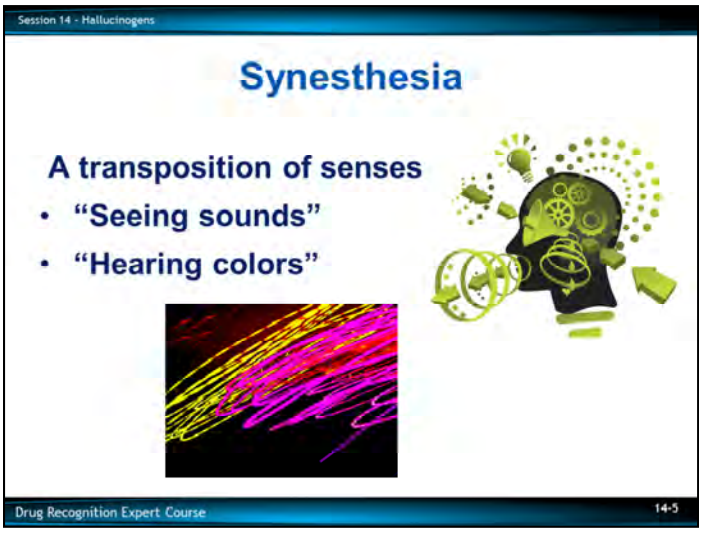

Synesthesia

One common type of hallucination produced by these drugs is called Synesthesia, which is a sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. In its simplest terms, it is a transposition of senses.

Synesthesia can occur naturally in a small percentage of the population and can differ from drug-induced synesthesia.

Examples: The user may "see a flash of color, or some other sight, when the telephone rings."

- Sounds, for example, may be transposed into sights
- Sights may be transposed into odors
- The user may "smell" a particular fragrance when he or she looks at something painted yellow
- The illusions and distorted perceptions produced by hallucinogenic drugs may be very alarming, even terrifying
- They may produce panic and uncontrolled excitement

Bad Trips

Point out the expression "bad trip" refers principally to these panic-filled reactions to Hallucinogens.

The user may be unable to cope with the terror and may attempt to flee wildly.

A user who is emotionally or mentally unstable may become psychotic in response to this frightening experience.

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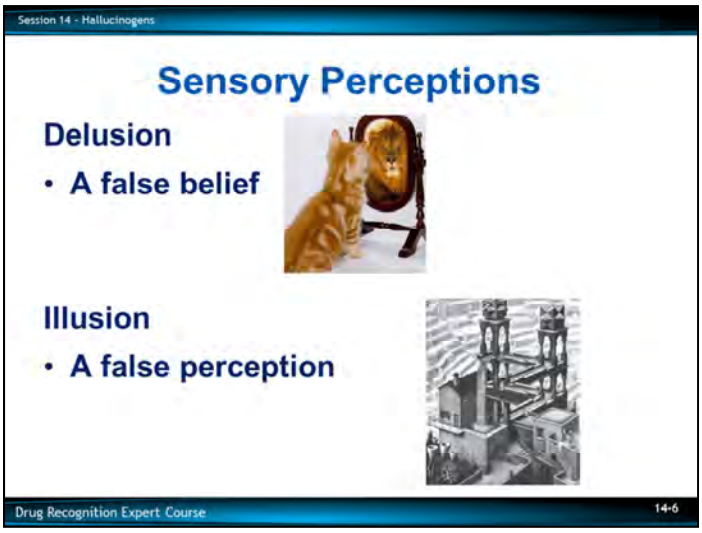
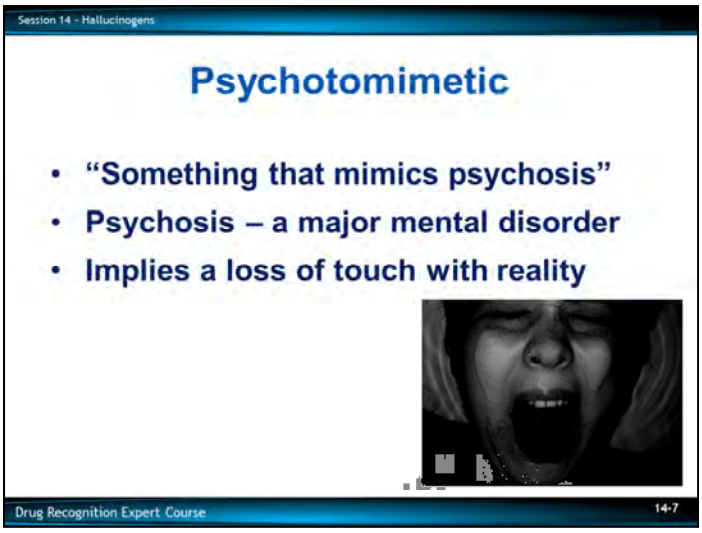


Delusion and Illusion

Remember Hallucinogens produce delusions, illusions, or both.

- A delusion is a false belief
  - Example: "I am an Elephant"

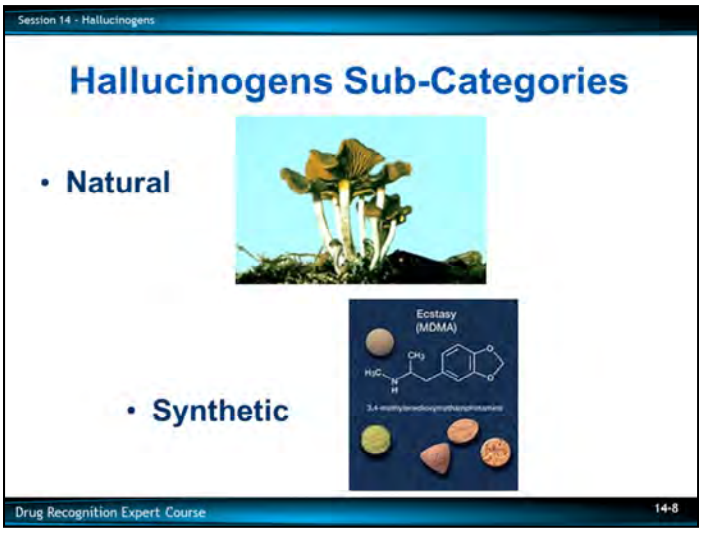
- An illusion is a false perception, i.e., a misrepresentation of what the senses are receiving
  - Example: "I see an Elephant"



Because they often make the user appear to be psychotic, Hallucinogens are sometimes called psychotomimetic drugs.

"Psychotomimetic" means "something that mimics psychosis." A psychosis is a major mental disorder. It implies a loss of touch with reality.

Point out some Hallucinogens may create a psychotomimetic response in the user, meaning they literally appear to have psychosis.



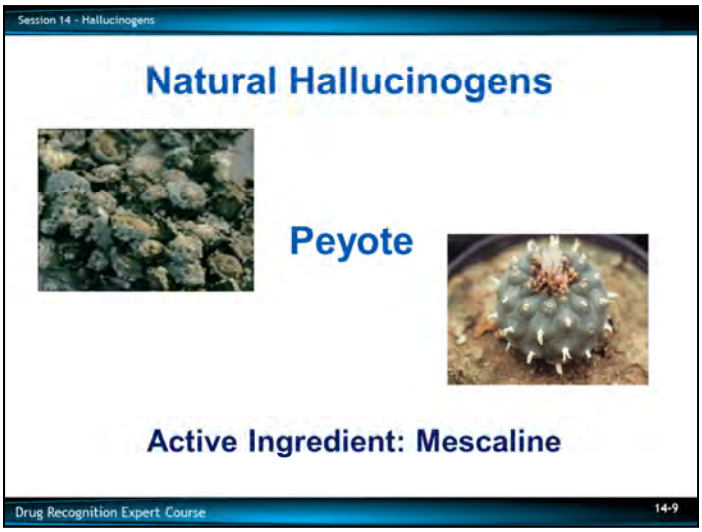
Hallucinogen Sub-categories
Some Hallucinogens come from natural sources, while others are synthetically manufactured.

- Natural – those occurring in nature, such as various plants

Peyote, Psilocybin, and Salvia Divinorum are examples of naturally-occurring Hallucinogens. Other naturally-occurring Hallucinogens include Nutmeg, Jimson Weed, Morning Glory seeds, and Bufotenine, a substance found in the glands of certain toads.
Some regional or local Hallucinogens may be discussed in more detail.

- Synthetic – those made solely in a laboratory

MDMA, LSD, DOM and 2CB are examples of synthetic Hallucinogens



Peyote is a small, spineless cactus.

The active, hallucinogenic ingredient in peyote is Mescaline.

Mescaline is a chemical relative of adrenaline. Effects may be similar to those that would result from a massive rush of adrenaline.

Mescaline was first isolated from Peyote in 1856. It was named after the Mescalero Apaches.

Peyote is used legally in religious ceremonies of the Native American Church.

Psilocybin is a drug found in a number of different species of mushrooms of the genus Psilocybe.

There are over 185 known species of mushrooms that contain Psilocybin and Psilocin.
Source: Drug Identification Bible, 2014-2015

These mushrooms also have been used in Native American religious ceremonies for thousands of years.

An unstable derivative of Psilocybin, called Psilocin, is also found in these mushrooms and also has hallucinogenic properties.

Psilocybin is chemically very similar to Serotonin, a neurotransmitter found in the brain.

The effects of Psilocybin may be similar to what would happen if the brain were suddenly flooded with Serotonin.
If available, show slides of Psilocybin Mushrooms.

Salvia Divinorum, also known as S. Divinorum or Salvia, is a naturally occurring Hallucinogen.

Salvia Divinorum is a perennial herb in the mint family native to certain areas of Mexico. The plant, which can grow to over three feet in height, has large green leaves, hollow square stems, and white flowers with purple calyces can also be grown successfully outside of this region.

Salvia Divinorum has been used by the Mazatec Indians for its ritual divination and healing. The active constituent of Salvia Divinorum has been identified as Salvinorin A.

Some common street names for Salvia Divinorum include:
- Salvia
- Sally D
- Magic Mint
- Maria Pastora
- Diviner's Sage

Salvia is not listed under the Controlled Substance Act (CSA), but it has been banned in many States. It has not been approved for medical use.

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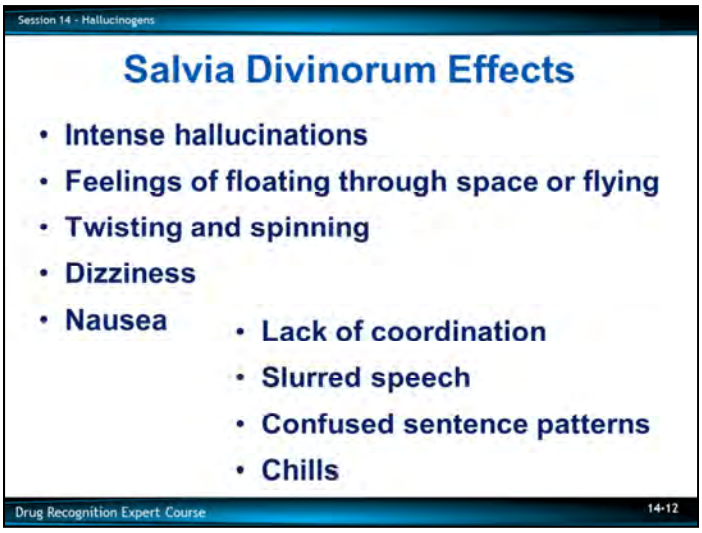

There are several methods of ingesting Salvia with varying durations of hallucinogenic effects:

- Dried leaves of Salvia can be smoked like marijuana, in a bong, pipe, or as a joint, with the effects lasting up to 15-30 minutes

- Fresh leaves can be chewed as a quid
  - The leaves of Salvia produce extractions of Salvinorin A before the leaves are removed from the mouth
  - Effects from chewing Salvia can last up to one hour

- Salvinorin A can also be vaporized and inhaled by heating the leaves in a pipe of tin foil and the vapors inhaled through a glass pipe

Effects of Salvia Divinorum include:

- Intense hallucinations
- Feelings of floating through space or flying
- Twisting and spinning
- Dizziness
- Nausea
- Lack of coordination
- Slurred speech
- Confused sentence patterns
- Chills

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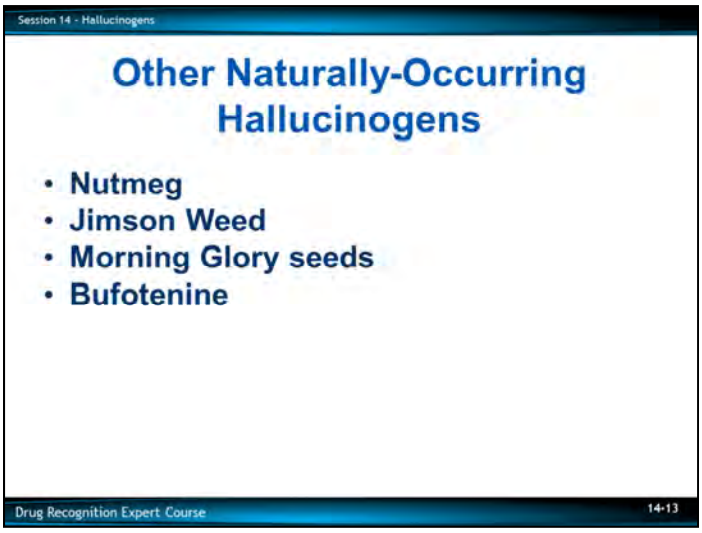


Other naturally-occurring Hallucinogens include:

- Nutmeg

Nutmeg contains Myristicin, a natural compound that has mind-altering effects if ingested in large doses. The buzz can last a long time and can be hallucinogenic, much like LSD.

- Jimson Weed

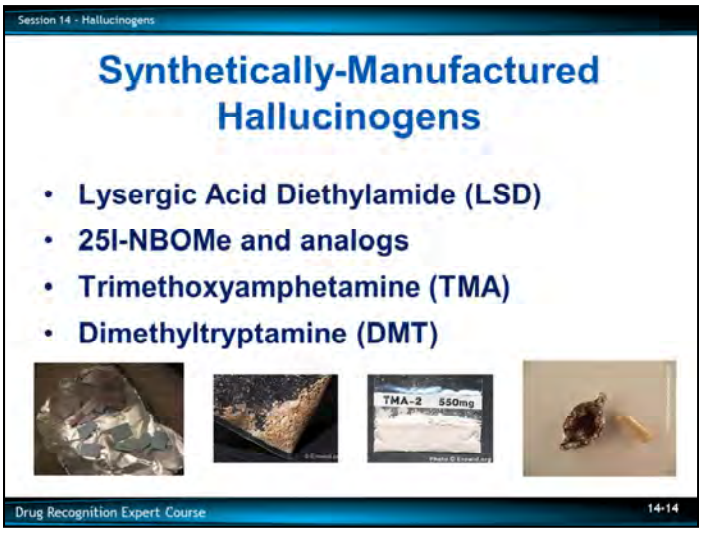
Jimson weed is a member of the Belladonna alkyloid family and grows naturally in many parts of the United States. It can be brewed as a tea or chewed and seed pods contain myristicin, a natural compound that has mind-altering effects if ingested in large doses. The buzz can last one to two days and can be hallucinogenic, much like LSD.

- Morning Glory seeds

The seeds of several varieties of Morning Glory (Ipomoea violacea) contain a naturally-occurring Tryptamine called Lysergic Acid Amide (LSA), which is closely related to LSD. Seeds are normally ingested orally and can be eaten whole or the active alkaloids can be extracted. Like LSD, LSA is a Hallucinogen, which can have strong mental effects.

- Bufotenine

Bufotenine is a Hallucinogen found in frog or toad skins, most notably in the Colorado River Toad (Bufo alvarius).

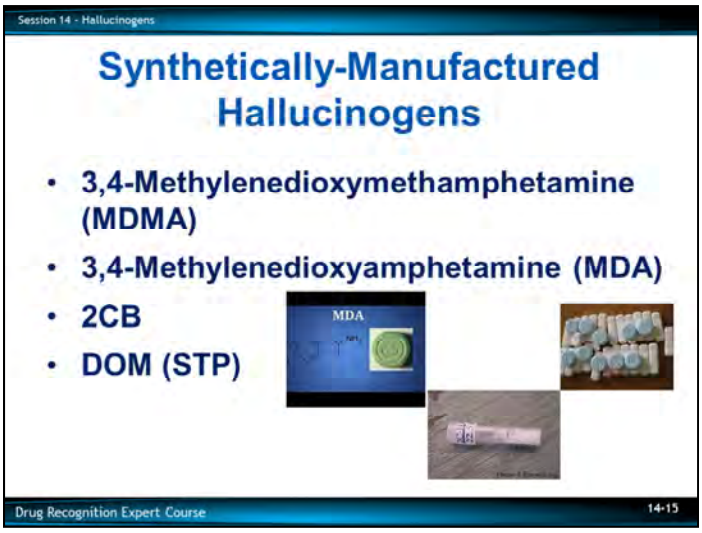


LSD, TMA, DMT, MDMA, MDA, and 2CB are examples of synthetically-manufactured Hallucinogens. ***For your information: Drugs such as MDA, MDMA, STP, and TMA all contain amphetamine-based compounds. They are for this reason sometimes called "psychedelic amphetamines." In essence, they are high-powered CNS Stimulants that cause hallucinations.***

- Lysergic Acid Diethylamide (LSD)
- 25I-NBOMe: 2-(4-iodo-2,5-dimethoxyphenyl)-*N*-(2-methoxybenzyl)ethanamine
  - This synthetic drug and analogs exhibit effects similar to LSD
  - Referred to as "N-Bomb" or "Smiles"

25I-NBOMe and analogs have been banned by DEA.

- Trimethoxyamphetamine (TMA)
- Dimethyltryptamine (DMT)



- MDMA is an abbreviation for 3,4-Methylenedioxymethamphetamine and is commonly referred to as "Ecstasy"
  - It is a hallucinogen that also acts as a stimulant
  - It produces an energizing effect as well as distortions in time and perception and enhances enjoyment from tactile experiences

- MDA is an abbreviation for 3,4-Methylenedioxyamphetamine
  - It is normally produced as a clear liquid or as a white powder in capsule or tablet form

- 2CB (4-Bromo-2, 5-Dimethoxyphenethylamine) is a white powder usually found in pressed tablets or gel caps
  - It is considered a synthetic psychedelic amphetamine ***(DEA, Feb. 2011)***

- DOM (2, 5-dimethoxy-4-methylamphetamine) is also known as STP
  - STP is an abbreviation for "Serenity, Tranquility, and Peace."

Lysergic Acid Diethylamide (LSD) is perhaps the most famous of the synthetically-manufactured Hallucinogens.
If available, show slides of various forms of LSD.

First produced in 1938, although its hallucinogenic properties were not discovered until 1943.

- LSD was used in psychotherapy during the 1940's and early 1950's
  - Example: it was occasionally used in the treatment of alcoholism

Although LSD is a synthetic drug, it was first derived from Ergot, a fungus that grows on rye and other grains.

In the Middle Ages, when people accidentally ate this fungus, their resulting bizarre behavior was thought to stem from possession by the Devil.

- Ergot is still used medically to treat migraine headaches
  - Sandoz Laboratories markets a combination of Caffeine and Ergot called Cafergot

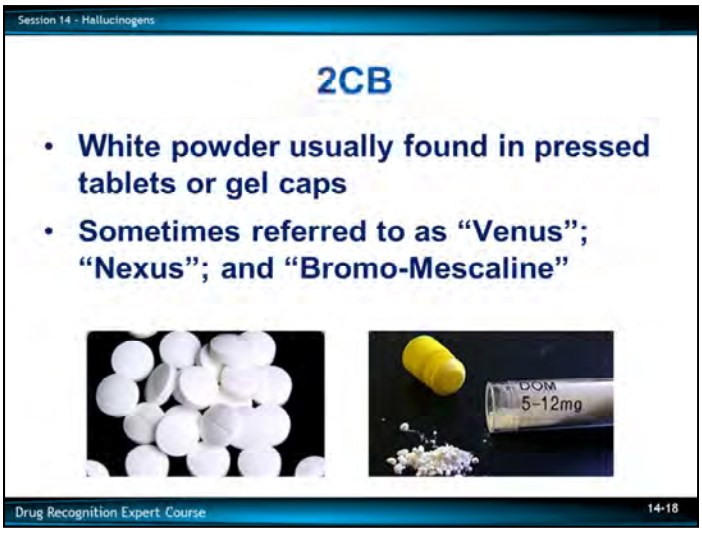
MDA, MDMA, STP, and TMA are synthetically-manufactured hallucinogens sometimes called "Psychedelic Amphetamines."

- Chemically related to Amphetamines and produce many effects similar to those of CNS Stimulants

- Chemically related to Mescaline

Among users, MDA sometimes is referred to as the "Mellow Drug of America."
Point out there are many more Hallucinogens beyond those listed in this session.

An important fact about Hallucinogens is they are not addictive, in the sense cessation of use does not produce withdrawal signs or symptoms; however, regular users do develop tolerance to these drugs.
Point out many people repeatedly abuse these non-addictive drugs because they enjoy the hallucinogenic effects they produce.



2CB (4-Bromo-2, 5-Dimethoxyphenethylamine)

- A popular drug first synthesized in 1974
- White powder usually found in pressed tablets or gel caps
- Sometimes referred to as "Venus," "Nexus," and "Bromo-Mescaline"

Solicit participants' comments or questions on this overview of Hallucinogens.

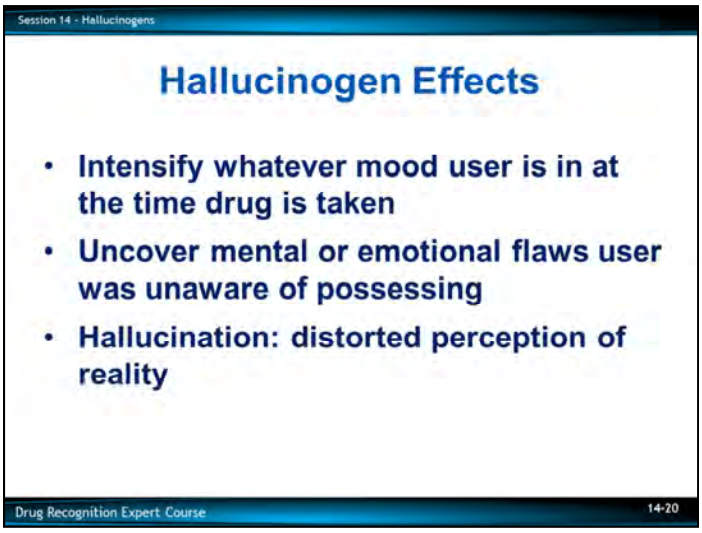
Common Methods of Ingestion of Hallucinogens
The most common method of ingesting Hallucinogens is orally.

Some Hallucinogens can also be smoked. However, LSD cannot be ingested by smoking. LSD is usually ingested orally. It can also be absorbed by placing drops in the eye.

Officers should make it a practice to wear protective gloves when handling any suspected drugs.

MDA and many other Psychedelic Amphetamines can also be insufflated, or "snorted."

Some Hallucinogens can be ingested and absorbed through the skin.
Point out some Hallucinogens such as LSD can be absorbed through the skin.



B. <u>Possible Effects</u>

The effects of Hallucinogens vary widely and are affected by the user's personality, mood, expectations, and by the surroundings in which the drug is taken.

The most common effect of the Hallucinogen is hallucination: the distorted perception of reality, often with a mixing of senses that makes it virtually impossible for the drug-influenced user to function in the real world.

Generally, Hallucinogens intensify whatever mood the user is in at the time the drug is taken.
- If the user is depressed, the drug will usually deepen the depression
- If the user is feeling pleasant, the drug will usually heighten that feeling

If the user expects the drug will help him or her achieve new insights or an expanded consciousness, the "trip" will seem to have that effect.

However, Hallucinogens also often uncover mental or emotional flaws the user was unaware of possessing. Therefore, many users who expect a positive experience with the drug will encounter instead the panic of a "bad trip."

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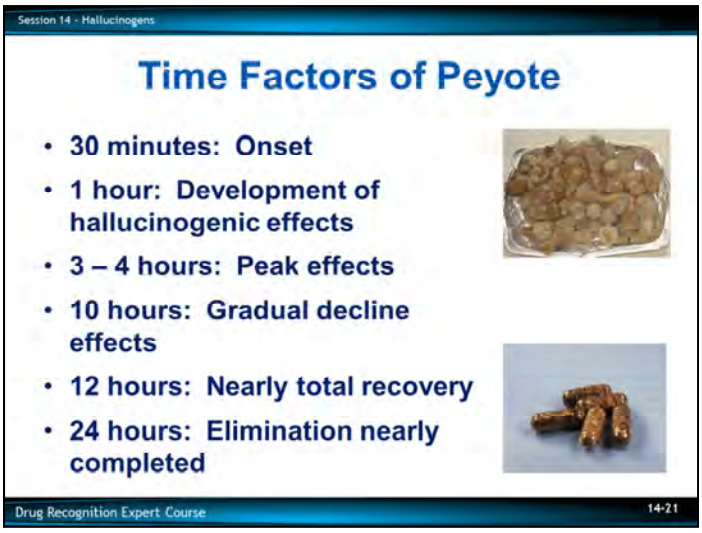

C. <u>Onset and Duration Effects</u>

Time Factors of Peyote
The time parameters associated with Hallucinogens vary from drug to drug.

The effects of Peyote (Mescaline) begin to be felt within approximately one-half hour after eating the cactus "buttons."

- 30 minutes: nausea, possibly leading to vomiting; mild rise in blood pressure, pulse, temperature, and heart rate; pupils dilate

- One hour: sensory changes begin; visual distortions accompanied by rich colors; objects take on new forms and begin to move; shapes "come alive"

- 3 – 4 hours: sensory changes reach their peak; synesthesia (transposition of senses) commonly occurs

- 10 hours: gradual decline in effects

- 12 hours: nearly total recovery from effects

- 24 hours: the majority of the Mescaline has been excreted from the body

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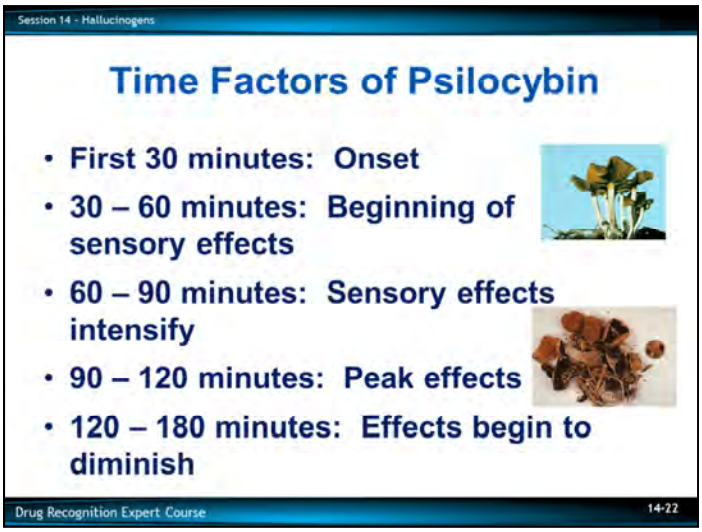


Time Factors of Psilocybin

Psilocybin also begins to exert its effects within one-half hour.

- First 30 minutes: dizziness; light headed feeling; giddiness; the extremities (hands, feet, etc.) may feel very light or very heavy

- 30 – 60 minutes: vision blurs; colors become brighter; leave longer lasting after images; objects take on sharp visual definition; hearing becomes more acute

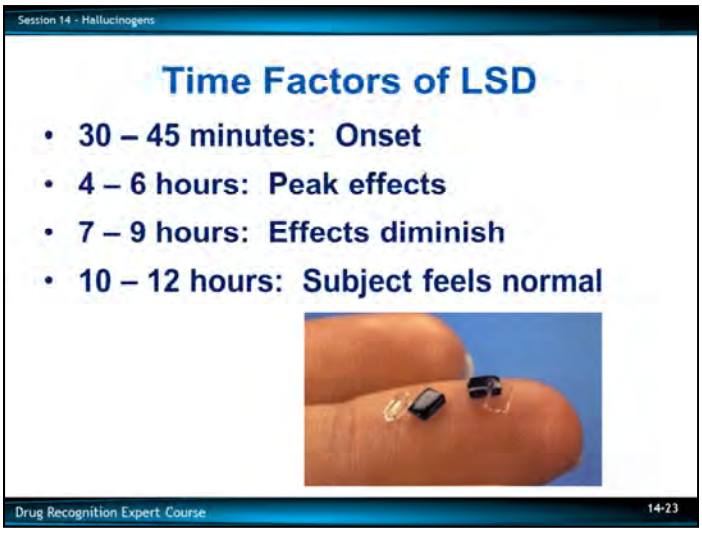
- 60 – 90 minutes: color patterns and shapes start to develop; the surfaces of objects appear to develop waves and wave-like patterns; distance perception becomes impaired; feelings of euphoria develop

- 90 – 120 minutes: body sensations increase, along with mental perceptions; user commonly becomes introspective, with increased bodily sensations and mental perceptions

- 120 – 180 minutes: effects start to diminish

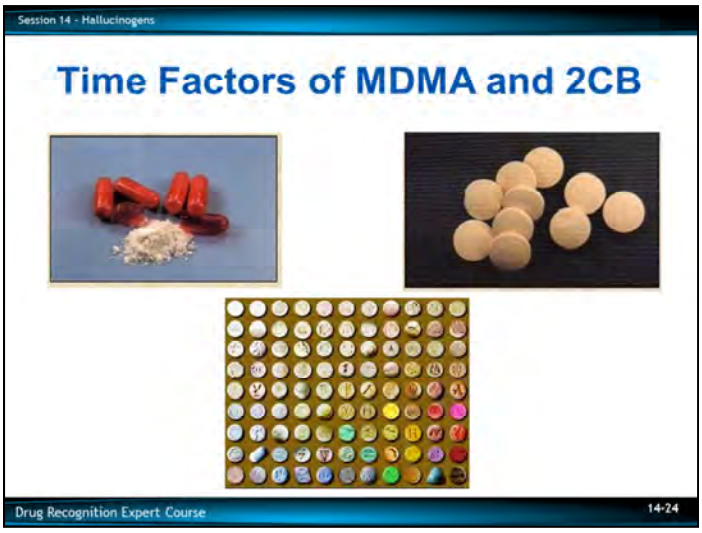
- 180 – 300 minutes: Nearly complete resolution of drug-induced effects

Source: Drug Identification Bible, 2014-2015



LSD's effects begin to be felt within 30 – 45 minutes.

- 30 – 45 minutes: blood pressure, pulse and temperature rise; pupils dilate; hair starts to stand on end (Piloerection); nausea, dizziness, and headache development
- 4 – 6 hours: effects reach their peak
- 7 – 9 hours: effects diminish
- 10 – 12 hours: user feels normal



MDMA's effects usually begin within several minutes to a half hour if taken orally.

Psychological effects include confusion, depression, anxiety, and paranoia.

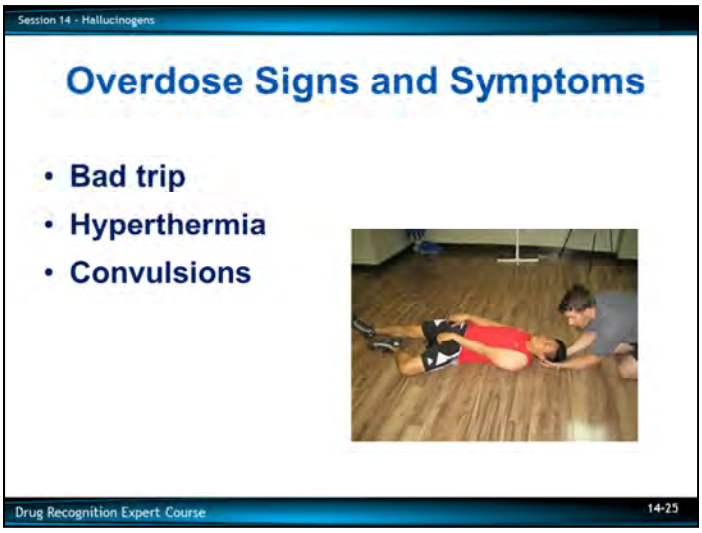
The duration effects can last from 1 – 12 hours depending on dosage.

2CB's effects are dose related.

- Lower doses (5-15mg) produce enhanced sensual sensations and feelings of being "in one's body"
- At higher doses (15-30mg), it produces intense visual effects that includes moving objects with "trails" behind them and colors appearing from nowhere

Onset and duration of effects of other Hallucinogens vary widely from about 2 hours to about 24 hours.

Solicit participants' comments and questions concerning time factors.



D. <u>Overdose Signs and Symptoms</u>

The most common danger of an overdose of Hallucinogen is an intense "bad trip" which can result in severe and sometimes permanent damage.

Apart from Psychedelic Amphetamines, it is unlikely other Hallucinogens would directly result in death from overdoses. There have been occasions people have overdosed on Psychedelic Amphetamines, resulting in hyperthermia, convulsions, and even death.

However, an overdose on other hallucinogens can still be extremely dangerous and indirectly result in death.

The extreme panic and agitation of a "bad trip" have been known to result in suicide or in accidental death as the user attempts to flee the hallucinations.

Sometimes Hallucinogens induce a perception of invulnerability in the user, leading to bizarre and very dangerous behavior and death.
- Example: at least one LSD user was killed when he attempted to stop a train
- Others have died from jumping off buildings believing they can fly

Some evidence suggests prolonged use of LSD may produce organic brain damage, leading to impaired memory, reduced attention span, mental confusion, and impaired ability to deal with abstract concepts.

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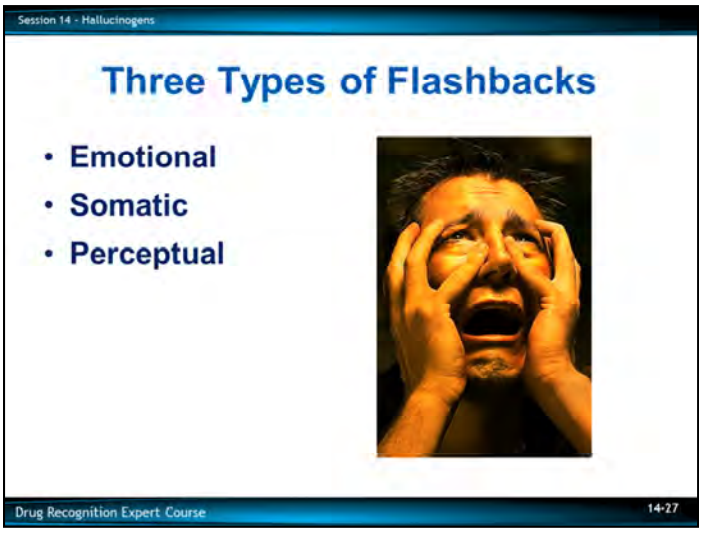
Flashback
A terrifying "bad trip" sometimes may be re-experienced as a flashback.

In simple terms, a flashback is a vivid recollection of a portion of a hallucinogenic experience. However, flashbacks typically do not cause all the signs and symptoms you may expect from an evaluation of a subject under the influence of a Hallucinogen.

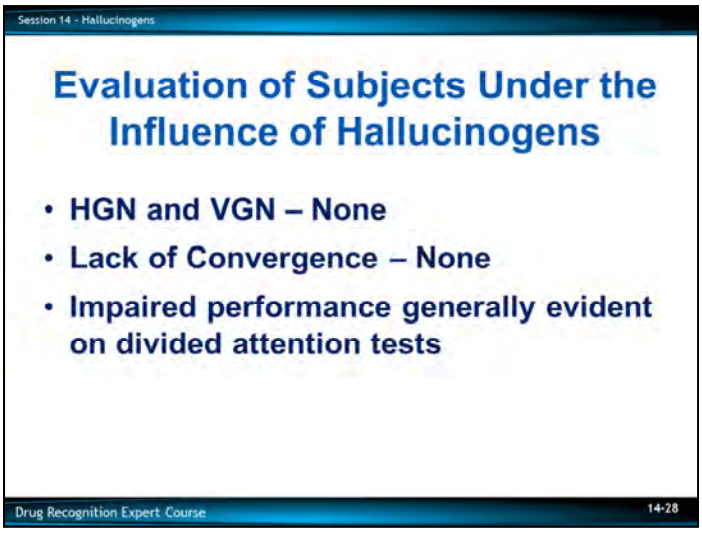
A flashback does not occur because of a residual quantity of drug in the user's body. Instead, a flashback essentially is a very intense daydream.
Point out subsequent use of the drug may precipitate a flashback, by causing the user to re-experience the frightening illusions of the previous "bad trip."



Three Types of Flashbacks

There are **three types** of flashbacks:

- Emotional: most dangerous - feelings of panic, fear, etc.; the sensations of a "bad trip"
- Somatic: Altered body sensations, tremors, weakness, dizziness, crawly, tingly feelings on the skin
- Perceptual: Distortions of vision, hearing, smell, taste, and touch (associated with original "trip" least harmful, unless driving a motor vehicle)



E. <u>Expected Results of the Evaluation</u>

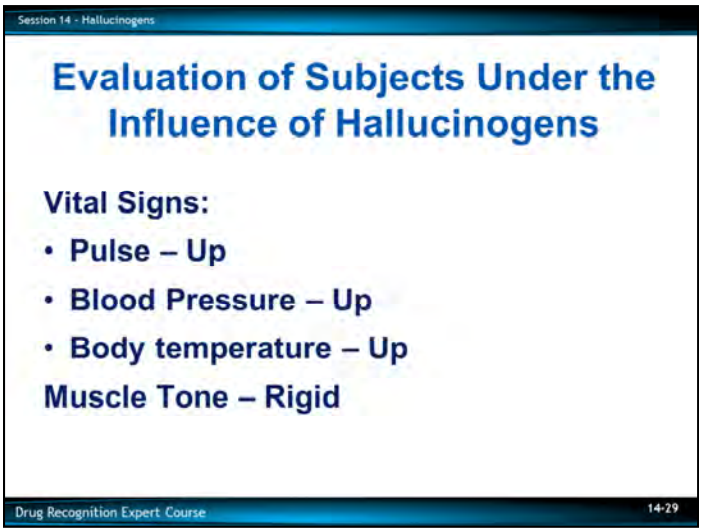
Observable Evidence of Impairment
Point out some subjects under the influence of Hallucinogens may not be able to understand or complete the tests, especially if the subject is hallucinating.

Eye Exams:
- Neither Horizontal Gaze Nystagmus (HGN) nor Vertical Gaze Nystagmus (VGN) will be present
- Lack of Convergence (LOC) will not be evident

Psychophysical Tests:
- Performance on the Modified Romberg Balance (MRB) test will generally be impaired, particularly in the subject's estimation of the passage of 30 seconds.

Emphasize DRE officers conducting evaluations on subjects under the influence of Hallucinogens should be especially careful due to the bizarre and unpredictable behavior of these subjects.

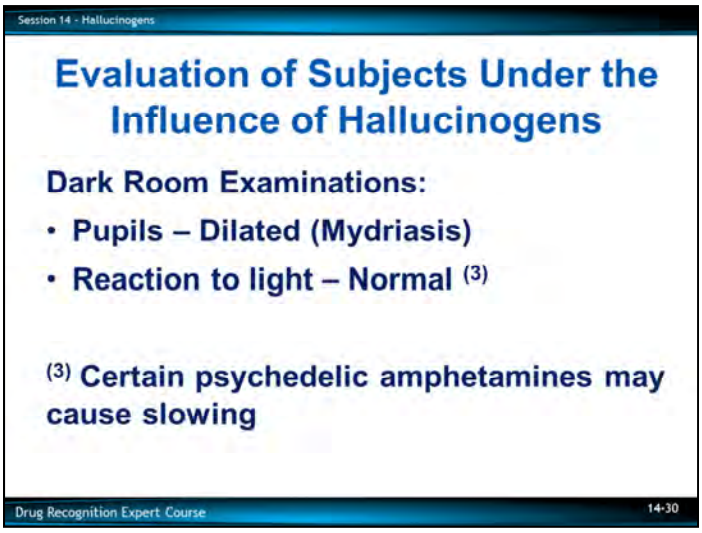
- Performance on the Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) tests will generally be impaired due to the subject's severe visual distortion, impaired perception of distance, and decreased muscle coordination.



Vital Signs

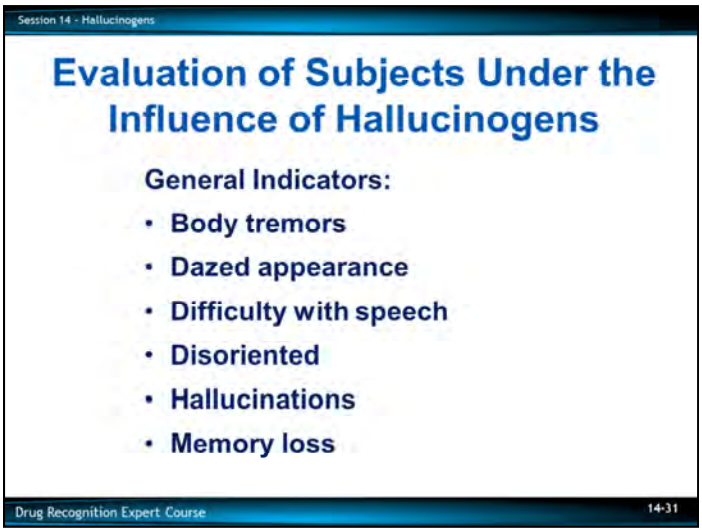
- Pulse will generally be elevated
- Blood pressure generally will be elevated
- Body temperature generally will be elevated

Muscle tone generally will be rigid.



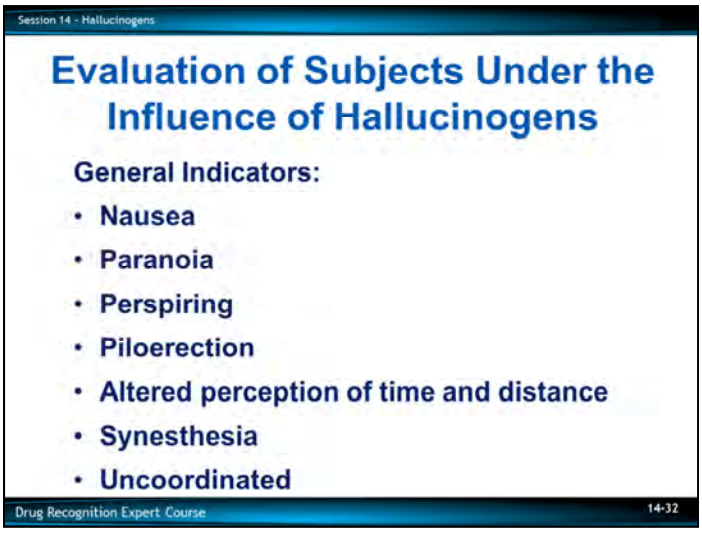
Dark Room

- Pupils generally will be dilated
- Reaction to light will usually be normal
  - Certain Psychedelic Amphetamines may cause slowing of the pupil's Reaction to Light



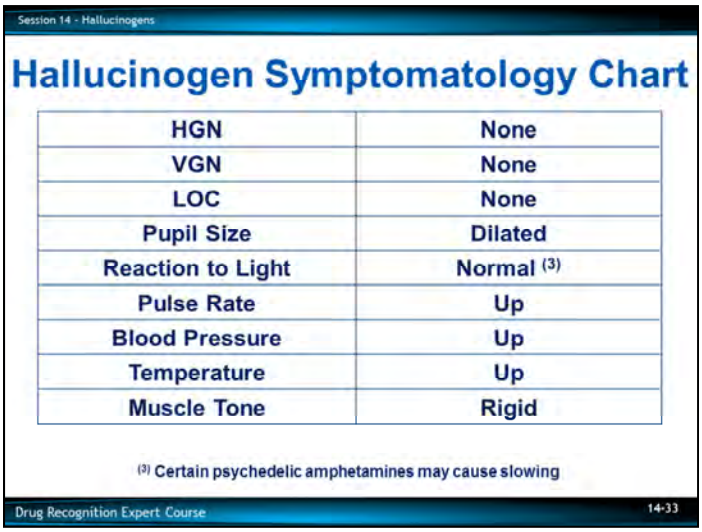
General Indicators

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Memory loss

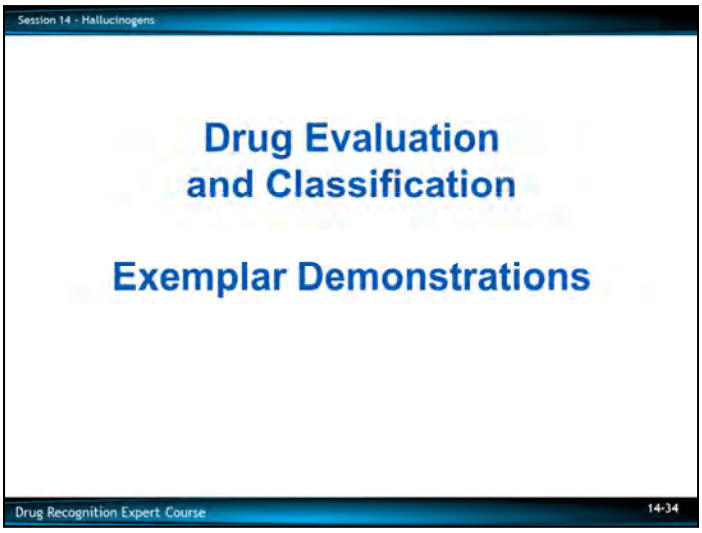


General Indicators

- Nausea
- Paranoia
- Perspiring
- Piloerection (hair standing on end, i.e. goosebumps)
- Altered perception of time and distance
- Synesthesia
- Uncoordinated



Symptomatology Chart



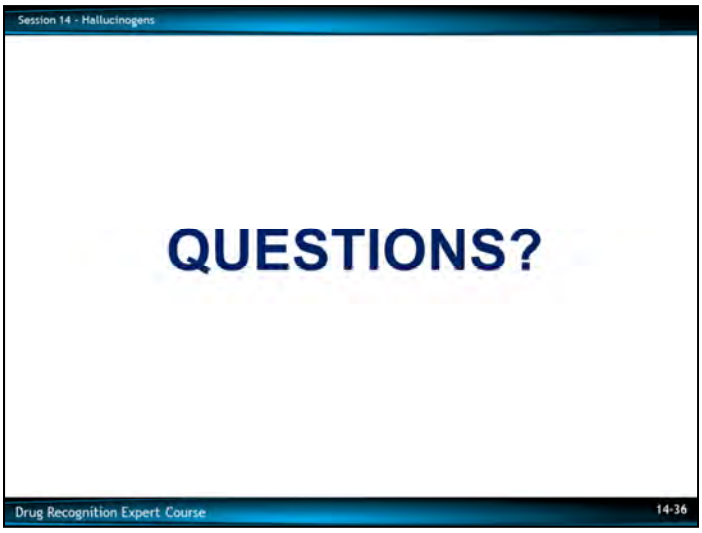
F. <u>Classification Exemplars</u>

Refer students to the exemplars found at the end of Session 14 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

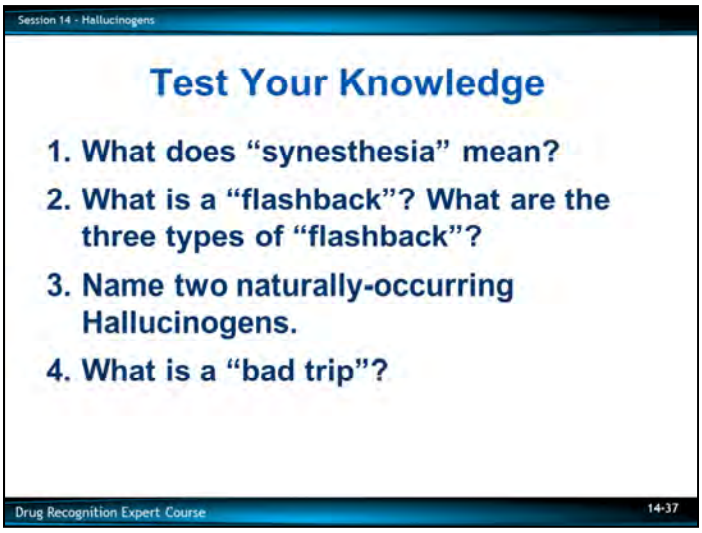
The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Relate the items on the exemplars to the Hallucinogen Symptomatology Chart.

Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a Hallucinogen. (Approximately 19 minutes).



***Solicit participants' questions or comments concerning expected results of the evaluation of subjects under the influence of Hallucinogens*.**



Test Your Knowledge

1. What does "synesthesia" mean?

A sensory perception disorder, in which an input via one sense is perceived by the brain as another sense. "Hearing" a phone ring and "seeing" the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of hallucinogens.

2. What is a "flashback"? What are the three types of "flashback"?

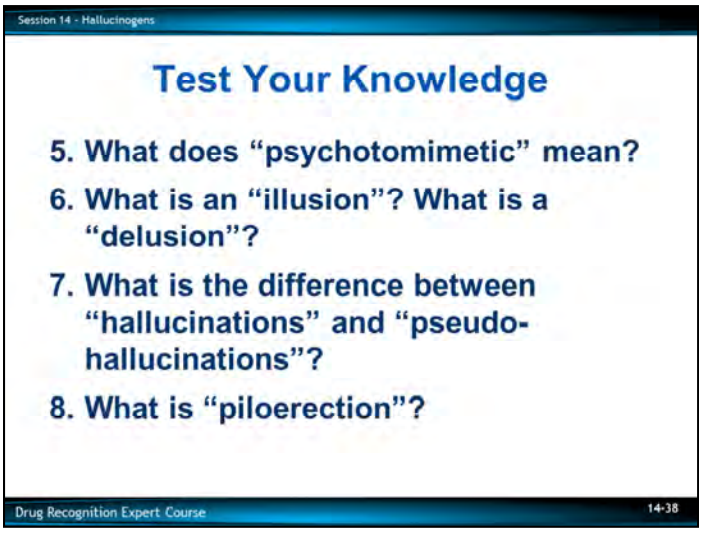
A flashback is a vivid recollection of a portion of a hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional – feelings of panic, fear, etc.; (2) somatic – altered body sensations, tremors, dizziness, etc.; (3) perceptual – distortions of vision, hearing, smell, etc.

3. Name two naturally occurring Hallucinogens.

Peyote, Psilocybin, Nutmeg, Jimson Weed, Morning Glory seeds, and/ or Bufotenine

4. What is a "bad trip"?

An hallucination where the user becomes panic-stricken by what he/she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror.



5. What does "psychotomimetic" mean?
Literally "mimicking psychosis," or "impersonating insanity." A drug is considered psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence of that drug.

6. What is an "illusion"? What is a "delusion"?
An "illusion" is a false perception, i.e., a misrepresentation of what the senses are receiving. A "delusion" is a false belief.

7. What is the difference between "hallucinations" and "pseudo-hallucinations"?
The difference is the user typically knows what he/she is seeing, hearing, smelling, etc. is not real, but is a product of the drug with a "pseudo-hallucinations."

8. What is "piloerection"?
Literally, "hair standing up," or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Trooper Trent Heuretz	14375	17-08-32	South Dakota Highway Patrol	Session 14-1

Recorder/Witness	Crash	Arresting Officer's Agency
Trooper Stuart Griffith South Dakota HP	☒ None ☐ Fatal ☐ Injury ☐ Property	Sioux Falls Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Flipping, Candi R.	6/19/86	F	W	Officer Christopher Treadway #10786

Date Examined / Time /Location	Breath Test	Chemical Test
08/10/17 / 1410 / Sioux Falls Police Department	Results: 0.00 Test Refused ☐ Instrument #: Intoximeter 9000	Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Off. Golsin	☒ Yes ☐ No	Muffin, eggs, kale sandwich	About noon	Water 4 or 5 bottles	n/a

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
4 PM / 2:15PM	Last night 3 or 4 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☒ Yes ☐ No "Just a couple of Mollys"	Cooperative, dazed	Poor, staggering

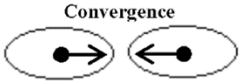
Speech:	Breath odor:	Face:
Rambling, slurred	Normal	Flushed, sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 10 / 142	Lack of Smooth Pursuit	None	None
2. 10 / 143	Maximum Deviation	None	None
3. 10 / 145	Angle of Onset	None	None

Convergence

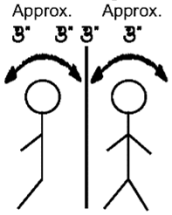


Right eye Left eye

n/a/30 **One Leg Stand** n/a /30

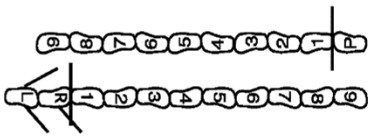
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Body tremors

Walk and Turn Test



Test stopped. Nearly fell 3 times
Claimed the line was moving.

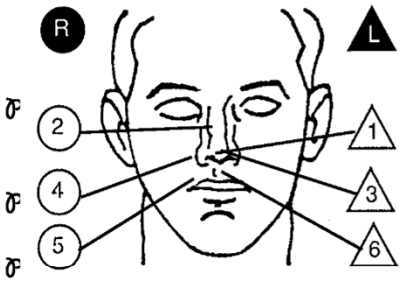
	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken	n/a	n/a

L	R	
✓		Sways while balancing
✓		Uses arms to balance
		Hopping
✓		Puts foot down

Tests stopped after nearly falling.

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
46 estimated as 30 seconds	n/a	Nearly fell 3 times	Bare feet

Finger to Nose
(Draw lines to spots touched)



Used pads of fingers on attempts 2, 4, 6.
Body tremors

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.5	9.0	6.0
Right Eye	7.5	9.0	6.0

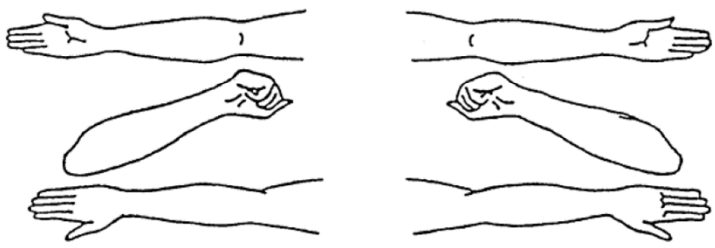
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Clear

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



No visible marks detected

Blood Pressure	Temperature
146 / 98	99.9 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Just a couple of Mollys"	"just a couple"	"don't remember"	"in the park at a concert."

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
08/10/17 / 1450	1:55 PM	2:10 PM	3:20 PM	

DRE/Officer's Signature:	Reviewed/approved by / date:	DRE#
Trent Heuretz		14375

Opinion of Evaluator:
☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☒ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Revised 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Flipping, Candi R.

1. **Location:** The evaluation was conducted in the Interview Room of the Sioux Falls Police Department. The darkroom examinations were conducted in a storage room adjacent to the Interview Room. Both areas were well illuminated and both had smooth tile flooring free of obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Trooper Stuart Griffith of the South Dakota HP.

3. **Breath Alcohol Test:** The suspect's breath test was administered by Officer Treadway prior to my arrival with a 0.00% BAC result.

4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to conduct a drug evaluation for Officer Treadway of the Sioux Falls PD. When contacted, Officer Treadway advised that he had observed the suspect driving her vehicle 20 miles under the posted speed limit and weaving within her lane on North Minnesota Avenue. According to Officer Treadway, the suspect's vehicle tires nearly struck the curb numerous times. After activating his emergency lights and siren, the suspect continued her poor driving until eventually pulling over about two blocks later. When contacted, the suspect was extremely disoriented and had difficulty speaking. According to Officer Treadway, the suspect indicated she was in the area for the Sturgis Motorcycle Rally. She indicated she had just left a concert and was on her way to her friend's campsite near Deadwood. Officer Treadway suspected the driver was impaired and tried to administer SFST's to the suspect. However, the suspect was unable to do the SFST's due to her poor balance and coordination. He attempted to administer the Horizontal Gaze Nystagmus (HGN) test, but he was unable to do so because the suspect could not focus on his penlight. He also attempted to administer the Walk & Turn (W&T) test, but the suspect could not maintain her position in the instructions stage. For this reason, he did not have the suspect attempt any other field sobriety tests. No alcoholic beverage was detected on the suspect's breath, but Officer Treadway did observe that the suspect's pupils were dilated. Officer Treadway arrested the suspect for DUI and transported her to the Sioux Falls PD for processing. After obtaining a 0.00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the interview area at the Sioux Falls PD. She was seated on a bench and was perspiring heavily and had a flushed face. She appeared dazed and disoriented. I noted that she was wearing cut-off jeans, a Grateful Dead tee-shirt, and was bare foot. She responded slowly to my greeting, and at times appeared to be looking elsewhere. She was cooperative, and was responsive to my questions, but many of her responses were not relevant to my questions. When I asked her if she was felling alright, she stated, "I am, but your hair is glowing." She did indicate that she felt okay, but had an upset stomach. She mumbled to herself and had rambling, slurred speech. She did tell me she believed it was about 4:00 pm when it was actually 2:15 pm. She stated she ate breakfast earlier, and had toast and some eggs. She also had a kale sandwich and 4 or 5 bottles of water during the day. She stated she slept the night before for about 3 or 4 hours. Her pupils were noticeably dilated. She agreed to submit to the evaluation.

6. **Medical Problems and Treatment:** Several times the suspect stated she felt nauseous. When asked, she told me she did not require any medical attention. She denied having any medical problems. She stated she was not epileptic or diabetic and does not take insulin. She indicated that she is in generally good health, is not under the care of a doctor or dentist, and has no physical defects.

7. **Psychophysical Indicators of Impairment:** For the following psychophysical tests, the suspect was given instructions and demonstrations for each. She told me she understood the tests before each one was attempted. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: Three times the suspect asked me to repeat the instructions. After the third time, she told me she understood the instructions. The suspect swayed approximately 3" front to back and side to side. The suspect had a slowed time estimation, estimating 30 seconds in 46 seconds. She exhibited body tremors while attempting the test.

Walk & Turn: For this this test, a line on the tile floor was used. The suspect was unable to perform this test due to her extreme poor balance. Each time the suspect tried to get into the instruction position, she nearly fell and the test had to be stopped for her safety. She appeared to be upset because she could not do the test and told me that the line was moving.

One Leg Stand: On the first attempt while raising her right foot, she immediately swayed and used her arms for balance. She put her foot down immediately after raising it, then nearly fell three times. For her safety, the test was stopped and I did not attempt to administer the second part of test.

Finger to Nose: The suspect swayed noticeably and she missed the tip of her nose on all six attempts. She used the pads of her fingers on attempts 2, 4 and 6. She also exhibited body tremors. She also laughed out loud throughout most of the test. Occasionally she would open her eyes, look at me then close them again.

8. **Clinical Indicators of Impairment:**

Eye Signs: The subject exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. On the HGN test, the suspect had to be reminded numerous times to focus on my penlight. I was able to complete the test, and no clues were observed. She did not exhibit vertical gaze nystagmus in either eye. She did not exhibit lack of convergence, as her eyes were able to converge as instructed. The suspect's pupils were dilated and above the DRE average ranges. In Room Light, her pupils were estimated at 7.5 millimeters (mm) in both eyes, In Near Total Darkness, her pupils were estimated at 9.0 mm in both eyes, and in Direct Light, they were estimated at 6.0 mm in both eyes. Her pupillary reaction to light was slow and she did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated at 102, 104 and 102 beats per minute (bpm). All three Were above the DRE average range. Her blood pressure was elevated at 146/98 millimeters of Mercury (mmHg), and her body temperature were elevated at 99.9° F. Both were above the DRE average ranges. Her muscle tone was rigid.

9. **Signs of Ingestion:** There were no obvious signs of ingestion. Her nasal cavity was clear, as was her oral cavity. There were no obvious marks on her arms or hands.

10. **Suspect's Statements:** The suspect stated she was healthy and did not take medications. She admitted taking "a couple Molly's" at a concert earlier in the day. She said they made her happy and helped her enjoy the music. When asked if "Molly" was Ecstasy, she replied, "Yea, I think so."

11. **DRE's Opinion:** It is my opinion as certified Drug Recognition Expert that the suspect is under the influence of a Hallucinogen and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect by Officer Treadway. The sample was submitted as evidence pending analysis by the state crime laboratory.

13. **Miscellaneous:** "Molly" is a street name for MDMA (3,4-methylenedioxy-methamphetamine), also known as Ecstasy. Refer to Officer Treadway's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sgt. Allan Kolak		17-05-109	Cape Coral PD	Session 14-2

Recorder/Witness	Crash	Arresting Officer's Agency
Deputy Tim Cornelius, Collier Co SO	☒ None ☐ Fatal ☐ Injury ☐ Property	Cape Coral Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
	07/18/88	M	W	Officer Heather Causer #16882

Date Examined / Time /Location	Breath Test / Results	Test Refused / Instrument #	Chemical Test
5/17/17 / 2210 / Collier Co. Jail	Results: 0.00	☐ Instrument #: Drager #12557	Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given / Given by:	☒ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
Officer Causer		Two hotdogs	5 pm	Water	n/a	n/a

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
7 PM / 10:15 P	Yesterday	6 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Indifferent, distracted, paranoid	Poor, staggering

Speech:	Breath odor:	Face:
Rambling, incoherent at times	Normal	Flushed, sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

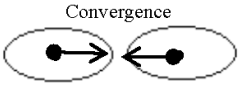
Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

1.	112	2224
2.	110	2234
3.	112	2248

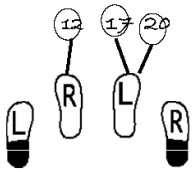
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



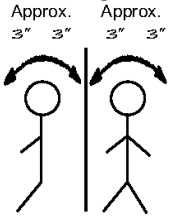
Right eye Left eye

26/30 One Leg Stand 32/30

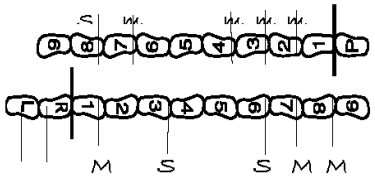


Modified Romberg Balance

Approx. 3″ 3″ Approx. 3″ 3″



Walk and Turn Test



M S S M M

Leg tremors throughout

	1st Nine	2nd Nine
Cannot keep balance	√	
Starts too soon	√	
Stops walking	√√	√
Misses heel-toe	√√√	√√√
Steps off line	n/a	n/a
Raises arms	√	√
Actual steps taken	9	9

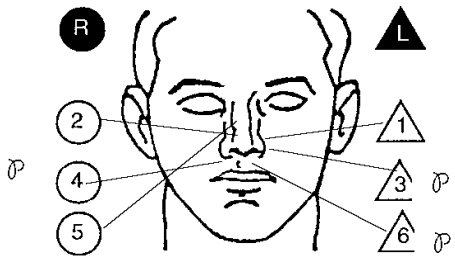
L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
✓	✓✓	Puts foot down

Body tremors

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
16 estimated as 30 seconds	Lost balance, nearly fell	n/a	sandals

Finger to Nose

(Draw lines to spots touched)



Body tremors, legs & arms

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	9.0	5.5
Right Eye	6.0	9.0	5.5

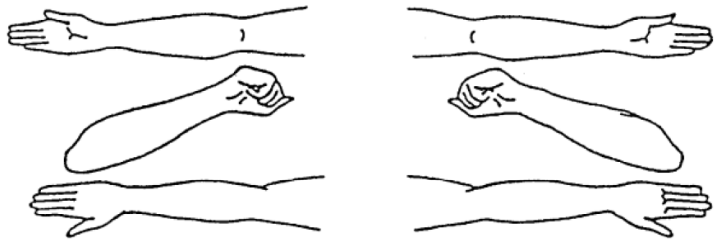
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Clear

Reaction to Light: Normal

RIGHT ARM LEFT ARM



No noticeable marks

Blood Pressure	Temperature
160 / 96	99.8 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing"	n/a	n/a	n/a

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
5/17/17 / 2105	2125	2210	2305	

DRE/Officer's Signature: Allan Kolak

Reviewed/approved by / date:

DRE# 8191

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☒ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

Rev. 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Tripp, Brad

1. **Location:** The evaluation was conducted on 05/17/17 in the Collier County Jail Interview Room. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting to conduct an evaluation and both have smooth tile flooring with no obstructions.

2. **Witnesses:** Deputy Timothy Corneilus from the Collier County S.O. witnessed and recorded the evaluation. The darkroom examinations were witnessed by the arresting officer, Officer Heather Causer.

3. **Breath Alcohol Test:** The suspect's breath test was 0.00%, and was administered by Officer Causer at the County Jail prior to my arrival.

4. **Notification and Interview of the Arresting Officer:** I was requested to conduct a drug evaluation for Officer Causer and contacted her at the Collier County Jail. She advised that she had arrested the suspect after observing him driving his vehicle along the gravel shoulder of Beach Road trying to pass slower moving vehicles. According to Officer Causer, the suspect was acting very strange and at times began talking to imaginary people. The suspect also claimed that the overhead lights on Officer Causer's patrol vehicle were burning his eyes and skin. According to Officer Causer, she administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests to the suspect. No clues of HGN were observed. However, the suspect did very poorly on the W&T and OLS tests, and due to his poor balance and coordination, the tests had to be stopped for safety reasons. According to Officer Causer, she could not detect an odor of alcoholic beverage on the suspect's breath. He was subsequently arrested for DWI and taken to the County Jail for processing. After obtaining a 0.00 BAC, Officer Causer requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect sitting in the Interview Room. He appeared to be extremely disoriented. At times, he was talking to himself, and once he pointed to the clock on the wall and began talking to it. He was also indifferent, distracted, and occasionally paranoid acting. He would ramble on about various things. He did tell me that he was not sick or injured. He had a flushed sweaty face. His breath odor was unremarkable, his coordination was poor, and at times he staggered as he walked. When asked what time it was, he thought it was about 7:00 pm, when it was actually 10:15 pm. He stated he had eaten two hotdogs about 5:00 pm, and only had water to drink. He denied drinking alcohol. He stated he did not wear corrective lenses, and could see fine. He stated he slept yesterday for about six hours. I noted that the subject was wearing soiled green pants, a red tee-shirt and slip-on sandals.

6. **Medical Problems and Treatment:** The suspect indicated he was not sick and was not injured. No indicators of injury or illness were mentioned or observed during the evaluation. He stated he was not under the care of a doctor or dentist, was not epileptic or diabetic, and did not take insulin. He further stated he had no medical problems, and was not taking any medication.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the subject prior to each test. He stated he understood the instructions for each one. The following tests were administered to the suspect:

   Modified Romberg Balance: The suspect swayed approximately three inches front to back and side to side. His time estimation was fast, estimating 30 seconds in 16 seconds. When asked how he estimated the 30 seconds, he pointed to the ceiling and said, "I was watching the clock in the sky."

Walk and Turn: For this test, a line of the tile floor was used. The suspect lost his balance twice during the instructions stage and tried to start the test too soon once. He stopped while walking once and missed touching heel to toe four times on the first nine steps. He also used his arms for balance. He made an improper turn when he lost his balance and nearly fell. After regaining his position and starting the next nine steps, he missed touching heel to toe four times, stopped while walking once and again used his arms for balance on all nine steps. He was asked if he'd prefer to remove his sandals for the test and he looked at his feet for about 30 seconds, and said, "No, I have both my feet."

One Leg Stand: The suspect swayed while balancing and used his arms for balance while standing on his left foot. He put his foot down once at 1,012 while standing on his left foot and counted to 1,026 in 30 seconds. While standing on his right foot, he swayed and used his arms for balance. He put his foot twice, at his count of 1,017 and 1,020. He exhibited body tremors throughout each test.

Finger to Nose: During this test, the suspect missed the tip of his nose on each attempt and used the pads of his fingers on attempts 3, 4 and 6. He exhibited quick jerky movements with his arms on each attempt. He also exhibited body tremors throughout the test. His legs tremored constantly, and is arms exhibited tremors throughout, particularly when each was at his side.

8. **Clinical Indicators of Impairment:**

Eye Signs: The subject's eyes tracked equally, his pupils were approximately equal in size, and he did not have resting nystagmus. No clues of HGN were detected and he did not exhibit VGN. He did not exhibit a lack of convergence, as his eyes were able to converge. The suspect's pupils were dilated in all three lighting levels and were estimated at; 6.0 millimeters (mm) in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness, and 5.5 mm in both eyes in Direct Light. All three estimates were above the DRE average ranges. His pupillary reaction to light was normal. He did not exhibit rebound dilation.

Vital Signs: The subject's pulse rates were all above the DRE average range, at 112 beats per minute (bpm), 110 bpm and 112 bpm. The subject's blood pressure was above the average ranges at 160/96 millimeters of mercury (mmHg). His body temperature was above average range at 99.8° Fahrenheit (F). His muscle tone was rigid.

9. **Signs of Ingestion:** No obvious signs of ingestion were observed. His nasal and oral cavities were clear and he had no obvious marks on his arms or hands.

10. **Suspect's Statements:** The suspect denied any drug use. He made numerous rambling statements that were many times incoherent, and appeared to be talking to someone or something that was not real. He seemed to see objects that were not truly present and kept looking around the room.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Hallucinogen and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect. It was turned over to the arresting officer for submission to the lab for analysis.

13. **Miscellaneous:** Due to the suspect's periodic hallucinations and elevated vital signs, the suspect was put on a medical watch alert by the Jail staff and his condition was monitored by jail medical staff.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Cpl. Jay Penton	15465	17-07-37	Alabama State Police	Session 14-3

Recorder/Witness	Crash	Arresting Officer's Agency
Deputy Ricky Thompson, Montgomery	☒ None ☐ Fatal ☐ Injury ☐ Property	Prattville Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Trumpet, Angel	01/23/92	F	W	Sgt. Brian Gentry #25218

Date Examined / Time /Location	Breath Test	Chemical Test
07-29-17 /1830 Prattville PD	Results: 0.00 Test Refused ☐ Instrument #: 36642	Oral Fluid ☐ Urine ☐ Blood ☒ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
Given by: Officer Belcher	☒ Yes ☐ No	"Nothing, I'm fasting"	N/A	"Just water"	2 bottles	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
10 pm? /1830	Last night	8 hours	☒ Yes ☐ No Upset stomach	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "I don't do drugs!"	Argumentative, Excited	Poor, Staggering, Falling

Speech:	Breath odor:	Face:
Rapid, Incoherent at times	Rancid	Flushed, Sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

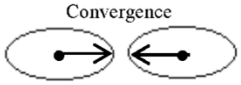
Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

1. 108 / 1834
2. 106 / 1858
3. 106 / 1912

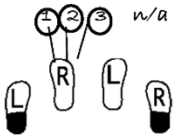
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



Right eye Left eye

5/30 One Leg Stand N/A/30



n/a

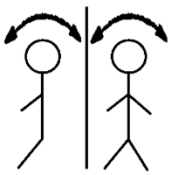
n/a

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
3		Puts foot down

Nearly fell, tests stopped for safety

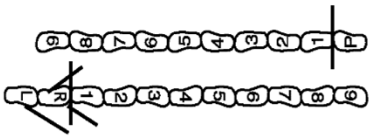
Modified Romberg Balance

Approx. n/a Approx. n/a



Unable to stand, test stopped

Walk and Turn Test



Lost balance 3 times and nearly fell. Stopped for safety reasons

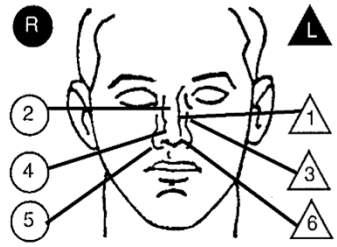
Cannot keep balance ✓✓✓

Starts too soon n/a

	1st Nine	2nd Nine
Stops walking	n/a	n/a
Misses heel-toe	n/a	n/a
Steps off line	n/a	n/a
Raises arms	n/a	n/a
Actual steps taken	n/a	n/a

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
n/a estimated as 30 seconds	n/a	Nearly fell several times	Lace-up work boots

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	8.5	5.0
Right Eye	6.0	8.5	5.0

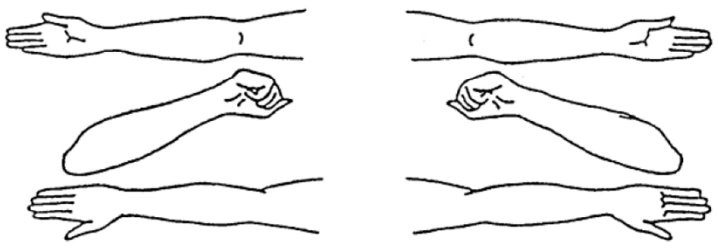
Nasal area: Clear

Oral cavity: Brown coating on tongue, brown vegetable matter in teeth

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM LEFT ARM



No visible marks observed

Blood Pressure	Temperature
148/96	99.8 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I told you, I don't do drugs!"	"None!"	n/a	n/a

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
07/29/17 / 1749	1810	1830	1916	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: Cpl. Jay Penton	DRE # 15465	Reviewed/approved by / date:

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☒ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

Rev. 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Trumpet, Angel

1. **Location:** The drug evaluation was conducted in the booking room of the Prattville Police Department. The dark room examinations were conducted in the staff restroom at that location. Both areas have adequate lighting for conducting a drug evaluation and have a concrete floor with no obstructions.

2. **Witnesses:** Deputy Ricky Thompson of the Montgomery CO. S.O. observed and recorded the evaluation.

3. **Breath Alcohol Test:** The suspect's breath test was administered by Sgt. Brian Gentry with a 0.00 result.

4. **Notification and Interview of the Arresting Officer:** I was on duty and was contacted by Sergeant Brian Gentry of the Prattville Police Department requesting a drug evaluation. I contacted him at the PD where he advised he had located the suspect's vehicle stopped partially in the travel portion of East Main Street. The suspect appeared dazed and very disoriented. Several times she pointed to some lights near the area and told Sergeant Gentry she stopped because the lights were so bright. She was at times incoherent, and it took some time for Sergeant Gentry to get her to understand who he was. He was eventually able to get her to exit her vehicle to check on her condition. Sergeant Gentry determined that the suspect was not suffering from any injuries or medical condition and suspected that she was possibily impaired. He was able to get her to do the Horizontal Gaze Nystagmus (HGN) test, and no clues were observed. However, he did note that her pupils were very dilated. She was unable to complete the Walk & Turn (W&T) and the One Leg Stand (OLS) tests, as she nearly fell several times. She complained during the testing that a space ship was overhead and that was why she kept falling. Sergeant Gentry arrested the suspect for DUI and advised her of her Miranda rights. During transport to the jail, she was complaining that the street lights were too loud, and that she needed earmuffs because of the noise. She was able to comply with Sergeant Gentry's requests in regards to getting out of the patrol car, going into the police department, sitting down, and answering questions. Once completing the breath test and obtaining a .00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect seated in the booking area at the PD. She was staring straight ahead. When I entered the room, she quickly turned and asked "Are you God?" I responded by giving her my name and asking for consent to conduct a drug evaluation. She replied, "They sent you, it must be okay." Her speech was rapid, and she stuttered at times, making her speech somewhat incoherent. She was perspiring heavily, and her face was flushed. She had a rancid breath odor. At times she acted very paranoid, was excited, and argumentative with other officers, although at other times she was cooperative. When asked about her condition, she stated, "I'm okay as long as my goddess is next to me." She stated she ate nothing and was "fasting" and drank two bottles of water. She estimated the time as 10 pm when it was actually 6:30 pm. She stated she could see fine, did not have any blindness or vision problems, and did not wear corrective lenses. Her eyelids appeared normal and her pupils were noticeably dilated. I noted that she was wearing cut-off levi's, a black tee-shirt with a marijuana leaf insigna on the front, and unlaced black work-type boots.

6. **Medical Problems and Treatment:** The suspect indicated that she had an upset stomach from something she ate, but did not require medical assistance. She stated she was not epileptic, not diabetic and did not take insulin. She stated she was not under the care of a doctor or dentist, and had no physical defects. She stated she did not take any medications, and did not have any medical problems.

7. **Psychophysical Indicators of Impairment:** The psychophysical tests were explained and demonstrated to the suspect. Even though several had to be explained multiple times, she stated she understood them prior to attempting each test. The following tests were administered to the suspect:

Modifed Romberg Balance: Due to the suspect's poor balance, and nearly falling several times when she closed her eyes, it was necessary to terminate this test for safety reasons.

Walk and Turn: A line of the floor was used for this test. The suspect started in the instructional position, but lost her balance three times, therefore the test was terminated for safety reasons. After nearly falling for the third time and having to use the wall for balance, she stated, "It's not my fault. The room is moving."

One Leg Stand: This test was also stopped for her safety. On the first attempt, the suspect started to raise her right foot as directed, but quickly put her foot down three times and nearly fell. When she attempted to raise her left foot as directed, she lost her balance and used the wall to keep from falling. She then stated, "Everything moving." This part of the test was also stopped for safety reasons.

Finger to Nose: For safety reasons, this test was conducted while she was seated. She missed the tip of her nose on all six attempts, and got visibly upset when she could not touch her nose.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect's eyes had equal tracking and she had equal pupil size. She did not exhibit any clues of HGN, and VGN was not present. She did not exhibit a lack of convergence, as her eyes were able to converge as instructed. The suspect's pupils were dilated and above the DRE average ranges. In Room Light her pupil sizes were estimated at 6.0 mm in both eyes, in Near Total Darkness her pupil sizes were estimated at 8.5 mm in both eyes, and in Direct Light her pupil sizes were estimated at 5.0 mm in both eyes. Her pupillary reaction to light was normal and she did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were above the DRE average range, at 108 beats per minute (bpm), 106 bpm and 106 bpm. Her blood pressure was also above the DRE average range at 148/96 millimeters of mercury (mmHg) blood pressure. Her body temperature was above the DRE average range at 99.8° Farenheit (F). Her muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal area was clear. Her breath was rancid smelling, and she had brownish coating on her tongue. She also had small pieces of brown vegetable matter in her teeth. When asked about the brown matter in her teeth, she indicated that she likes to eat healthy food and that she doesn't brush her teeth very often.

10. **Suspect's Statements:** The suspect first stated she was fasting for religious reasons, and is not allowed to use of alcohol or drugs. However, she then stated that she got hungry, so she purchased some "organic mushrooms" from a guy at a truck stop. She did not know who he was, and had not seen him before. She made numerous statements regarding things she saw and heard that no one else saw or heard. She would occasionally state that the overhead room lights were making too much noise, and that she could not lean on the table as it was a pool of water and she didn't want to fall in. When asked about drug use, she stated loudly, "I don't do drugs!" She became visibly upset that I asked her this question and stated she was "pure" and would never take drugs, or anything to harm her body.

11. **DRE's Opinion:** It is my opinion as a certifed Drug Recognition Expert that the suspect is under the influence of a Hallucinogen and is unable to operate a vehicle safely.

12. **Toxicogical Sample:** After the evaluation, Sergeant Gentry transported the suspect to the Prattville Hospital where a blood sample was collected from the suspect at 1953 hours. Sergeant Gentry collected the sample and submitted it as evidence pending testing by the Alabama Crime Lab.

13. **Miscellaneous:** Refer to Sergeant Gentry's report for additional details.

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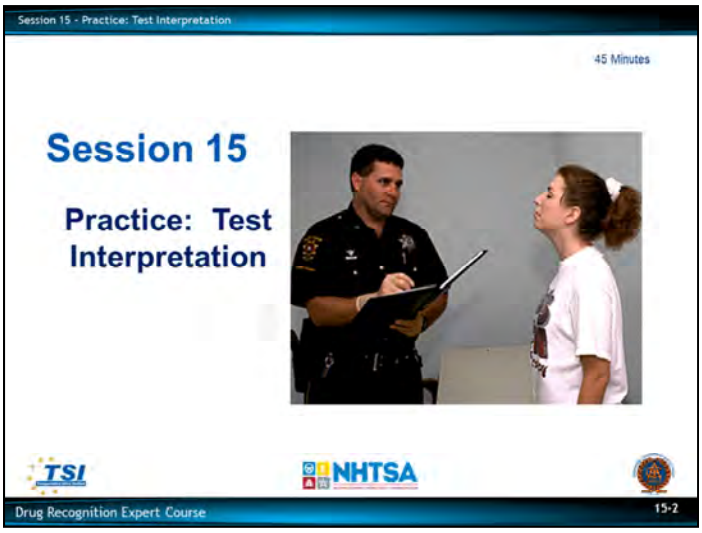
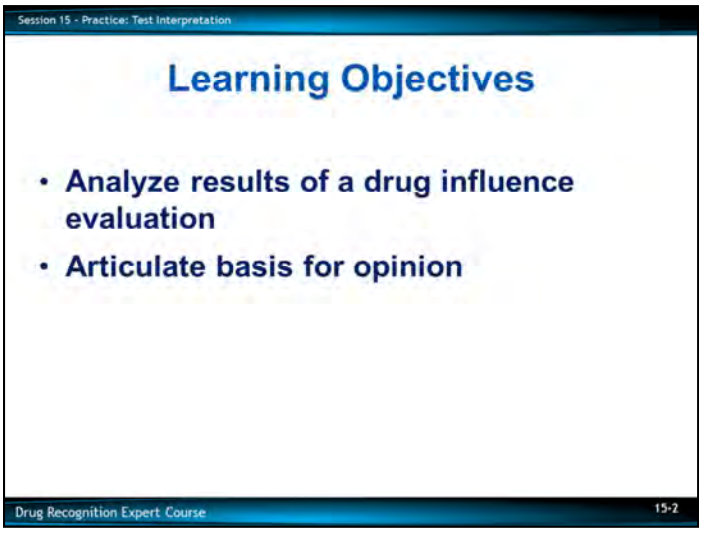

Session 15 - Practice: Test Interpretation
45 Minutes
Session 15
Practice: Test Interpretation
TSI
NHTSA
Drug Recognition Expert Course
15-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

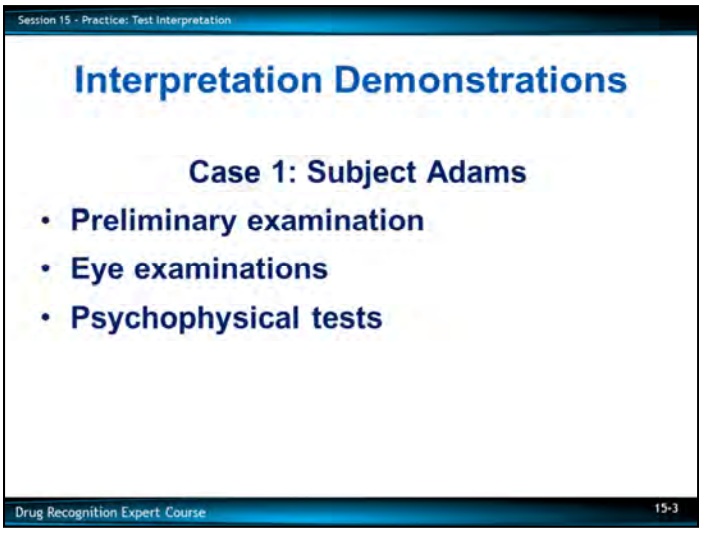
- Analyze the results of a complete drug influence evaluation and identify the category of drugs affecting the individual examined
- Articulate the basis for the drug category identification

CONTENT SEGMENTS

A. Interpretation Demonstration
B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small-Group Practice
Participant-Led Presentations



A. Interpretation Demonstrations

Case One: Subject Adams

Direct participants to review the "Subject Adams" exemplar in Session 15 of their manuals.

Preliminary Examination

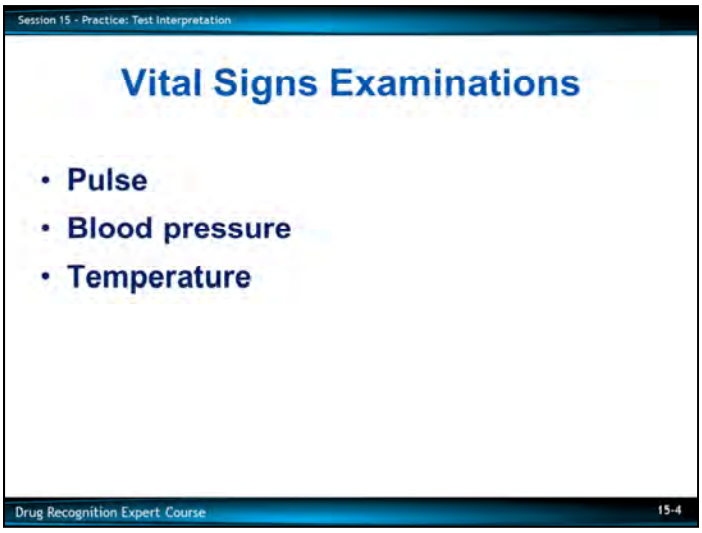
Review the results of the Preliminary Examination of Subject Adams.
Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the bases for participants' responses.

Eye Examinations

Review the results of the Eye Examinations of Subject Adams.
Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

Psychophysical Tests

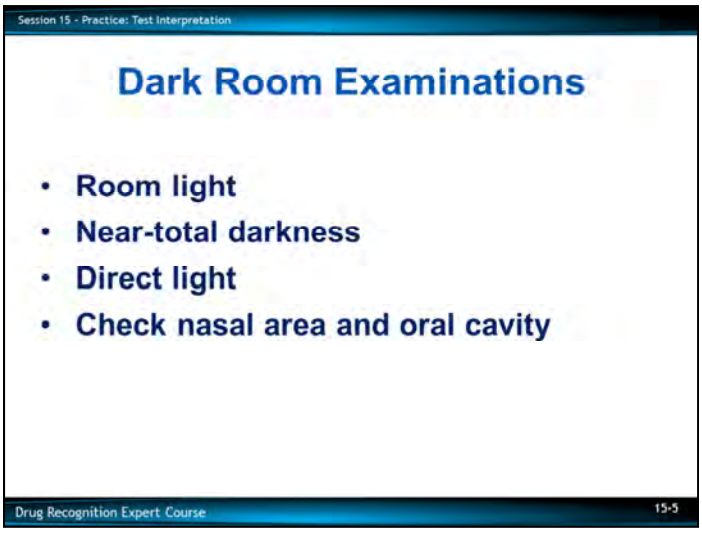
Review the results of the Psychophysical Tests of Subject Adams.
Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.



Vital Signs Examinations

Review the results of the Vital Signs Examinations of Subject Adams.

Ask participants to discuss the category or categories of drugs that would produce these results.



Dark Room Examinations

Review the results of the Dark Room Examinations of Subject Adams.

Ask participants to discuss the category or categories of drugs that would produce these results.

Other evidence and additional observations.

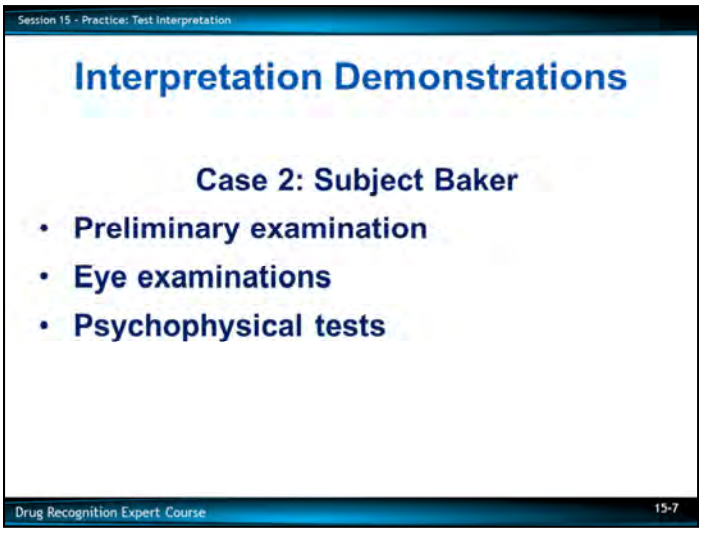
Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Adams.

Narrative report

Briefly review the narrative report on the reverse side of the "Adams" exemplar.
Point out the DRE's opinion is missing from this sample.

Opinion of Evaluator

Point out the evidence indicates that Subject Adams is under the influence of a CNS Depressant.
Solicit participants' questions concerning this demonstration.



Case Two: Subject Baker

Direct participants to review the "Subject Baker" exemplar.

Preliminary Examination

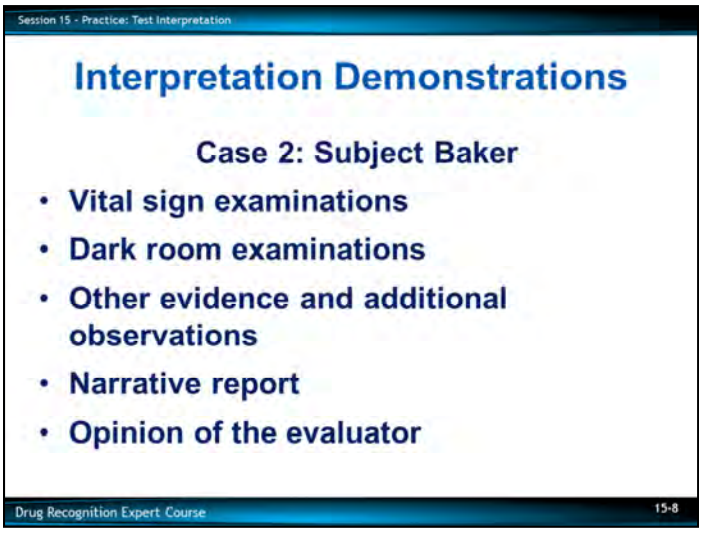
Review the results of the Preliminary Examination of Subject Baker.
Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the bases for participants' responses.

Eye Examination

Review the results of the Eye Examinations of Subject Baker.
Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

Psychophysical Tests

Review the results of the Psychophysical Test of Subject Baker.
Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.



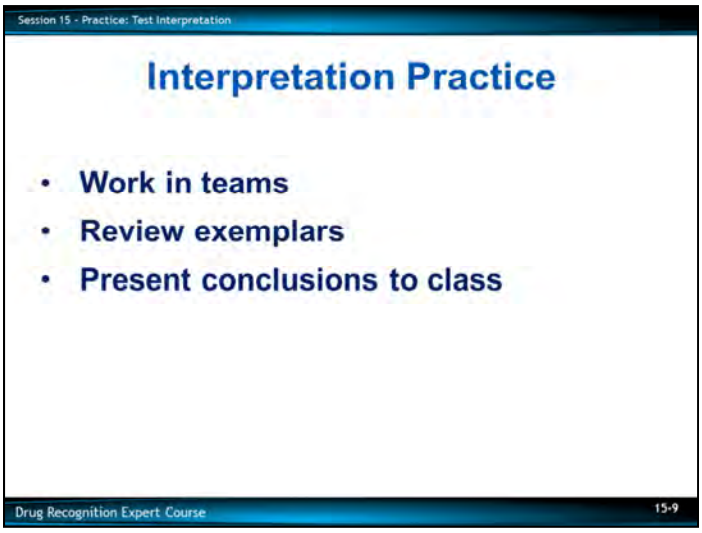
Vital Signs Examinations
Review the results of the Vital Signs Examinations of Subject Baker.
Ask participants to discuss the category or categories of drugs that would produce these results.

Dark Room Examinations
Review the results of the Dark Room Examinations of Subject Baker.
Ask participants to discuss the category or categories of drugs that would produce these results.

Other Evidence and Additional Observations
Review the results of the Examinations for Injection Sites and Muscle Rigidity, and of the final interview of Subject Baker.

Narrative Report
Briefly review the narrative report on the reverse side of the "Baker" exemplar. Point out that the DRE's Opinion is missing from this sample.
Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.

Opinion of the Evaluator
Point out the evidence indicates that Subject Baker is under the influence of a CNS Stimulant.
Solicit participants' questions concerning this demonstration.

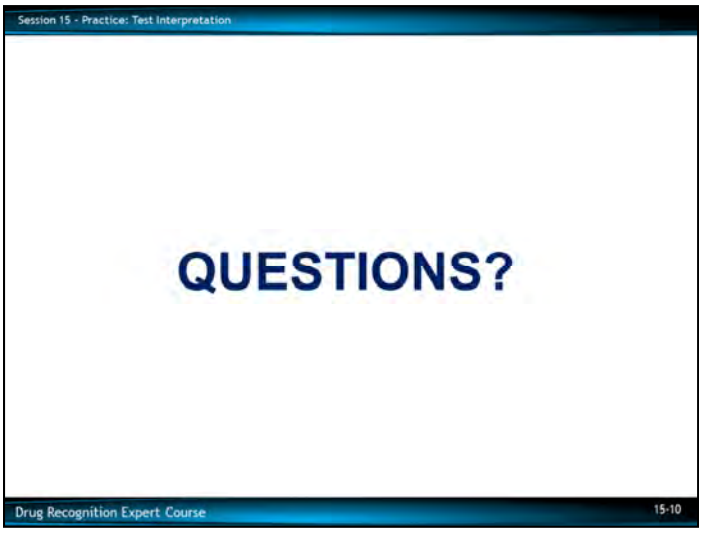


B. <u>Interpretation Practice</u>

Team Practice
Assign participants to work in teams of three or four members.
Tell teams they are to review three exemplars (Subjects Charles, Dodge, and Edwards). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category of drugs, if any.
Teams will present their conclusions to the entire class.

Review and discussion of exemplars by teams.
Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.
Feedback of Results

Poll teams to determine their conclusions concerning the category of drugs present in each subject.
Subject Charles
Subject Dodge
Subject Edwards
Offer appropriate comments concerning the teams performance.



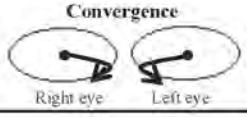
Solicit participants' comments and questions concerning this Practice Session.

DRUG INFLUENCE EVALUATION

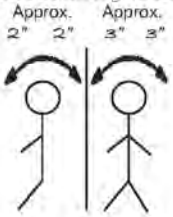
Evaluator: Officer Mark Ashby	DRE #: 5696	Rolling Log #: 14-10-125	Evaluator's Agency: Thornton PD	Case #: Session XV-#1
Recorder/Witness: Deputy Mark George Boulder Co. SO	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Denver PD	
Arrestee's Name (Last, First, Middle): Adams, Frank B.	Date of Birth: 01/12/82	Sex: M	Race	Arresting Officer (Name, ID#): Officer Alan Ma #15588
Date Examined / Time /Location: 10 / 06 / 14	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 44352	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: ☒ Yes ☐ No Given by: Officer Ma	What have you eaten today? When? Chicken Dinner 6pm		What have you been drinking? How much? "Just some water" N/A	Time of last drink? N/A
Time now/ Actual: 9:30PM / 2220	When did you last sleep? How long? Last night 7-8 hours		Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☒ Yes ☐ No Dr. Davis – sleeping problems	
Are you taking any medication or drugs? ☒ Yes ☐ No "Something to help me sleep"	Attitude: Cooperative		Coordination: Unsteady	
Speech: Thick, slow, slurred	Breath odor: Normal		Face: Normal	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time		HGN	Left Eye	Right Eye
1.	56 / 2230	Lack of Smooth Pursuit	Present	Present
2.	56 / 2242	Maximum Deviation	Present	Present
3.	54 / 2255	Angle of Onset	35	35

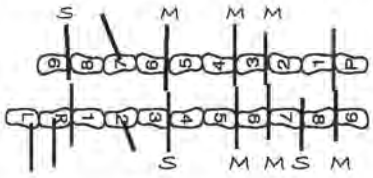
Convergence



Modified Romberg Balance



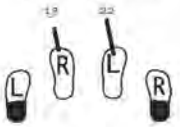
Walk and Turn Test



Walked slowly throughout the test

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓✓	✓
Misses heel-toe	✓✓✓	✓✓✓
Steps off line	✓	✓
Raises arms	✓✓✓	✓✓✓
Actual steps taken	9	9

26/30 **One Leg Stand** 24/30

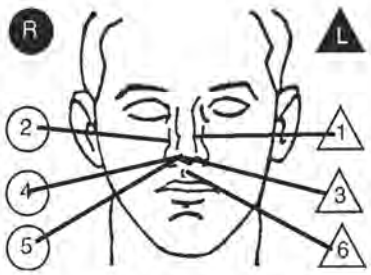


L	R	
1	1	Sways while balancing
		Uses arms to balance
1	1	Hopping
1	1	Puts foot down

Miscounted several times

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
36 estimated as 30 seconds	Walking turn with both feet	N/A	Dress shoes

Finger to Nose
(Draw lines to spots touched)



Slow hand movements. Searched for tip of nose

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	3.5
Right Eye	4.5	6.5	3.5

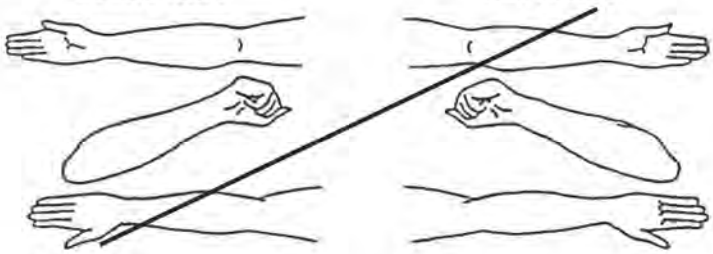
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing detected

Blood Pressure	Temperature	Muscle Tone	Comments
104 / 64	97.4 °F	☐ Rigid ☒ Flaccid ☐ Rigid	

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Something to help me sleep"	"1 or 2 pills"	"About 6pm"	"At dinner"

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
10/06/14 / 2118	2150	2215	2310	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☒ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

Suspect: **Adams, Frank**

1. **Location:** The drug influence evaluation was conducted at the Denver County Jail Intake Center, 10500 E. Smith Road, Denver, Colorado. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Officer Mark Ashby (Thornton Police Department). Deputy Mark George (Boulder County Sheriff's Office) was the scribe.

3. **Breath Test:** A breath test was administered to Adams with an approved evidential breath-testing device with the results of 0.000, and 0.000.

4. **Notification/Interview:** Officer Alan Ma stopped the subject after observing him drifting outside the travel lane and then making an improper turn. While speaking with Adams at roadside, Officer Ma noticed he had slurred speech and appeared to have difficulties with divided attention tasks. Officer Ma was unable to detect the odor of an alcoholic beverage on his breath, but did administer SFSTs to the subject. Officer Ma observed all six clues of the Horizontal Gaze Nystagmus Test during field sobriety testing, as well as Vertical Gaze Nystagmus. Adams demonstrated significant impairment during the Walk and Turn and the One Leg Stand tests. Officer Ma arrested Adams and transported him to the Denver County jail for breath testing. When his breath alcohol test was inconsistent with the impairment observed at roadside, Officer Ma contacted a DRE for further investigation. I was on-duty and responded to his location.

5. **Initial Observation of Suspect:** I first observed the suspect in the booking room at the jail. His head was tilted forward, his eyes were closed, and his breathing was deep and slow. He responded slowly to questions. His speech was slow, slurred, and thick. Several times when he stood, he would stagger and use the wall to steady himself. He was cooperative, his face appeared normal, and there was no discernable odor of an alcoholic beverage on his breath. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were droopy.

6. **Medical Problems/Treatment:** Adams stated he had no physical problems and none were observed. He stated he was seeing Dr. Davis for a sleeping problem, to which he had received a prescription for an unknown sleep aid. He was unable to recall the name of the medication. Adams he was not under the care of a dentist and was not seeing any other doctors.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Adams estimated the passage of 30 seconds when 36 seconds actually elapsed. During this test he had a front to back sway of approximately 2 inches in each direction, as well as a side-to-side sway of approximately 3 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Adams lost his balance twice during the instructions phase. During the walking stage he stopped while walking two times during the first set of nine steps (#4, #8) and once during the second set of nine steps (#9), he missed heel to toe three times in the first set of nine steps (#6, #7, #9) and three times in the second set (#3, #4, #6), he stepped off the line once in each direction (#2 first set, #7 second set), and raised his arms for balance three times each direction. During the turn he did a walking turn with both feet. He was wearing dress shoes during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once, used his arms to balance once, and put his foot down at count 1,019. He counted slowly and only reached 1,026 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, used his arms to balance once, and put his foot down at 1,022. He counted to 1,024 at the conclusion of the

30 seconds. He miscounted several times during this test. He was wearing dress shoes during this test.

Finger to Nose: During the Finger to Nose test, Adams displayed slow hand and arm movements and appeared to have to search for the tip of his nose. He touched the tip of his nose correctly three times (#3, #4, #5) and missed it three times. On one attempt (#6) he missed his nose entirely and touched his upper lip instead.

8. **Clinical Signs:** Adams had all six clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 35 degrees. He also had Vertical Gaze Nystagmus. Adams was not able to converge his eyes. Adams' pulse was measured three times during the course of the evaluation: 1) at 2230 hours it was 56 beats per minute; 2) at 2242 hours it was 56 beats per minute; and 3) at 2255 hours it was 54 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 104/64, which was below the DRE average ranges. His body temperature was measured at 97.4°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5, and in direct light at 3.5 and 3.5. These sizes are within the DRE average range. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was flaccid.

9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were no indicators of injection sites.

10. **Statements:** Officer Ma advised Adams of his constitutional rights and he agreed to waive his rights and answer questions. He stated he taken "1 or 2 pills" around 1800 hours (approximately 3 hours before the arrest) while he was at dinner. He said the pills were "something to help him sleep."

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Adams is under the influence of a ***CNS Depressant*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and in accordance with statutory requirements. The collection was witnessed by me and Officer Ma, and immediately delivered into his custody. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.

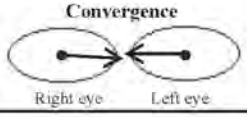
13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

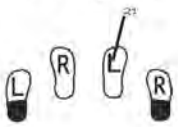
Evaluator: Trooper Joseph Germano	DRE #: 10712	Rolling Log #: 14-08-021	Evaluator's Agency: NY State Police	Case #: Session XV-#2
Recorder/Witness: Trooper David Olney NY State Police	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: New York State Police	
Arrestee's Name (Last, First, Middle): Baker, Samuel	Date of Birth: 10/15/88	Sex: M	Race: B	Arresting Officer (Name, ID#): Trooper Jim Guerriere #5525
Date Examined / Time /Location: 08/04/14 2210 Cooperstown PD	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 44321	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: ☒ Yes ☐ No Given by: Tpr Guerriere	What have you eaten today? When? French fries 2 hours ago		What have you been drinking? How much? Water 1 bottle	Time of last drink: N/A
Time now/ Actual: 9:30PM / 2215	When did you last sleep? How long? This morning 2 hours		Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative		Coordination: Poor, staggering at times	
Speech: Rapid, slurred at times	Breath odor: Rancid		Face: Normal	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time		HGN	Left Eye	Right Eye
1.	90 / 2224	Lack of Smooth Pursuit	None	None
2.	92 / 2235	Maximum Deviation	None	None
3.	92 / 2252	Angle of Onset	None	None

Convergence



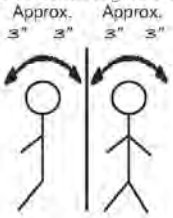
One Leg Stand 40/30 — 38/30



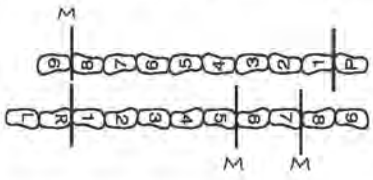
L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
	1	Puts foot down

Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Walk and Turn Test



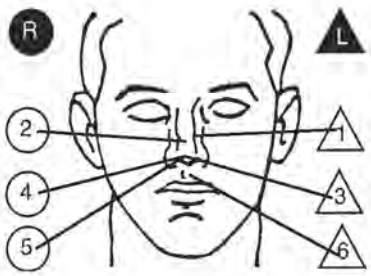
Quick, jerky steps

	1st Nine	2nd Nine
Cannot keep balance		
Starts too soon	✔	
Stops walking		✔
Misses heel-toe	✔✔	✔
Steps off line		
Raises arms	✔✔✔	✔✔
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
21 estimated as 30 seconds	As instructed	N/A	Lace-up shoes

Finger to Nose

(Draw lines to spots touched)



Quick and jerky hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	8.0	6.0
Right Eye	6.5	8.0	6.0

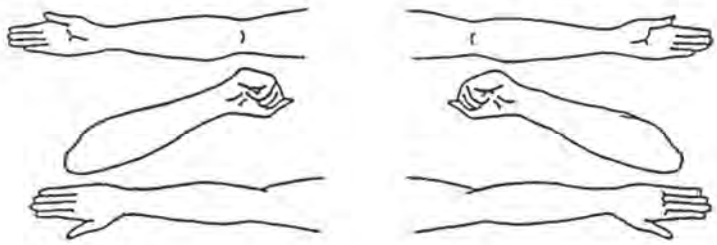
Nasal area: Redness

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing detected

Blood Pressure	Temperature
104 / 64	97.4 °F

Muscle Tone: ☐ Rigid ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing"	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
08/04/14 / 2110	2130	2210	2315	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: | Reviewed/approved by / date: | DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Baker, Samuel**

1. **Location:** The drug influence evaluation was conducted at the Cooperstown Police Department, 22 Main Street, Cooperstown, New York. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Trooper David Olney (New York State Police). Trooper Joseph Germano (New York State Police) was the scribe.

3. **Breath Test:** A breath test was administered to Baker with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** Trooper Jim Guerriere stopped the subject after observing him cross over the center line of a two-lane roadway and almost struck an oncoming vehicle. While speaking with Baker at roadside, Trooper Guerriere noticed Baker's speech was quick and difficult to understand at times and he was very fidgety. Trooper Guerriere did not detect an odor of an alcoholic beverage on his breath, but did administer SFSTs to the subject. Baker appeared to have great difficulty with the SFSTs and could not perform them as directed. Trooper Guerriere arrested Baker and transported him to the Cooperstown PD for breath testing. When his breath alcohol test was inconsistent with the impairment observed at roadside, Trooper Guerriere requested a DRE for further investigation. I was off-duty, but lived nearby and responded to his location.

5. **Initial Observation of Suspect:** I first observed the suspect in the breath testing room at Cooperstown PD. Baker repeatedly shifted his weight from foot to foot and appeared restless. He was frequently moving his hands and arms. His pupils were dilated, and I noticed he was grinding his teeth. His speech was both fast and slurred. His coordination was poor, and he staggered several times while standing. Several times when he stood he would stagger. He was cooperative, his face appeared normal, and his breath was rancid. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were normal.

6. **Medical Problems/Treatment:** Baker stated he had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Baker estimated the passage of 30 seconds when 21 seconds actually elapsed. During this test he had a front to back sway of approximately 3 inches in each direction, as well as a side-to-side sway of approximately 3 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Baker attempted to start the test before instructed during the instructions phase. During the walking stage he missed heel to toe two times in the first set of nine steps (#6, #9) and once in the second set (#9), and raised his arms for balance three times on the first set of nine steps and two times on the second set. He turned as instructed. He walked with quick, jerky steps. He was wearing lace-up shoes during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once, and used his arms to balance once. He counted quickly and reached 1,040 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, used his arms to balance once, and put his foot down at 1,021. He counted to 1,038 at the conclusion of the 30 seconds. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Baker displayed quick and jerky hand and arm movements. He touched the tip of his nose correctly three times (#3, #4, #5) and missed it three times.

8. **Clinical Signs:** Baker had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Baker was able to converge his eyes. Baker' pulse was measured three times during the course of the evaluation: 1) at 2224 hours it was 90 beats per minute; 2) at 2235 hours it was 92 beats per minute; and 3) at 2252 hours it was 92 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 142/98, which was above the DRE average ranges. His body temperature was measured at 99.7°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.5 and 6.5, near total darkness at 8.0 and 8.0, and in direct light at 6.0 and 6.0. These sizes are dilated in room light and direct light. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.

9. **Signs of Ingestion:** His nasal area showed some redness. His oral cavity was clear. There were no indicators of injection sites.

10. **Statements:** Trooper Guerriere advised Baker of his constitutional rights and he agreed to waive his rights and answer questions. He denied consuming any drugs.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Baker is under the influence of a ***CNS Stimulant*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A urine sample was collected from the suspect and witnessed by me. I immediately delivered the specimen to Trooper Guerriere. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.

13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator: Deputy Rob Corn	DRE #: 12373	Rolling Log #: 14-03-058	Evaluator's Agency: Kitsap County SO	Case #: Session XV-#3
Recorder/Witness: Sgt Courtney Stewart WA State Patrol	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Seattle Police Dept	
Arrestee's Name (Last, First, Middle): Charles, Mary C.	Date of Birth: 6/13/72	Sex: F	Race: W	Arresting Officer (Name, ID#): Officer Michael Jongma #6156
Date Examined / Time /Location: 03/17/14 0045 Seattle PD	Breath Test: Results: 0.05	Test Refused ☐ Instrument #: 13345	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: ☒ Yes ☐ No Given by: Ofc Jongma	What have you eaten today? Pizza	When? 6 pm	What have you been drinking? How much? "Couple glasses of wine 2	Time of last drink? About 11 pm
Time now/ Actual: midnight / 0055	When did you last sleep? Last night	How long? 8 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative		Coordination: Fair	
Speech: Slurred	Breath odor: Alcohol (ETOH)		Face: Flushed	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☒ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus: ☐ Yes ☒ No	Vertical Nystagmus: ☐ Yes ☒ No	Able to follow stimulus: ☒ Yes ☐ No	Eyelids: ☒ Normal ☐ Droopy

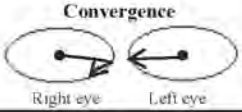
Pulse and Time

1. 66 / 0105
2. 64 / 0114
3. 64 / 0128

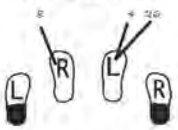
HGN

	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	None	None

Convergence



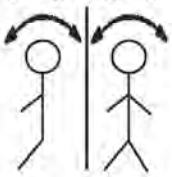
28/30 **One Leg Stand** 30/30



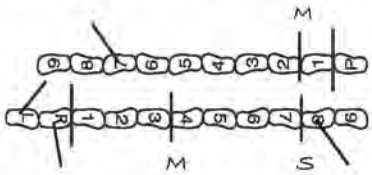
L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
1	2	Puts foot down

Modified Romberg Balance

Approx. 2" 2" Approx. 2" 2"



Walk and Turn Test



Cannot keep balance ✓✓

Starts too soon

	1st Nine	2nd Nine
Stops walking	✓	
Misses heel-toe	✓	✓
Steps off line	✓	✓
Raises arms	✓✓	✓✓✓
Actual steps taken	9	9

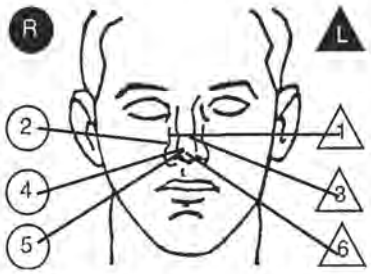
Time Estimation: 32 estimated as 30 seconds

Describe turn: Lost balance, staggered

Cannot do test (explain): N/A

Type of footwear: Slip on shoes

Finger to Nose (Draw lines to spots touched)



Quick and jerky hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	3.5
Right Eye	4.5	6.5	3.5

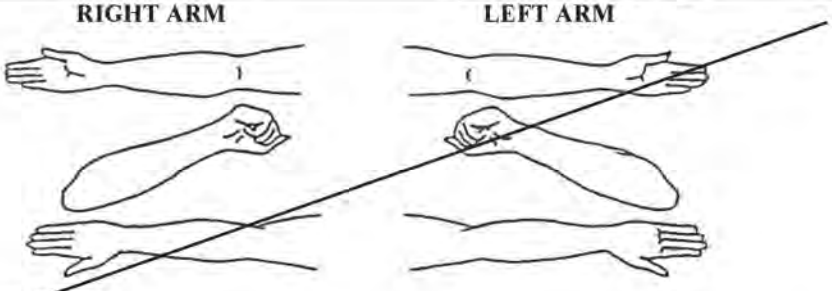
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing detected

Blood Pressure	Temperature
120 / 72	98.6 °F

Muscle Tone: ☐ Near ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I smoked some MJ 2 or 3 days ago"	"A couple of grams maybe"	5 pm	Home

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
03/17/14 / 0005	0020	0045	0140	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: | Reviewed/approved by / date: | DRE #

Opinion of Evaluator: ☐ Not Impaired ☒ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Charles, Mary**

1. **Location:** The drug influence evaluation was conducted at the Seattle Police Department Southwest Precinct, 2300 SW Webster Street, Seattle, Washington. The darkroom examinations were conducted inside a storage room at that location. The surface was level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Deputy Rob Corn (Kitsap County Sheriff's Office). Sergeant Courtney Stewart (Washington State Patrol) was the scribe.

3. **Breath Test:** A breath test was administered to Charles with an approved evidential breath-testing device with the results of .050.

4. **Notification/Interview:** Officer Michael Jongma advised the subject had been reported by another motorist as a possible DUI on I-5. Officer Jongma observed her traveling northbound on I-5 in the vicinity of the call and noticed she was unable to maintain her vehicle in a single travel lane. He stopped her and spoke with her at roadside. During his roadside interview, she had slow, sluggish reactions and her speech was thick and slurred. She admitted to drinking a couple glasses of wine earlier in the evening. She consented to SFSTs and she performed poorly. Officer Jongma arrested Charles and transported her to the Southwest Precinct of the Seattle Police Department for breath testing. When her breath alcohol test was inconsistent with the impairment observed at roadside, Officer Jongma requested a DRE for further investigation. I was on duty and responded to his location.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the Southwest Precinct of Seattle PD. Charles was swaying when she stood, and was unstable on her feet when moving. Her speech was slow, thick, and slurred. She was very emotional at times and began crying several times. She was cooperative, her face appeared flushed, and her breath had the odor of an alcoholic beverage. Her eyes were bloodshot and watery, her pupils were equal, and her eyes tracked together. Her eyelids were normal.

6. **Medical Problems/Treatment:** Charles stated she had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Charles estimated the passage of 30 seconds when 32 seconds actually elapsed. During this test she had a front to back sway of approximately 2 inches in each direction, as well as a side-to-side sway of approximately 2 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Charles lost her balance twice during the instructions phase. During the walking stage she stopped while walking one time during the first set of nine steps #7, missed heel to toe once in each direction (#4 on first, #2 on second), stepped off the line once in the first set of nine steps (#8) and once in the second set of nine steps (#7), and raised her arms for balance two times on the first set of nine steps and three times on the second set. She lost her balance during the turn and staggered. She was wearing slip on shoes during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, she swayed while balancing once, used her arms to balance once, and placed her foot down one time (#1,008). During the second test, she swayed while balancing one time, used her arms to balance once, and put her foot down at 1,009, and 1,026. She was wearing slip on shoes during this test.

Finger to Nose: During the Finger to Nose test, Charles touched the tip of her nose correctly three times (#4, #5, #6) and missed it three times.

8. **Clinical Signs:** Charles had a lack of smooth pursuit and a distinct and sustained nystagmus at maximum deviation in both eyes, but an onset angle of nystagmus was not observed. Vertical Gaze Nystagmus was not present. Charles was not able to converge her eyes. Charles' pulse was measured three times during the course of the evaluation: 1) at 0105 hours it was 66 beats per minute; 2) at 0114 hours it was 64 beats per minute; and 3) at 0128 hours it was 64 beats per minute. These readings are within the DRE average range of 60-90 beats per minute. Her blood pressure was measured at 120/72, which was within the DRE average ranges. Her body temperature was measured at 98.6°, which was normal. During the pupil size examinations, her eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5, and in direct light at 3.5 and 3.5. These sizes are within the DRE normal ranges. Rebound dilation was not present. She had a normal reaction to light. Her muscle tone was flaccid.

9. **Signs of Ingestion:** Her nasal area and oral cavity were clear. There were no indicators of injection sites.

10. **Statements:** Officer Jongma advised Charles of her constitutional rights and she agreed to waive her rights and answer questions. In addition to the two glasses of wine, Charles also stated she had smoked marijuana "2 or 3 days ago" while at home. She stated she had smoked "a couple of grams, maybe."

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Charles is under the influence of ***Alcohol*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Jongma and myself. The collected evidence was provided to Officer Jongma. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.

13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sergeant Joseph Milos	4477	14-02-008	Bellevue PD	Session XV-#4

Recorder/Witness	Crash	Arresting Officer's Agency
Sgt Martin Denton Nebraska SP	☒ None ☐ Fatal ☐ Injury ☐ Property	Grand Island Police Dept

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Dodge, Fred A..	10/13/75	M	W	Sergeant Dale Hilderbrand #6047

Date Examined / Time /Location	Breath Test	Chemical Test
02/22/14 0210 Grand Island PD	Results: 0.05 Test Refused ☐ Instrument #: 37755	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given					
Given by: Hilderbrand	☒ Yes ☐ No	What have you eaten today? "Nothing"	When? N/A	What have you been drinking? How much? Coffee 2-3 cups	Time of last drink? N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
1 am? / 0215	Last night	5-6 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No Long pause before answering	Antagonistic	Poor, quick

Speech:	Breath odor:	Face:
Rapid, slurred	Normal	Flushed, sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

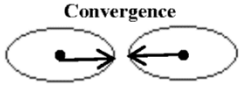
Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

1. 102 / 0218
2. 100 / 0228
3. 102 / 0240

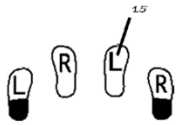
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



Right eye Left eye

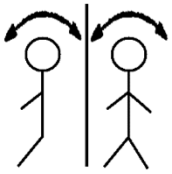
38/30 **One Leg Stand** 36/30



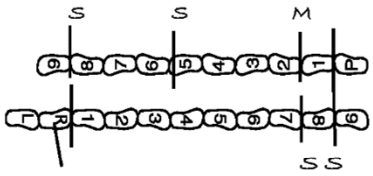
L	R	
1	1	Sways while balancing
		Uses arms to balance
		Hopping
	1	Puts foot down

Modified Romberg Balance

Approx. 0" 0" Approx. 2" 2"



Walk and Turn Test



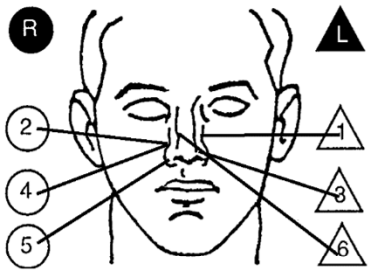
Walked quickly. Stiff legged

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓✓	
Stops walking	✓✓	✓✓
Misses heel-toe		✓
Steps off line		
Raises arms	✓	✓✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
22 estimated as 30 seconds	As instructed. Stiff movements	N/A	Lace-up work boots

Finger to Nose

(Draw lines to spots touched)



Quick hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	8.5	5.0
Right Eye	6.0	8.5	5.0

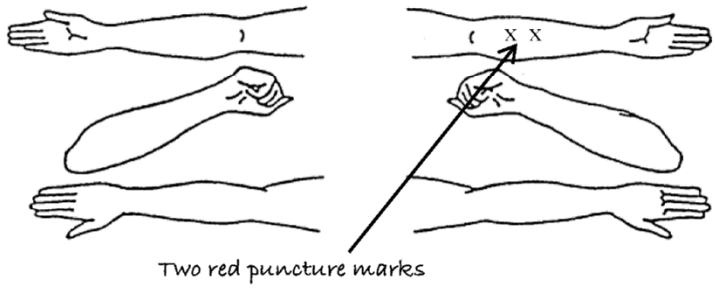
Nasal area: Redness

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Two red puncture marks

Blood Pressure	Temperature
162 / 96	99.8 °F

Muscle Tone: ☐ Near ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I'm not answering that"	Refused	Refused	Refused

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
02/22/14 / 0108	0130	0210	0250	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Dodge, Fred**

1. **Location:** The drug influence evaluation was conducted at the Grand Island Police Department, 111 Public Safety Drive, Grand Island, Nebraska. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Sergeant Joseph Milos (Bellevue PD). Sergeant Martin Denton (Nebraska State Patrol) was the scribe.

3. **Breath Test:** A breath test was administered to Dodge with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** Sergeant Dale Hilderbrand indicated Dodge had attempted to elude police, but was apprehended after a short pursuit. Dodge was very restless, animated, and unable to stand still. He was very talkative and his speech was rapid and slurred. He appeared to have great difficulty with divided attention tasks. When he was sufficiently secure, he was administered SFSTs and had difficulty in performing them He was arrested for DUI and other offenses related to the pursuit and transported to Grand Island Police Department for processing. A breath test confirmed Dodge was not impaired by alcohol, so a DRE was summoned for further investigation. I was on duty and responded to his location.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at Grand Island PD. Dodge's speech was rapid, loud and slurred. He had quick movements and was unable to stand still. He was constantly moving around the room. He appeared to be sweating though the inside temperature was cool, and his pupils appeared dilated. His coordination was poor but with quick movements. He was antagonistic, his face was flushed and sweaty, and his breath was normal. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were normal.

6. **Medical Problems/Treatment:** Dodge stated he had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Dodge estimated the passage of 30 seconds when 22 seconds actually elapsed. During this test he had a side-to-side sway of approximately 2 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Dodge lost his balance once while listening to instructions and attempted to start the test before instructed twice. During the walking stage he stopped while walking two times during the first nine steps (#7, #8) and two times during the second set of nine steps (#5, #8), missed heel to toe once in the second set of nine steps (#2), and raised his arms for balance once on the first set of nine steps and two times on the second set. He turned as instructed, but his movements were stiff. He walked quickly and was stiff-legged. He was wearing lace-up work boots during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once. He counted quickly and reached 1,038 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, and put his foot down at 1,015. He counted to 1,036 at the conclusion of the 30 seconds. he was wearing lace-up work books during this test.

Finger to Nose: During the Finger to Nose test, Dodge displayed quick hand and arm movements. He missed the tip his nose on all six attempts.

8. **Clinical Signs:** Dodge had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Dodge was able to converge his eyes. Dodge' pulse was measured three times during the course of the evaluation: 1) at 0218 hours it was 102 beats per minute; 2) at 0228 hours it was 100 beats per minute; and 3) at 0240 hours it was 102 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 162/96, which was above the DRE average ranges. His body temperature was measured at 99.8°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.0 and 6.0, near total darkness at 8.5 and 8.5, and in direct light at 5.0 and 5.0. These sizes are dilated. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.

9. **Signs of Ingestion:** His nasal area showed some redness. His oral cavity was clear. There were two red puncture marks on his left arm.

10. **Statements:** Sergeant Hilderbrand advised Dodge of his constitutional rights and he refused to waive his rights and answer questions.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Dodge is under the influence of a ***CNS Stimulant*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Sergeant Hilderbrand. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Sergeant Hilderbrand.

13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator: Sergeant Jim Roy	DRE #: 12574	Rolling Log #: 14-08-035	Evaluator's Agency: Colchester PD	Case #: Session XV-#5
Recorder/Witness: Lt John Flannigan Vermont State Police	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: St. Albans PD	
Arrestee's Name (Last, First, Middle): Edwards, Joan L.	Date of Birth: 1/16/92	Sex: F	Race: W	Arresting Officer (Name, ID#): Officer Ron Hoague #13224
Date Examined / Time /Location: 08/15/14 2010 St Albans PD	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 45401	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given Given by: Ofc Hoague	☒ Yes ☐ No	What have you eaten today? Veggie Burger	When? 6 pm	What have you been drinking? How much? "Just water" "A lot"	Time of last drink? N/A
Time now/ Actual 9 pm / 2015	When did you last sleep? "I don't remember"	How long?	Are you sick or injured? ☐ Yes ☒ No		Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No		
Are you taking any medication or drugs? ☒ Yes ☐ No Just some herbal vitamins	Attitude: Disoriented, cooperative		Coordination: Poor		
Speech: Incoherent at times, rambling	Breath odor: Normal		Face: Flushed, sweaty		
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right		Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No		Eyelids ☒ Normal ☐ Droopy

Pulse and Time

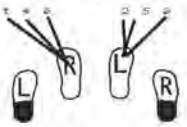
1. 106 / 2025
2. 102 / 2038
3. 104 / 2055

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence

Right eye Left eye

6/30 **One Leg Stand** 6/30

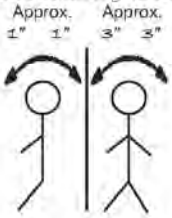


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
3	3	Puts foot down

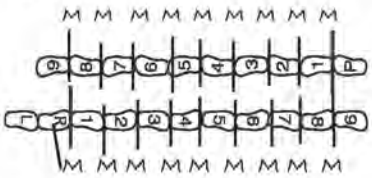
Test stopped two times – almost fell

Modified Romberg Balance

Approx. 1" 1" Approx. 3" 3"



Walk and Turn Test



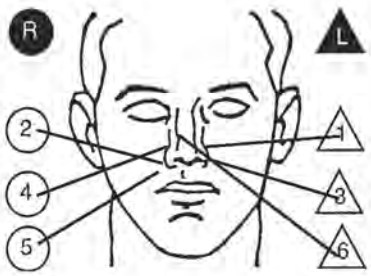
Missed heel to toe on all steps

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓✓	
Stops walking		
Misses heel-toe	All	All
Steps off line		
Raises arms	✓✓✓✓	✓✓
Actual steps taken	9	9

Time Estimation 62 estimated as 30 seconds	Describe turn: Made a walking turn	Cannot do test (explain): N/A	Type of footwear: Flip-flops

Finger to Nose

(Draw lines to spots touched)



Kept her eyes open throughout the test

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.0	9.5	6.0
Right Eye	7.0	9.5	6.0

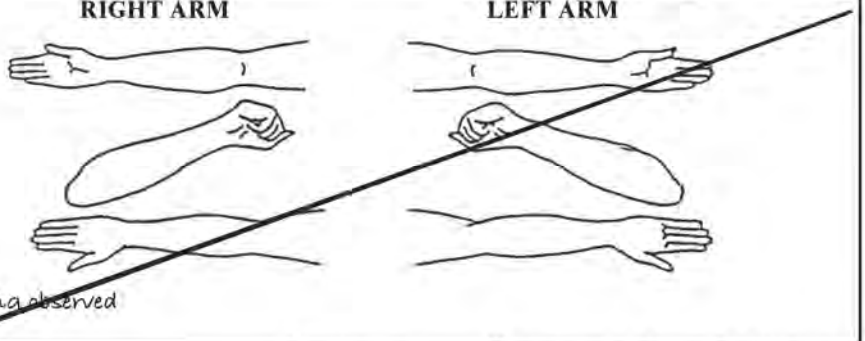
Nasal area: Redness

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure: 166/98	Temperature: 101 °F
Muscle Tone: ☐ Flaccid ☐ Rigid ☒ Rigid	
Comments:	

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
Stated "nothing" then laughed	N/A	N/A	N/A

Date / Time of arrest: 08/15/14 / 1900	Time DRE was notified: 1940	Evaluation start time: 2010	Evaluation completion time: 2115	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☒ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

Suspect: **Edwards, Joan**

1. **Location:** The drug influence evaluation was conducted at the St. Albans Police Department 30 Lower Welden Street, St. Albans, Vermont. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Officer Ron Hoague (St. Albans PD). Lieutenant John Flannigan (Vermont State Police) was the scribe.

3. **Breath Test:** A breath test was administered to Edwards with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** Officer Ron Hoague observed Edwards stop her car near I-89. She exited her vehicle and climbed onto the hoot and began waving her arms and screaming at vehicles as they passed. Officer Hoague made contact with her because of her bizarre behavior. Her answers to his questions rambled frequently, but he was able to learn she had driven to this location after attending a concert in Canada. She appeared very uncoordinated and Officer Hoague suspected she was impaired. He administered SFSTs to the subject and determined she was DUI. He placed her into custody and transported her to the St Albans Police Department for processing. Her breath rest results showed no alcohol, so a DRE was summoned for further investigation. I was on duty and responded to his location.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at St Albans PD. Edwards's speech incoherent at times and rambling. She appeared dazed, disoriented, and had difficulty standing. She was flushed and sweating though she had been in a cool environment for nearly an hour. Her breath was normal, her eyes were normal, pupils were equal, and her eyes tracked together.

6. **Medical Problems/Treatment:** Edwards stated she felt nauseous, but did not require medical attention. She stated she had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Edwards estimated the passage of 30 seconds when 62 seconds actually elapsed. During this test she had a front-to-back sway of approximately one inch in each direction, and a side-to-side sway of approximately 3 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Edwards lost her balance once while listening to instructions and attempted to start the test before instructed twice. During the walking stage she missed heel to toe on every step, and raised her arms for balance four times during the first set of nine steps and two times on the second set. She made a walking turn. She was wearing flip-flops during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, she swayed while balancing once, used her arms for balance, and put her foot down at 1,001, 1,004, and 1,006. It appeared she was in danger of falling so the test was stopped at that point. During the second test, she again swayed while

balancing, used her arms for balance, and put her foot down at 1,002, 1,005, and 1,006. For her safety, this test was also terminated early. She was wearing flip-flops during this test.

Finger to Nose: During the Finger to Nose test, Edwards kept her eyes open during the entire test. Despite having her eyes open, she still she missed the tip her nose on all six attempts.

8. **Clinical Signs:** Edwards had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Edwards was able to converge her eyes. Edwards' pulse was measured three times during the course of the evaluation: 1) at 2025 hours it was 106 beats per minute; 2) at 2038 hours it was 102 beats per minute; and 3) at 2055 hours it was 104 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. Her blood pressure was measured at 166/98, which was above the DRE average ranges. Her body temperature was measured at 101°, which is above normal. During the pupil size examinations, her eyes were estimated in room light at 7.0 and 7.0, near total darkness at 9.5 and 9.5, and in direct light at 6.0 and 6.0. These sizes are dilated. Rebound dilation was not present. She had a normal reaction to light. Her muscle tone was rigid.

9. **Signs of Ingestion:** Her nasal area and her oral cavity were both clear. There were no indicators of injection sites.

10. **Statements:** Officer Hoague advised Edwards of her constitutional rights and she agreed to answer questions. When asked what drug she had taken, she replied "Nothing," and laughed.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Edwards is under the influence of a ***Hallucinogen*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Hoague. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Hoague.

13. **Miscellaneous:** None

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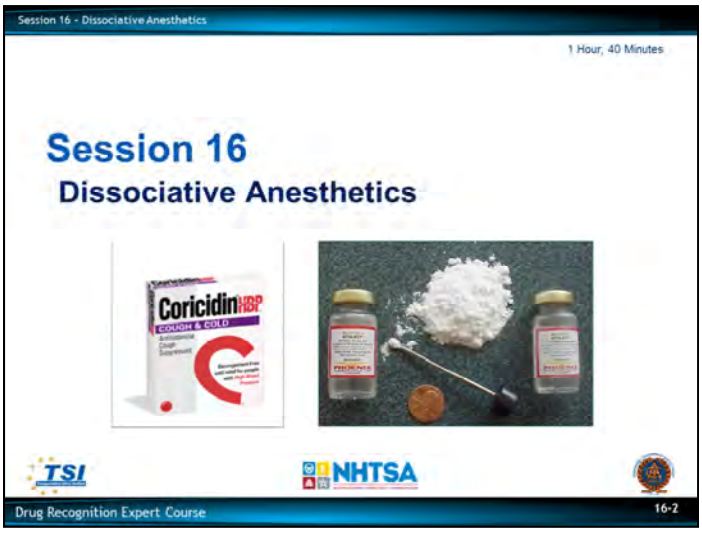
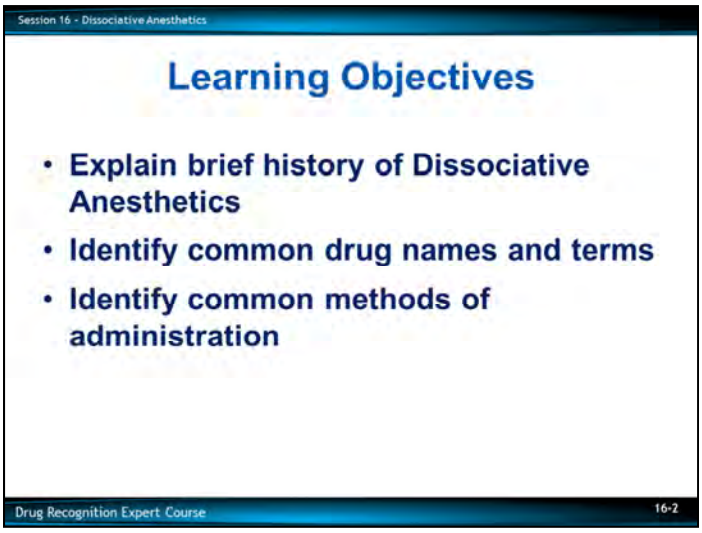
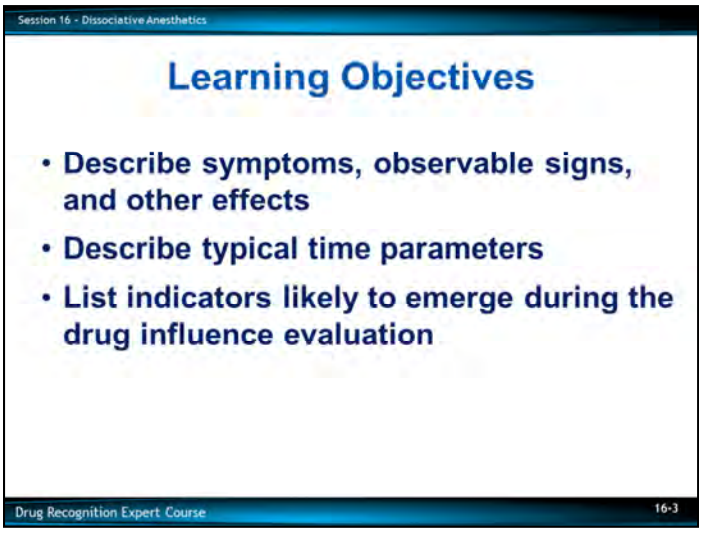

Session 16 - Dissociative Anesthetics
1 Hour, 40 Minutes
Session 16
Dissociative Anesthetics
Coricidin HBP
COUGH & COLD
TSI
NHTSA
Drug Recognition Expert Course
16-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of Dissociative Anesthetics and specifically Phencyclidine (PCP) and its analogs
- Identify common drug names and terms associated with this drug category
- Identify common methods of administration for this drug category



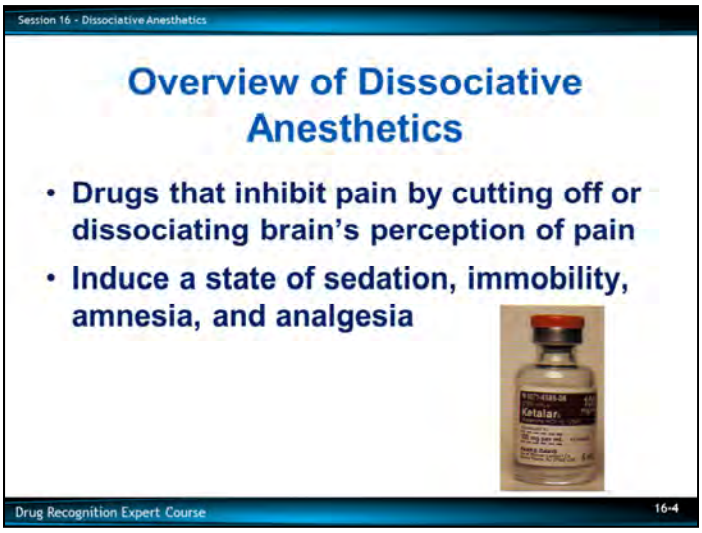
- Describe the symptoms, observable signs, and other effects associated with this drug category
- Describe the typical time parameters associated with this drug category
- List the clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

CONTENT SEGMENTS

A. Overview of Dissociative Anesthetics
B. Possible Effects of Dissociative Anesthetics
C. Onset and Duration of Effects
D. Signs and Symptoms of Dissociative
E. Anesthetics Overdose
F. Expected Results of the Evaluation
G. Classification Exemplars

LEARNING ACTIVITIES

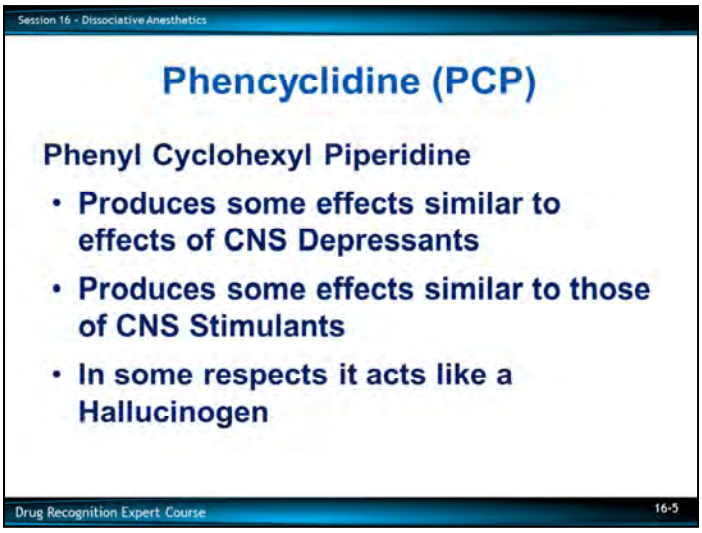
Instructor-Led Presentations
Review of DEC Program Exemplars
Reading Assignments
Video Presentations
Slide Presentations



A. <u>Overview of Dissociative Anesthetics</u>

Dissociative Anesthetics include drugs that inhibit pain by cutting off or disassociating the brain's perception of pain. The drugs within this category normally will induce a state of sedation, immobility, amnesia, and marked analgesia.

Point out the term "Dissociative Anesthesia" is derived from the strong feeling of dissociation from the environment expected by the user. PCP was the first drug used for this purpose.



Phencyclidine (PCP)
PCP is a drug that, along with its analogs, are examples of this distinct drug category.

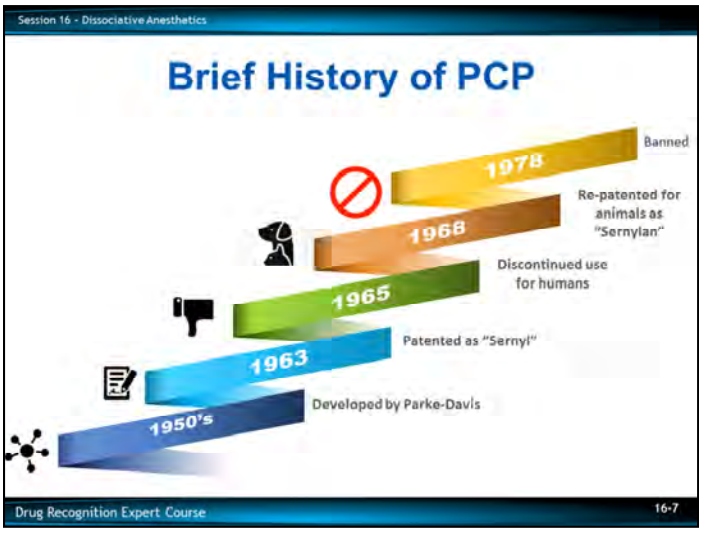
The chemical for PCP is Phenyl Cyclohexyl Piperidine.
Write the chemical name on the dry erase board or easel/easel pad, underlining the first "P", the first "C" and the last "P".

PCP shares some characteristics with each of the three categories of drugs.
- It produces some effects similar to the effects of Central Nervous System (CNS) Depressants
  - Examples of effects PCP shares with CNS Depressants: nystagmus, slurred speech, slowed responses

- It produces some effects similar to those of CNS Stimulants
  - Examples of effects PCP shares with CNS Stimulants: elevated vital signs and restlessness

- In some respects it acts like a Hallucinogen

Point out PCP and its analogs have often been referred to as "psychedelic anesthetics" because of the bizarre and varying effects they can cause. "Phencyclidine" is a contracted or a shortened form of the chemical name. Point out an "Analog" is a chemical very similar to the drug in terms of molecular structure or in psychoactive effects.
Point out in many medical texts and other reference documents, PCP may be classified as a Hallucinogen. However, for purposes of the DEC Program, it is treated as a separate category.



PCP was first developed in the late 1950's. It was developed by Parke-Davis and Company, a leading pharmaceutical firm.

- The developers were searching for a drug that would serve as an efficient intravenous anesthetic

- PCP proved to be a very effective anesthetic

- An anesthetic is an agent that reduces or abolishes pain sensitivity

- It was patented and marketed in 1963 under the trade name Sernyl

- It was used in the treatment of mental and psychological disorders, including schizophrenia

- Many adverse side effects were experienced by persons who had been treated with PCP

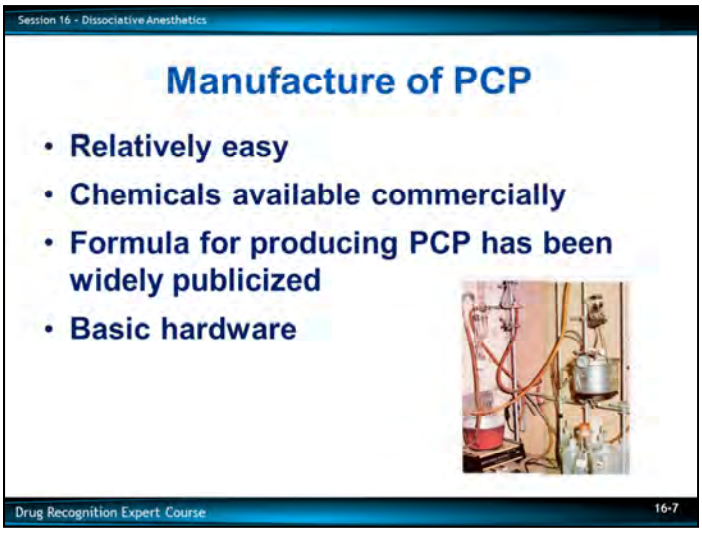
Point out some of these side effects will be discussed later.

- In 1965, use of PCP as an anesthetic for humans was discontinued

- In 1968, Parke-Davis re-patented PCP under the trade name Sernylan, which was restricted to use as a veterinary anesthetic

- Sernyl for animals is Sernylan
  - However, Sernylan was often illicitly diverted to "street" use, so most legitimate manufacturing of PCP was stopped in 1978

Point out this is why PCP sometimes goes by the "street" names "Monkey Dust," "Elephant Tranquilizer," "Horse Tranquilizer," etc.



PCP is relatively easy to manufacture.

- The chemicals required to produce it are readily available commercially
- The formula for producing PCP has been widely publicized
- The hardware needed to combine the chemicals is very basic

Emphasize, however, there is some danger present in the manufacturing process. Illicit PCP laboratories frequently explode and burn.

Emphasize officers should exercise great caution when they discover an illicit PCP lab.

PCP labs commonly contain Potassium Cyanide and Hydrochloric Acid. If combined, those two chemicals produce the same lethal gas used in gas chambers designed for executions.

Review the policy and procedures of the participants' department for dealing with PCP labs and materials.

Street names for PCP:

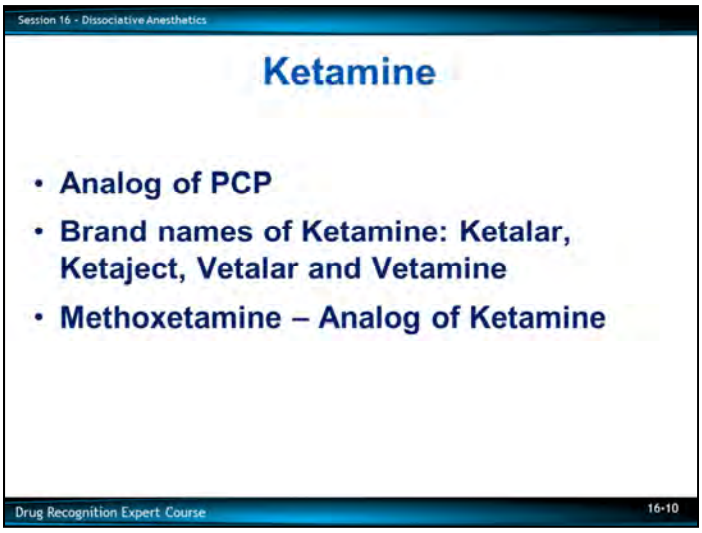
- Ace
- Angel Dust
- Crystal
- DOA
- Dust
- Embalming Fluid
- Jet
- Juice
- Lovely
- Monkey
- Ozone
- Rocket Fuel
- Wack
- Water
- Wet

(Source: Drug Identification Bible, 2014-2015)

More Street names for PCP:

- Peace
- Peace Pill
- Paz
- Green
- Elephant Tranquilizer
- Horse Tranquilizer
- Animal Tranquilizer
- Green Leaves
- Tic Tac
- Kools
- Super Kools
- Super Grass
- Super Weed
- Zombie Weed
- Peace Weed
- Mint Weed
- Killer Weed
- Sherms

(Source: Drug Identification Bible, 2014-2015)



Ketamine

Write Ketamine on the dry erase or easel/easel pad.

Another drug in this category is called Ketamine, which is an analog of PCP. Unlike PCP, Ketamine continues to be manufactured and sold legitimately.

Ketamine is a white, crystalline powder or clear liquid.

Ketamine is used as a rapid surgical anesthetic, both for animals and humans, especially children.

- Some brand names of Ketamine: Ketalar (human use), Ketaject, Vetalar, and Vetamine (veterinary use)

- Ketamine is being studied as a possible treatment of depression

- Methoxetamine is a research chemical not currently approved for human or veterinary use
  - Methoxetamine has a similar abuse profile to Ketamine and can cause pain suppression, tachycardia, hypertension, and altered perception and memory

  - Signs and symptoms include dissociated and catatonic state, nausea, vomiting, and visual hallucinations

Source: "Society of Forensic Toxicologists Newsletter", Volume 36, Issue 4 (2012)

Ketamine street names include:

- K
- Special K
- Vitamin K
- Jet
- Super acid
- Kit Kat
- Lady K
- Kitty
- Cat Valium
- Super K

Dextromethorphan (DXM)

Another drug in this category is Dextromethorphan. It is sometimes referred to as "DXM" and is an ingredient found in numerous over-the-counter (OTC) cough and cold remedies.

Point out DREs frequently encounter persons abusing DXM due to it's availability in so many OTC products.

Point out in some respects, DXM's effects can be similar to a CNS Depressant, CNS Stimulant, and Hallucinogen. It has been classified as a CNS Depressant in some medical texts and scientific/research reports.

Point out DXM is often in other OTC substances containing Acetaminophen, Chlorpheniramine, and Guaifenesin.

DXM is a synthetically-produced substance that is chemically related to Codeine although it is not an Opiate.

When ingested in recommended dosage levels, DXM generally is a safe and highly-effective cough suppressant; however, when ingested in large amounts, it produces negative physiological effects.

DXM abusers normally ingest the drug orally although some snort.

Some abusers ingest 250 to 1,500 milligrams in a single dosage.

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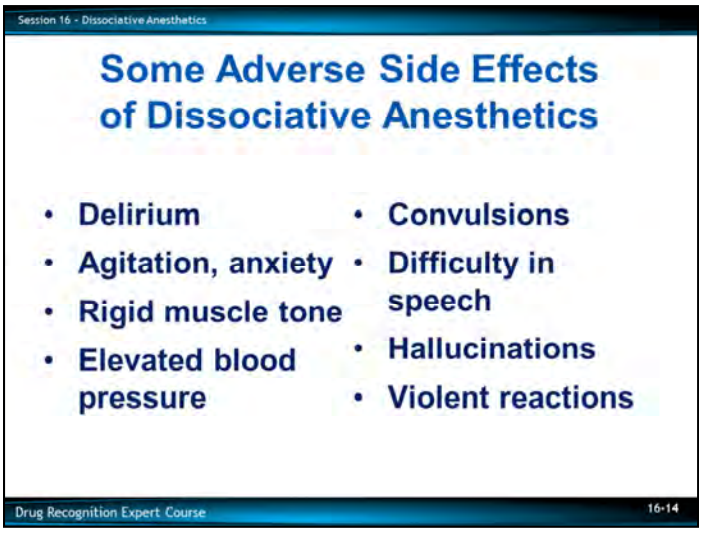
Street names for Dextromethorphan include:

- Triple C
- Robo
- Robo-Tripping
- Skittles
- Robo-Dosing
- Robo-Fire
- Rojo
- Candy
- Velvet
- DM



B. <u>Possible Effects of Dissociative Anesthetics</u>

Possible effects of PCP and other Dissociative Anesthetics may include the following adverse side effects

Source: Drug Identification Bible, 2014-2015

- Delirium: confusion, incoherent speech, excitement, illusions, hallucinations, and disorientation
- Agitation, anxiety
- Rigid muscle tone
- Elevated blood pressure
- Convulsions: involuntary contortion of the muscles, producing contortion of the body and limbs
- Difficulty in speech
- Hallucinations
- Violent reactions

Some lingering and long-term effects were also noted.

- Some patients complained of dizziness for several hours after their attention and consciousness appeared to be cleared of PCP's effects

- Some patients report memory disorders and other psychological disorders resembling schizophrenia for several months and even years afterwards

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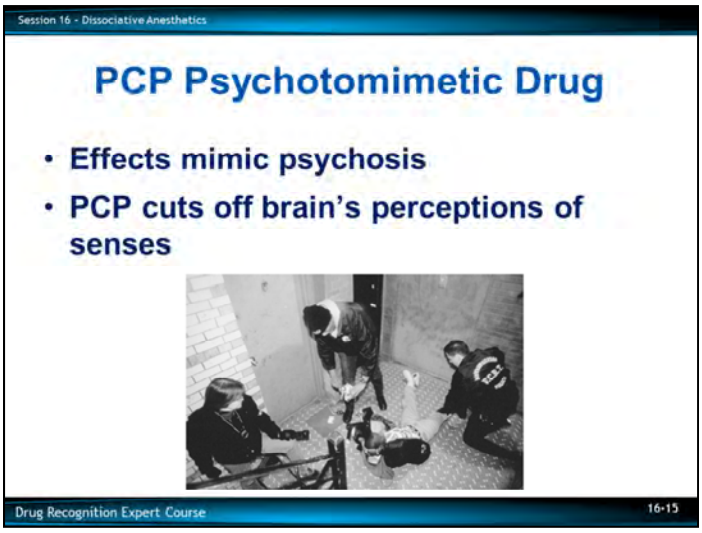
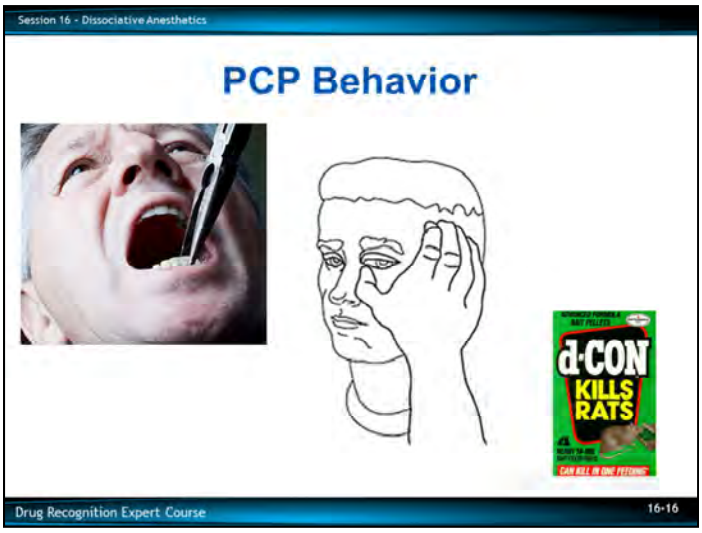


PCP has sometimes been called a psychotomimetic drug; i.e., it produces effects that mimic psychosis, or "craziness." When the psychosis remains long after the drug has dissipated, we say its effects were psychotogenic, i.e., it didn't simply mimic craziness, it caused craziness.

PCP is classified as a Dissociative Anesthetic because it cuts off the brain's perceptions of the senses.

- PCP users often feel their heads are physically separated from their bodies
- They sometimes report feeling they are dead and their heads are floating away



Cases of terribly bizarre, self-destructive behavior have been reported with persons under the influence of PCP.

Feel free to replace or supplement these examples with others known personally to them.

- One young man methodically pulled his own teeth out using a pair of pliers

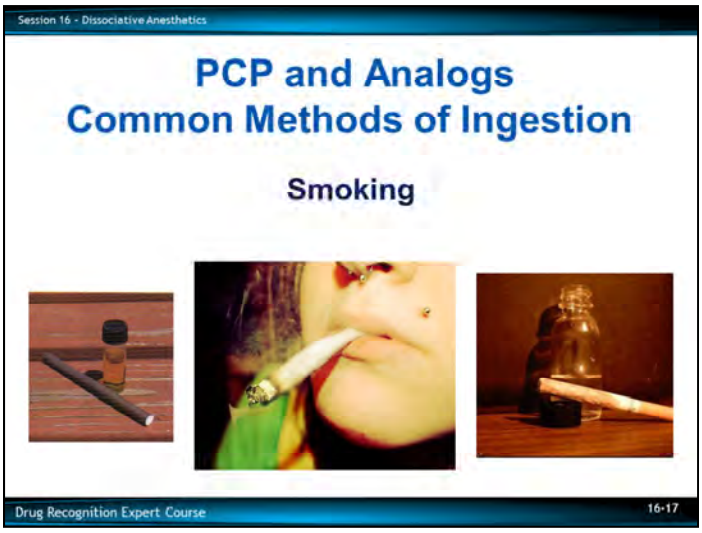
Point out PCP can render the user impervious to pain. It anesthetizes the central nervous system to the extent surgery could be performed on the user while he or she is wide awake.

- Another individual suffered hallucinations of unbelievably grotesque monsters and gouged out his own eyes to avoid seeing the monsters

- Another young man drank rat poison, attempting to kill rats he imagined were inhabiting his body

- A nude woman plunged a butcher knife into her own eye, chest, groin, and abdomen. She then threatened a police officer with the knife and was shot to death

Source: Washington Post, March 7, 1988



Common Methods of Ingestion: PCP

If available, display slides of the various PCP ingestion paraphernalia.

- Many users ingest PCP by smoking

- PCP can be applied in either powder or liquid form to a variety of vegetable or leafy substances, which can then be smoked in a pipe or homemade cigarette

- Popular substances include mint leaves, parsley, oregano, tobacco, or marijuana

Point out PCP smoke is very hot and can irritate the mouth and tongue. Mint leaves and similar material help to cool the smoke.

- Commercially-prepared cigarettes can also be dipped in liquid PCP, allowed to dry, and then smoked

PCP-adulterated cigarettes usually will be wrapped in metal foil to be preserved.

- Some users prefer to dip a string in liquid PCP and then insert the string into a tobacco cigarette

Point out menthol brand cigarettes are popular for this because they are mentholated. PCP-adulterated cigarettes are sometimes called "Super Kools" or "Sherms" because of the cigarette brand used.

White cigarette paper will be stained brown if adulterated with PCP. Brown cigarette paper will show white crystals when adulterated.

Solicit participants' questions and comments about the overview of PCP.

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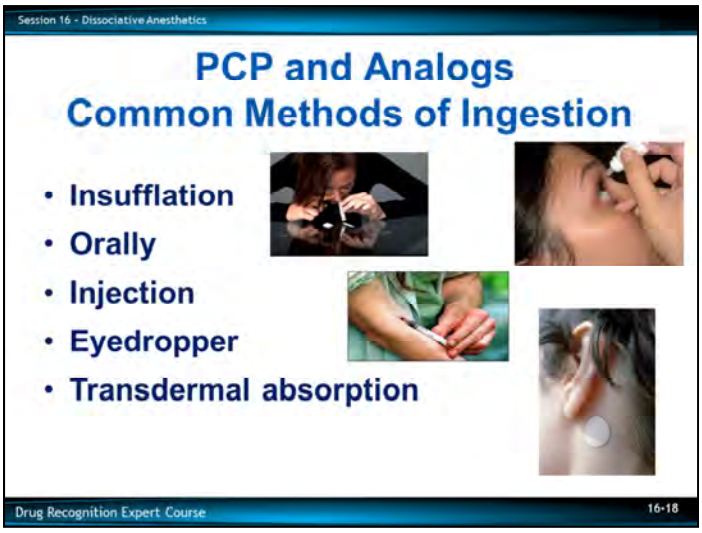


PCP can also be insufflated or "snorted."

It can also be taken orally, in capsule or tablet form.

Some users inject liquid PCP either directly into a vein, under the skin, or into a muscle.

Some users have administered PCP to themselves by dripping liquid PCP onto their eyes using an eyedropper.

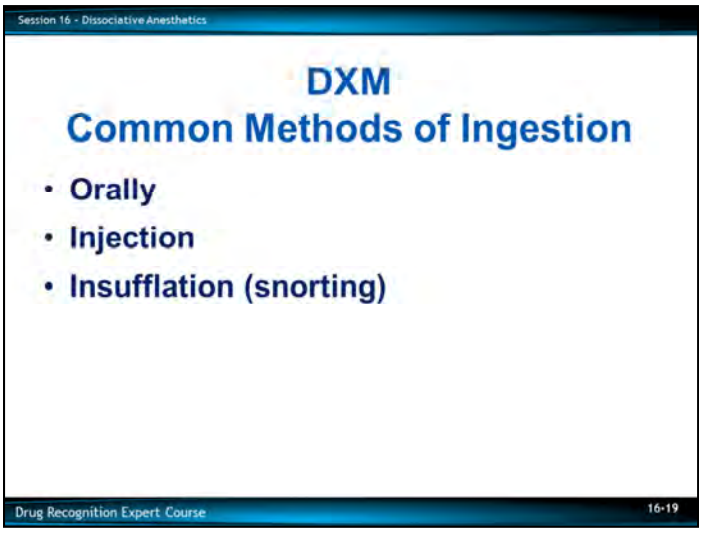
Transdermal absorption of PCP has also been reported (i.e., when applied to the skin, especially as a liquid, PCP can penetrate directly into the body and bloodstream).
Liquid PCP is especially dangerous because it can be absorbed through the skin. Hence, it could be used as a weapon.
Re-emphasize the danger to officers handling suspected drugs without proper protective gloves.

Common Methods of Ingestion: Ketamine
Ketamine can be applied in either powder or liquid form to a variety of vegetable or leafy substances which can then be smoked in a pipe or homemade cigarettes.

Popular substances include mint leaves, parsley, oregano, tobacco, or Marijuana.

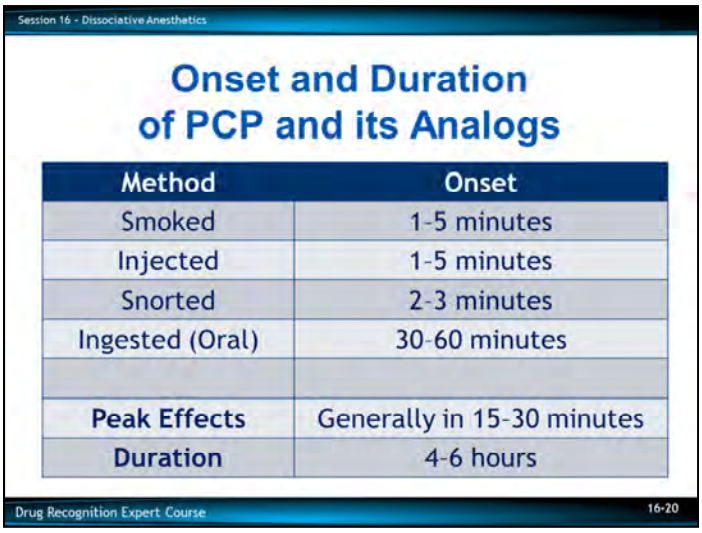
Commercially-prepared cigarettes can also be dipped in liquid Ketamine, allowed to dry, and then smoked.

Some users prefer to dip a string in liquid Ketamine and then insert the string into a tobacco cigarette.



Common Methods of Ingestion: DXM

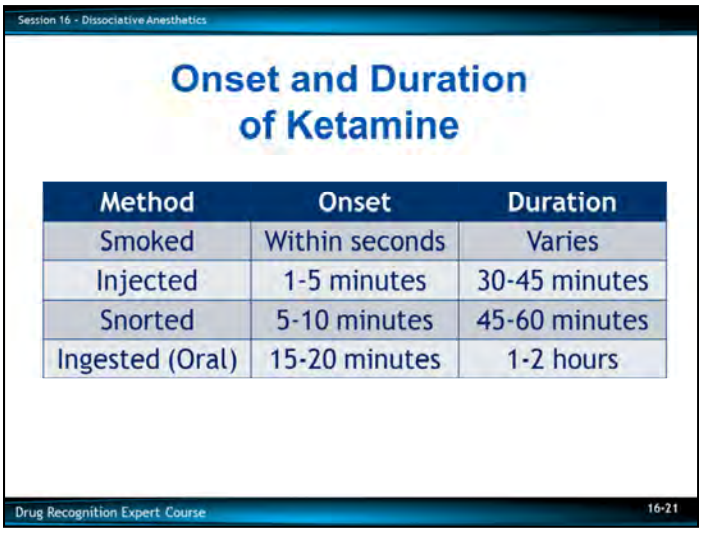
- Orally
- Injection
- Insufflation (snorting)



C. <u>Onset and Duration of Effects</u>

PCP

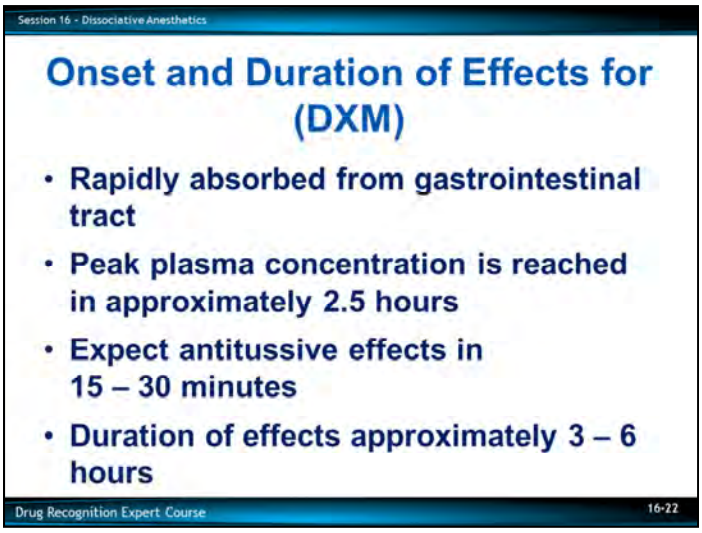
- When PCP is smoked or injected, onset occurs within 1 – 5 minutes
- When inhaled ("snorted"), onset occurs in 2 – 3 minutes
- Onset is considerably slower when PCP is taken orally: 30 – 60 minutes
- The effects reach their peak in about 15 – 30 minutes, assuming the PCP was smoked, injected, or snorted
- The effects generally last 4 – 6 hours, but they can go somewhat longer
- The user usually, but not always, returns to normal within 24 – 48 hours



Ketamine

- Within seconds if smoked; duration varies
- 1 – 5 minutes if injected; lasting 30 – 45 minutes
- 5 – 10 minutes if snorted; lasting 45 – 60 minutes
- 15 – 20 minutes if orally; lasting 1 – 2 hours

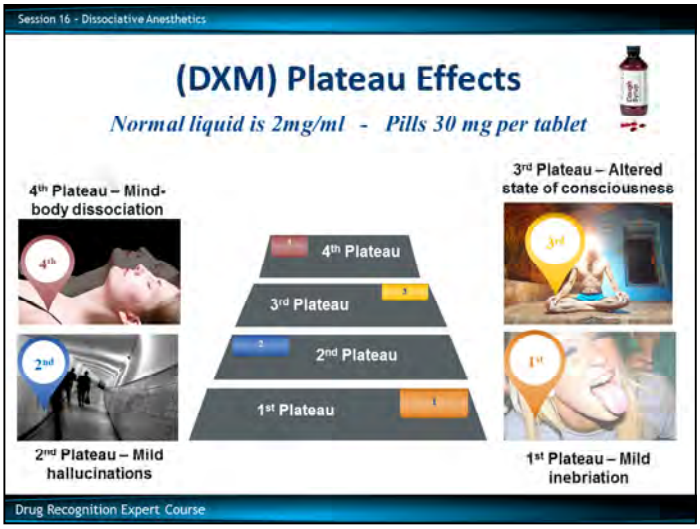
Point out Ketamine abusers will often "re-administer" the drug due to it's relatively short duration of action.



DXM

Point out Dextromethorphan is demethylated to dextrorphan an active metabolite.

- Rapidly absorbed from the gastrointestinal tract and peak plasma concentrations are reached in approximately 2.5 hours
- DXM is widely distributed and is rapidly and extensively metabolized by the liver
- DXM exerts its antitussive effects within 15 – 30 minutes of oral administration
- The duration of action is approximately 3 – 6 hours with conventional dosage forms



DXM Plateau (or effect)
Abusers will also ingest various amounts of DXM depending on their body weight and the effect or "plateau" they are attempting to achieve. Plateau's include:
Point out the normal recommended therapeutic dosages of DXM are 10 to 20 milligrams for every four hours or 30 milligrams every 6 to 8 hours.

- 1st Plateau: Mild inebriation

- 2nd Plateau: An effect similar to alcohol intoxication with mild hallucinations

Point out speech at the 2nd plateau can become slurred and short-term memory may be temporarily impaired.

- 3rd Plateau: An altered state of consciousness where the abuser's senses, particularly vision, can become impaired

- 4th Plateau: Mind and body dissociation or an "out of body" experience

Point out abusers at the 4th plateau can lose some or all contact with his or her senses. The effects at this level are comparable to PCP.

Other effects include: blurred vision, body itching, rash, sweating, fever, hypertension, shallow respiration, diarrhea, toxic psychosis, and an increased heart rate, blood pressure, and body temperature.

Acute dose between 250 – 1500 mg.
Solicit participants' questions and comments concerning onset and duration factors.

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D. <u>Signs and Symptoms of Dissociative Anesthetic Overdose</u>

In addition to the bizarre, violent, and self-destructive behavior discussed previously, persons severely intoxicated by Dissociative Anesthetics may exhibit definite and extreme symptoms signifying a medically dangerous condition.

- A deep coma, lasting up to 12 hours
- Seizures and convulsions
- A danger associated with severe Dissociative Anesthetics intoxication is the person may die due to respiratory depression
- There is also some evidence Dissociative Anesthetics may trigger a heart attack if the user had some pre-existing condition disposing him or her to possible cardiac problems
- Eyes generally open with a blank stare

There is also some evidence prolonged use of Dissociative Anesthetics can lead to psychosis, which can be permanent.

Solicit students questions and comments concerning signs and symptoms of Dissociative Anesthetic overdose.

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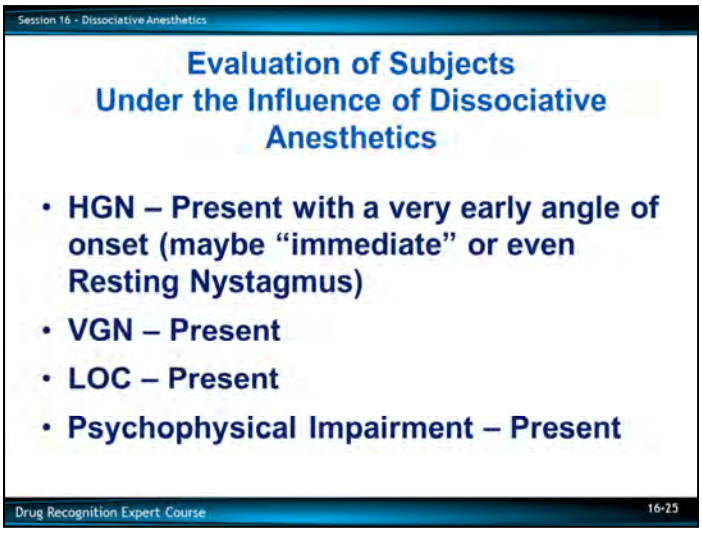

E. <u>Expected Results of the Evaluation</u>

- Horizontal Gaze Nystagmus (HGN) generally will be present with a very early angle of onset

Mention so-called "Resting Nystagmus" may be evident, especially with high doses, and is more often associated with a neurological issue. Remind participants Resting Nystagmus is a distinct jerking of the eyeballs even as the subject stares straight ahead.

- Vertical Gaze Nystagmus (VGN) usually will be present
- Lack of Convergence (LOC) will generally be present
- Performance on Modified Romberg Balance (MRB) will be impaired: time estimation may be slowed
- Performance on Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) will be impaired
- Muscle tone will usually be rigid

With PCP, the subject may exhibit a "high gait ataxia" (unsteady, uncoordinated walk) or "moon walking," i.e., taking abnormally high and slow steps as though he or she were trying to step over obstacles in his or her path.

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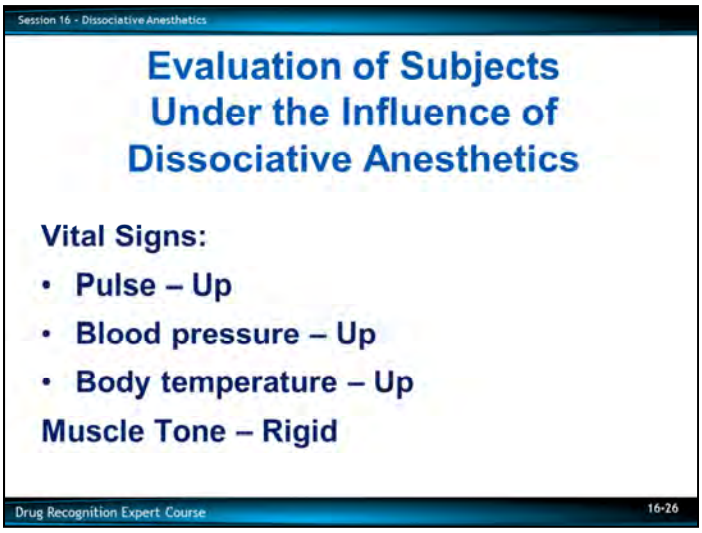
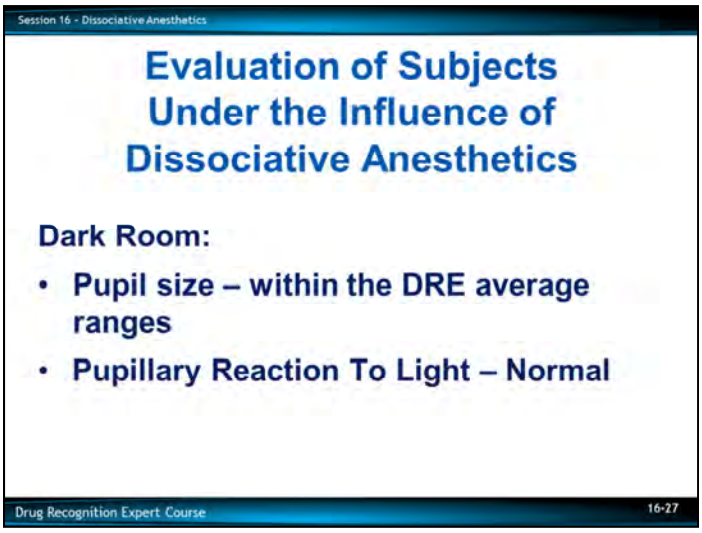


Vital Signs

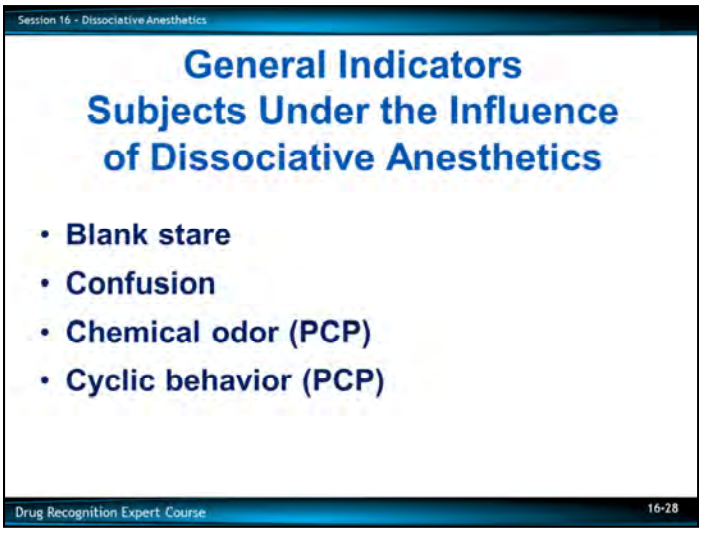
- Pulse rate will generally be up
- Blood pressure will generally be elevated
- Body temperature will generally be up

Muscle tone will be rigid.



Dark Room

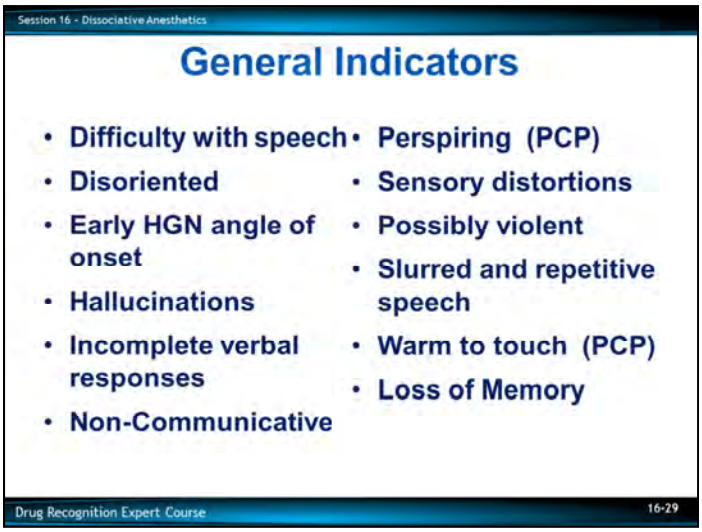
- Pupil size will be within the DRE average ranges
- Reaction to Light will be normal



General Indicators

Point out many, but not all, of the general indicators for PCP and DXM are very similar.

- Blank stare
- Confusion
- Chemical odor (PCP)
- Cyclic behavior (PCP)

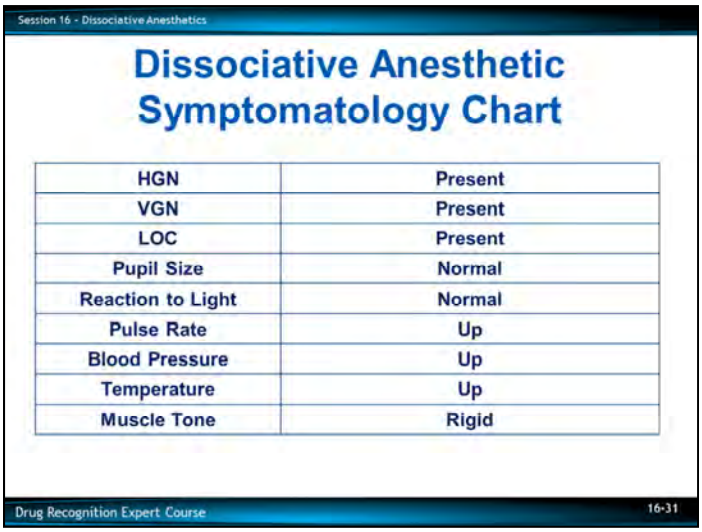


Emphasize PCP abusers may display "cyclic behaviors," which is a drug-induced cycle of behaviors, varying between passive/calm, irritated/agitated, and aggressive/combative, that tend to increase and decrease cyclically.

- Difficulty with speech
- Disoriented
- Early HGN angle of onset
- Hallucinations

Especially auditory hallucinations.

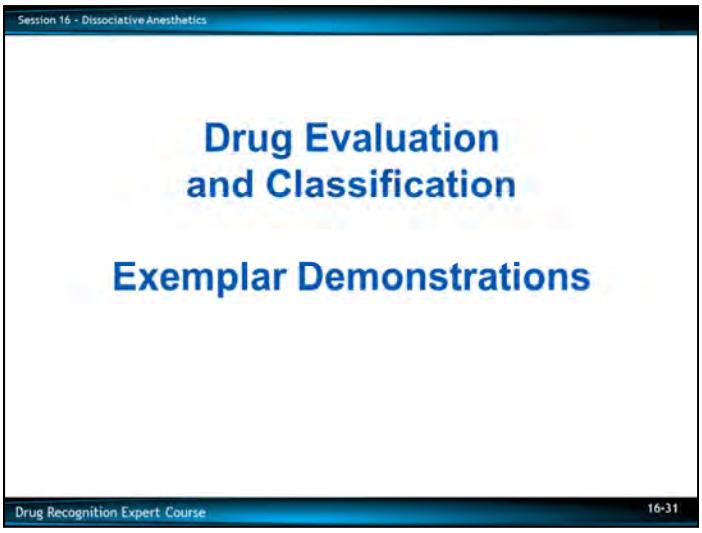
- Incomplete verbal responses
- Non-communicative
- Perspiring (PCP)
- Sensory distortions
- Possibly violent
- Slurred and repetitive speech
- Warm to touch (PCP)
- Loss of Memory



Summary

Expected Results of the Evaluation. **"Normal" for pupil sizes refers to within the DRE average ranges.** ***Point out as with other drug categories, DREs should not specify the exact drug such as PCP, Ketamine, or DXM.***

When a DRE concludes a subject is impaired by a Dissociative Anesthetic, such as PCP or DXM, the report should state "the subject is under the influence of a Dissociative Anesthetic."

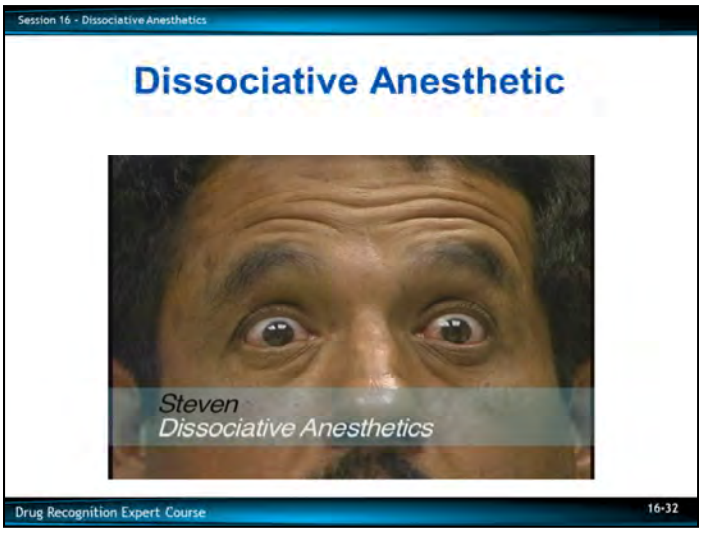


F. <u>Classification Exemplars</u>

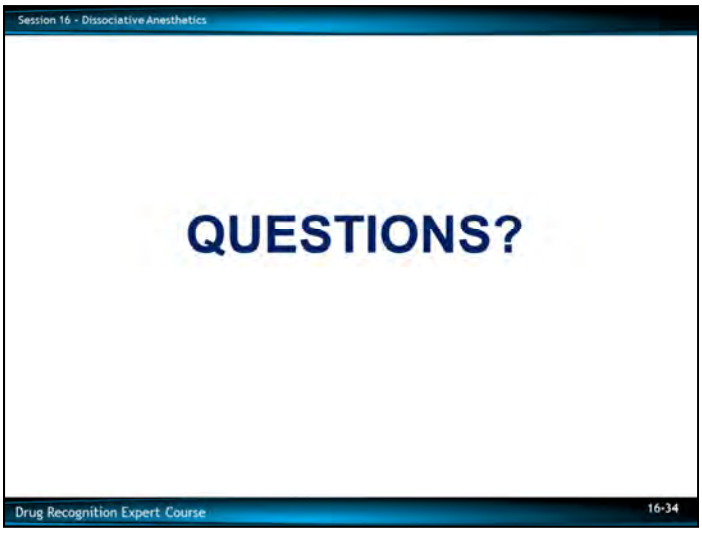
Refer students to the exemplars found at the end of Session 16 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

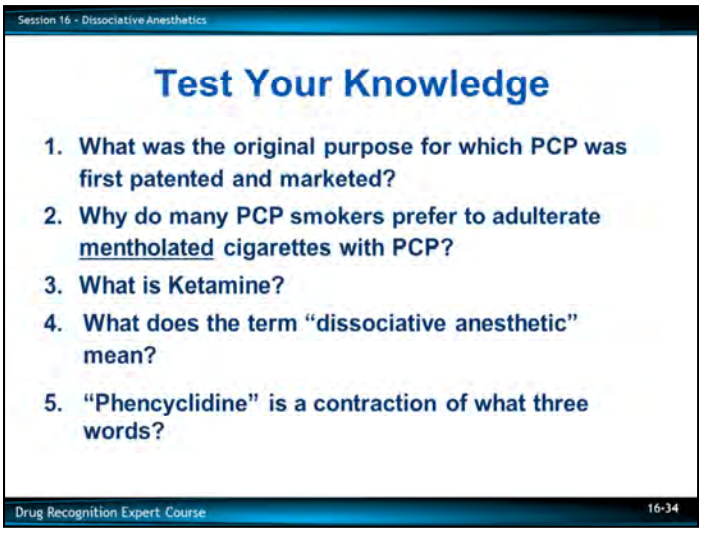
Relate the items on the exemplars to the Dissociative Anesthetics Symptomatology Chart.



Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a Dissociative Anesthetics.
(Approximately 20 minutes).



Solicit questions or comments concerning expected results of the drug evaluation of Dissociative Anesthetic subjects.



Test Your Knowledge

1. What was the original purpose for which PCP was first patented and marketed?
It was developed in the 1950's as an intravenous anesthetic.

2. Why do many PCP smokers prefer to adulterate mentholated cigarettes with PCP?
PCP smoke is very hot, so users will cool it through the use of mentholated cigarettes.

3. What is Ketamine?
An analog of PCP used as a surgical anesthetic, both for animals and humans, especially children.

4. What does the term "dissociative anesthetic" mean?
A dissociative anesthetic inhibits pain by cutting off (or dissociating) the brain's perception of the pain. PCP and its analogs are considered dissociative anesthetics.

5. "Phencyclidine" is a contraction of what three words?
Phenyl Cyclohexyl Piperidine

DRUG INFLUENCE EVALUATION

Evaluator: Deputy Phillip Lillibridge	DRE # 10331	Rolling Log # 17-04-046	Evaluator's Agency: Harris County Sheriff's Office	Case # 17-10177 (Session XVI - #1)
Recorder/Witness: Lt. Susan Cotter, Harris Co. S.O.	Crash: ☐ None ☐ Fatal ☐ Injury ☒ Property		Arresting Officer's Agency: Pasadena Police Department	
Arrestee's Name (Last, First, Middle): Dexing, Delbert R.	Date of Birth: 03/09/89	Sex: F	Race: W	Arresting Officer (Name, ID#): Officer Gary White #10219
Date Examined / Time /Location: 4/07/17 1620 Harris Co. Jail	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 90914	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Officer White	☒ Yes ☐ No	What have you eaten today? Fried Chicken	When? About noon	What have you been drinking? How much? Water "Lots"	Time of last drink? N/A
Time now/ Actual: 2 pm / 1625	When did you last sleep? (Long pause) "Last night"	How long? 2 hours	Are you sick or injured? ☐ Yes ☐ No No response		Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☐ No No response	Do you have any physical defects? ☐ Yes ☒ No "I'm not sick"		Are you under the care of a doctor or dentist? ☐ Yes ☒ No "I don't think so"		
Are you taking any medication or drugs? ☐ Yes ☒ No No response (Laughed)	Attitude: Cooperative		Coordination: Poor, Slow, Rigid		
Speech: Slow, Confused, Incomplete responses	Breath odor: Normal		Face: Flushed, Sweaty, Blank Stare at times		
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right		Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No		Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1.	110	1635
2.	112	1644
3.	110	1658

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	Immed	Immed

Convergence

Right eye Left eye

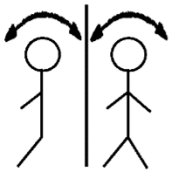
34/30 **One Leg Stand** 38/30

Rigid movements

L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
		Puts foot down

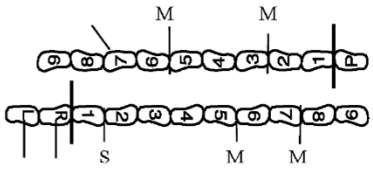
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Body tremors. Rigid

Walk and Turn Test



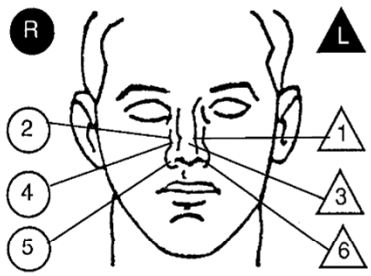
Rigid. Slow, stiff movements

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon	✓✓	
Stops walking	✓	
Misses heel-toe	✓✓	✓✓
Steps off line		✓
Raises arms	✓	✓
Actual steps taken	9	9

Time Estimation 38 estimated as 30 seconds	Describe turn: Rigid steps with both feet	Cannot do test (explain): N/A	Type of footwear: Slip-on boots

Finger to Nose

(Draw lines to spots touched)



Slow, rigid movements

PUPIL SIZE	Room light (2.5	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	7.0	4.0
Right Eye	5.0	7.0	4.0

Nasal area: Clear

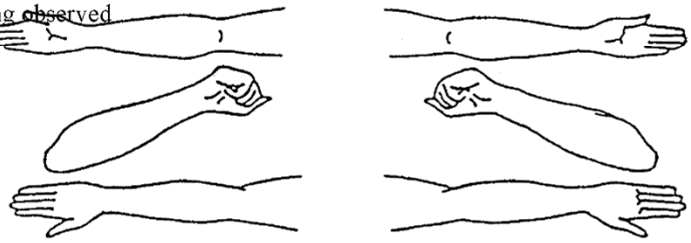
Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**

Nothing observed



Blood Pressure	Temperature
180 / 98	99.8 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Just some Coricidin"	(Long pause) "About a dozen" (Laughed)	This morning	Home and in my car

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
4/07/17 / 1515	1545	1620	1725	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: *Phillip Lillibridge* | Reviewed/approved by / date: | DRE# 10331

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☒ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Dexing, Delbert R.

1. **Location:** The evaluation was conducted in the booking area of the Harris County Jail. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated for conducting a drug evaluation and have smooth concrete flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Lt. Susan Cotter of the Harris County Sheriff's Office. The arresting officer, Officer Gary White of the Pasadena Police Department witnessed the darkroom examinations.

3. **Breath Alcohol Test:** The suspect's breath test was administered by Officer White prior to my arrival. The result was 0.00% BAC.

4. **Notification and Interview of the Arresting Officer:** On 4/07/17 at approximately 1545 hours, I was dispatched to conduct a drug evaluation at the Harris County Jail. Upon my arrival, I met with the arresting officer, Officer Gary White of the Pasadena PD. He told me that the suspect (Delbert Dexing) was involved in a non-injury crash on the Spencer Highway in Pasadena. According to Officer White, the suspect was traveling westbound on the Spencer Highway and failed to stop at the red light and collided with a vehicle at Preston Avenue. During the personal contact with the suspect, Officer White did not detect an odor of an alcoholic beverage on the suspect's breath. However, he observed him to be very rigid, and in a dazed state. In addition, the suspect had poor balance and his speech was slurred and confused. The suspect consented to SFSTs at roadside and Officer White administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests. He reported observing all six clues of HGN, with an immediate angle of onset. He also observed Vertical Gaze Nystagmus (VGN). The suspect had a difficult time completing the W&T and OLS tests due to his poor balance and coordination. According to Officer White, he located several boxes of Coricidin cold tablets in the suspect's vehicle, one of which was empty. Officer White arrested the suspect for DWI, and transported him to the County Jail for processing. After obtaining a 0.00 BAC on the breath test, he requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the County Jail. He was seated in a chair at the table and appeared dazed and disoriented. When he was asked questions by the intake staff, he was slow to respond and at times did not respond at all. He had a flushed face and appeared to be sweating. When he stood, he was very rigid and moved about slowly and several times used the wall and the chair in the room to steady himself. I introduced myself and asked if he would consent to a drug evaluation. The suspect stated, "What? Okay. I guess so." For the most part, the suspect was cooperative, but at times was non-responsive and seemed unconcerned about his arrest and circumstances. I asked the suspect if he was informed of his Miranda rights and he stated, "Rights? Oh ya, I was." I confirmed with Officer White that the suspect had in fact been advised of his Miranda rights. I asked the suspect if he had any injuries from his crash or physical defects, which he indicated that he did not. The suspect denied consuming any drugs, but did admit taking cold medicine. During the preliminary examination, he occasionally would quit talking and had a blank stare. The suspect told me he was not blind in either eye and did not wear corrective lenses. The suspect was wearing dirty black jeans, a dirty blue sweatshirt and black slip-on boots.

6. **Medical Problems and Treatment:** No medical problems were reported by the suspect and none were observed or detected during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. Several times I had repeat my instructions to ensure he understood them, as he at times had a blank stare and appeared to be having concentration issues. After each demonstration, the suspect confirmed that he understood the instructions. Per DRE protocol, the following psychophysical tests were administered to the suspect:

Modified Romberg Balance: While performing this test, the suspect had an approximate three-inch side to side sway and front to back sway. His time estimation was slow as he estimated 30 seconds in 38 seconds. Throughout this test, the suspect stood very rigid and body tremors were evident in his legs and arms.

Walk and Turn: For this test, a line on the floor was used. The suspect stepped out of the instruction position with his right foot two times. During the walking stage, he had slow, rigid movements. He stopped after his first step and appeared confused. He was told to continue walking which he did. He missed touching heel to toe on step six and step eight on the first nine steps. He made an improper turn by talking several steps with both feet in a rigid-like movement. On the second nine steps, the suspect missed heel to toe on step three and step six. He also stepped off the line on step seven. He raised both arms approximately six-inches from his body one time on the first nine steps and one time on the second nine steps. The suspect was given the option of removing his boots for the test, however, he elected to keep them on.

One Leg Stand: During this test, when the suspect raised his right foot, he swayed while balancing and used his arms to balance once. When the suspect stood on his right foot and raised his left foot, he again was very rigid. He also raised both arms approximately six-inches from his body to maintain his balance. The suspect reached the count of 1,034 in 30 seconds while standing on his left foot, and reached the count of 1,038 in 30 seconds when standing on his right foot.

Finger to Nose: While performing this test, the suspect had very slow, rigid arm and hand movements. He did not touch the tip of his nose with the tip of his index finger on any of the six attempts.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. His eyes were not able to converge as instructed. The suspect's pupils were examined in three different lighting conditions. In Room Light, his pupils were estimated at 5.0 mm in both eyes. In Near Total Darkness, his pupils were estimated at 7.0 mm in both eyes, and in Direct Light, his pupils were estimated at 4.0 mm in both eyes. All three estimates were within the DRE average ranges for the lighting conditions. His pupillary reaction was Normal, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated throughout the evaluation, at 110, 112, and 110 beats per minute (bpm) All three were above the DRE average range of 60-90 bpm for pulse rate. His blood pressure of 160/98 was also elevated and above the DRE average range. His body temperature was above the DRE average range, measured at 98.8 degrees Fahrenheit using an oral thermometer. His muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear. There were no visible signs of injection on his arms or hands.

10. **Suspect's Statements:** The suspect had been advised of his Miranda rights by Officer White and he agreed to answer questions. When asked about his drug use and specifically the Coricidin located in his vehicle, the suspect stated, "I take it for my cold." When asked how much of the Coricidin he had used and the last time he had used it, he stated, "About a dozen" then laughed, and said he had last used it that morning.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Dexing is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample which was collected by Officer White and submitted as evidence pending delivery to the crime laboratory for analysis.

13. **Miscellaneous:** Refer to Officer's White's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case # 17-40175
Officer Kameron Sardar	16369	17-05-146	Los Angeles Police Department	(Session XVI - #2)

Recorder/Witness	Crash	Arresting Officer's Agency
Reserve Officer Clark John, LAPD	☐ None ☐ Fatal ☒ Injury ☐ Property	Los Angeles Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Sherms, Shelly	08/24/88	F	W	Officer Timothy Arroyo #39477

Date Examined / Time /Location	Breath Test	Chemical Test
05/02/17 2310 Metro Detention Center	Results: 0.00 Test Refused ☐ Instrument #: 77154	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Officer Arroyo	☒ Yes ☐ No	Chicken Sandwich	About noon	Water 4 or 5 bottles	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
10 pm / 2315	"Last night"	"About 6 hours"	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☐ No No response	☐ Yes ☒ No "I'm not sick"	☐ Yes ☒ No "I don't think so"

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "I used to use meth"	Indifferent	Poor, Slow, Rigid

Speech:	Breath odor:	Face:
Slow, Thick, Confused,	Chemical-like	Flushed, Sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
	☐ Yes ☒ No	☒ Yes ☐ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

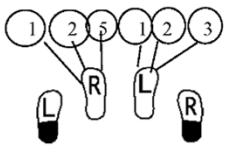
1. 102 / 2322
2. 100 / 2330
3. 102 / 2342

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	Immed	Immed

Convergence

Right eye Left eye

One Leg Stand 5/30 3/30

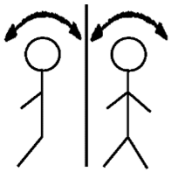


Falling – test stopped

L	R	
All	All	Sways while balancing
All	All	Uses arms to balance
		Hopping
3	3	Puts foot down

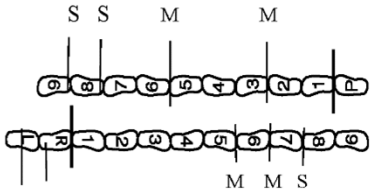
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Rigid movements

Walk and Turn Test

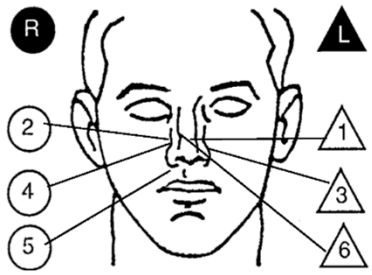


Rigid. Slow, stiff movements

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon	✓✓	
Stops walking	✓	
Misses heel-toe	✓✓	✓✓
Steps off line		✓
Raises arms	✓✓✓	✓✓✓✓
Actual steps taken	9	11

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
42 estimated as 30 seconds	Slow, Rigid steps	N/A	Slip-on Vans

Finger to Nose



Slow, deliberate movements

PUPIL SIZE	Room light	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.0	6.0	3.0
Right Eye	4.0	6.0	3.0

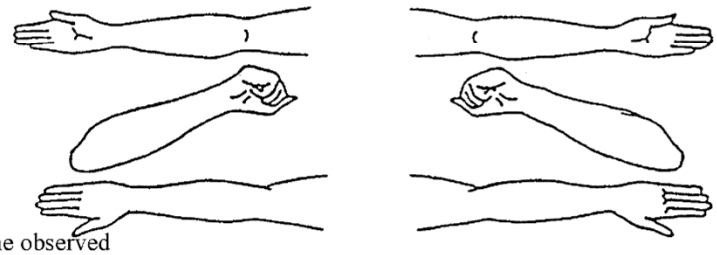
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



None observed

Blood Pressure	Temperature
188 / 98	100.0 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
No response	No response	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
5/02/17 / 2214	2240	2310	2358	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: Kamaron Sardar	Reviewed/approved by / date:	DRE# 16369

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☒ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Sherms, Shelly

1. **Location:** The evaluation was conducted in the booking area of the LAPD Metro Detention Center. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated and conducive for conducting a DRE drug evaluation. Both areas have smooth concrete flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by LAPD Reserve Officer Clark John. The arresting officer, Timothy Arroyo of the LAPD witnessed the psychophysical tests.

3. **Breath Alcohol Test:** The suspect's breath test was administered by Officer Arroyo prior to my arrival. The result was 0.00% BAC.

4. **Notification and Interview of the Arresting Officer:** On 5/02/17 at approximately 2240 hours, I was dispatched to conduct a drug evaluation at the Metro Detention Center. Upon my arrival, I met with the arresting officer, Officer Timothy Arroyo of the LAPD. Officer Arroyo advised that during an interagency DUI enforcement operation he had stopped the suspect's vehicle after observing it nearly hit several parked cars along West Olympic Blvd. According to Officer Arroyo, he activated his emergency lights to stop the suspect's vehicle. However, she continued without stopping for almost three blocks, nearly hitting other parked vehicles. When stopping, her vehicle stuck the curb with the right front tire. During the personal contact with the suspect, Officer Arroyo did not detect an odor of an alcoholic beverage on the suspect's breath. However, he observed the suspect to be in a dazed-like state and confused acting. The suspect had difficulty producing her operator's license and other paperwork. Several times, she forgot what she was looking for and appeared confused. Officer Arroyo had the suspect exit her vehicle and had to remind her several times to turn off the vehicle's ignition. Once outside the vehicle, the suspect had poor balance and her speech was slurred and thick. Officer Arroyo also detected a chemical-like odor on the suspect's breath. When asked about the odor, the suspect claimed it was just her bad breath. Officer Arroyo administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests to the suspect. He reported observing all six clues of HGN, with an immediate angle of onset. He also observed Vertical Gaze Nystagmus (VGN). The suspect had difficulty completing the W&T and OLS tests due to her poor balance and coordination, and both tests had to be stopped for safety reasons. Officer Arroyo arrested the suspect for DWI, administered Miranda rights, and transported her to the Detention Center for processing. After obtaining a 0.00 BAC on the breath test, he requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the Metro Detention Center. She was seated in a chair at the table and appeared confused and disoriented. I noted that she was slow to respond to questions and was staring at the wall. Her face appeared flushed and she appeared to be sweating. When the suspect stood, her movements were slow and rigid-like. Several times she bumped into the interview desk and twice used the wall to steady herself. I introduced myself and asked if she would consent to a drug evaluation. The suspect appeared confused and after a 20 to 30 second pause, asked, "Is that a drug test?" After explaining the procedure to her, she agreed to do the evaluation. I asked if she remembered being informed of her Miranda rights, she looked at me with a blank stare and did not respond. Therefore, I re-advised the suspect of her Miranda rights, and she gave a verbal response that she understood them and agreed to answer my questions. did. I asked the suspect if she had any injuries or physical defects, to which she replied she did not. The suspect denied consuming any drugs or medications, only saying she used to use meth (Methamphetamine) and sometimes smokes pot (Marijuana). During the preliminary examination, the suspect would occasionally stop talking, sometimes in the middle of a sentence. The suspect did advise that she was not blind in either eye and did not wear corrective lenses. The suspect was wearing jeans, a blue LA Dodgers tee-shirt and slip-on Vans shoes.

6. **Medical Problems and Treatment:** No medical problems were reported by the suspect and none were observed or detected during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. I had repeat my instructions to her several times. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: While performing this test, the suspect had an approximate three-inch side to side sway and front to back sway. The suspect demonstrated a slow time estimation, estimating 30 seconds in 42 seconds. While performing the test, she stood very rigid.

Walk and Turn: For this test, a line on the floor was used. The suspect lost her balance to the right two times while in instruction position. During the walking phase, she had slow, rigid, stiff movements. During the first nine steps, the suspect missed touching heel to toe on steps five and six, six and seven, and seven and eight. She also stopped walking at step eight and appeared confused, then continued with the test. She made an improper turn by talking slow rigid-like steps with both feet. On the second nine steps, the suspect missed touching heel to toe on steps two and three and five and six. She also stopped walking at steps seven and eight. She then continued the test taking a total of eleven steps instead of nine as directed. She also raised both arms from her body three times on the first nine steps and four times on the second nine steps.

One Leg Stand: During this test, when attempting to raise her right foot, she swayed while balancing, used her arms to balance, and put her foot down three times immediately after attempting to raise her foot. The test was then stopped for safety reasons. When the suspect attempted to stand on her right foot and raise her left foot, she again was very rigid, swayed while balancing, used her arms to balance, and put her foot down after three attempts. This portion of the test was also stopped for safety reasons.

Finger to Nose: While performing this test, the suspect had very slow and deliberate arm movements. She did not touch the tip of her nose with the tip of her index finger on any of the six attempts.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. Her eyes were not able to converge as instructed and her eyes looked straight ahead. The suspect's pupils were examined in three different lighting conditions. In Room Light, her pupils were estimated at 4.0 mm in both eyes. In Near Total Darkness, her pupils were estimated at 6.0 mm in both eyes, and in Direct Light, her pupils were estimated at 3.0 mm in both eyes. All three estimates were within the DRE average ranges for the three lighting levels. Her pupillary reaction to light was normal, and she did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were checked three different times during the evaluation. They were elevated and checked at 102, 100, and 112 beats per minute (bpm). All three were above the DRE average range. Her blood pressure of 158/96 was also above the DRE average range. Her body temperature was above the DRE average range, measured at 100 degrees Fahrenheit. Her muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear and there were no visible signs of injection marks.

10. **Suspect's Statements:** The suspect had been advised of his Miranda rights and she agreed to answer my questions. When asked about drug use, she gave no response, other than saying she "used to use meth."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a blood sample after the evaluation. Officer Arroyo collected the sample and submitted it as evidence pending delivery to the crime laboratory for analysis.

13. **Miscellaneous:** Refer to Officer's Arroyo's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case # 17-75301
Det. Joseph MacLean	11522	17-09-66	Franklin Police Department	(Session XVI - #3)

Recorder/Witness	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency
Sgt. Don Decker, Nahant PD		Middleboro Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Krystal, K. J.	09/06/89	M	B	Sgt. Deb Batista #10423

Date Examined / Time /Location	Breath Test:	Test Refused ☐	Chemical Test: Urine ☒ Blood ☐
09/28/17 2145 Middleboro PD	Results: 0.00	Instrument #: 14454	Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given	☒ Yes ☐ No	What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Sgt. Batista		Pizza	About 7 pm	Juice & Water 4 or 5 bottles	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
8 pm / 2150	"Yesterday"	"About 5 hours"	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Cooperative, Passive	Poor, Staggering

Speech:	Breath odor:	Face:
Slow, Low, Slurred	Normal	Flushed, Sweaty

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

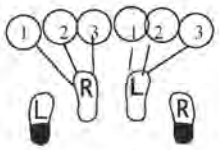
Pulse and Time

1. 102 / 2150
2. 104 / 2202
3. 100 / 2215

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	Immed	Immed

Convergence

3/30 **One Leg Stand** 3/30

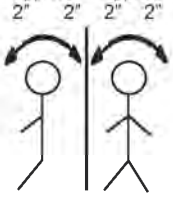


Tests stopped

L	R	
All	All	Sways while balancing
1	1	Uses arms to balance
		Hopping
3	3	Puts foot down

Modified Romberg Balance

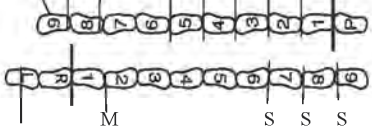
Approx. 2" 2" Approx. 2" 2"



Rigid

Walk and Turn Test

S M M M M M S S



M S S S

Slow, rigid, stiff movements

Cannot keep balance 1

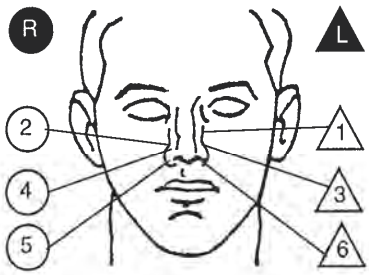
Starts too soon

	1st Nine	2nd Nine
Stops walking	✓✓✓	✓✓✓
Misses heel-toe	✓	✓✓✓✓
Steps off line		✓
Raises arms	All	All
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
38 estimated as 30 seconds	Stopped. Needed directions	N/A	Athletic type shoes

Finger to Nose

(Draw lines to spots touched)



Slow, rigid movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.8.5)	Direct (2.0 – 4.5)
Left Eye	4.0	6.0	3.0
Right Eye	4.0	6.0	3.0

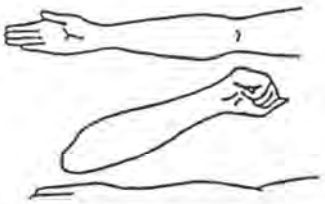
Nasal area: Clear

Oral cavity: Clear

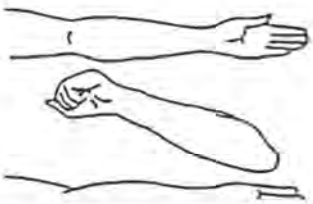
Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM



LEFT ARM



None observed

Blood Pressure	Temperature
188 / 98	101.0 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
No response	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
9/28/17 / 2100	2120	2145	2230	

Officer's Signature: Joseph MacLean	Reviewed/approved by / date:	DRE# 11522

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☒ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Krystal, K. J.

1. **Location:** The evaluation was conducted in the Interview Room of the Middleboro Police Department. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and have smooth tile flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Sergeant Don Decker of the Nahant PD. The arresting officer, Sergeant Deb Batista witnessed the eye examinations.

3. **Breath Alcohol Test:** The suspect provided a breath test which was conducted by Sergeant Batista prior to my arrival. The result was 0 .00%.

4. **Notification and Interview of the Arresting Officer:** On 09/28/17 at approximately 2120 hours, I was requested conduct a drug evaluation for Sergeant Batista at the Middleboro Police Department. Upon my arrival, Sergeant Batista advised that she had stopped the suspect's vehicle after observing it fail to stop while exiting a business and nearly hitting another vehicle. According to Sergeant Batista, during the personal contact with the suspect, she did not detect an odor of an alcoholic beverage on the suspect's breath. However, she noted that the suspect was confused acting and appeared to be impaired. The suspect had difficulty finding his operator's license and vehicle registration. Several times the suspect had to be reminded to produce the documents. She also noted that his speech was slurred and thick. Once the suspect existed his vehicle, Sergeant Batista noted that he had poor balance and needed to steady himself on his vehicle. Sergeant Batista administered SFST's and she reported observing all six clues of Horizontal Gaze Nystagmus (HGN), with an immediate angle of onset. She also observed Vertical Gaze Nystagmus (VGN). The suspect had difficulty completing the Walk and Turn (W&T) and the One Leg Stand (OLS) tests due to his poor balance. Both tests had to be stopped because the suspect nearly fell several times. After completing the SFSTs, Sergeant Batista arrested the suspect for DUI and transported him to the PD for processing. After obtaining a 0.00 BAC on the breath test, she requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at Middleboro PD. He was standing at the table and appeared disoriented. He was slow to respond to Sergeant Batista's questions and was noticeably sweating. When the suspect moved around the room, his movements were slow and he appeared to be very stiff and rigid. Several times he used the wall to steady himself. I introduced myself and requested to conduct a drug evaluation, which the suspect agreed to do. For the most part, the suspect was cooperative. I asked if he remembered being informed of his Miranda rights and he indicated that he did. I asked the suspect if he had any injuries or physical defects and he stated, "None that I can remember." The suspect denied consuming any drugs or medications and claimed he was just tired and couldn't understand why he was being arrested. During the preliminary examination, at times the suspect would stop talking and appeared to be confused, and was trying to process information. The suspect did advise that he was not blind in either eye and did not wear corrective lenses. The suspect was wearing black baggy shorts, a gray hoody sweatshirt, and red unlaced athletic shoes.

6. **Medical Problems and Treatment:** No medical problems were reported by the suspect and none were observed or detected during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. Several of the instructions had to be repeated. However, the suspect did confirm that he understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: While performing this test, the suspect had an approximate two-inch side to side sway and front to back sway. The suspect had a slow time estimation, estimating 30 seconds in 38 seconds. While performing the test, he stood very rigid.

Walk and Turn: For this test, a line in the tile floor was used. The suspect lost his balance to the left one time during the instruction phase. During the walking phase, he had slow, rigid, stiff movements. On the first nine steps, the suspect missed touching heel to toe on his second step. He also stopped walking four times on the first nine steps. At the turn, he stopped and asked for directions on how to complete the turn. Once the directions were given to him, he made a slow, rigid turn. On the second nine steps, the suspect stopped while walking three times and missed touching heel to toe four times. On his final step, he stepped off the line to the right. The suspect had his arms raised in a stiff-like manner during the entire test.

One Leg Stand: During this test, when attempting to raise his right foot, the suspect swayed while balancing, and immediately put his right foot down three times to keep from falling. The test was stopped for safety reasons. When the suspect attempted to stand on his right foot and raise his left foot, he again nearly fell and put his foot down three times. The test was then stopped for safety reasons. On each attempt, the suspect appeared to be very rigid and stiff.

Finger to Nose: While performing this test, the suspect had slow and rigid arm movements. He was unable to touch the tip of his nose with the tip of his index finger on any of the six attempts.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. The suspect's eyes were not able to converge as instructed. The suspect's pupils were examined in three different lighting levels. In Room Light, his pupils were estimated at 4.0 mm in both eyes. In Near Total Darkness, his pupils were estimated at 6.0 mm in both eyes, and in Direct Light, they were estimated at 3.0 mm in both eyes. All three estimates were within the DRE average ranges for the three lighting levels. His pupillary reaction was normal, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation. Each time they were elevated at 102, 104, and 100 beats per minute (bpm), and were above the DRE average ranges of 60-90 bpm. His blood pressure of 188/98 was also above the DRE average range. His body temperature was checked at 101 degrees Fahrenheit, which was also above the DRE average range. His muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavity were clear and there were no visible signs of injection marks on his hands and arms.

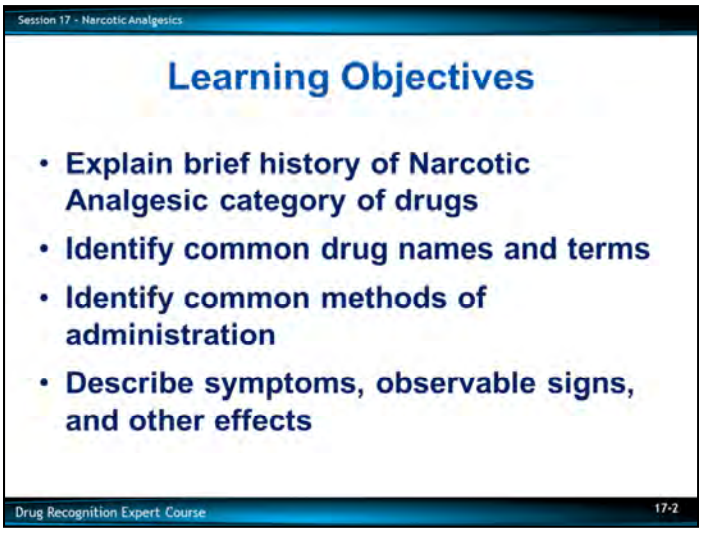
10. **Suspect's Statements:** The suspect had been advised of his Miranda rights by Sergeant Batista and he agreed to answer questions. When asked about drug use, he refused to answer, providing no response.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Krystal is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample after the evaluation which was turned over to Sergeant Batista who submitted it as evidence pending analysis by the crime laboratory.

13. **Miscellaneous:** Due to the suspect's high vital signs, EMS was requested to evaluate the suspect's condition. The suspect was subsequently released to EMS who transported him to the hospital for a follow-up medical evaluation. Refer to Sergeant Batista's arrest report for additional details.

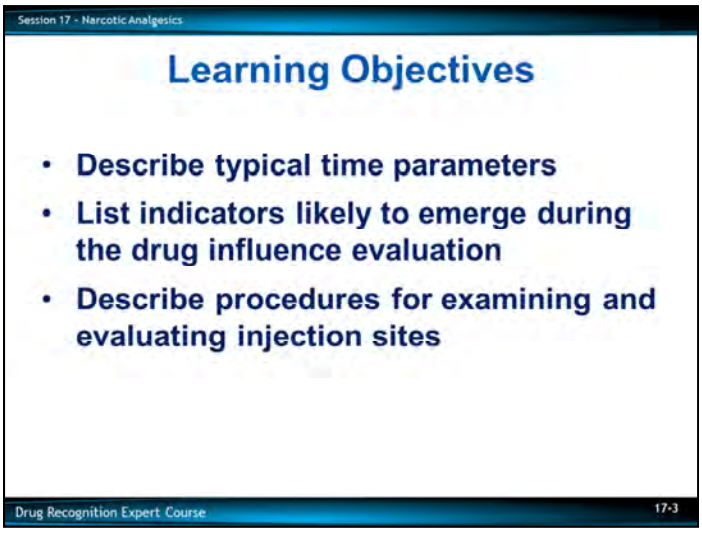
Session 17 - Narcotic Analgesics
3 Hours
Session 17
Narcotic Analgesics
FENTANYL Citrate
MORPHINE
TSI
NHTSA
Drug Recognition Expert Course
17-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of the Narcotic Analgesic category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs, and other effects associated with this category



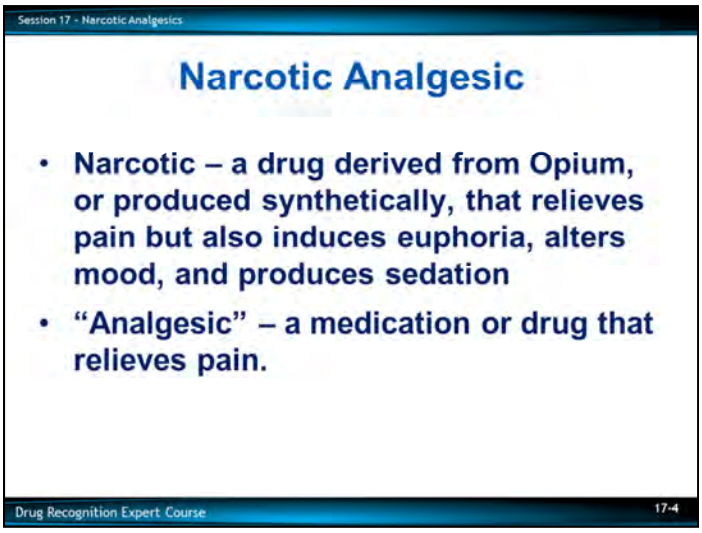
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Describe the procedures for examining and evaluating injection sites

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects
C. Onset and Duration
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Injection Site Examination
G. Expected Locations of Injection Marks
H. Conclusion
I. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentations
Slide Presentations
Review of DEC Program Exemplars



A. <u>Overview of the Category</u>

Narcotic Analgesic Defined
This category sometimes is called "The Opioids"; the drugs it contains either are found in Opium, derived chemically from Opium or produce effects similar to those of the Opium Derivatives.

The term "Opioid," however, most correctly refers to the synthetic subcategory of Narcotic Analgesics.

A medical term, not a legal or police term.

A Narcotic is a drug derived from Opium, or produced synthetically, that relieves pain but also induces euphoria, alters mood, and produces sedation.

An "Analgesic" is a medication or drug that relieves pain. It differs from an anesthetic, in that it lowers one's perception or sensations of pain, rather than stopping nerve transmission.

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Non-Narcotic Analgesics, such as Aspirin, Tylenol, and Motrin, relieve pain, but do NOT produce narcosis, which means numbness or sedation.

Clarification: non-Narcotic Analgesics relieve pain, but do not alter mood. Therefore, they, in small amounts, are not psychoactive and are not abused for their mind or mood altering actions.

There are two subcategories of Narcotic Analgesics:

- Opiates
- Synthetics

Opiates: drugs that either contain or are derived from Opium.

Natural alkaloids of Opium.
Point out a "natural alkaloid" is a substance found in another substance and can be isolated from it. Morphine, for example, is a natural alkaloid of Opium. Codeine is another example of a natural alkaloid.

The term "main ingredient" can be used as a synonym for "alkaloid."

The Natural Alkaloids
Alkaloids and the Opium derivatives all come from Opium, which is sap from the seed pods of a particular type of poppy.

The Opium poppy is also called "Papaver Somniferum" (Somniferum in Latin means "carrier of sleep")
An analogy to help participants understand the difference between an alkaloid and a derivative would be to compare Opium to wheat. The 'alkaloid" of the wheat would be whole wheat flour – a derivative of the wheat would be white flour (wheat flour which has been chemically treated).

Opium Derivatives
Opium derivatives are obtained by chemically treating the Opium alkaloid. Opium derivatives are therefore derived from Opium.

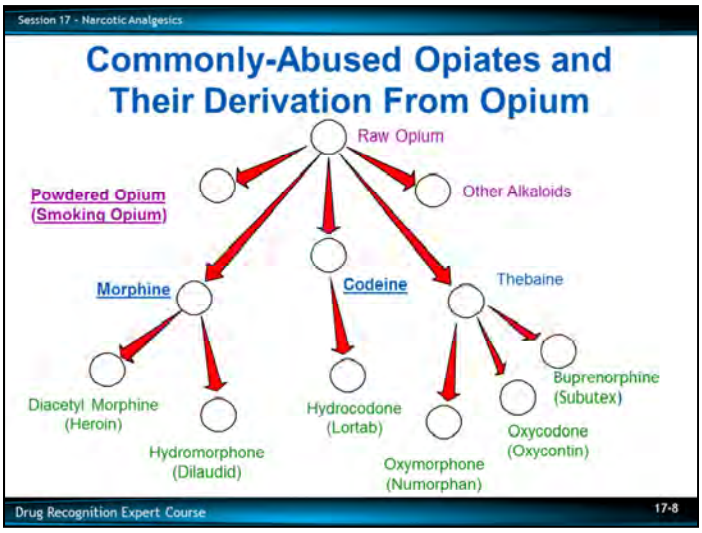
Synthetics
Synthetics, which do not derive from Opium at all, have similar or identical effects as Opium alkaloids and derivatives.
Point out synthetic Narcotic Analgesics are produced from a variety of non-opiate substances. Again, these are sometimes called "Opioids."

Narcotic Analgesics all share three characteristics:

- They all relieve pain
  - Clarification: They produce analgesia

- They will produce withdrawal signs and symptoms when the user is physically dependent and drug use is stopped
  - Clarification: Physical dependence results from "chronic administration"
  - This means the drug has been taken at fairly regular intervals for a period of time

- They will suppress the withdrawal signs and symptoms of chronic Narcotic Analgesic administration
  - Clarification: This means the various Narcotic Analgesics can be substituted for each other to relieve withdrawal symptoms

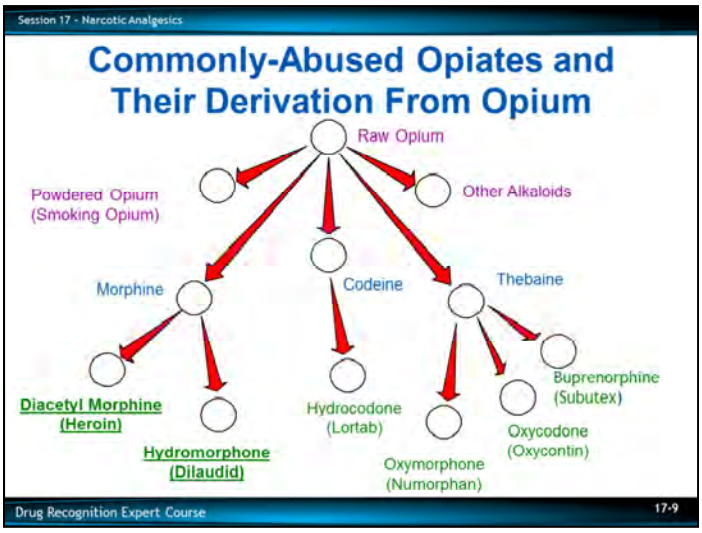


Point out the chart located in the participant manual.
Some Commonly Abused Opiates

Powdered Opium
- Also known as smoking Opium
- A simple refinement of raw Opium
- Used medically to treat diarrhea (administered orally)
- The development of more effective opiates and synthetics has virtually eliminated its use medically
  - In recent years, there has been little street use of Opium
  - It is important to realize, however, drug use trends can and do change
- Remains popular as a drug of abuse (smoked) among some Asian-American communities.

Morphine
For your information: named after Morpheus, the Greek God of Dreams.
- The principal natural alkaloid of Opium
- First isolated from Opium in 1805
- Used medically to suppress severe pain (e.g., with terminal cancer patients)
- Highly addictive
- Was widely used during the Civil War. Morphine addiction was termed "Soldier's disease"
- At one time, Morphine was the most commonly abused Narcotic Analgesic
- Morphine is typically used as the standard for comparison with other Narcotic Analgesics.

Codeine
- Codeine is another natural alkaloid of Opium
- Its technical name is Methylmorphine
- First isolated in 1832
- Codeine's pain-killing ability is much weaker than Morphine's
- Used medically to suppress coughing or minor pain
  - Clarification: Narcotic Analgesic addicts often turn to Codeine when they cannot get more popular drugs
- Codeine is definitely an addictive drug



Heroin

- Heroin is the most commonly-abused illicit Narcotic Analgesic

Point out the generic, or technical, name for Heroin is "Diacetyl Morphine."
Write "Diacetyl Morphine" on the dry erase board or ease/easel pad.

- Derived from Morphine in 1874
- First thought to be a non-addictive substitute for Morphine
- Approved for general use by the American Medical Association in 1906
- By the 1920's it was evident Heroin was much more addictive than Morphine
- Importation and manufacture of Heroin have been illegal in this country since 1925
- Schedule I drug, which means it has no legitimate medical uses in the United States.

Dilaudid

- Dilaudid is another derivative from Morphine
- Technical Name: Hydromorphone Hydrochloride
- First produced in 1923
- Sometimes called "Drug Store Heroin" since it is commercially available from medical and pharmaceutical sources
- Has the same addictive liabilities as does Heroin or Morphine
- Used medically for short-term relief of moderate to severe pain and to suppress severe, persistent coughs
- Can be ingested via injection, orally, or in suppositories
- Sometimes abused by addicts who are unable to obtain Morphine or Heroin

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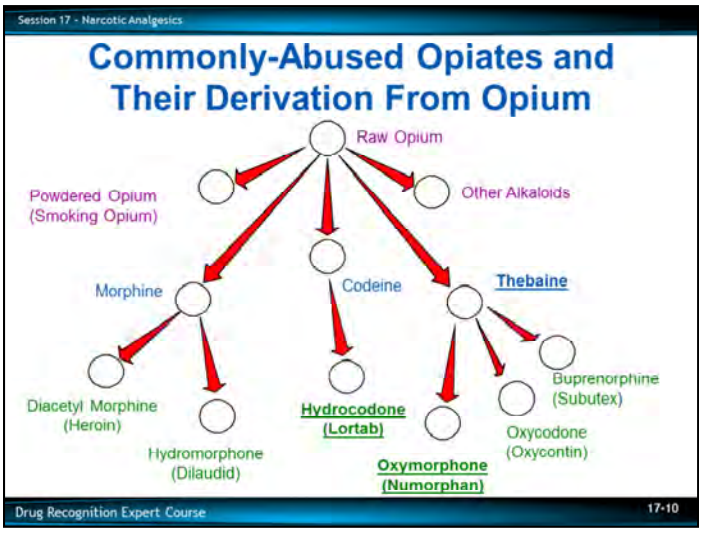


Hydrocodone

- Derived from Codeine but is more closely related to Morphine in its pharmacological profile
- Hydrocodone (Vicodin, Hycodan, Tussend, Norco, Lortab) is the most widely-prescribed Opioid with many of the same actions as Codeine, but produces less nausea
    - Used orally for relief of moderate to severe pain, but also commonly taken in liquid form as an antitussive/cough suppressant

Point out Hydrocodone products are frequently-prescribed pharmaceutical opiates (Narcotic Analgesic).

- Examples include:
    - Hycodan (A commonly prescribed pain reliever containing Hydrocodone and Acetaminophen)
    - Vicodin (Lortab) (Vicodin is a commonly prescribed pain reliever containing Hydrocodone and Acetaminophen)

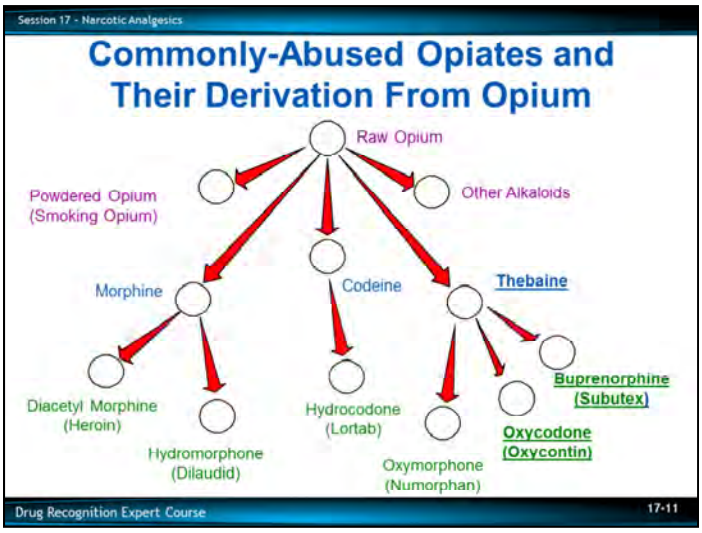
Thebaine

- An Opiate alkaloid derived from Opium
- Not used therapeutically
- Converted into several drugs including Oxycodone and Oxymorphone

Oxymorphone

- Numorphan or Opana are derivatives of Thebaine and used to treat moderate to severe pain.
- Sometimes used before surgery to cause sedation and to reduce anxiety
- As a narcotic pain reliever, it works by dulling the pain perception center in the brain
- It is used medically for the relief of chronic pain
- It is sold in ampules (injection) and in suppositories
    - Previously (pre-1972) it was sold in tablets and was a favorite substitute for Heroin among addicts; addicts now generally prefer Dilaudid as a Heroin substitute

(Source: "Disposition of Toxic Drugs and Chemicals in Man" 9th edition, R. Baselt)



Oxycodone

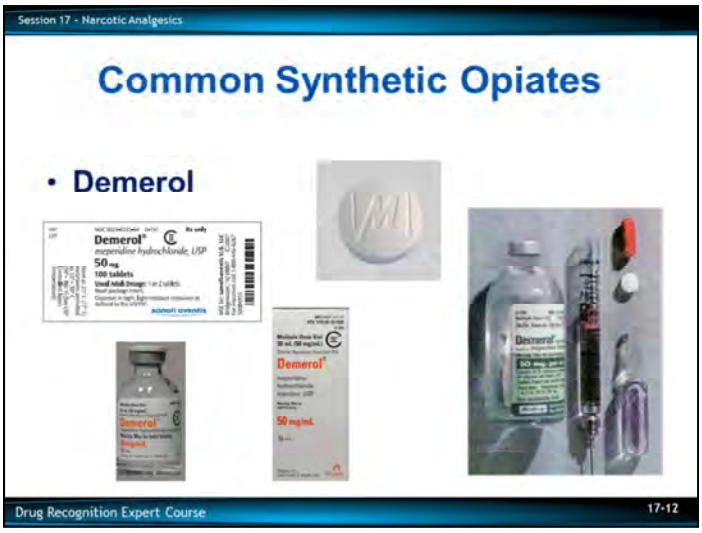
- Oxycodone is a semi-synthetic narcotic produced by chemically treating Thebaine
- It is somewhat less addictive than Morphine, but more than Codeine
- Two examples are:
  - Brand Name: OxyContin
  - Percodan is one of the most commonly prescribed Narcotic Analgesics
- It is also produced under the brand name of "Percocet", which is Percodan combined with Acetaminophen, such as Tylenol
- OxyContin is a controlled-release tablet that contains large amounts of Oxycodone (10-160mg)
- Abusers learn to circumvent the slow release mechanism
- Street names: "Oxy"; "OC"; "Killer"

Buprenorphine

- A Thebaine derivative with powerful analgesia
- As an analgesic, it is about 25 to 40 times more potent than Morphine

(Source: "Disposition of Toxic Drugs and Chemicals in Man" 9th Edition, R. Baselt)

- It is an ingredient of the drug Suboxone
- Depending on the application form, Buprenorphine is normally prescribed for the treatment of moderate to severe chronic pain (pain that has outlived its use to prevent injury and after three months)
- It is commonly used in the treatment of Opioid addiction, much like Methadone
- Buprenorphine Hydrochloride is normally administered by intramuscular injection, intravenous infusion, via a transdermal patch, or as a sublingual (under the tongue) tablet
- It is also used in the treatment of narcotic addiction.



Some Common Synthetic Opiates

Demerol

- Meperidine (Demerol, Pethidine, Mepergan) is a short-acting Opioid used to treat moderate-to-severe pain, to help put people to sleep before surgery, and provide pain relief after childbirth
- First produced in 1939
- One of the most widely used Synthetic Opiates for relief of pain and for sedation
- Also one of the Narcotic Analgesics most frequently abused by medical personnel
- Widely used as an analgesic in childbirth
- One medical advantage of Demerol is it produces less respiratory depression than do other Narcotic Analgesics; thus, a fatal overdose is less likely with Demerol
- Medical literature sometimes indicates Demerol does not cause pupillary constriction
  - Enforcement experience indicates to the contrary.

Point out pupillary constriction ordinarily is one of the most reliable indicators of a Narcotic Analgesic.

Methadone

- Developed in Germany during World War II and first marketed in America in 1947
- Developed in Germany because of wartime shortages of Morphine
- Effects are similar to Morphine's, although they develop more slowly and last longer than do Morphine's effects
- Withdrawal symptoms are slower and milder than are Morphine's

Ask participants: "What is one of the most common medical uses of Methadone in this country?"

- Used extensively in "maintenance programs" as a substitute for Heroin for addicts undergoing therapy and treatment

Remind participants one characteristic shared by all Narcotic Analgesics is they suppress withdrawal symptoms of chronic Morphine administration.

  - In theory, the daily dose of Methadone given to a Heroin addict allows the addict to function normally with no physical need for up to 24 hours
  - Methadone has a much longer duration of effects than Heroin and is not designed to be injected.
- Also used medically to relieve moderate to severe pain and to suppress coughing
- Methadone (Dolophine) is an Opioid used to treat pain and as maintenance therapy or to help with detoxification in people with Opioid dependence

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Fentanyl

Fentanyl (Sublimaze, Actiq) is a highly potent, synthetic Opioid pain medication with a rapid onset and short duration of action. It is 50 to 100 times more potent than Morphine on a weight-for-weight basis. It was introduced into medical practice as an intravenous anesthetic under the trade name of Sublimaze in the 1960s.

In 2015, there were 6.5 million Fentanyl prescriptions dispensed in the U.S. Similarly, in the first nine months of 2016, 4.55 million Fentanyl prescriptions were dispensed (IMS Health). Fentanyl pharmaceutical products are currently available in the dosage forms of oral transmucosal lozenges, commonly referred to as the Fentanyl "lollipops" (Actiq), effervescent buccal tablets (Fentora), sublingual tablet (Abstral), sublingual spray (Subsys), nasal spray (Lazanda), transdermal patches (Duragesic), and injectable formulations. Oral transmucosal lozenges and effervescent buccal tablets are used for the management of break-through cancer pain in patients who are already receiving Opioid medication for their underlying persistent pain. Transdermal patches are used in the management of chronic pain in patients who require continuous Opioid analgesia. Fentanyl citrate injections are administered intravenously, intramuscularly, spinally, or epidurally for potent analgesia and anesthesia.

Fentanyl is about 100 times more potent than Morphine as an analgesic. It is a u-Opiod receptor agonist with high lipid solubility and a rapid onset and short duration of effects. Fentanyl rapidly crosses the blood-brain barrier. It is similar to other u-Opioid receptor agonists (like Morphine or Oxycodone) in its pharmacological effects and produces analgesia, sedation, nausea, vomiting, itching, and respiratory depression. Fentanyl appears to produce muscle rigidity with greater frequency than other Opioids. Unlike some u-Opioid receptor agonists, Fentanyl does not cause histamine release and has minimal depressant effects on the heart.

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Other Narcotic Analgesics

Kratom (Mitragyna Speciosa) is produced from the leaves of tropical trees native to Indonesia, Malaysia, Thailand, and other areas of Southeast Asia.

- At high doses, it delivers Opioid-like effects, inhibits smooth muscle control, and reduces pain
- At low doses, it has a stimulant effect, increasing alertness, talkativeness, and outward behaviors
- In the U.S., it is usually obtained over the internet and is most likely to be consumed in tea or chewed
- It is not a controlled substance in the U.S., but is illegal in several countries

Common Methods of Ingestion
Methods of administration of Narcotic Analgesics vary from one drug to another.

- Some are commonly taken orally
- Some are smoked
- Some are snorted (insufflated).

Users have stated the fear of contracting diseases, such as AIDS, from shared needles, has prompted them to either snort or smoke Heroin.
If available, show Heroin injection paraphernalia.

Some are often administered in suppositories. Medically, some Narcotic Analgesics may be administered transdermally or through the skin.

Fentanyl patches are often used for chronic pain.

Heroin and some others are usually taken by injection.
Solicit participants' comments and questions concerning this overview of Narcotic Analgesics.

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B. <u>Possible Effects</u>

As with nearly all drugs of abuse, the effects produced by Heroin or other Narcotic Analgesics depend on the tolerance the user has developed for the drug.

People develop tolerance for Narcotic Analgesics fairly rapidly. "Tolerance" means the same dose of the drug will produce diminishing effects or conversely a steadily larger dose is needed to produce the same effects.

A Narcotic Analgesic user who has developed tolerance and who is using his or her "normal" dose of the drug may exhibit little or no evidence of intellectual or physical impairment. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e., in the vital signs and eye signs).
Emphasize habitual users of drugs may develop tolerance to the drug.

Impairment is more evident with new users and with tolerant users who exceed their "normal" doses.

Clarification: the tolerant addict who has injected his or her "normal dose" of Heroin may appear to be much less impaired than an inexperienced user who had taken the same dose.

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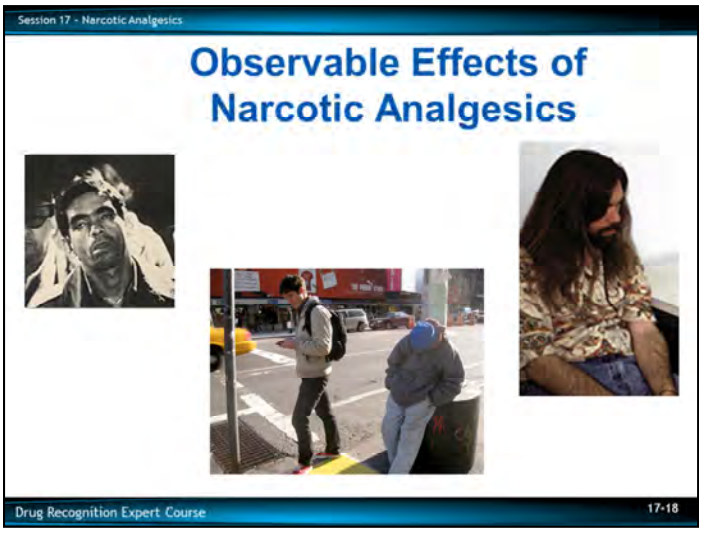


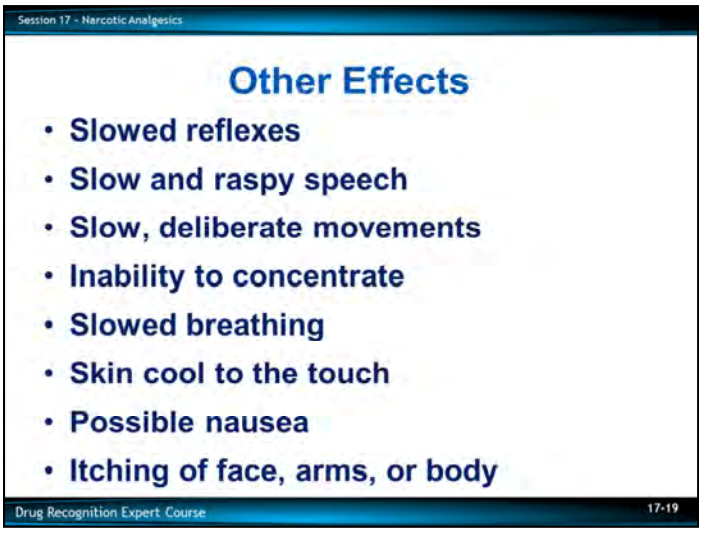
Observable Effects
Observable effects of Heroin and other Narcotic Analgesics.

Sedation – "On the Nod."
- The condition known as "on the nod" is a semiconscious state of deep relaxation

Point out "on the nod" occurs most often with new users or with users exceeding their normal or usual doses.

The user's eyelids become very droopy.
Remind participants the technical term for "droopy eyelids" is Ptosis.

Their head will slump forward until the chin rests on the chest. In this condition, the user usually can be aroused easily and will be sufficiently alert to respond to questions.
Point out this condition is different from someone under the influence of a CNS Depressant at the point of passing out or someone "crashing" after high doses of CNS Stimulants.



Other Effects

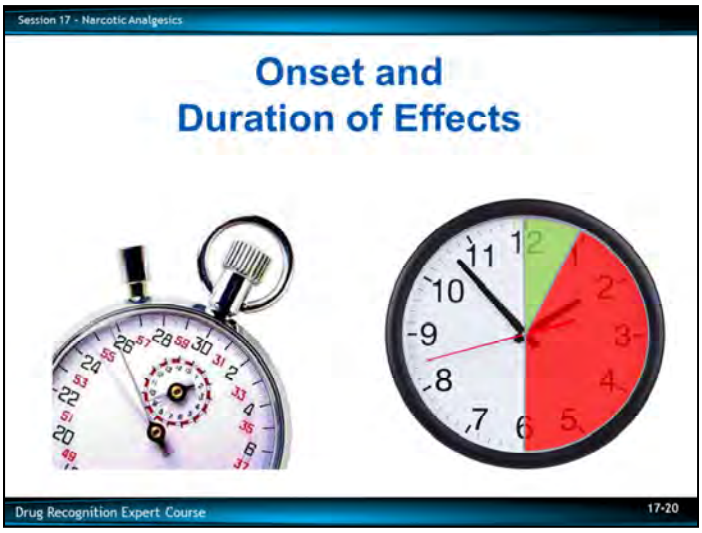
These effects may be dose-related and most often occur with non-tolerant users.

- Slowed reflexes
- Slow and raspy speech
- Slow, deliberate movements
- Inability to concentrate
- Slowed breathing

For your information: Technical terms are Hypopnea or Bradypnea.

- Skin cool to the touch
- Possible nausea
- Itching of the face, arms, or body

***Solicit participants' comments and questions concerning possible effects of Narcotic Analgesics*.**



C. <u>Onset and Duration of Effects</u>

Psychological Effects

The psychological effects of Heroin begin immediately after the injection.

- A feeling of pleasure or euphoria

Point out the intensity of the euphoria will depend on a number of factors, one of which is the addict's tolerance. A heavily addicted user who is beginning withdrawal symptoms may experience only mild euphoria.

- Relief from the symptoms of withdrawal
- Relief from pain

Observable Signs

The observable signs will usually become evident within 5 – 30 minutes after the user has injected.

- User may nod head and move in and out of consciousness
- User may display poor motor coordination, depressed reflexes, and slowed breathing

Remind participants the physical effects may not be observed at all if the addict is tolerant and has injected a "normal" or "maintenance" dose.

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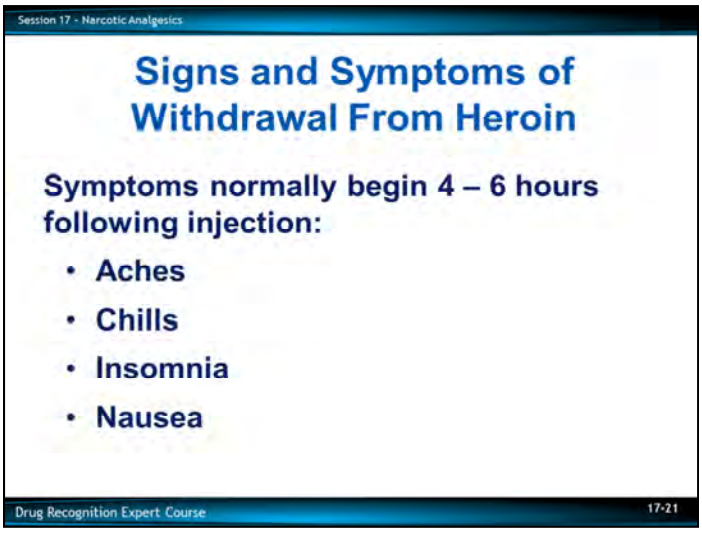

The effects will usually be observable for up to 4 – 6 hours.

As the drug wears off, withdrawal signs and symptoms start to develop until the addict user injects again.
Point out the development of withdrawal symptoms implies the Narcotic Analgesic has worn off.

As the effects of Heroin diminish, withdrawal symptoms begin.
- Aches
- Chills
- Insomnia
- Nausea

As with nearly all drugs, the withdrawal signs and symptoms are essentially the opposite of the "high" or intoxicated state.

Withdrawal signs start to become observable 8 – 12 hours following injection.

- Goose bumps (usually associated to chills)
- Sweating
- Runny nose
- Tearing
- Vomiting
- Yawning

Point out yawning, tearing, runny nose, and vomiting usually appear only after marked withdrawal of many hours.

Withdrawal signs and symptoms closely resemble those of Influenza or the common cold.

These symptoms begin to intensify from 14 – 24 hours after injection and may be accompanied by goose bumps (piloerection), slight tremors, loss of appetite, and dilation of the pupils.
Point out "withdrawal" signs of Narcotic Analgesics are essentially the opposite of their "under the influence" signs.

Approximately 24 – 36 hours after injection, the addicted user experiences insomnia, vomiting, diarrhea, weakness, depression, and hot and cold flashes.

Withdrawal symptoms and signs generally reach their peak 2 – 3 days after injection:

- Muscular and abdominal cramps
- Severe tremors and twitching
- Elevated temperature
- Sharp loss of weight

Point out involuntary tremors and twitching of the legs give rise to the expression "kicking the habit."

The addicted user at this point is nauseated, gags, vomits, and may lose 10 – 15 pounds within 24 hours.

The withdrawal syndrome continues to decrease in intensity over time and is usually greatly reduced by the fifth day, disappearing in one week to 10 days.

A common misconception regarding withdrawal from Narcotic Analgesics is they may be fatal. In reality, however, although Narcotic withdrawal is extremely uncomfortable, it rarely, if ever proves fatal.

Solicit participants' comments or questions concerning onset and duration of the effects of Narcotic Analgesics.

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D. <u>Overdose Signs and Symptoms</u>

Narcotic Analgesics depress respiration.

In overdoses, the user's breathing will become slow and shallow.

Other signs and symptoms of an overdose of a Narcotic Analgesic include clammy skin, convulsions and coma, blue lips and pale or blue body, extremely constricted pupils (unless there is brain damage, in which pupils may be dilated), recent needle marks, or perhaps a needle still in the user's arm.
Point out a person suffering from Narcotic Analgesic overdose may appear to be in shock.

Death can occur from severe respiratory depression.

The danger of death is heightened by the fact the addicted user may not know the strength of the drug he or she is taking.

Clarification: the percentage of pure Heroin in the sample the addict uses may be much higher than what the addict expects and is accustomed.

Narcotic Analgesic overdoses are sometimes treated by the administration of a Narcotic antagonist such as Narcan. A Narcotic antagonist works at neuron receptor sites, blocking or counteracting the effects of Narcotic Analgesics. In effect, these substances precipitate withdrawal. The short duration of effects produced by Narcotic antagonists, however, require continued medical monitoring of the user.
***Solicit participants' comments and questions concerning signs and symptoms of an overdose of Narcotic Analgesics*.**

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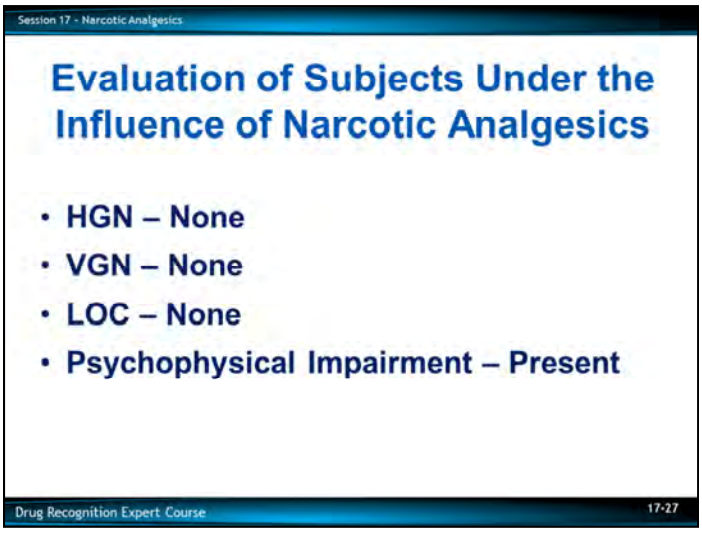

E. <u>Expected Results of the Evaluation</u>

Observable Evidence of Impairment
Neither Horizontal Gaze Nystagmus (HGN) nor Vertical Gaze Nystagmus (VGN) will be present.

Eyes will not exhibit Lack of Convergence (LOC).

Psychophysical Tests
Performance on the Modified Romberg Balance (MRB) test will be impaired. Generally, the subject will appear drowsy and will have slow time estimation.
Point out, if the user has ingested enough Narcotic Analgesic to exceed his or her level of tolerance, his or her performance on the SFSTs will be uncoordinated and "rubber-legged," similar to that caused by CNS Depressants.

Performance on the Walk and Turn (WAT) and One Leg Stand (OLS) will generally be impaired and will reflect the slow and deliberate movements caused by this category of drugs.

Performance on Finger to Nose (FTN) will also be impaired. Generally, the subject will appear drowsy, possibly "on the nod," and exhibit slow and deliberate movements.

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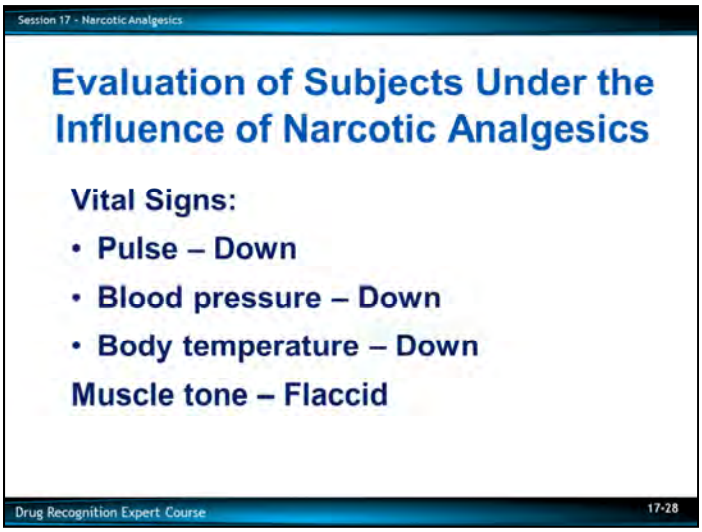
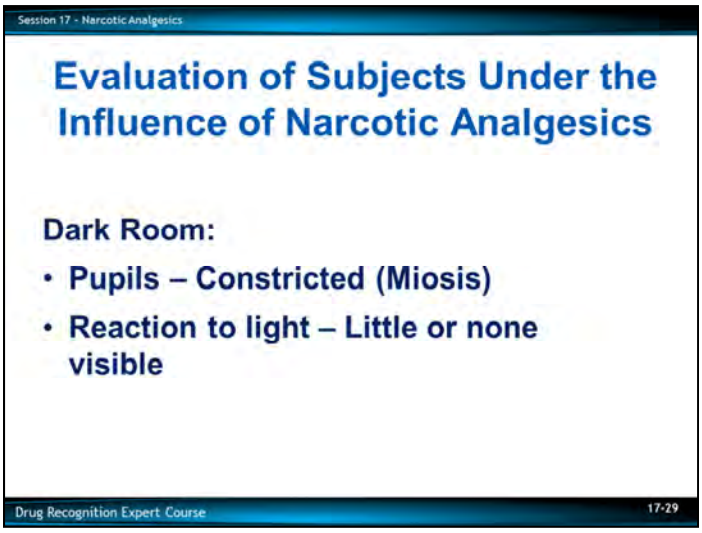


Vital Signs

- Pulse will be down
- Blood pressure will be down
- Body temperature will be down

Remind participants these cardiovascular indicators may not be present if the subject is a tolerant user who has taken a "normal" dose of the drug.

Muscle tone will be flaccid.

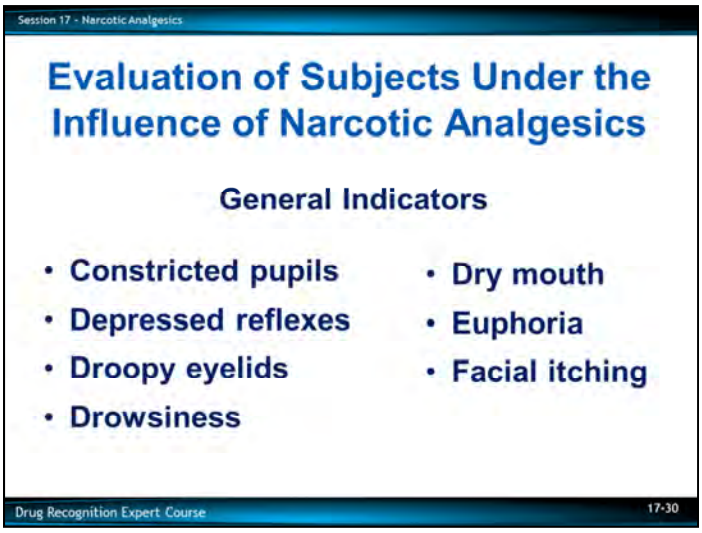


Dark Room

- Pupil size generally will be constricted (below 3.0 mm in diameter)

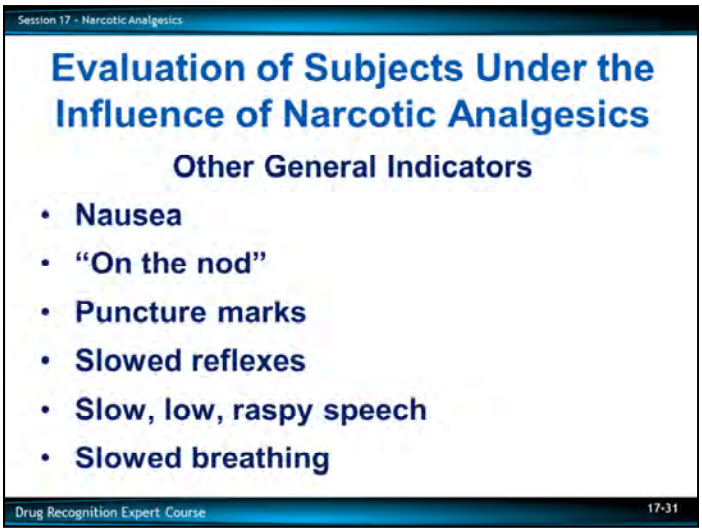
Point out constricted pupils are one of the most reliable indicators of a Narcotic Analgesic. The technical term for "constricted pupils" is "Miosis."

- Pupil reaction to light will be little or none visible



General Indicators

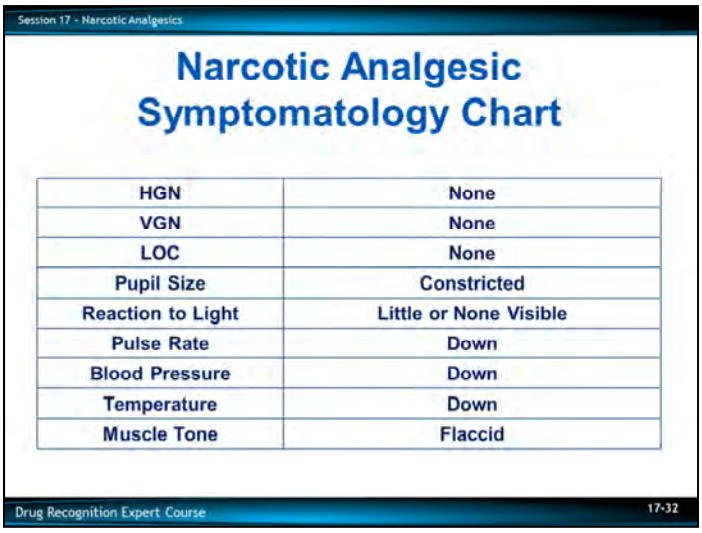
- Constricted pupils (Miosis)
- Depressed reflexes
- Droopy eyelids (Ptosis)
- Drowsiness
- Dry mouth
- Euphoria
- Facial itching
    - Itching – caused by the release of Histamines



- Nausea
- "On the nod"
- Puncture marks

If available, show slide of typical addicts "track" marks.

- Slowed reflexes
- Slow, low, raspy speech
- Slowed breathing

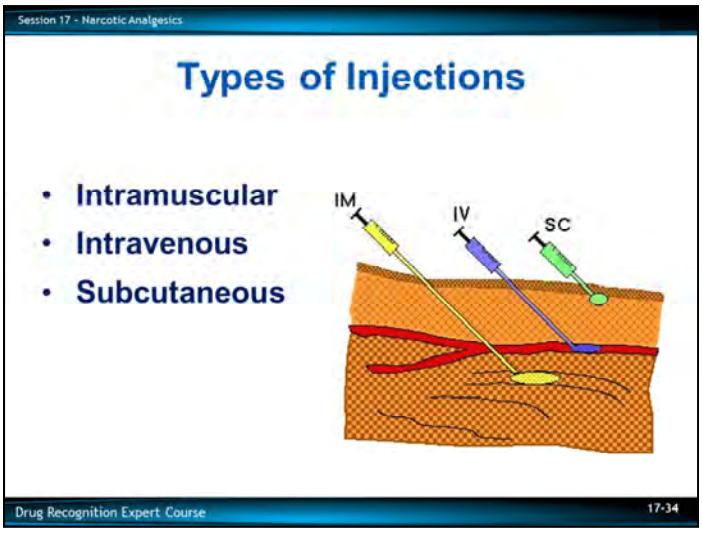


Symptomatology Chart

F. <u>Injection Site Examination</u>

Examination of subject's injection sites can give many clues to their drug habits.

- The slang term for an injection site is a "mark"
- Many drugs can be injected
- The presence of injection sites doesn't ensure the subject is under the influence of drugs
  - Examination of injection sites is just one of the 12 steps in the evaluation
- Injection sites are a sign of drug abuse which may or may not be present
- May be evidence of habitual use
- The trauma to the skin, muscles, and the blood is the basic concept of injection sites



Drugs and medication are injected into the body in three ways:

Intramuscular

Legal injections are usually Intramuscular.

- Abbreviated as I/M
- "Intramuscular" is defined as administering by entering a muscle

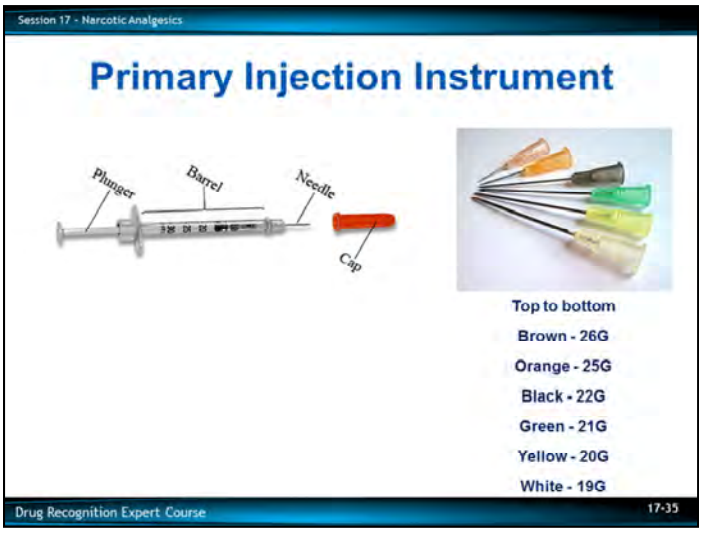
Intravenous

- For medically drawing of blood or emergency medical procedures, the injection is made into a blood vessel (Intravenous)
  - Veins are usually used
  - Arteries are deep, thus not lending themselves to injection
- Abbreviated as I/V
- "Intravenous" defined as entering a vein

Subcutaneous

- Subcutaneous (S/C) means just under the skin
- Commonly referred to as "skin popping"

Let the participants know insulin injections are "Subcutaneous" (S/C) and are not normally I/M or I/V injections. Insulin is never injected into a blood vessel because the person could go into a coma.



The primary instrument for injection is the hypodermic syringe.

- It consists of a hollow needle, a barrel (tube) and a plunger
- Needles vary in size, with the primary variance being the inside diameter of the needle or the gauge
- A 26 gauge needle is used by a diabetic
- The greater the number the larger the gauge, the smaller the inside diameter of the needle
- Most illegal drug users prefer a larger gauge needle
- The hypodermic marks are smaller and are, therefore, less noticeable making it more difficult for the Drug Recognition Expert (DRE) to see them

The user's equipment is commonly referred to as a "hype kit" or "works."

The kit contains a "cooker" which is any device such as a bottle cap, a metal spoon, etc., used to heat the drug with water to form an injectable solution. Other parts of the "kit" include:

- A handle to hold the "cooker" over the flames

- Matches, lighters (primarily disposable, adjustable flame types) used to heat the substance in the "cooker"

- A tourniquet, which can be a rubber tubing, a tie, belt, etc.
  - It is tied around the arm, above the injection site, to cause the vein to bulge or rise, thus making it easier to inject

- "Cottons" are the cotton balls or cigarette filters used to "purify" the drug
  - The user places the "cottons" into their cooker and draws the drug up through the cottons

- The cottons are saved for later use since they contain some of the drug

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As a DRE, you may be asked in court to describe the difference between a medical and non-medical injection site.

- A medical injection is usually IM
  - Some exceptions would be in a blood donation, an emergency, or a lab test

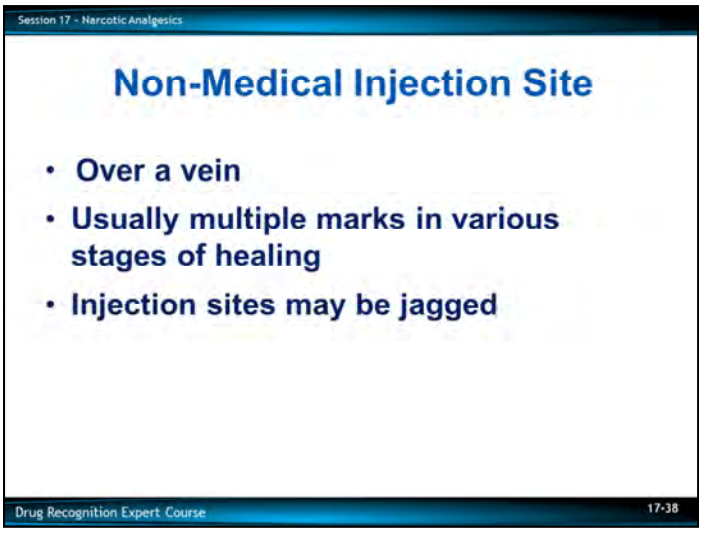
If the technician is unable to find a vein during the first try, there may be multiple injections. There may also be bruising near the site.

The injection mark for medical purposes can be described as:

- Clean
- No scarring or scabbing

Most IM medical injections will not be evident during a DRE evaluation.

- Usually there will be only one mark and it will be larger than the typical non-medical injection
- Medical injections are made with new, sterile needles



The non-medical (illicit) mark is usually over a vein.

- There will usually be multiple marks in various stages of healing
  - It takes approximately two weeks for a "mark" to totally heal
  - For example, the Heroin addict will inject approximately four to six times each day (every four to six hours)
  - Therefore, they will inject approximately 2,000 times in one year

- Users frequently use the same needle over and over again, thus making it become dull or barbed

- Frequently the needles are carried in pockets or socks and the rubbing against clothing causes them to be dull or barbed

- Since the used needles make it more difficult to pierce the skin and vein, the injection sites may be jagged

- A barbed needle may tear the skin on the way in and on the way out

- Use of old, dirty, and shared needles cause the spread of infections and diseases such as AIDS

ALWAYS WEAR PROTECTIVE GLOVES PRIOR TO CONDUCTING THE EXAMINATION.

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G. <u>Expected Locations of Injection Marks</u>

Prior to conducting the injection site examination, always remember to wear gloves.
Injection sites may be located anywhere on the subject's body.

Conduct a thorough, slow, methodical examination of the subject's hands and arms beginning with the left.

- Using a magnifying light or "ski light" examine the inner arm as it is extended with the palm facing you

Point out "ski light" is short for schematic light. An ideal light is a 10 power magnification light.

- Beginning at the bicep, slowly examine the arm; document the findings of your examination

- Ask the subject to contract the arm, grasping their shoulder
  - Starting at the wrist, slowly examine the arm to the elbow documenting the results
  - This forces the individual's veins to protrude

- Next examine the outer arm as it is extended palm facing downward
  - Start the examination at the shoulder moving to the wrist

- Subject should extend and spread his/her fingers when examining the hands
  - Examine both sides of the hands, with particular attention to the areas between the fingers, under watch bands and rings

- Conduct the entire procedure for the right side

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Ankles are a common injection area.

- Subject should be instructed to remove their shoes and socks to allow the DRE to examine them for puncture wounds
- The most common area is on the foot or the ankle

Subject's sometimes hide hypodermic needles in their socks, shoes, and the heel compartments of their shoes.

On a case-by-case basis, the DRE may need to examine other parts of the body for marks. Another such area may be the legs.

ALWAYS follow your agency's rules, policies, and procedures and laws regarding invasive type searches.

Other Indicators of Injection Sites

Users may "sterilize" a needle by using an open flame. This results in dark carbon deposits left on the needle. When the user inserts the needle, the carbon deposits are then injected into the skin. This is termed "tattooing" and results in a "tattoo effect" when the carbon is left under the skin when the needle is removed.

Users may frequently use the same spot to inject as an attempt to reduce their likelihood of detection. The veins may become hard and thick from continuous injections and this makes them difficult to find.

After about 10 to 20 injections, a large sore forms causing the site to enlarge and bruise. Upon close examination, the site may reveal there are numerous, overlapping puncture wounds in the same area. This is referred to as "tunnel" or "corn".

The entire vein area becomes scarred and hardened and, over time, future injections may not be possible. The area becomes silvery-blue in color and raised. This is referred to as "tracks" or "silver streaks".

AS A GENERAL RULE: one inch of tracks indicates approximately 50 – 100 separate injections have been administered in this area.

In an attempt to hide evidence of intravenous drug usage, users may inject into decorative tattoos. Tattoos designed to hide puncture wounds are frequently colored and found on the inner arms.

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Basic Principles of Puncture Healing
The healing is greatly retarded.

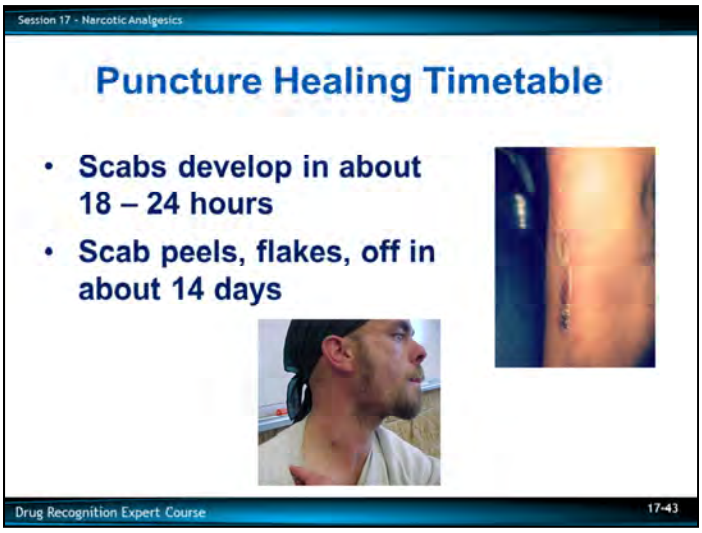
Any needle that punctures the skin leaves a scab. A scab is simply a crust formed by the drying of the discharge from the puncture.

Scab is the dried remains of blood, plasma (a cellular, colorless fluid part of the blood), lymph fluid (a thin fluid that bathes all the tissues of the body), and puss (a thick yellowish/greenish fluid that forms at an injection(s) site).

These dried remains fill the gap caused by the puncture of the skin. As the fluids dry, they harden (clot and gel).

Users will sometimes peal a corner of a healing scab up and inject into that area then cover the injection site with the scab.

This injecting under a scab to hide multiple puncture wounds is referred to as "Trap Dooring."

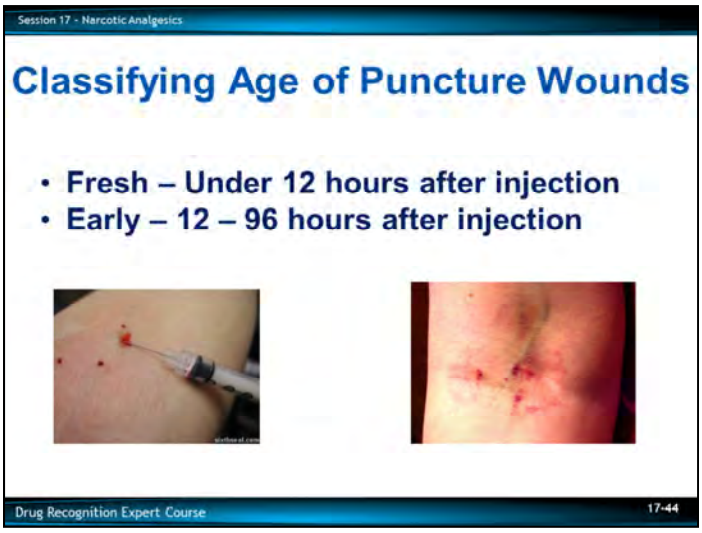


Puncture Healing Timetable

There are no exact timetables for wounds to heal, but there are some general guidelines.

- Chronic disease, poor nutrition, etc. retard the puncture healing process
- Scabs develop within about 18 – 24 hours after a puncture
- A general rule: when the scab first forms, it is bright red; with age, the color gets darker and darker

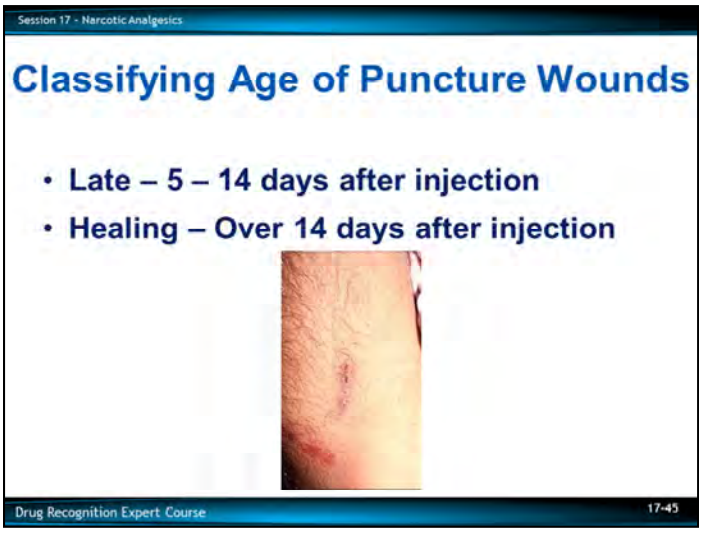
After about 14 days, a scab usually starts to peel or flake and then falls off. The skin under the scab is shriveled and is lighter in color than the surrounding tissue.



There is no exact science to classifying the age of puncture wounds. Some general guidelines are:

- Fresh puncture wounds are defined as under 12 hours after injection and will be a red dot and have an oozing appearance or blood crater with no scab formation

- Early puncture wound is 12 – 96 hours (half day to 4 days) after injection
  - It will have a light scab, light bruise, reddened border, and a crater appearance



- Late puncture wound is 5 – 14 days old and will have a dark scab, dark bruise, and the crater will flatten

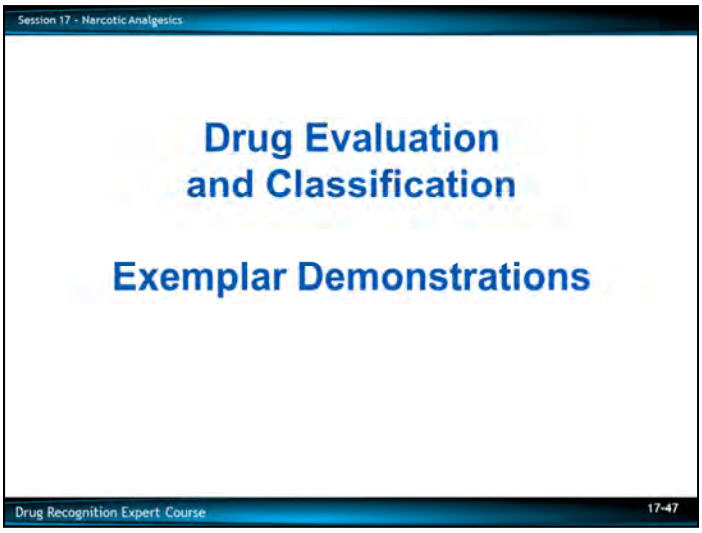
- Healing puncture wound is over 14 days
  - The scab will be flaking and falling off with shriveled light colored skin underneath

H. <u>Conclusion</u>

The injection site examination may reveal evidence of recent use.
Point out DREs may want to photograph new or recent injection marks for evidential purposes.

The presence of marks, however, doesn't mean drug influence or impairment at the time of the evaluation.

Conducting an injection site examination is a skill. As with all skills, such as taking blood pressure, competency improves with practice.

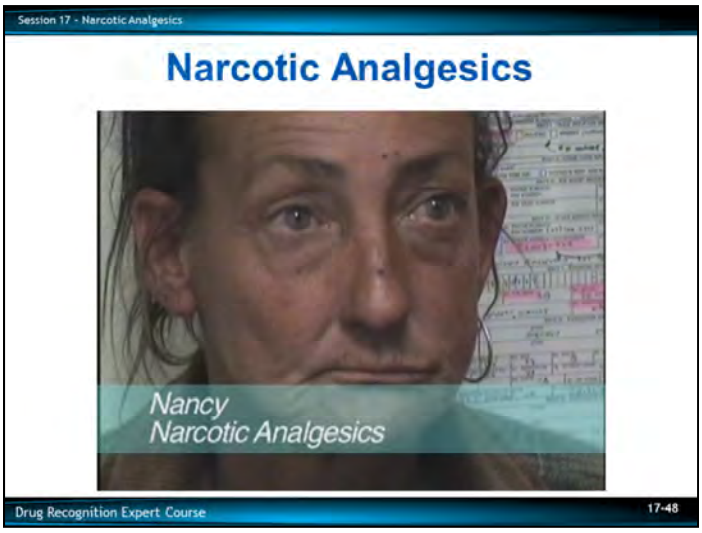


I. <u>Classification Exemplars</u>

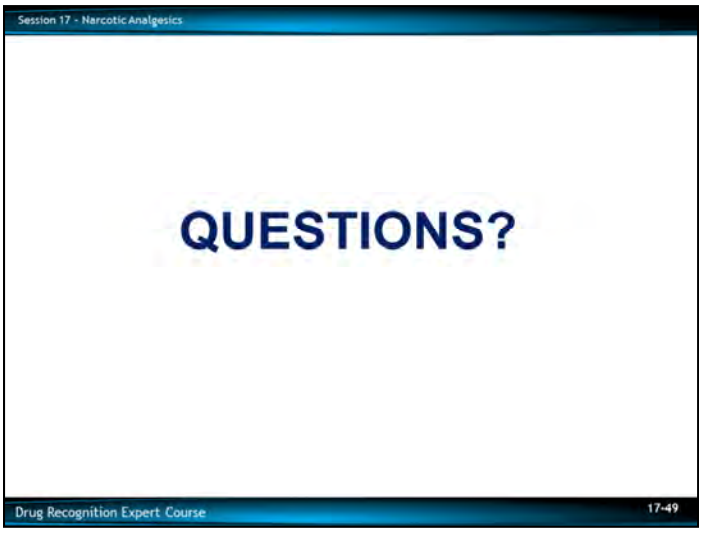
Refer students to the exemplars found at the end of Session 17 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

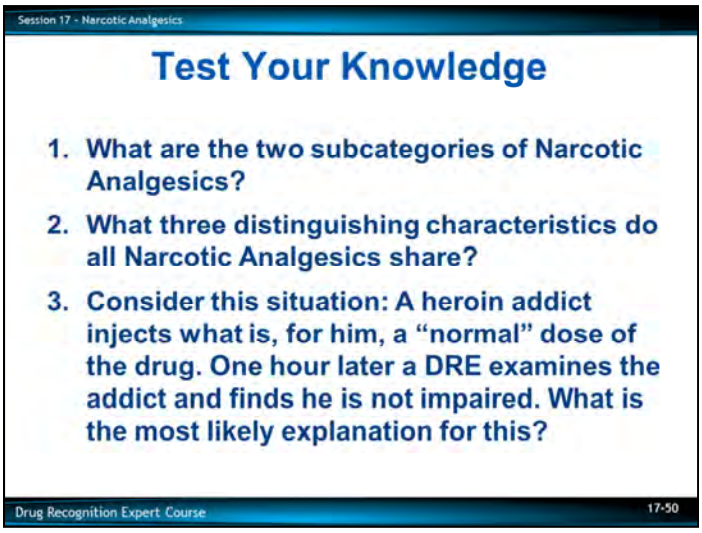
Relate the items on the exemplars to the Narcotic Analgesics Symptomatology Chart.



Click video to begin.
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a Narcotic Analgesic. (Approximately 23 minutes).



Solicit participants' comments and questions concerning the Narcotic Analgesic and Injection Site Examination.



Test Your Knowledge

1. What are the two subcategories of Narcotic Analgesics?

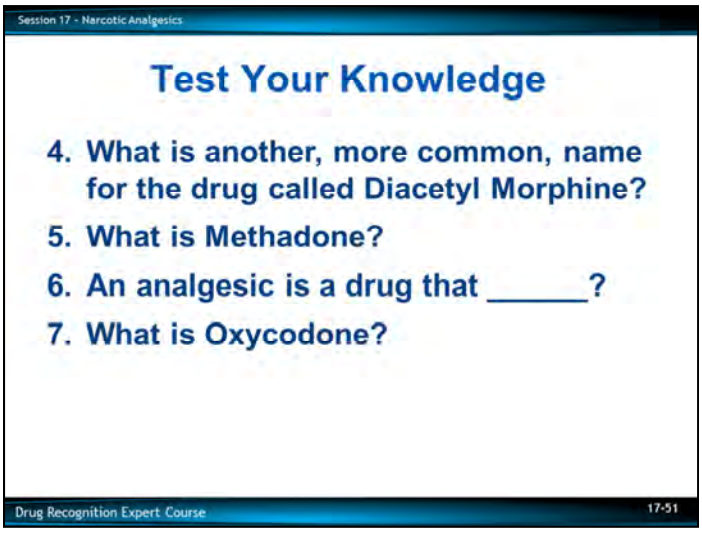
Natural Opiates and Synthetic Opiates

2. What three distinguishing characteristics do all Narcotic Analgesics share?

They relieve pain, they will produce withdrawal signs and symptoms, and their use will suppress the withdrawal signs and symptoms of chronic morphine administration.

3. Consider this situation: A heroin addict injects what is, for him, a "normal" dose of the drug. One hour later a DRE examines the addict and finds he is not impaired. What is the most likely explanation for this?

The addict has developed a tolerance and is using his/her "normal" dose of the drug.



4. What is another, more common, name for the drug called Diacetyl Morphine?
Heroin

5. What is Methadone?
A drug used extensively in maintenance programs as a substitute for heroin.

6. An analgesic is a drug that _____?
Relieves pain

7. What is Oxycodone?
A semi-synthetic narcotic prescribed for chronic or long-lasting pain.

DRUG INFLUENCE EVALUATION

Evaluator: Officer Joseph Koher	DRE #: 21707	Rolling Log #: 17-1-068	Evaluator's Agency: Huntington Police Department	Case #: 17-7850 (Session XVII-1)
Recorder/Witness: Sgt. Jay Powers West VA State Police	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Huntington Police Department	
Arrestee's Name (Last, First, Middle): Schmack, Charley J.	Date of Birth: 5/14/1970	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Travis Hogan #23990
Date Examined / Time /Location: 1/23/2017 / 1505 / Huntington PD	Breath Test: Results: 0.000	Test Refused ☐ Instrument #: 67590	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Officer Hogan	☒ Yes ☐ No	What have you eaten today?: Nothing	When?: N/A	What have you been drinking? How much?: "just coffee" 4 or 5 cups	Time of last drink?: N/A
Time now/ Actual: "About 4 pm"/1510	When did you last sleep?: Last night	How long?: 5 - 6 hours	Are you sick or injured? ☐ Yes ☒ No		Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No		
Are you taking any medication or drugs? ☐ Yes ☐ No "You tell me"	Attitude: Cooperative, Passive		Coordination: Poor, Relaxed, Unstable		
Speech: Low, Raspy	Breath odor: Normal	Face: Pale			
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal		
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy	

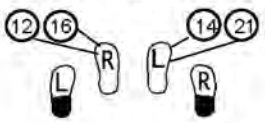
Pulse and Time

1.	56	1518
2.	52	1538
3.	52	1550

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

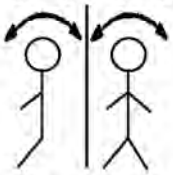
Convergence

20/30 **One Leg Stand** 22/30



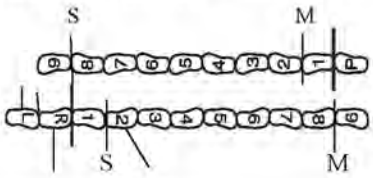
Modified Romberg Balance

Approx. 2" 2" Approx. 2" 2"



On the nod. Counted slowly

Walk and Turn Test



Slow, deliberate steps.

	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking	✓	✓
Misses heel-toe	✓	✓
Steps off line		✓
Raises arms	✓	✓✓
Actual steps taken	9	9

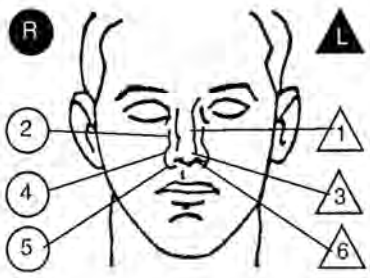
L	R	
All	All	Sways while balancing
All	All	Uses arms to balance
		Hopping
2	2	Puts foot down

Counted slowly

Time Estimation: 54 estimated as 30 seconds	Describe turn: Slow, deliberate	Cannot do test (explain): N/A	Type of footwear: Lace-up boots

Finger to Nose

(Draw lines to spots touched)



Slow movements. On the nod.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	4.0	2.0
Right Eye	2.0	4.0	2.0

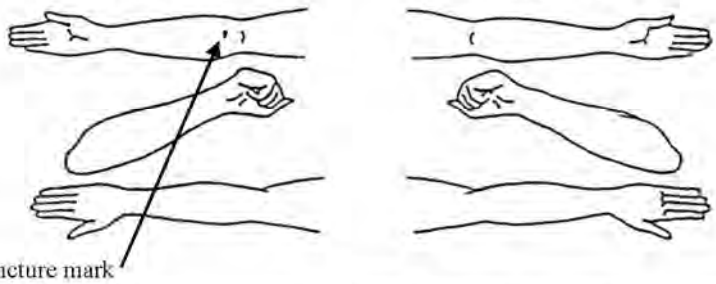
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to None

RIGHT ARM **LEFT ARM**



Red puncture mark

Blood Pressure	Temperature
110 / 60	97.0 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I don't use drugs. I'm just tired."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
1/23/2017 / 1340	1430	1505	1600	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: *Joseph Koher* | Reviewed/approved by / date: | DRE #21707

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☒ Narcotic Analgesic	☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Schmack, Charley

1. **Location:** The evaluation was conducted in the booking room at Huntington Police Department. The room is well illuminated and has a tile floor with no obstructions. The dark room examinations were conducted in the staff restroom adjacent to the interview room.

2. **Witnesses:** Sergeant Jay Powers of the West Virginia State Police observed and recorded the entire evaluation. The arresting officer, Officer Travis Hogan, observed the psychophysical examinations.

3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered by Officer Hogan using the Intoxilyzer 9000 prior to my arrival.

4. **Notification and Interview of the Arresting Officer:** I was on-duty and contacted by Dispatch and requested to contact Officer Hogan at HPD for a drug evaluation. When contacted, Officer Hogan advised that the suspect was found slumped over the steering wheel in the driver's seat with his foot on the brake, and he appeared to be unconscious. At first, Officer Hogan thought he may have to administer Narcan to the suspect. However, the suspect became responsive, and Narcan was not administered. During the personal contact, Officer Hogan did not detect an odor of an alcoholic beverage coming from suspect's breath. However, he did observe indicators of possible drug impairment, which included slow movements while retrieving his identification, along with slow, thick, and raspy speech. Officer Hogan also noted that the suspect had small, constricted pupils. He was also lethargic and passive acting, and had poor coordination. Officer Hogan also noted that the suspect had a red puncture mark on his right arm, and was frequently licking his lips. According to Officer Hogan, the suspect consented to SFSTs at roadside. Officer Hogan administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests to the suspect. No clues of HGN were observed, however, five clues where observed on the W&T, and three clues were observed on the OLS. After completing the SFSTs, Officer Hogan arrested the suspect for DWI and transported him to HPD for processing. After obtaining a 0.00 BAC result, Officer Hogan requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking room at HPD. He appeared to be "on the nod." His eyes were partially closed, his head kept nodding forward, and his breathing was slow and shallow. The suspect responded to my questions slowly, and his speech was thick and slurred. He had a dry mouth and was frequently licking his lips. His movements were slow and deliberate. The suspect was wearing blue jeans, a red tee-shirt, and lace-up boots. I introduced myself and asked if he would consent to a drug evaluation. He replied by stating, "Sure, I guess so." His coordination was poor. He appeared to be relaxed, and he was unstable on his feet. I asked the suspect if he had been informed of his Miranda rights and he confirmed that he had. I asked if he had any injuries or physical defects, and he indicated he did not, and that he was not under the care of a doctor or dentist. He told me he had not eaten anything today and drank 4 or 5 cups of coffee during the day. When asked if he was taking any medications or drugs, he responded "You tell me." The suspect advised that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept, he indicated he had slept about 4 or 6 hours last night.

6. **Medical Problems and Treatment:** The suspect did not report any injuries or physical problems. During the evaluation, none were mentioned by the suspect and none were observed.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect swayed approximately 2" front to back and approximately 2" side to side. His time estimation was slow, estimating 30 seconds in 54 seconds, and he appeared to be "on the nod" during the test.

Walk & Turn: For this test, a painted line of the booking room floor was used. During this test, the suspect lost his balance three times during the instructions phase. Once he started the walking phase, he stopped one time, stepped off the line once, and missed touching heel to toe once on the first nine steps. His turn was slow and deliberate, but done as described. On the second nine steps, he missed touching heel to toe once, and stopped while walking at step eight and appeared to be confused on what to do. Once completing the test, he moved towards the wall and leaned against to steady himself.

One Leg Stand: For this test, when the suspect raised his right leg, he swayed front to back noticeably. He used his arms to balance during the entire test. He also put his foot down on counts 1,012 and 1,016. He counted slowly throughout the test, counting to 1,020 in 30 seconds. When he raised his left leg, the suspect again swayed noticeably. He also used his arms to balance during the entire test. The suspect put his foot down on counts 1,014 and 1,021. He again counted slowly, counting to 1,022 in the 30 second period.

Finger to Nose: During this test, the suspect swayed front to back approximately 2 – 3 inches. He also missed touching the tip of his nose with the tip of his index finger on four of the six attempts. His arm movements were slow and deliberate, and he again appeared to be on the nod during portions of the test.

8. **Clinical Indicators of Impairment:**
Eye Signs: The suspect exhibited equal tracking, equal pupil size and did not exhibit resting nystagmus. No HGN clues or Vertical Gaze Nystagmus were observed. His eyes converged as directed. The suspect's pupil sizes were estimated in three lighting levels and were 2.0 mm in both eyes in Room Light, 4.0 mm in both eyes in Near Total Darkness, and 2.0 mm in both eyes in Direct Light. The Room Light and Near Total Darkness estimates were below the DRE average ranges for the lighting conditions. The Direct Light estimate was at the low end of the DRE average range. His pupillary reaction was little to none, and he did not exhibit rebound dilation.
Vital Signs: The suspect's pulse rates were low throughout the evaluation at 56, 52, and 52 beats per minute (bpm). All three were below the DRE average range. His blood pressure of 110/60 millimeters of Mercury (mmHg) and body temperature of 97.0 degrees Fahrenheit, were low and below the DRE average ranges. The suspect's eyelids were droopy, and his muscle tone was flaccid. Numerous times during the evaluation, the suspect appeared to be "on the nod."

9. **Signs of Ingestion:** A red injection mark was located on the inside of the suspect's right arm. The suspect claimed it was from a blood donation he did a couple of days ago. His nasal and oral cavities were clear.

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. The suspect denied using drugs and continued to claim he was just tired.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample, which I collected and submitted as evidence pending delivery to the State Police Forensic Laboratory for analysis.

13. **Miscellaneous:** Officer Hogan advised after the evaluation that while securing the suspect's vehicle, a syringe was located on the passenger side floorboard. The syringe contained a small amount of liquid and it will be forwarded to the State Police Forensic Laboratory for analysis. (Refer to Officer Hogan's arrest report for additional details).

DRUG INFLUENCE EVALUATION

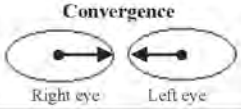
Evaluator: Trooper Sam Criswell	DRE #: 22372	Rolling Log #: 17-07-045	Evaluator's Agency: Ohio Highway Patrol	Case #: 17-9750 (Session XVII - 2)
Recorder/Witness: Trooper Joshua Craft, OH State Patrol	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Columbus Police Department	
Arrestee's Name (Last, First, Middle): Wynn, Hara	Date of Birth: 4/10/1987	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Nick Konves #21898
Date Examined / Time /Location: 7/05/17 / 1840 / Franklin County Jail	Breath Test: Results: 0.000	Test Refused ☐ Instrument #: 32455	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: Given by: Ofc. Konves	☒ Yes ☐ No	What have you eaten today? "Couple of candy bars"	When? 3 pm	What have you been drinking? How much? Water, Dr. Pepper A couple
Time of last drink? N/A				
Time now/ Actual: 7 pm / 1845	When did you last sleep? Last night	How long? "A few hours"	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No "No medicine"	Attitude: Cooperative		Coordination: Poor, Sluggish, Unstable	
Speech: Slow, Thick	Breath odor: Normal		Face: Pale	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time

1.	56	1855
2.	52	1908
3.	52	1920

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



Right eye Left eye

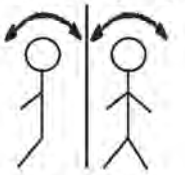
24/30 **One Leg Stand** 26/30

L	R	
All	All	Sways while balancing
All	All	Uses arms to balance
		Hopping
2	1	Puts foot down

Counted slowly. Scratching arms and face.

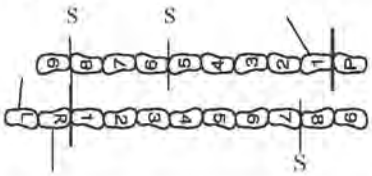
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Counted slow. On the nod.

Walk and Turn Test



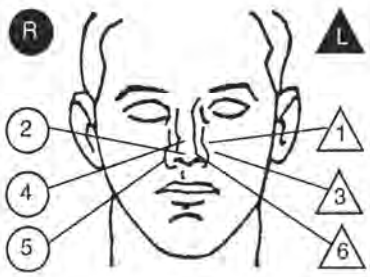
Walked slowly with deliberate steps.

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓	✓✓
Misses heel-toe		
Steps off line		✓
Raises arms	✓	✓✓✓
Actual steps taken	9	9

Time Estimation 44 estimated as 30 seconds	Describe turn: Slow, deliberate steps	Cannot do test (explain): N/A	Type of footwear: Athletic shoes

Finger to Nose

(Draw lines to spots touched)



Slow arm movements. Leaned forward.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	3.5	1.5
Right Eye	2.0	3.5	1.5

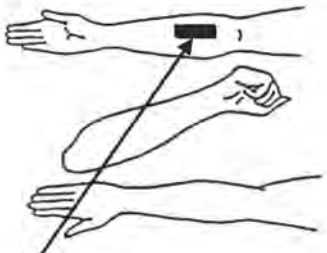
Nasal area: Clear

Oral cavity: White coating. Dry lips

Rebound Dilation: ☐ Yes ☒ No

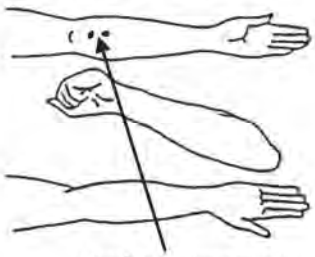
Reaction to Light: Little to None

RIGHT ARM



Scar tissue

LEFT ARM



Fresh puncture marks

Blood Pressure: 108 / 66	Temperature: 97.0 °F		
Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid	Comments:		
What drugs or medications have you been using? "I'm not going to answer that"	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: 7/05/17 / 1735	Time DRE was notified: 1815	Evaluation start time: 1840	Evaluation completion time: 1935	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
Officer's Signature: *Samuel Criswell*	Reviewed/approved by / date:			DRE #22372

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Wynn, Hara

1. **Location:** The evaluation was conducted in the booking area of the Franklin County Jail. The area is well illuminated and has a concrete floor with no obstructions. The dark room examinations were conducted in the booking area restroom.

2. **Witnesses:** Trooper Joshua Craft of the Ohio Highway Patrol witnessed and recorded the entire evaluation.

3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered by the arresting officer, Sergeant Nick Konves of the Columbus PD prior to my arrival.

4. **Notification and Interview of the Arresting Officer:** I was on duty and at approximately 1815 hours, I was requested to contact Sergeant Konves from the Columbus Police Department for a drug evaluation. I contacted Sergeant Konves at the Franklin County Jail and it was determined that the suspect had been arrested for OVI after the vehicle he was operating failed to stop at a red traffic light at E. Broad and High Streets and had nearly crashed into his patrol vehicle. Sergeant Konves further advised that after stopping the suspect's vehicle, the suspect did not have an odor of an alcoholic beverage on his breath, but showed other indicators of impairment. He reported that the suspect passed over driver's license three times while looking for it. He also had slow and deliberate hand movements. Sergeant Konves also noticed that the suspect's speech was slow, think and slurred. He also noted that the suspect's pupils were very constricted. Sergeant Konves administered SFSTs at roadside to the suspect which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no HGN clues, but did observe four clues on the W&T and four clues on the OLS. Throughout the tests, the suspect was unstable on his feet and his movements were slow and sluggish. Sergeant Konves arrested the suspect for OVI and transported him to the Franklin County Jail for processing. According to Sergeant Konves, while the suspect was in back his patrol vehicle, he was slumped over and appeared to be on-the-nod.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking room at the Franklin County Jail. Sergeant Konves had just completed the breath test and was completing his paperwork when I arrived. I noted that the suspect was repeatedly scratching his face and neck. His head kept nodding forward and he appeared to be "on the nod." His voice was low and raspy. His pupils appeared to be constricted and his coordination and movements were slow and deliberate. The suspect was wearing soiled blue jeans, a brown button-up shirt, and lace-up athletic shoes. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to do. I asked the suspect if he had been informed of his Miranda rights and he stated, "yup." I asked if he had any injuries or physical defects that would prevent him from doing the tests, and he said he did not. He also stated that he was not currently under the care of a doctor or dentist. He advised he had eaten a couple of candy bars around 3 pm and had drank some water and a Dr. Pepper earlier. When asked if he was taking any medication or drugs, he responded "No, no medicine." The suspect told me he was not blind in either eye and did not wear corrective lenses. When asked when he had last slept, he stated, "last night." When asked for how many hours, and he stated, "a few hours." His responses to my questions were slow and at times thick and slurred. His eyelids were very droopy and face was pale colored.

6. **Medical Problems and Treatment:** The suspect did not report any injuries or physical problems, and none were mentioned or observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the tests were explained and demonstrated to the suspect prior to him attempting them. Several times the instructions had to be repeated, as the suspect appeared to be having attention problems. After each demonstration, the suspected indicated that he understood the instructions. The following tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect swayed approximately 3" front to back and 3" side to side, and had a slow time estimation, estimating 30 seconds in 44 seconds. The suspect was on-the-nod during portions of the test.

Walk and Turn: For this test, a painted white line on the booking room floor was used. During the test, the suspect lost his balance twice during the instructions phase. During the walking phase, he stopped while walking one time on the first nine steps and twice on the second nine steps. He stepped off the line on the first step after making his turn, which was slow and made with deliberate steps. He also raised his arms for balance once on the first nine steps and three times on the second nine steps.

One Leg Stand: When the suspect stood on his left foot and raised his right foot, he counted slowly and swayed front to back approximately three inches. He also used his arms to balance repeatedly during the test, and put foot down on counts 1,010 and 1,019. When the suspect stood on his right foot and raised his left foot, he swayed front to back approximately three inches. He also used his arms to balance during the entire test, and put foot down on count 1,017. His counting was slow, counting to 1,024 in 30 seconds while standing on his left foot and counting to 1,026 in 30 seconds while standing on his left foot. During the test, the suspect continued to scratch his arms and face.

Finger to Nose: During this test, the suspect leaned forward when attempting to touch his nose. He missed the tip of his nose with the tip of his index finger on all six attempts, and had slow hand and arm movements.

8. **Clinical Indicators of Impairment:**
Eye Signs: The suspect's pupils were checked in three lighting levels and were estimated at 2.0 mm in both eyes in Room Light, 3.5 mm in both eyes in Near Total Darkness, and 1.5 mm in both eyes in Direct Light. All were below the DRE average ranges. The suspect's reaction to light was little to none visible. The suspect's eyes were able to converge as directed and rebound dilation was not present.
Vital Signs: The suspect's pulse, blood pressure, and body temperature were below the DRE average ranges. His pulse rates were 56, 52 and 52 beats per minute (bpm). The suspect's blood pressure was measured at 108/66. His temperature was checked using a standard oral thermometer and was 97.0 degrees Fahrenheit, which was also below the DRE average range for body temperature. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect had scars on his right inside forearm and two fresh puncture wounds on the inside of his left arm. When asked about the fresh puncture wounds, he stated, "I think they're just scratches." The scars and marks were photographed.

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He responded by saying, "I'm not going to answer that."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** Wynn provided a urine sample, which I collected and forwarded to the State Police Crime Laboratory for analysis.

13. **Miscellaneous:** Sergeant Konves reported that the suspect's vehicle was towed per department policy and a pre-tow inventory revealed several used syringes under the driver's seat of the vehicle. Refer to Sergeant Konves' arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sergeant Jeff Bullard	20418	17-01-87	Casper Police Department	17-8875 (Session XVII - 3)

Recorder/Witness	Crash	Arresting Officer's Agency
Sergeant Scott Jones	☒ None ☐ Fatal ☐ Injury ☐ Property	Casper Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Cottin, Ozzie	5/16/1976	M	H	Officer Ben Flake #P65

Date Examined / Time /Location	Breath Test	Chemical Test
1/07/2017 / 2000 / Natrona County Jail	Results: 0.000 Test Refused ☐ Instrument #: 32215	Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Officer Flake	☒ Yes ☐ No	Cheeseburger	1 pm	Energy drink 1 can	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
9 pm / 2005	Last night	About 9 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☒ Yes ☐ No Sore elbow	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "But I used to take pain pills"	Cooperative	Poor, Slow, Unstable

Speech:	Breath odor:	Face:
Slow, Thick	Normal	Pale

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☐ Normal ☒ Droopy

Pulse and Time

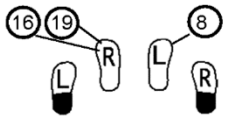
1. 58 / 2015
2. 56 / 2027
3. 56 / 2045

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence

Right eye Left eye

23/30 **One Leg Stand** 25/30

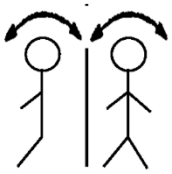


L	R	
1	1	Sways while balancing
All	All	Uses arms to balance
		Hopping
2	1	Puts foot down

Slow count

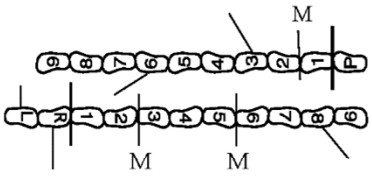
Modified Romberg Balance

Approx. 2" Approx. 2" 2" 2"



Scratching arms

Walk and Turn Test

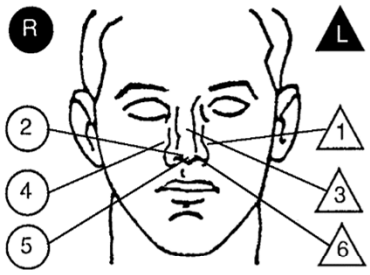


Stopped counting out loud on 5th step.
Had to be reminded to count out loud.

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking		
Misses heel-toe	✓✓	✓
Steps off line	✓	✓✓
Raises arms	✓✓✓✓	✓✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
55 estimated as 30 seconds	As instructed. Slow	N/A	N/A

Finger to Nose
(Draw lines to spots touched)



Slow hand and arm movements. Scratching his arms.

PUPIL SIZE	Room light (2.5	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	3.0	1.5
Right Eye	2.0	3.0	1.5

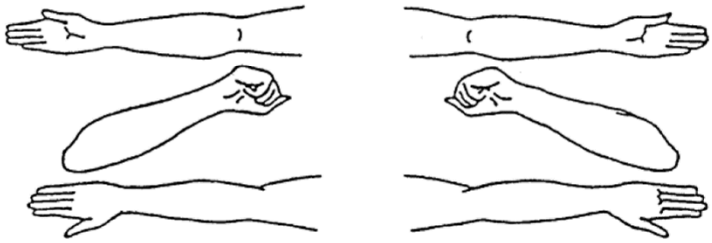
Nasal area: Clear

Oral cavity: White coating, Dry mouth

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to None

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
112/64	97.2 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I used to use pain pills"	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
1/07/17 1905	1940	2000	2305	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Cotton, Ozzie

1. **Location:** The evaluation was conducted at the Natrona County Jail in the booking room. The room is well illuminated and has a concrete floor with no obstructions and has ample room for conducting a drug influence evaluation. The darkroom examinations were conducted in the staff restroom.

2. **Witnesses:** Sergeant Scott Jones of the Casper Police Department witnessed and recorded the entire evaluation.

3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered by Officer Ben Flake on prior to my arrival.

4. **Notification and Interview of the Arresting Officer:** I was requested to contact Casper Police Officer Flake for a drug evaluation. Upon contacting Officer Flake at the Natrona County Jail, he advised me that the suspect's vehicle was observed drifting in and out of his traffic lane and driving 20 mph under the posted speed on Highway 220. According to Officer Flake, during personal contact, the suspect did not have an odor of an alcoholic beverage on his breath. However, Officer Flake observed that the suspect had poor coordination, slow and deliberate movements, and constricted pupils. He also noticed that the suspect's speech was slow, thick, and slurred, and that his face appeared pale. The consented to SFSTs at roadside. Officer Flake told me that the suspect reported having no medical conditions, injuries, or physical defects, but observed that he had been driving barefoot. Officer Flake administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no clues of HGN, three clues on the W&T, and four clues on the OLS. At the conclusion of the SFSTs, Officer Flake arrested the suspect for DWI, and transported him to the Natrona County Jail for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the Natrona County Jail. He was sitting on a bench and was continually scratching his face and arms. He had a dry mouth and smacked his lips when he spoke. When he stood, he was unstable and several times used the wall next to the bench to steady himself. Several times he stated he was cold. The suspect was wearing blue jeans, a brown tee-shirt, and no footwear. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to. His coordination was poor and he had slow, deliberate movements. I asked the suspect if he had been informed of his Miranda rights and he indicated that he had. I asked the suspect if he had any injuries or physical defects, and he said he had a sore elbow. He also stated that he was otherwise healthy and was not under the care of a doctor or dentist. He told that he had eaten a cheeseburger around 1 pm and had drank an energy drink at that time. When asked if he was taking any medication or drugs, he responded "no" and added "but I used to take pain pills." The suspect told me that he was not blind in either eye and did not wear corrective lenses. He indicated that he had slept the night before for about nine hours. Several times during the initial contact with the suspect, he appeared to be on the nod and at times, I had to repeat my questions.

6. **Medical Problems and Treatment:** The suspect stated he had a sore elbow but had not seen a physician for the pain. During the evaluation, the did not report any other injuries and none were observed.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect.

   Modified Romberg Balance: During this test, the suspect swayed approximately two inches front to back and side to side. His time estimation was slow, estimating 30 seconds in 55 seconds. He scratched his arms and face during the test.

Walk & Turn: For this test, a painted line of the concrete floor was used. During the test, the suspect lost his balance twice during the instructions phase. During the walking phase of the test, he missed touching heel to toe twice on the first nine steps, stepped off the line once, and used his arms to balance four times. His turn was slow, but completed as instructed. On the second nine steps, the suspect missed touching heel to toe once, stepped off the line twice, and raised his arms to balance twice. Several times during the test, he had to be reminded to count his steps out loud.

One Leg Stand: When the suspect stood on his left foot and raised his right foot, he counted slowly, and swayed side to side. He also used his arms to balance during the entire test, and put foot down on counts 1,016 and 1,019. The suspect's counting was slow, counting to 1,023 in the 30 second period. When standing on his right foot and raising his left foot, the suspect swayed front to back. He used his arms to balance during the entire test, and put foot down on count 1,008. The suspect again counted slowly, counting to 1,025 in the 30 second period.

Finger to Nose: During this test, the suspect scratched his arms numerous times. He also did not touch the tip of his nose with the tip of his index finger as instructed on three of the six attempts. His hand and arm movements were slow and deliberate.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect's pupil sizes were estimated in three different lighting levels. In Room Light, his pupils were estimated at 2.0 mm in both eyes. In Near Total Darkness, the suspect's pupils were estimated at 3.0 mm both eyes, and in Direct Light they were estimated at 1.5 mm both eyes. All were below the DRE average ranges. There was little to none visible pupil reaction to light. Rebound dilation was not observed and he was able to converge his eyes as directed.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were 58 beats per minute (bpm), 56 bpm, and 56 bpm. All three were below the DRE average range of 60 – 90 bpm. His blood pressure was measured at 112/64, which was also below the DRE average ranges. The suspect's body temperature was measured with an oral thermometer at 97.2 degrees Fahrenheit which was below the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal was clear. The suspect's mouth was dry and he had a white coating on his tongue. There were no injection signs observed.

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He denied any current drug use, but admitted that he used to take pain pills. When asked how long ago, he indicated it had been about a year. He claimed he used them for lower back pain. When asked what pain medication he used, he indicated that he used several different kinds.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** At the end of the evaluation, the suspect provided a urine sample. The sample was submitted as evidence and will be forwarded to the state crime laboratory for analysis.

13. **Miscellaneous:** Refer to Officer Flake's arrest report for additional details.

MID-COURSE REVIEW

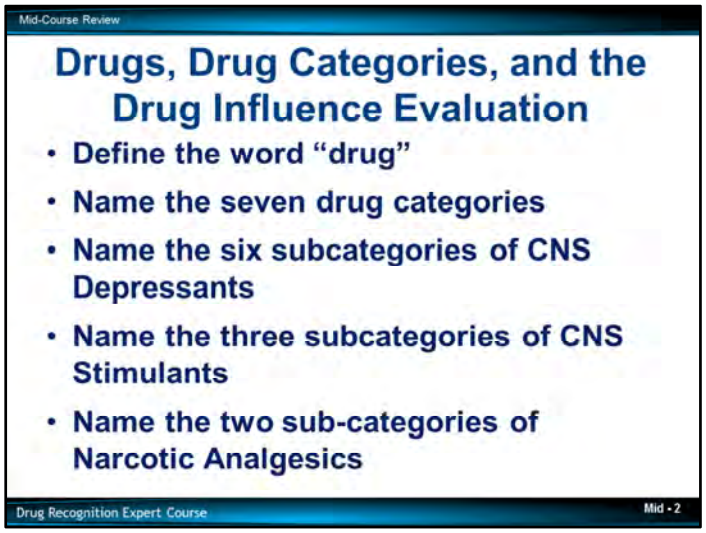
This is an after-normal-class-hours session participants are free to attend or not, but are encouraged to attend. Its principal purpose is to help solidify the knowledge and skills they have begun to acquire from the Pre-School and from the first four days of the DRE 7-Day School. This session must be highly interactive. Don't simply present information or conduct demonstrations. Make the participants do it. Ask questions and call upon participants to conduct the demonstrations required. Try to involve everybody and convey your gratitude for the fact they have attended this session.

CONTENT SEGMENTS

A. Drugs, Drug Categories, and the Drug Influence Evaluation
B. Eyes and Vital Signs
C. Physiology
D. Questions and Answers

LEARNING ACTIVITIES

Instructor/Participant Dialogues
Participant-Led Demonstrations



A. <u>Drugs, Drug Categories, and the Drug Influence Evaluation</u>

Define the word "drug."

- ***(Session 2, Page 4) Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.***

Name the seven drug categories.

- ***(Session 2, Pages 6 – 12) CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis***

Name the six subcategories of Central Nervous System (CNS) Depressants.

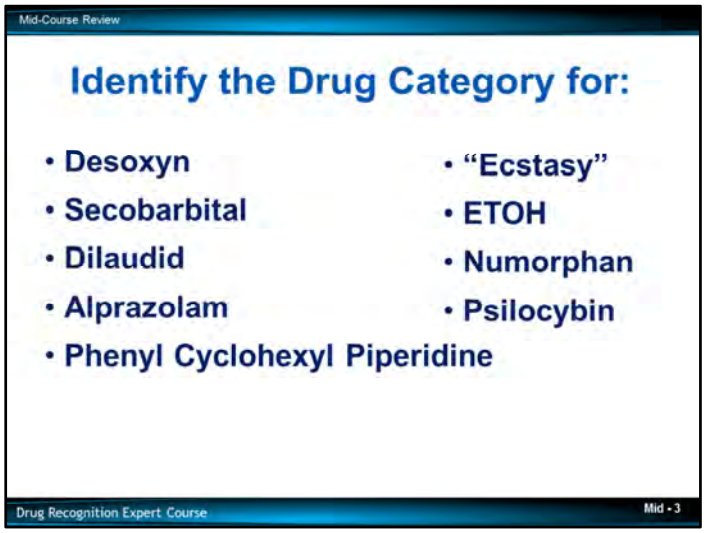
- ***(Session 9, Pages 7 – 8) Barbiturates, Non-Barbiturates, Anti-Anxiety Tranquilizers, Antidepressants, Anti-Psychotic Tranquilizers, and Combinations of the first five***

Name the three subcategories of CNS Stimulants.

- ***(Session 10, Pages 6 – 8) Cocaine, the Amphetamines, and "Others."***

Name the two sub-categories of Narcotic Analgesics.

- ***(Session 17, Page 7) Opiates and Synthetics***



Identify the category for each of the listed drugs:

Desoxyn

- ***(Session 10, Page 13) CNS Stimulant***

Secobarbital (Seconal)

- ***(Session 9, Page 9) CNS Depressant (Barbiturate)***

Dilaudid

- ***(Session 17, Page 10) Narcotic Analgesic***

Alprazolam (Xanax)

- ***(Session 9, Page 12) CNS Depressant (Anti-Anxiety)***

Phenyl Cyclohexyl Peperidine

- ***(Session 16, Page 6) Dissociative Anesthetics***

"Ecstasy" (MDMA)

- ***(Session 14, Page 16) Hallucinogen***

ETOH

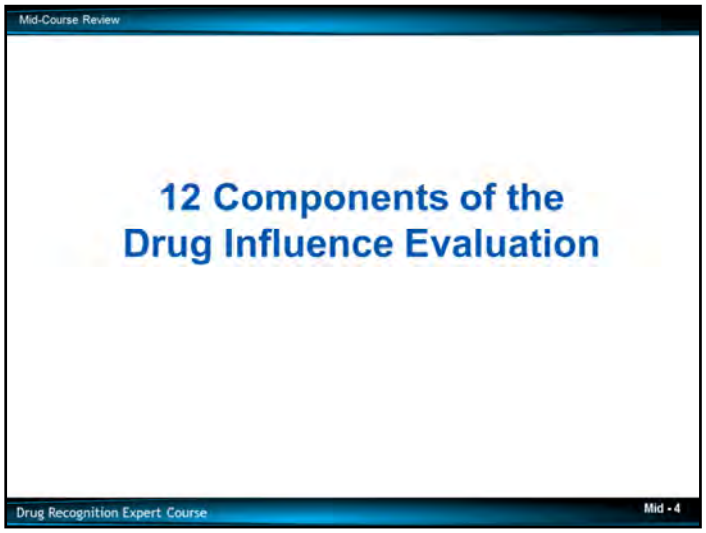
- ***(Session 9, Page 32) CNS Depressant***

Numorphan

- ***(Session 17, Page 9) Narcotic Analgesic***

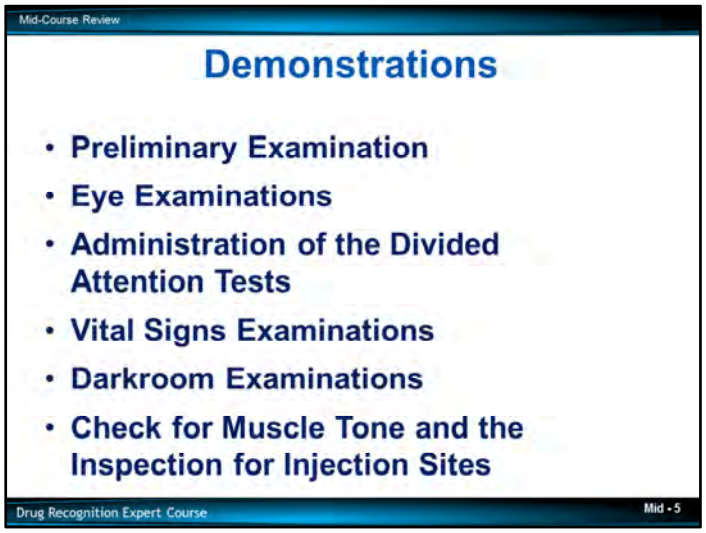
Psilocybin

- ***(Session 14, page 11) Hallucinogen***



List the twelve components of the Drug Influence Evaluation in the proper sequence.
(Session 4, Pages 7 – 8)

1. ***Breath Alcohol Test***
2. ***Interview of Arresting Officer***
3. ***Preliminary Examination***
4. ***Eye Examinations***
5. ***Divided Attention Tests***
6. ***Vital Signs Examinations***
7. ***Darkroom Examinations***
8. ***Check for Muscle Tone***
9. ***Injection Sites Inspection***
10. ***Statement of Suspect***
11. ***Evaluator's Opinion***
12. ***Toxicological Examination***



For demonstrations, allow participants to refer to the standard Drug Influence Evaluation Form. Be sure to provide appropriate positive feedback and constructive criticism of the demonstrators' performances.

Demonstrate the Preliminary Examination

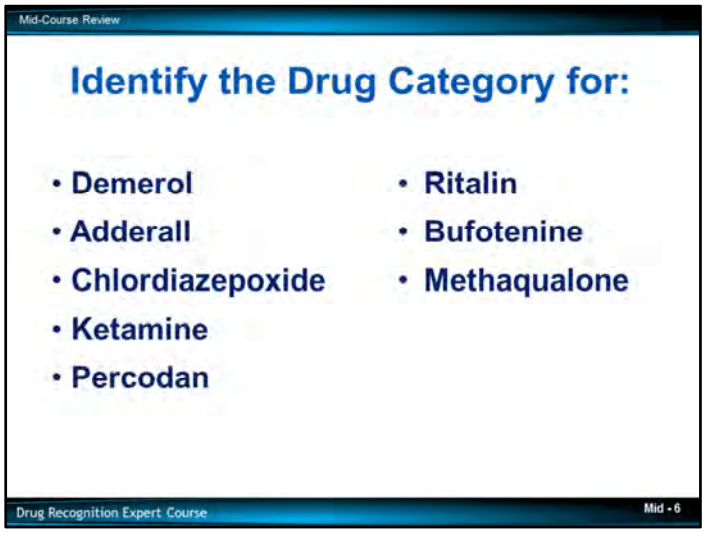
Demonstrate the Eye Examinations

Demonstrate the Administration of the Divided Attention Tests

Demonstrate the Vital Signs Examinations

Demonstrate the Darkroom Examinations

Demonstrate the Check for Muscle Tone and the inspection for Injection Sites



Identify the category for each of the listed drugs:

Demerol

- ***(Session 17, Page 13) Narcotic Analgesic***

Adderall

- ***(Session 10, page 13) CNS Stimulant***

Chlordiazepoxide

- ***(Session 9, Page 12) CNS Depressant***

Ketamine

- ***(Session 16, Page 11) Dissociative Anesthetics***

Percodan

- ***(Session 17, Page 12) Narcotic Analgesic***

Ritalin

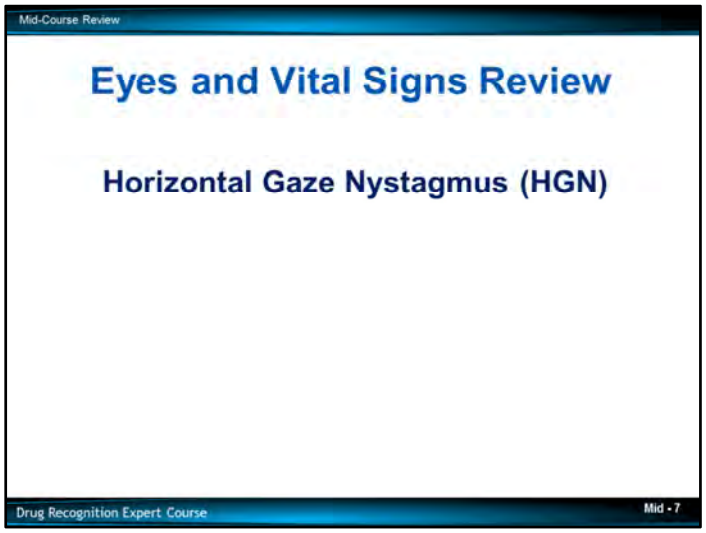
- ***(Session 10, Page 8) CNS Stimulant***

Bufotenine

- ***(Session 14, Pages 9 and 14) Hallucinogen***

Methaqualone

- ***(Session 9, Page 11) CNS Depressant***



B. <u>Eyes and Vital Signs</u>

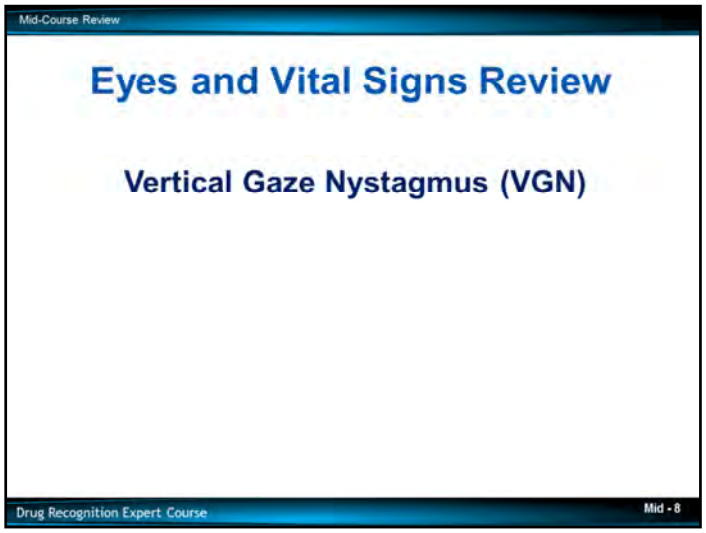
Name the three clues of Horizontal Gaze Nystagmus (HGN).

- ***(Session 5, Page 8) Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, Angle of Onset***

Demonstrate the check for "Lack of Smooth Pursuit."
Demonstrate the check for "Distinct and Sustained Nystagmus at Maximum Deviation."
Ask the participant demonstrator: How long should the eye be held at maximum deviation? (A minimum of four seconds)
Demonstrate the check for "Angle of Onset."
Ask the participant demonstrator: What is the formula that expresses the approximate relationships between BAC and Angle of Onset? (BAC = 50 – Angle of Onset)

Name the categories of drugs that cause HGN.

- ***(Session 9, Page 35) CNS Depressants, (Session 16, Page 31) Dissociative Anesthetics, and (Session 19, Page 24) Inhalants***



Name the categories that will cause Vertical Gaze Nystagmus (VGN).

- ***(Session 9, Page 35) CNS Depressants, (Session 16, Page 31) Dissociative Anesthetics, and (Session 19, Page 24) Inhalants***

Demonstrate the check for VGN.

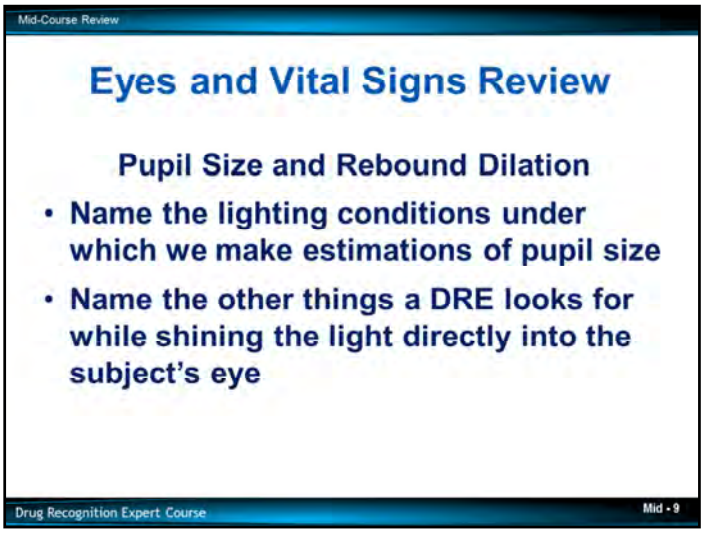
Name the test always administered immediately after VGN.

- ***(Session 5, Page 15) Lack of Convergence***

Demonstrate the test for LOC.

Name the categories of drugs that usually will cause Lack of Convergence (LOC).

- ***(Session 9, Page 35) CNS Depressants, (Session 16, Page 31) Dissociative Anesthetics, (Session 19, Page 24) Inhalants, (Session 21, Page 32) Cannabis***

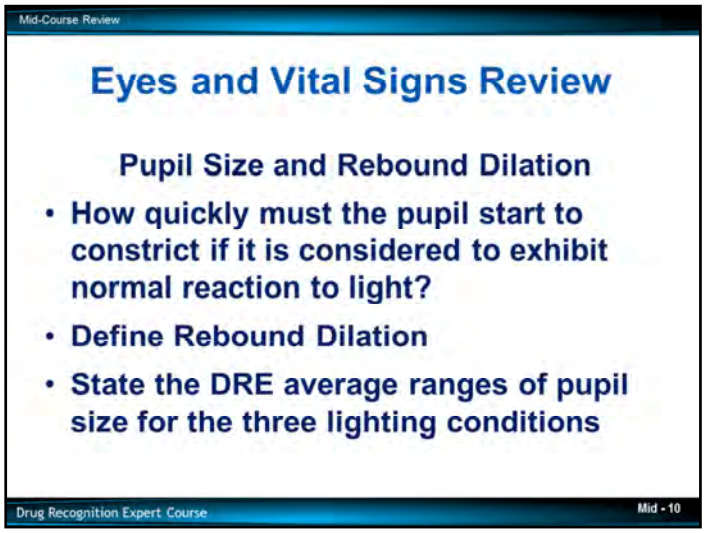


Name the lighting conditions under which we make estimations of pupil size.

- ***(Session 5, Page 21) Room light, near-total darkness, direct light***

Name the other things a Drug Recognition Expert (DRE) looks for while shining the light directly into the subject's eye.

- ***(Session 5, Pages 29 and 33) Rebound Dilation and Pupil Reaction to Light***



How quickly must the pupil start to constrict if it is considered to exhibit normal reaction to light?

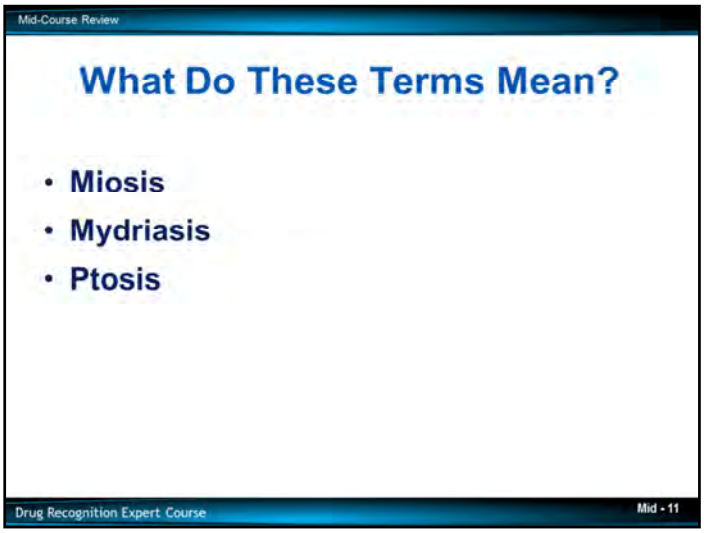
- ***(Session 5, Page 33) Within one second***

Define Rebound Dilation.

- ***(Session 5, Page 29) A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size***

State the DRE average ranges of pupil size for the three lighting conditions.
(Session 5, Page 32)

- ***Room light: 2.5 – 5.0 mm***
- ***Near Total Darkness: 5.0 – 8.5 mm***
- ***Direct Light: 2.0 – 4.5 mm***



Define each of the listed terms:

Miosis

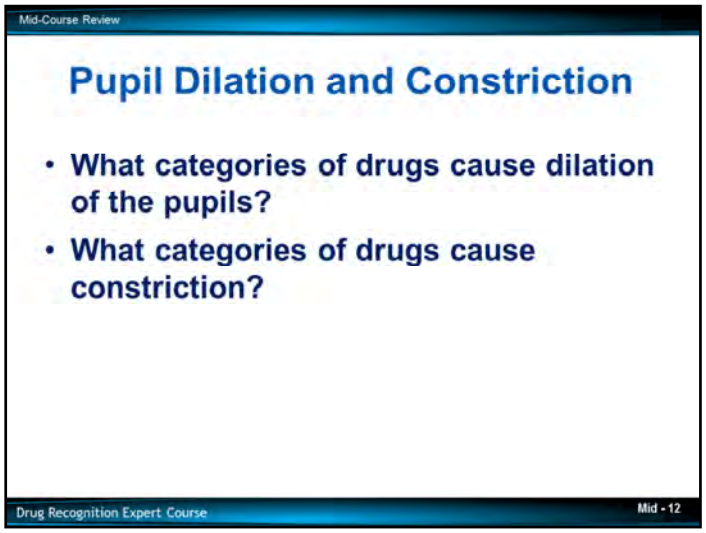
- ***(Session 5, Page 31) Abnormally small (constricted) pupils***

Mydriasis

- ***(Session 5, Page 31) Abnormally large (dilated) pupils***

Ptosis

- ***(Session 9, Page 34) Droopy eyelids***



What categories of drugs cause dilation of the pupils?

- ***(Session 10, Page 30) CNS Stimulants, (Session 14, Page 24) Hallucinogens, (Session 21, Page 32) Cannabis (although sometimes only slight dilation, if any)***

What categories of drugs cause constriction?

- ***(Session 17, Page 33) Narcotic Analgesics***

Identify the category for each of the listed drugs:

Oxycodone
- ***(Session 17, Page 12) Narcotic Analgesic***

Halcion
- ***(Session 9, Page 13) CNS Depressant***

Librium
- ***(Session 9, Page 12) CNS Depressant***

Peyote
- ***(Session 14, Page 10) Hallucinogen***

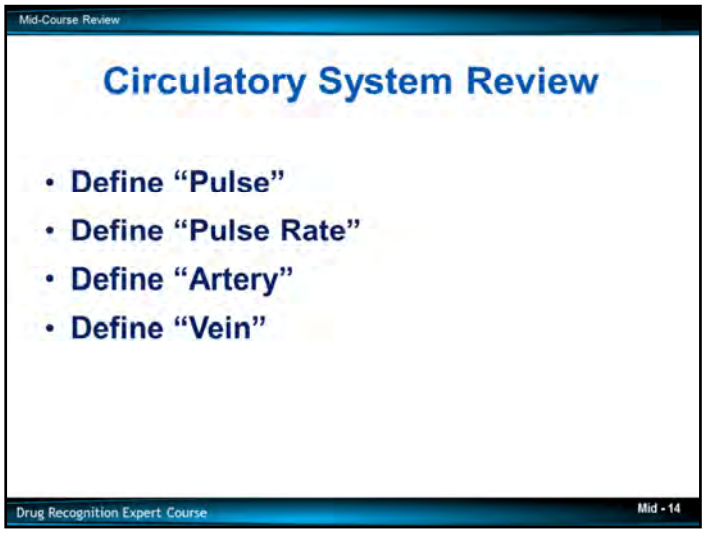
Ritalin
- ***(Session 10, Page 8) CNS Stimulant***

Diazepam
- ***(Session 9, Page 12) CNS Depressant***

Dexedrine
- ***(Session 10, Page 13) CNS Stimulant***

Hycodan
- ***(Session 17, Page 11) Narcotic Analgesic***

Klonopin
- ***(Session 9, Page 12) Page CNS Depressant***



Define "Pulse."

- ***(Session 7, Page 5) The rhythmic dilation and relaxation of an artery that results from the beating of the heart***

(Also acceptable: the expansion and contraction of an artery, caused by the surging flow of blood)

Define "Pulse Rate."

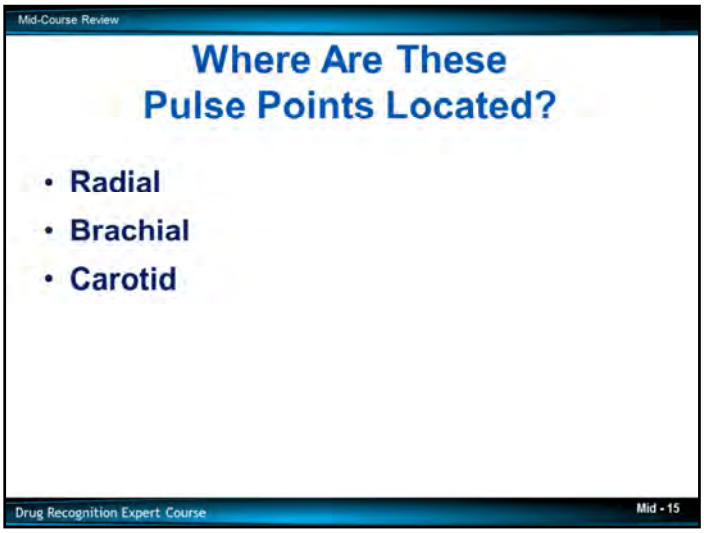
- ***(Session 7, Page 5) The number of pulsations in an artery per minute***

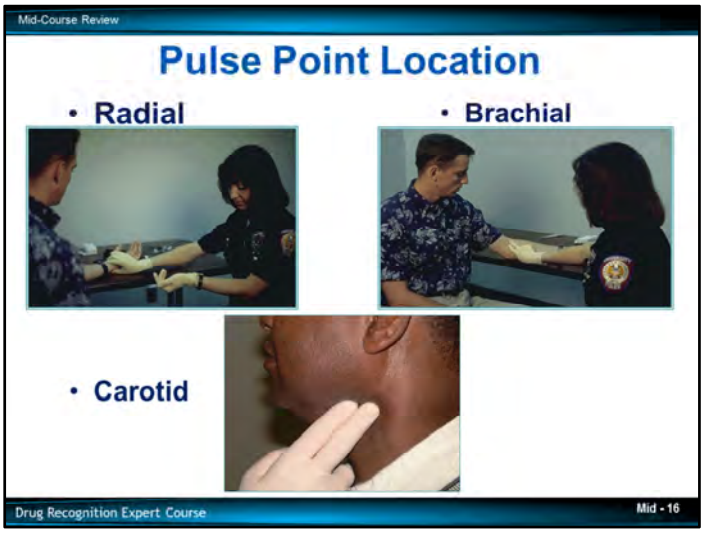
Define "Artery."

- ***(Session 7, Page 5) A strong, elastic blood vessel that carries blood from the heart to the body tissues***

Define "Vein."

- ***(Session 7, Page 5) A blood vessel that carries blood back to the heart from the body tissues***


Mid-Course Review
Where Are These Pulse Points Located?
• Radial
• Brachial
• Carotid
Drug Recognition Expert Course
Mid - 15



Identify the location of each listed pulse point:

Radial

- ***(Session 7, Page 6) In the wrist, at the base of the thumb***

Brachial

- ***(Session 7, Page 7) In the crook of the arm***

Carotid

- ***(Session 7, Page 8) In the neck, on either side of the center of the throat***

Demonstrate a pulse measurement, using the left Radial pulse point.

State the normal range of adult human pulse rate.

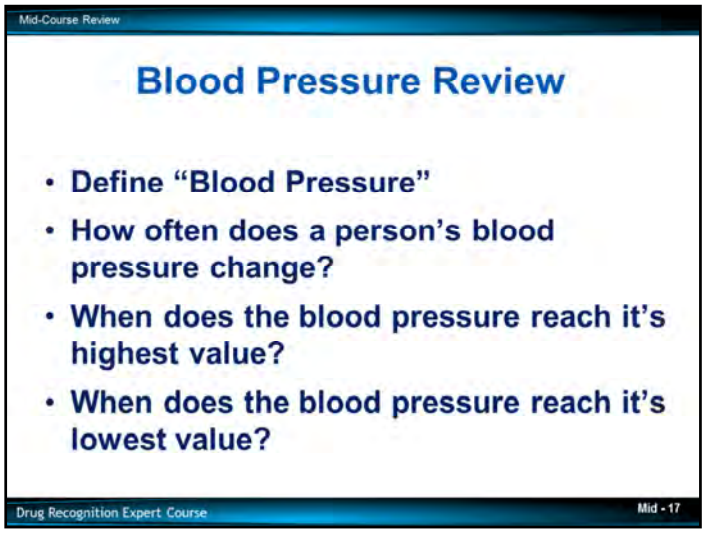
- ***(Session 7, Page 10) 60 – 90 beats per minute***

Name the drug categories that usually cause elevated pulse rate.

- ***(Session 10, Page 30) CNS Stimulants, (Session 14, Page 34) Hallucinogens, (Session 16, Page 31) Dissociative Anesthetics, (Session 19, Page 24) Inhalants, (Session 21, Page 32) Cannabis***

Name the drug categories that usually cause lowered pulse rate.

- ***(Session 9, Page 35) CNS Depressants, (Session 17, Page 33) Narcotic Analgesics***



Define "Blood Pressure."

- ***(Session 7, Page 12) The force exerted by blood on the walls of the arteries***

How often does a person's blood pressure change?

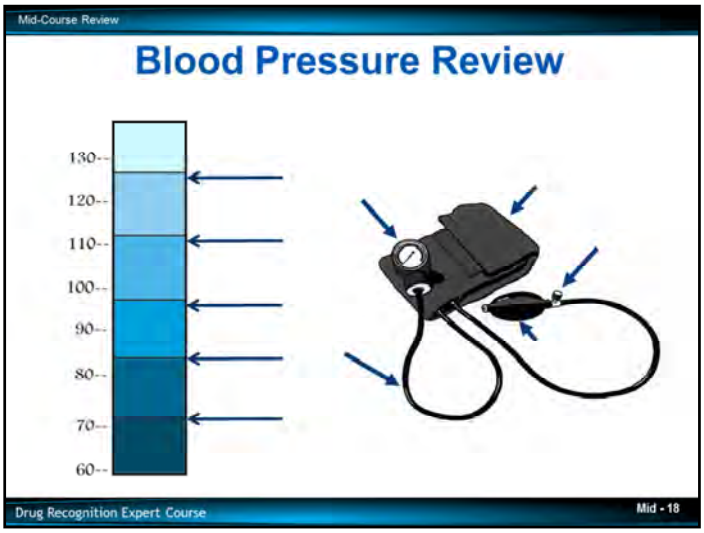
- ***(Session 7, Page 12) It is always changing, from instant to instant***

When does the blood pressure reach it's highest value?

- ***(Session 7, Page 12) When the heart is fully contracted, and blood is sent rushing into the arteries***

When does the blood pressure reach it's lowest value?

- ***(Session 7, Page 12) When the heart is fully expanded, just before it starts to contract for the next "pumping" action***



Name the two medical instruments used to measure blood pressure.

- ***(Session 7, Page 13) SPHYGMOMANOMETER and (Session 7, Page 16) STETHOSCOPE***

Select a participant to come to the dry erase board or easel/easel pad and print "SPHYGMOMANOMETER" and "STETHOSCOPE."

Name the sounds we hear through the stethoscope when we take a blood pressure measurement.

- ***(Session 7, Page 17) KOROTKOFF SOUNDS***

Select a participant to come to the dry erase board or easel/easel pad and print "KOROTKOFF SOUNDS."

What does this "Hg" mean?

- ***(Session 7, Page 11) Chemical symbol for the element Mercury; abbreviation for the Latin word Hydrargyrum, meaning "Mercury"***

Print "Hg" on the dry erase board or easel/easel pad.

In what units is blood pressure measured?

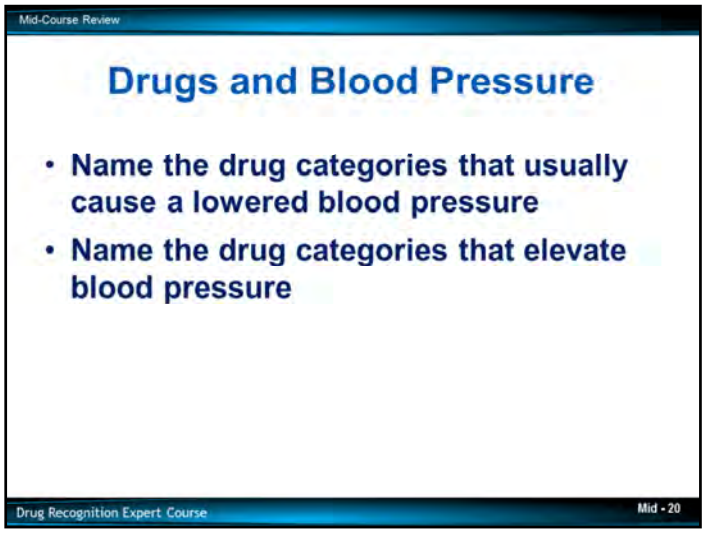
- ***(Session 7, Page 11) Millimeters of Mercury***

Print "mm" on the dry erase board or easel/easel pad right in front of the "Hg."

Suppose, at some particular instant, a person has a blood pressure of 120 mmHg. What does "120 mmHg" mean?

- ***(Session 7, Page 11) It means the pressure would be strong enough to push a column of liquid Mercury up a glass tube to a height of 120 millimeters***

If one is available, display a Sphygmomanometer that has a liquid mercury pressure gauge.

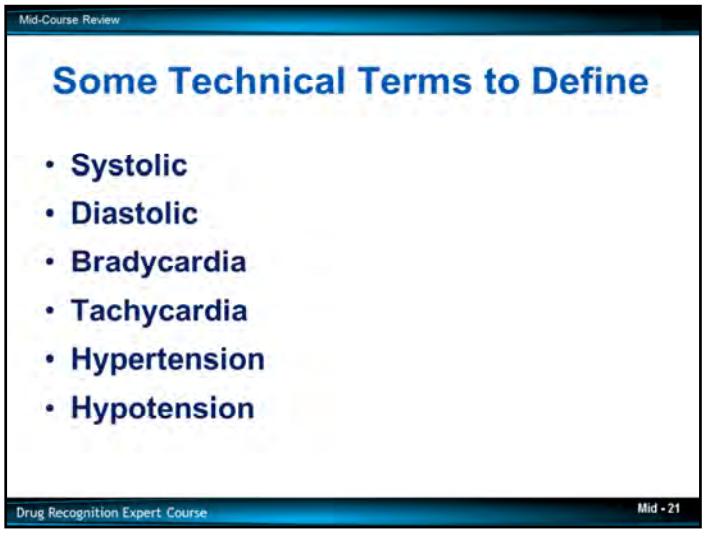


Name the drug categories that usually cause a lowered blood pressure.

- ***(Session 9, Page 35) CNS Depressants, (Session 17, Page 33) Narcotic Analgesics, and the (Session 19, Page 24) Anesthetic Gases subcategory of Inhalants***

Name the drug categories that elevate blood pressure.

- ***(Session 10, Page 30) CNS Stimulants, (Session 14, Page 34) Hallucinogens, (Session 16, Page 31) Dissociative Anesthetics, (Session 21, Page 32) Cannabis, and the (Session 19, Page 24) other two subcategories (Volatile Solvents and Aerosols) of Inhalants***



State the meaning of each of the listed terms:

Systolic

- ***(Session 7, Page 12) The highest value of blood pressure***

Diastolic

- ***(Session 7, Page 12) The lowest value of blood pressure***

Bradycardia

- ***(Session 7, Page 10) Abnormally slow heart rate, pulse rate below the normal range***

Tachycardia

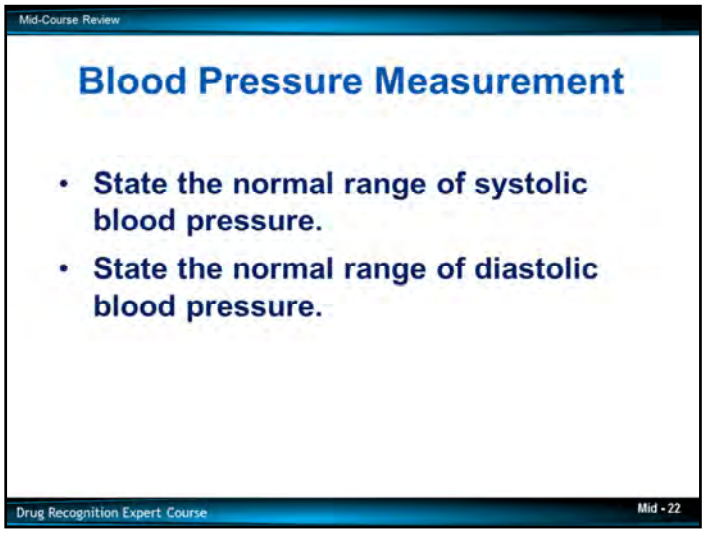
- ***(Session 7, Page 10) Abnormally rapid heart rate, pulse rate above the normal range***

Hypertension

- ***(Session 7, Page 23) Abnormally high blood pressure***

Hypotension

- ***(Session 7, Page 23) Abnormally low blood pressure***



State the normal range of systolic blood pressure.

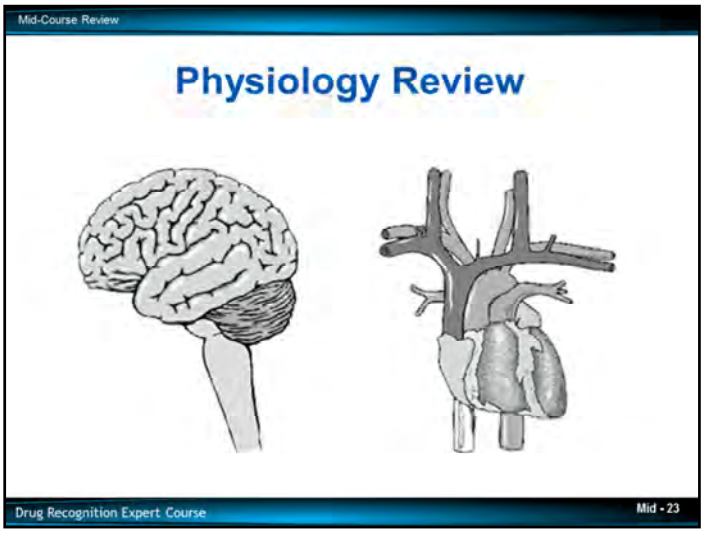
- ***(Session 7, Page 21) 120 – 140 mmHg***

State the normal range of diastolic blood pressure.

- ***(Session 7, Page 21) 70 – 90 mmHg***

Demonstrate the measurement of blood pressure.

Tell the participant demonstrator to explain out loud everything he or she does to take blood pressure measurement.



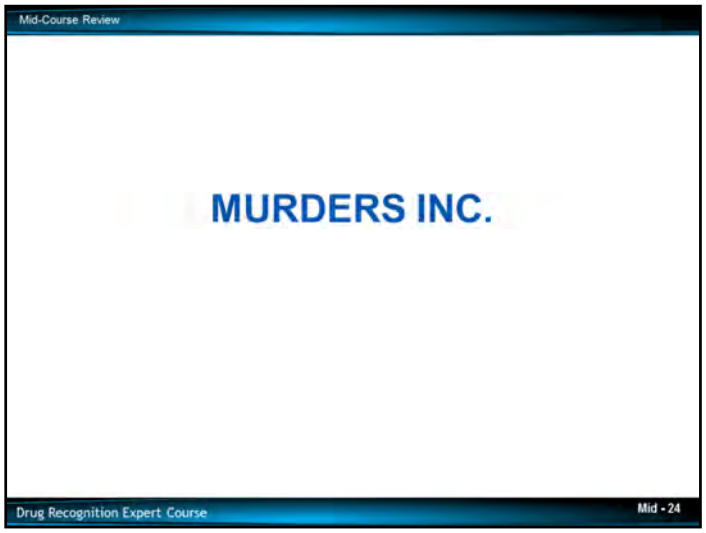
C. <u>Physiology</u>

Define "Physiology."

- ***(Session 6, Page 11) For the purposes of this training course, Physiology is the study of the functions of living organisms and their parts.***

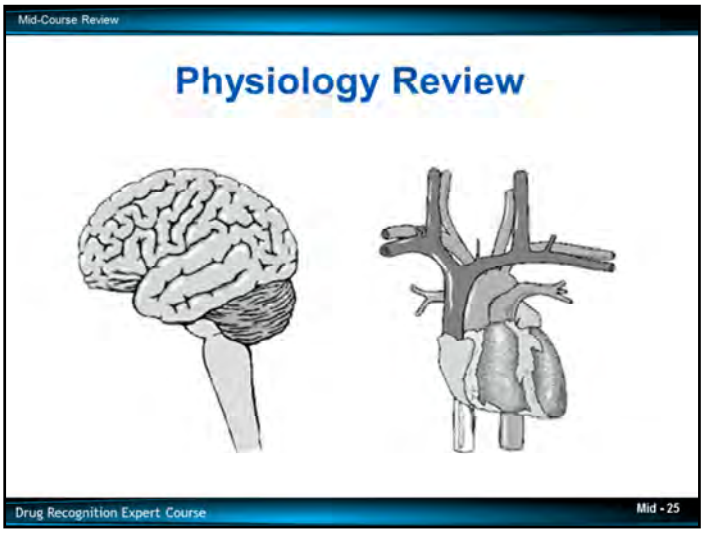
What is the expression we use to remember the names of the ten major body systems?

- ***(Session 6, Page 12) MURDERS INC***



Select a participant to come to the dry erase board of easel/easel pad and print "MURDERS INC" vertically.
Have participant write while class states what each letter stands for.
(Session 6, Pages 13 – 17)

- ***Muscular (have a student print out each name)***
- ***Urinary***
- ***Respiratory (or, reproductive)***
- ***Digestive***
- ***Endocrine***
- ***Reproductive (or, respiratory)***
- ***Skeletal***
- ***Integumentary***
- ***Nervous***
- ***Circulatory***



State the word that means "dynamic balance involving levels of salts, water, sugars and other materials in the body's fluids."
(Session 6, Page 20) Homeostasis

Which artery carries blood from the heart to the lungs?

- ***(Pre-School, Session 6, Page 7) Pulmonary***

What is unique about the Pulmonary artery, compared to all other arteries?

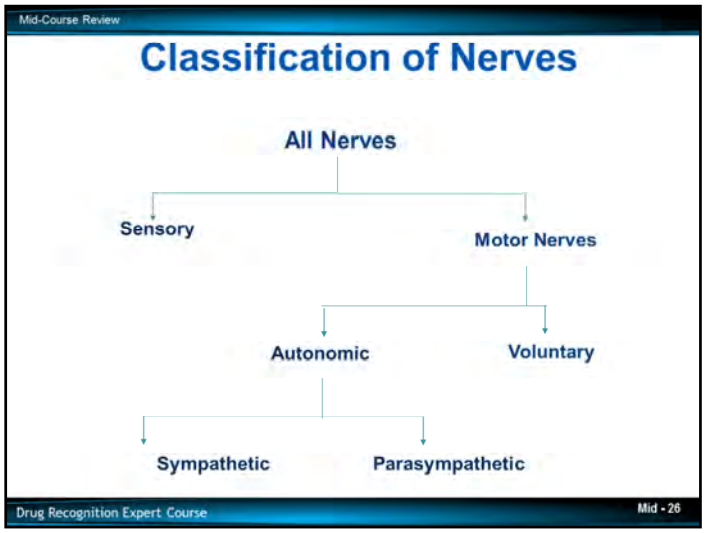
- ***(Pre-School, Session 6, Page 7) It is the only artery that takes blood from the right side of the heart***
- ***(Pre-School, Session 6, Page 7) It is the only artery that carries deoxygenated blood (i.e., blood depleted of oxygen)***

What are the Pulmonary veins?

- ***(Pre-School, Session 6, Page 7) The veins that carry blood back to the heart from the lungs***

What is unique about the Pulmonary veins?

- ***(Pre-School, Session 6, Page 7) They are the only veins that bring blood to the left side of the heart***
- ***(Pre-School, Session 6, Page 7) They are the only veins that carry oxygenated blood***



What do these terms mean?

Sensory

(Session 6, Page 28) Afferent Nerves

Motor Nerves

(Session 6, Page 28) Efferent Nerves

Voluntary

(Session 6, Page 29) Conscious control

Autonomic

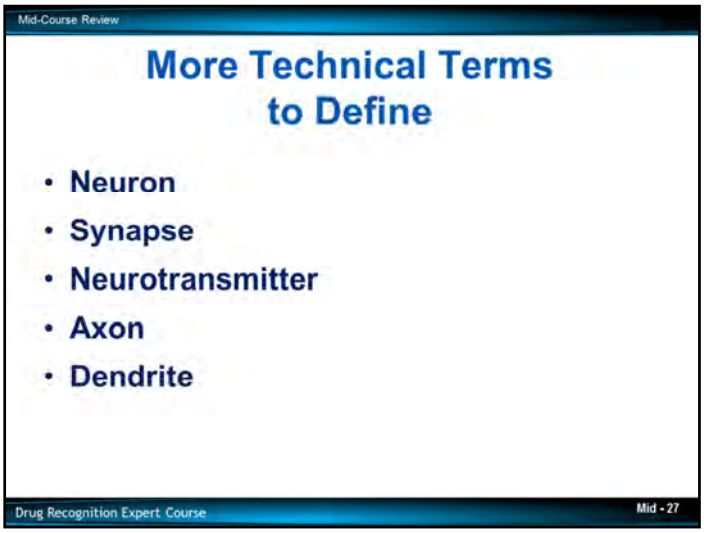
(Session 6, Page 29) Not conscious control

Sympathetic

(Session 6, Page 30) Fear, stress, etc.

Parasympathetic

(Session 6, Page 30) relaxation, tranquility, etc.



Define each of the listed terms:

Neuron

(Session 6, Page 25) A nerve cell, the basic "building block" of a nerve

Synapse

(Session 6, Page 25) The gap or space between two nerve cells

Neurotransmitter

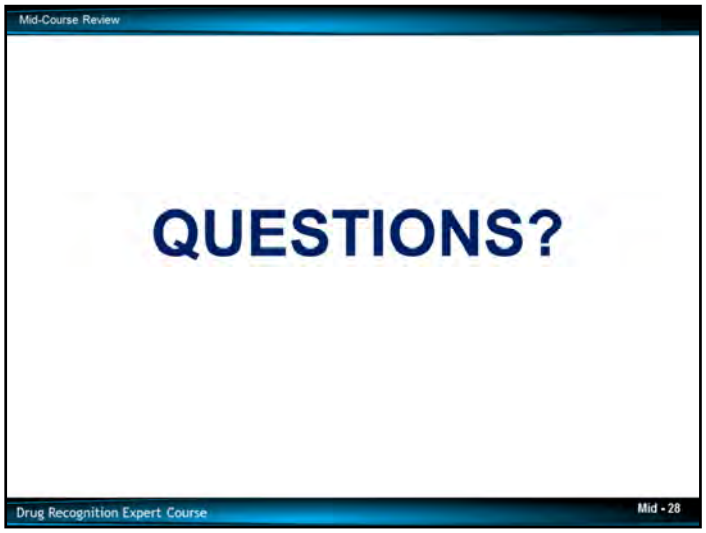
(Session 6, Page 27) A chemical that flows across the synapse, to carry a message from one neuron to the next

Axon

(Session 6, Page 25) The end of a neuron that sends out the neurotransmitter

Dendrite

(Session 6, Page 25) The end of a neuron that receives the neurotransmitter



D. <u>Questions and Answers</u>

Segment D can last as long as necessary.

Solicit and answer participants' questions about anything covered thus far in their training.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)

Date Examined / Time /Location / /	Breath Test: Test Refused ☐ Results: Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?

Time now/ Actual /	When did you last sleep? How long?	Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No

Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No	Are you under the care of a doctor or dentist? ☐ Yes ☐ No

Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:	Coordination:

Speech:	Breath odor:	Face:

Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery	Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal

Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

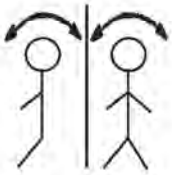
Pulse and Time 1. ____ / ____ 2. ____ / ____ 3. ____ /	HGN	Left Eye	Right Eye	Convergence Right eye Left eye
	Lack of Smooth Pursuit			
	Maximum Deviation			
	Angle of Onset			

/30 **One Leg Stand** /30

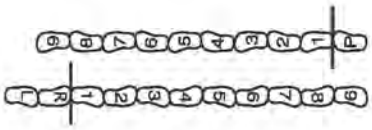
L R L R

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance
Approx. Approx.



Walk and Turn Test



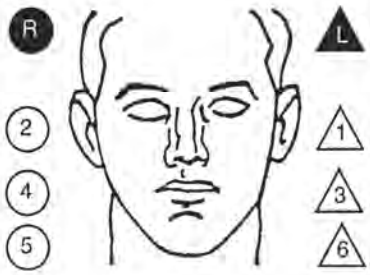
Cannot keep balance ____

Starts too soon ____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation ____estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

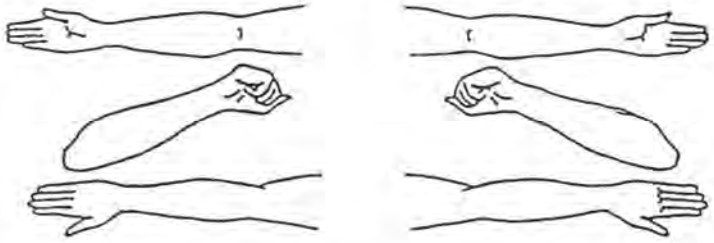
Nasal area:

Oral cavity:

Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM **LEFT ARM**



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:
☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

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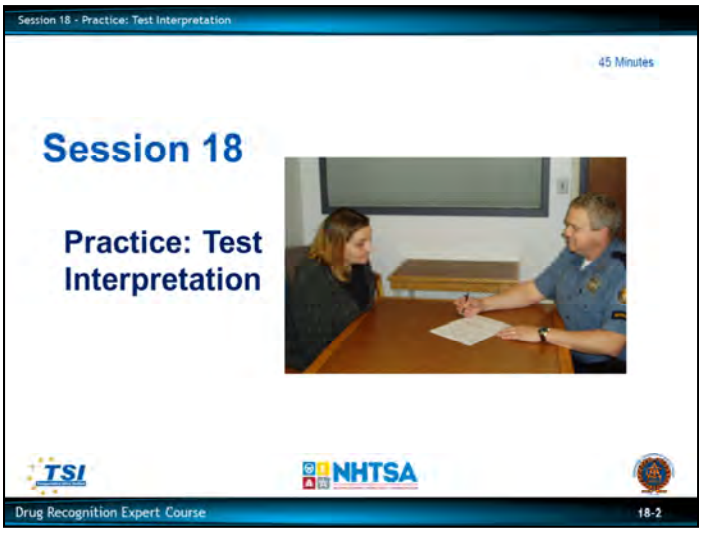
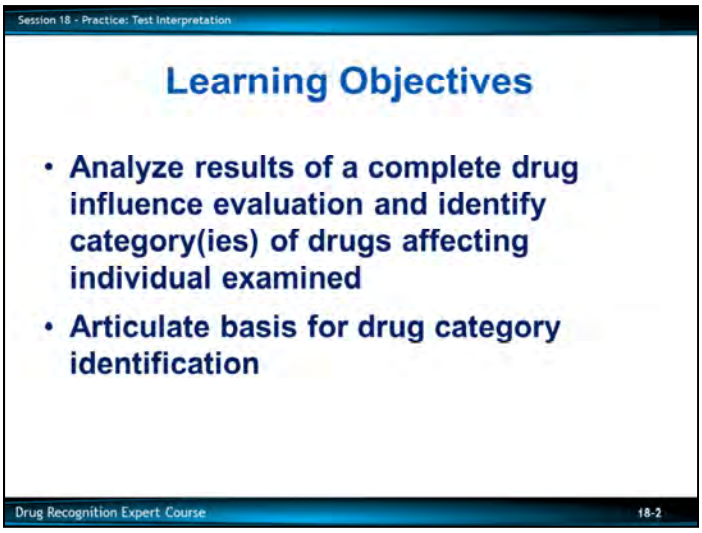


Reference "Test Interpretation" wall chart.



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

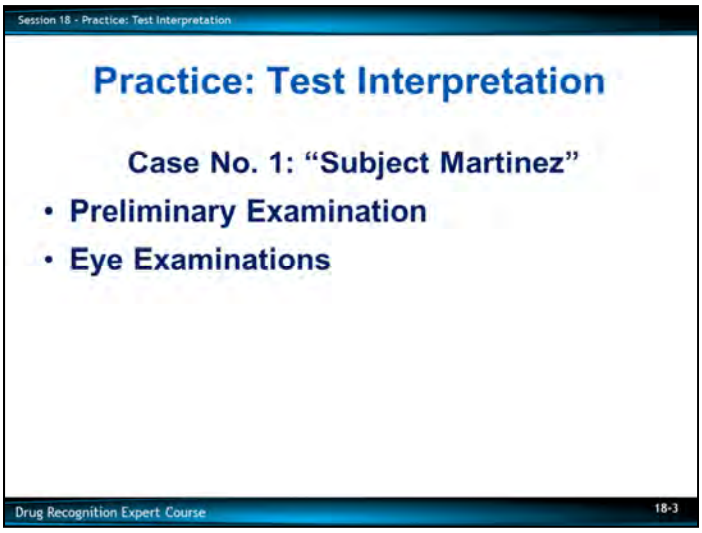
- Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined
- Articulate the bases for the drug category identification

CONTENT SEGMENTS

A. Interpretation Demonstrations
B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small-Group Practice
Participant-Led Presentations



A. <u>Interpretation Demonstrations</u>

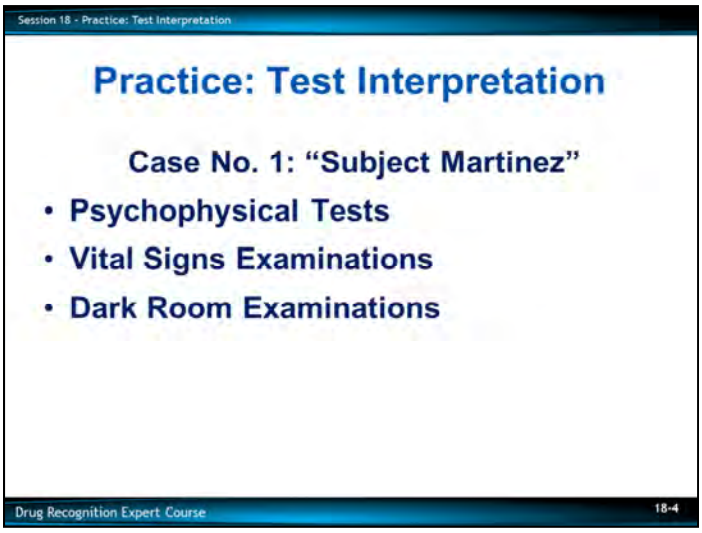
Case No.1: "Subject Martinez"
Direct participants to turn to the "Subject Martinez" exemplar in Session 18 of their manual.

Preliminary Examination
- Review the results of the preliminary examination of Subject Martinez

***Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis* for participants' responses.**

Eye Examinations
- Review the results of the eye examination of Subject Martinez

Ask participants to discuss the category or categories of drugs that would cause these examination results.



Psychophysical Tests

- Review the results of the psychophysical tests of Subject Martinez

Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.

Vital Signs Examinations

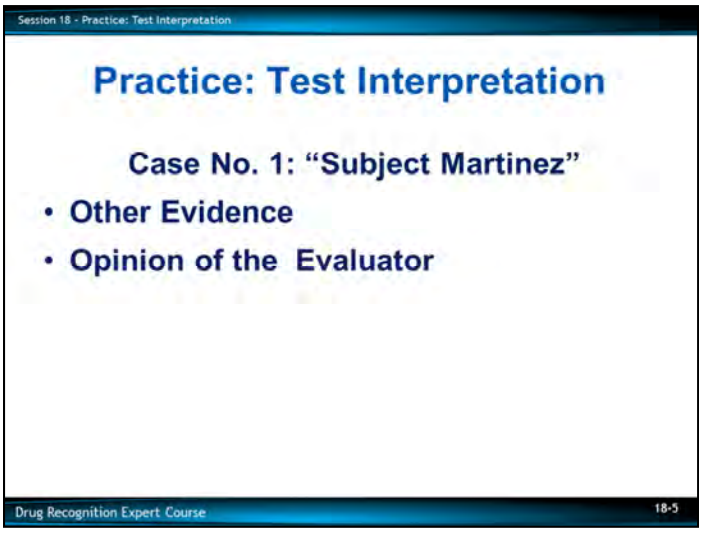
- Review the results of the vital signs examinations of Subject Martinez

Ask participants to discuss the category or categories of drugs that would cause these results.

Dark Room Examinations

- Review the results of the dark room examinations of Subject Martinez

Ask participants to discuss the category or categories of drugs that would produce these results.



Other Evidence

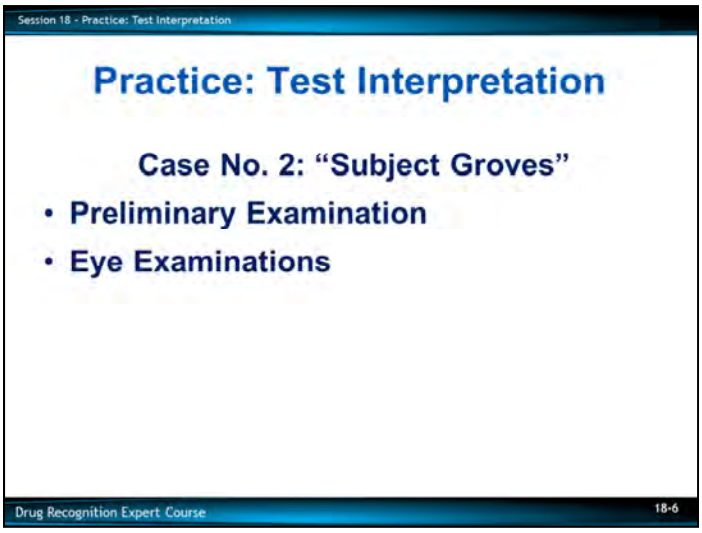
- Review the results of the examinations for injection sites and muscle rigidity and of the final interview of Subject Martinez

Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.

Opinion of the Evaluator

Point out the evidence indicates Subject Martinez is under the influence of a Dissociative Anesthetic.

Solicit participants' questions concerning this demonstration.



Case No.2: "Subject Groves"

Direct participants to review the "Subject Groves" exemplar.

Preliminary Examination

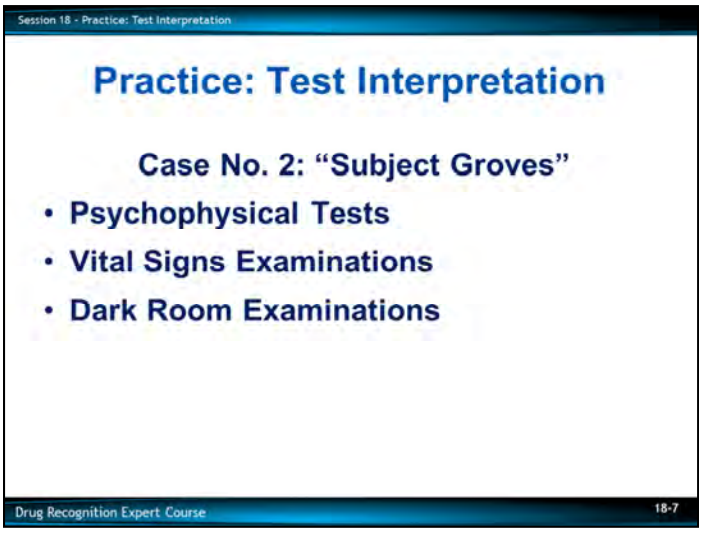
- Review the results of the preliminary examination of Subject Groves

Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis for participants' response.

Eye Examination

- Review the results of the eye examinations of Subject Groves

Ask participants to discuss the category or categories of drugs that would cause these eye examination results.



Psychophysical Tests

- Review the results of the psychophysical tests of Subject Groves

Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.

Vital Signs Examinations

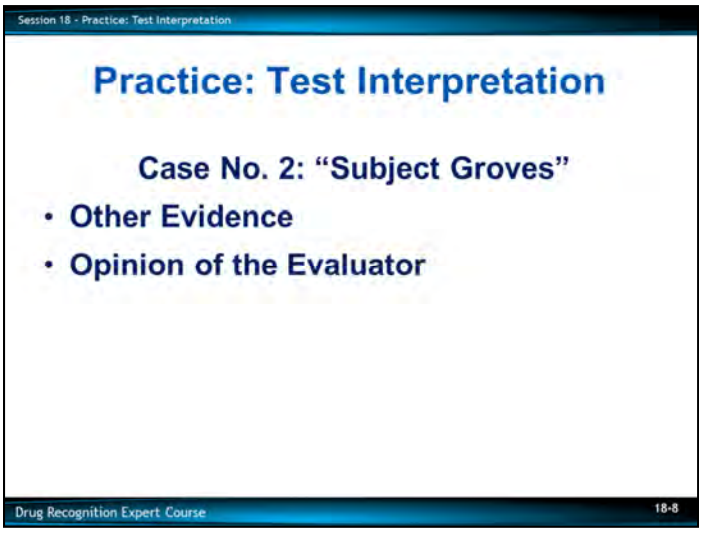
- Review the results of the vital signs examinations of Subject Groves

Ask participants to discuss the category or categories of drugs that would produce these results.

Dark Room Examinations

- Review the results of the dark room examinations of Subject Groves

Ask participants to discuss the category or categories of drugs that would produce these results*.*



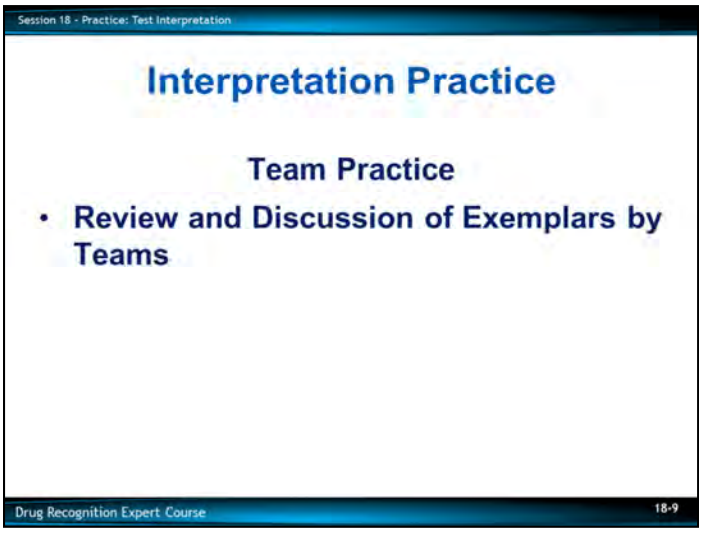
Other Evidence

- Review the results of the examinations for injection sites and muscle rigidity and of the final interview of Subject Groves

Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.

Opinion of the Evaluator

Point out the evidence indicates Subject Groves is under the influence of a Narcotic Analgesic. Solicit participants' questions concerning this demonstration.



B. Interpretation Practice

Team Practice

Assign participants to work in teams of three or four members.
Tell teams they are to review three exemplars (Subjects Hatos, Jackson, and Stevens). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, if any.
Teams will present their conclusions to the entire class.

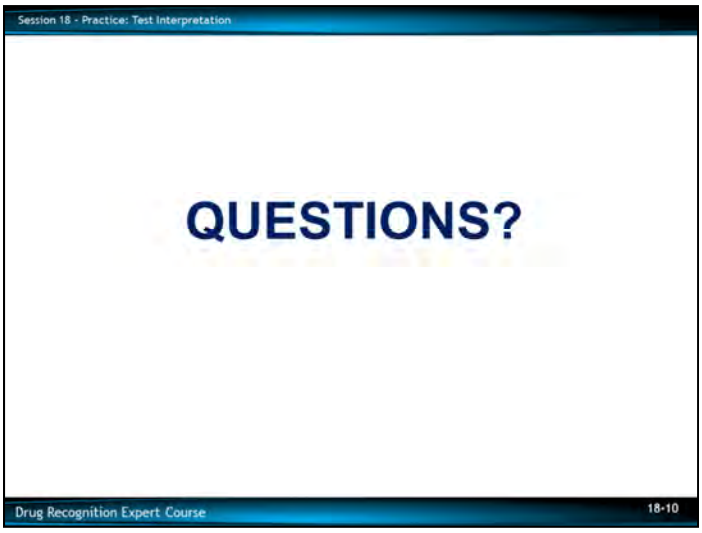
Review and Discussion of Exemplars by Teams

Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.

Feedback of Results

Poll teams to determine their conclusions concerning the category or categories of drugs present in each subject.
Subject Martinez
Subject Groves
Subject Hatos
Subject Jackson
Subject Stevens
Offer appropriate comments concerning the teams' performance.
Drug Categories for Interpretation Practice

Subject	***Categories***
Martinez	***CNS Stimulant***
Groves	***Narcotic Analgesic***
Hatos	***CNS Stimulant***
Jackson	***Narcotic Analgesic***
Stevens	***CNS Depressant***



Solicit participants' comments and questions concerning this Practice Session.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sgt Scott Peters	16855	14-08-024	Riverton PD	Session XVIII-#1

Recorder/Witness	Crash	Arresting Officer's Agency
Lt Ben Schlosser Wyoming HP	☒ None ☐ Fatal ☐ Injury ☐ Property	Laramie PD

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Martinez, Juan	5/20/80	M	W	Officer Troy Bartel #16843

Date Examined / Time /Location	Breath Test	Chemical Test
08/22/14 2330 County Jail Intake	Results: 0.00 Test Refused ☐ Instrument #: 32355	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Ofc Bartel	☒ Yes ☐ No	"Some food"	No response	No response	N/A

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
No response	No response	☐ Yes ☐ No No response	☐ Yes ☐ No Not sick

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☐ No No response	☐ Yes ☐ No No response	☐ Yes ☐ No No response

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☐ No No response	Passive	Unsteady

Speech:	Breath odor:	Face:
Slow, non-responsive at times	Chemical-like	Blank stare, sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

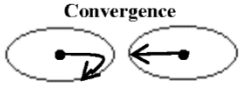
Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☒ Yes ☐ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

1. 104 / 2340
2. 108 / 2356
3. 106 / 0015

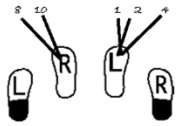
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	30	30

Convergence



Right eye Left eye

18/30 **One Leg Stand** 21/30

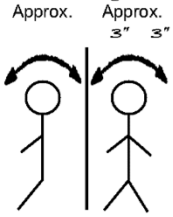


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
2	3	Puts foot down

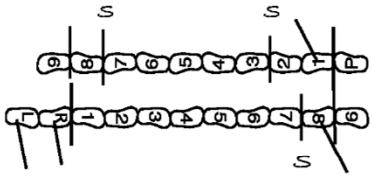
Tests stopped for safety reasons

Modified Romberg Balance

Approx. 3" Approx. 3"



Walk and Turn Test



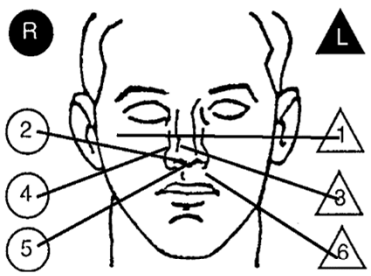
Rigid, stiff movements

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓	✓✓
Misses heel-toe		
Steps off line	✓	✓
Raises arms	✓✓	✓✓✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
38 estimated as 30 seconds	Slow	N/A	Boots

Finger to Nose

(Draw lines to spots touched)



Slow, rigid arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	6.5	4.0
Right Eye	5.0	6.5	4.0

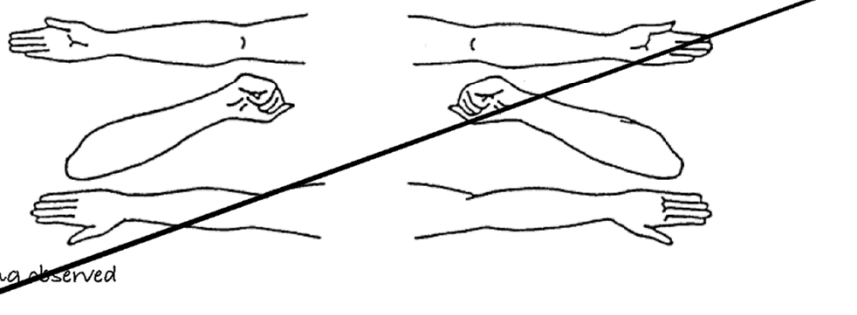
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
156/98	102 °F

Muscle Tone: ☐ Near ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
No response	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
08/22/14 / 2210	2235	2330	0030	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☒ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Martinez, Juan**

1. **Location:** The drug influence evaluation was conducted at the Albany County Jail, 420 E Ivinson Street, Laramie, Wyoming. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Officer Troy Bartel (Laramie PD). Lieutenant Ben Schlosser (Wyoming Highway Patrol) was the scribe.

3. **Breath Test:** A breath test was administered to Martinez with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** I was requested to contact Officer Bartel at the Albany County Jail for a drug influence evaluation. When I arrived, I spoke with Officer Bartel who advised he had observed the subject's vehicle drifting over the center lane divider on Highway 287 and nearly hit a vehicle head-on. After stopping the vehicle, Officer Bartel noticed the suspect appeared dazed and confused. He had a blank stare, was non-responsive at times, and was sweating profusely. The ambient temperature was in the upper 50's. Officer Bartel administered SFSTs to Martinez and noticed he had all six clues of HGN, VGN, and did very poorly on the Walk and Turn and One Leg Stand tests. He missed the tip of his nose on six attempts during the Finger to Nose test. Officer Bartel arrested Martinez and transported him to the Albany County jail for processing and breath testing. When contacted, I was off duty and responded in street clothes.

5. **Initial Observation of Suspect:** I first observed the suspect in the booking area at Albany County Jail. Martinez appeared disoriented and had a fixed, blank stare. He responded very slowing to questions. His speech was slow and slurred. He was flushed and sweaty, and was unsteady on his feet. His breath had a chemical odor, his eyes were normal, pupils were equal, and his eyes tracked together.

6. **Medical Problems/Treatment:** Martinez stated he was not sick, but otherwise did not respond to questions about his health. No physical problems were observed.

7. **Psychophysical Tests:**
   Modified Romberg Balance: During the Modified Romberg balance test, Martinez estimated the passage of 30 seconds when 38 seconds actually elapsed. During this test he had a side-to-side sway of approximately 3 inches in each direction.
   Walk and Turn: During the Walk and Turn test, Martinez lost his balance twice while listening to instructions. During the walking stage he stopped while walking one time during the first nine steps (#7) and two times during the second nine steps (#2, #7), stepped off the line one time in each direction (#8 during first nine steps, #1 on second set of nine steps), and raised his arms for balance two times during the first set of nine steps and three times on the second set. His turn was slow, but correct. He was wearing boots during this test.
   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,008, and 1,010. It appeared he was in danger of falling so the test was stopped at that point. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,001, 1,002, and 1,004. For his safety, this test was also terminated early. He was wearing boots during this test.

Finger to Nose: During the Finger to Nose test, Martinez missed the tip of his nose four times (#1, #3, #4, #6). On attempt #1, he touched his right cheekbone approximately one inch from his temple.

8. **Clinical Signs:** Martinez had all six clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 30 degrees. Vertical Gaze Nystagmus was also present. Martinez was not able to converge his eyes. Martinez's pulse was measured three times during the course of the evaluation: 1) at 2340 hours it was 104 beats per minute; 2) at 2356 hours it was 108 beats per minute; and 3) at 0015 hours it was 106 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. his blood pressure was measured at 156/98, which was above the DRE average ranges. His body temperature was measured at 102°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 5.0 and 5.0, near total darkness at 6.5 and 6.5, and in direct light at 4.0 and 4.0. These sizes are within the DRE normal ranges. Rebound dilation was not present. He had a normal reaction to light. His muscle tone was rigid.

9. **Signs of Ingestion:** His nasal area and his oral cavity were both clear. There were no indicators of injection sites.

10. **Statements:** Officer Bartel advised Martinez of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he did not respond.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Martinez is under the influence of ***a Dissociative Anesthetic*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Bartel. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Bartel.

13. **Miscellaneous:** A glass vial with an unknown liquid was located in the subject's vehicle. He claimed he got it from a friend and was unable to identify the contents.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sgt Sam Ketchum	16855	14-09-112	Idaho State Police	Session XVIII-#2

Recorder/Witness	Crash	Arresting Officer's Agency
Trooper Chris Glenn Idaho State Police	☒ None ☐ Fatal ☐ Injury ☐ Property	Nampa Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Groves, Robert R.	8/10/87	M	W	Officer Tim Riha #6164

Date Examined / Time /Location	Breath Test	Test Refused	Chemical Test	Urine	Blood
09/15/14 1730 Nampa PD	Results: 0.00	Instrument #: 76550	Oral Fluid ☐	Test or tests refused ☐	

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Ofc Riha	☒ Yes ☐ No	Bacon & eggs	Noon	Just lots of coffee 3-4 cups	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
6 pm / 1735	Last night	4-5 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☒ Yes ☐ No Just a sore back	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☒ Yes ☐ No Took a couple pills from a friend	Cooperative	Poor, wobbly at times

Speech:	Breath odor:	Face:
Mumbling, slow	Normal	Normal

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

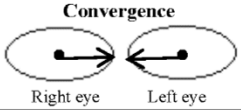
Pupil Size: (explain)	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☐ Normal ☒ Droopy

Pulse and Time

1. 58 / 1742
2. 56 / 1758
3. 56 / 1815

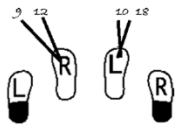
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



Right eye Left eye

22/30 **One Leg Stand** 24/30

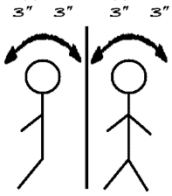


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
2	2	Puts foot down

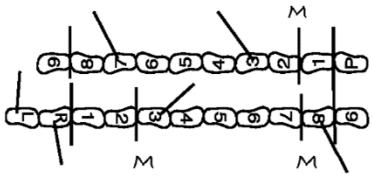
Tests stopped for safety reasons

Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Walk and Turn Test



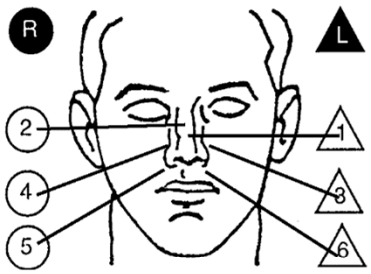
Rigid, stiff movements

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking		
Misses heel-toe	✓✓	✓
Steps off line	✓✓	✓✓
Raises arms	✓✓✓	✓✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
42 estimated as 30 seconds	As instructed	N/A	Lace-up shoes

Finger to Nose

(Draw lines to spots touched)



Slow hand and arm movements. Searched for nose

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	2.0	2.0
Right Eye	2.0	2.0	2.0

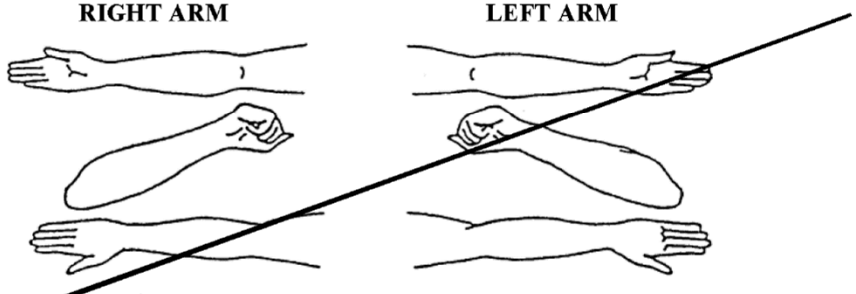
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to none

RIGHT ARM **LEFT ARM**



Nothing detected

Blood Pressure	Temperature
118/62	97.4 °F

Muscle Tone: ☐ Near ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"A couple pills from a friend"	"Just a couple"	"About 2 pm"	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
09/15/14 / 1640	1700	1730	1825	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant
☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

Suspect: **Groves, Robert**

1. **Location:** The drug influence evaluation was conducted at the Nampa Police Department, 820 2nd Street S, Nampa, Idaho. The darkroom examinations were conducted inside a bathroom at that location. The surface was a level and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Officer Tim Riha (Nampa PD). Trooper Chris Glenn (Idaho State Police) was the scribe.

3. **Breath Test:** A breath test was administered to Groves with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** I was notified to contact Officer Riha of the Nampa Police Department reference to a drug influence evaluation. I was on-duty and responded to his department's detention area. Upon my arrival, Officer Riha advised he had observed the suspect's vehicle drifting over the center line and traveling 15 mph under the posted speed limit on North Midland Boulevard. When stopped, the suspect had slow, slurred speech and had difficulty with divided attention tasks. During the SFSTs, Officer Riha noted the suspect's balance and coordination were poor, and he was unable to complete the SFSTs as directed. He was arrested for DUI and transported to Nampa PD for processing. Following the breath test, Officer requested the assistance of a DRE.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at Nampa PD. Groves appeared sleepy, and his head was nodding forward. His speech was slow and slurred. When he stood up, he lost his balance and used the desk to steady himself. His eyes were normal, pupils were equal, he had droopy eyelids, and his eyes tracked together.

6. **Medical Problems/Treatment:** Groves stated he twisted his back about two weeks ago but had not sought medical treatment. He stated he had taken some pills from a friend and they had helped with relieving his back pain. Groves stated he had no other physical problems and none were observed.

7. **Psychophysical Tests:**
   Modified Romberg Balance: During the Modified Romberg balance test, Groves estimated the passage of 30 seconds when 42 seconds actually elapsed. During this test he had a forward and backward sway and a side-to-side sway of approximately 3 inches in each direction.
   Walk and Turn: During the Walk and Turn test, Groves lost his balance twice while listening to instructions. During the walking stage he missed heel to toe two times during the first set of nine steps (#3, #8) and one time during the second set of nine steps (#2), stepped off the line two times in each direction (##3, #8 during first nine steps, #3, #7 on second set of nine steps), and raised his arms for balance three times during the first set of nine steps and two times on the second set. His turn was as instructed. He was wearing lace-up shoes during this test.
   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,009, and 1,012. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,010, and 1,018. He counted slowly both times, only counting to 1,022 and 1,024 respectively. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Groves missed the tip of his nose all six times. He hand movements were slow and it appeared as if he was searching for his nose

8. **Clinical Signs:** Groves had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Groves was able to converge his eyes. Groves' pulse was measured three times during the course of the evaluation: 1) at 1742 hours it was 58 beats per minute; 2) at 1758 hours it was 56 beats per minute; and 3) at 1815 hours it was 56 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 118/62, which was below the DRE average ranges. His body temperature was measured at 97.4°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 2.0 and 2.0, near total darkness at 2.0 and 2.0 and in direct light at 2.0 and 2.0. These sizes are below the DRE normal ranges. Rebound dilation was not present. He had little to no reaction to light. His muscle tone was flaccid.

9. **Signs of Ingestion:** His nasal area and his oral cavity were both clear. There were no indicators of injection sites.

10. **Statements:** Officer Riha advised Groves of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated he had taken a couple pills from a friend about 2 PM while he was at home. He could not identify the pills he took.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Groves is under the influence of a ***Narcotic Analgesic*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A urine sample was collected from the suspect and I witnessed the collection. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Riha.

13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Deputy Dallas Cotts	15690	14-07-320	Maricopa County SO	Session XVIII-#3

Recorder/Witness	Crash	Arresting Officer's Agency
Det Kemp Layton Phoenix PD	☒ None ☐ Fatal ☐ Injury ☐ Property	Glendale PD

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Hatos, Carlos	7/13/79	M	W	Officer Chip Haas #13073

Date Examined / Time /Location	Breath Test	Chemical Test
07/22/14 2110 4th Ave Jail	Results: 0.00 Test Refused ☐ Instrument #: 13430	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
Given by: Ofc Haas	☒ Yes ☐ No	Tacos	About 5 pm	Water	2 bottles	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
"10 pm" / 2115	Today	"Little bit"	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Cooperative, restless	Poor, jerky

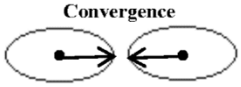
Speech:	Breath odor:	Face:
Rapid	Rancid	Flushed, sweaty

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

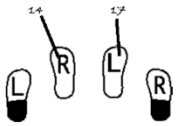
Pulse and Time	HGN	Left Eye	Right Eye
1. 108 / 2122	Lack of Smooth Pursuit	None	None
2. 106 / 2135	Maximum Deviation	None	None
3. 106 / 2150	Angle of Onset	None	None

Convergence



Right eye Left eye

38/30 **One Leg Stand** 41/30

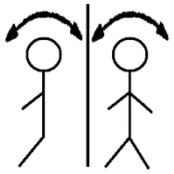


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
1	1	Puts foot down

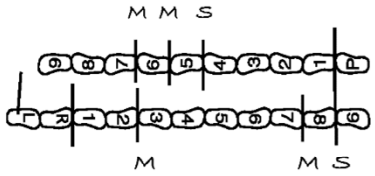
Counted quickly. Body tremors

Modified Romberg Balance

Approx. 2" 2" Approx. 3" 3"



Walk and Turn Test



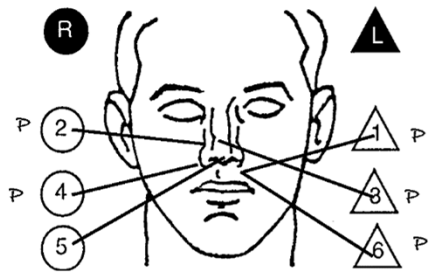
Took quick steps. Slammed heel to toes

	1st Nine	2nd Nine
Cannot keep balance	✔	
Starts too soon		
Stops walking	✔	✔
Misses heel-toe	✔✔	✔✔
Steps off line		
Raises arms	✔✔	✔✔
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
23 estimated as 30 seconds	Quick steps	N/A	Lace-up boots without laces

Finger to Nose

(Draw lines to spots touched)



Jerky, fast movements. Used pads of fingers

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	9.0	5.5
Right Eye	6.5	9.0	5.5

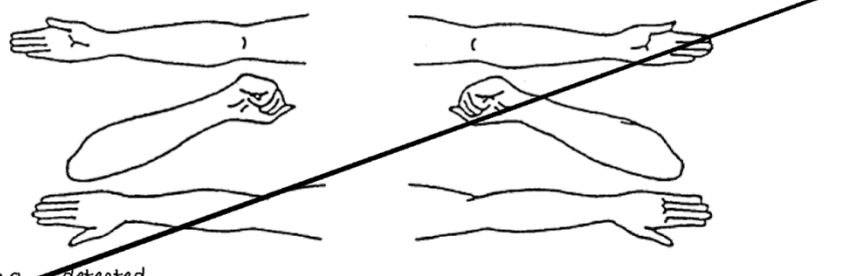
Nasal area: Redness

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing detected

Blood Pressure	Temperature
156/98	99.8 °F

Muscle Tone: ☐ Near ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"No man. I'm clean."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
07/22/14 / 2025	2050	2110	2200	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Hatos, Carlos**

1. **Location:** The drug influence evaluation was conducted at the 4th Avenue Jail, 201 S 4th Ave, Phoenix, Arizona. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Officer Chip Haas (Glendale PD). Detective Kemp Layton (Phoenix PD) was the scribe.

3. **Breath Test:** A breath test was administered to Hatos with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** I was notified to meet Officer Haas of the Glendale Police Department reference to a drug influence evaluation. I was on-duty and responded to his location at the 4th Avenue Jail. Upon my arrival, Officer Haas advised he had observed the suspect's vehicle driving at a high rate of speed on Indian School Road. When he stopped the suspect, the suspect appeared nervous, was very talkative, and could not stand still. Officer Haas also noticed Hatos' pupils were dilated. Suspecting impairment, Officer Haas administered SFSTs to Hatos. The suspect performed poorly on SFSTs and was subsequently arrested for DUI.

5. **Initial Observation of Suspect:** I first observed the suspect in the booking area at the 4th Avenue Jail. Hatos appeared flushed and sweaty, and he was very talkative. When he was standing, he repeatedly shifted his weight from foot to foot. He was making abrupt, quick hand movements, and he appeared very animated and restless. When he was not speaking, I noticed he was grinding his teeth. His pupils appeared dilated in the lighted jail room. His eyes were normal, pupils were equal, and his eyes tracked together.

6. **Medical Problems/Treatment:** Hatos stated he had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Hatos estimated the passage of 30 seconds when 23 seconds actually elapsed. During this test he had a forward and backward sway of approximately 2 inches in each direction, and a side-to-side sway of approximately 3 inches in each direction.

   Walk and Turn: During the Walk and Turn test, Hatos lost his balance once while listening to instructions. During the walking stage he stopped while walking one time in each direction (#8 on first set of nine steps, #4 for second sent of nine steps), missed heel to toe two times during the first set of nine steps (#3, #8) and two times during the second set of nine steps (#6, #7), and raised his arms for balance two times in each direction. His turn used quick steps. He was wearing lace-up boots without laces during this test.

   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,014. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,017. He counted quickly both times, counting to 1,038 and 1,041 respectively. During both attempts he had obvious body tremors. He was wearing lace-up boots without laces during this test.

   Finger to Nose: During the Finger to Nose test, Hatos missed the tip of his nose five times (#1, #2, #3, #4, #6). His hand movements were jerky fast movements. He used the pad of his fingers on the five misses as well.

8. **Clinical Signs:** Hatos had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Hatos was able to converge his eyes. Hatos' pulse was measured three times during the course of the evaluation: 1) at 2122 hours it was 108 beats per minute; 2) at 2135 hours it was 106 beats per minute; and 3) at 2150 hours it was 106 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 156/98, which was above the DRE average ranges. His body temperature was measured at 99.8°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.5 and 6.5, near total darkness at 9.0 and 9.0 and in direct light at 5.5 and 5.5. Because of his dark eyes, an ultraviolet light was also used for the near total darkness estimate. These sizes are above the DRE normal ranges. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.

9. **Signs of Ingestion:** His nasal area showed redness in both nostrils. His oral cavity was clear. There were no indicators of injection sites.

10. **Statements:** Officer Haas advised Hatos of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated "I'm clean" and he had stopped using drugs.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Hatos is under the influence of a ***CNS Stimulant*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist at 2300 hours and witnessed by Officer Haas. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Haas.

13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Officer Virgil Miller	10828	14-07-035	Wichita PD	Session XVIII-#4

Recorder/Witness	Crash	Arresting Officer's Agency
Det Karina Brasser Sedgwick CO SO	☒ None ☐ Fatal ☐ Injury ☐ Property	Kansas Highway Patrol

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Jackson, Scott M.	6/15/78	M	W	Trooper Mark Crump #7949

Date Examined / Time /Location	Breath Test	Test Refused	Chemical Test
07/18/14 2020 Sedgwick CO jail	Results: 0.00	☐ Instrument #: 13240	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
Given by: Tpr Crump	☒ Yes ☐ No	Ham Sandwich	Noon	Coffee	2 cups	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
"10 pm" / 2025	Last night	7 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Cooperative, passive	Poor, unsteady

Speech:	Breath odor:	Face:
Slow, thick	Normal	Pale, droopy

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

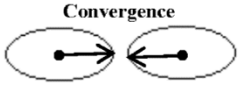
Pupil Size: (explain)	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☐ Normal ☒ Droopy

Pulse and Time

1. 54 / 2032
2. 54 / 2040
3. 52 / 2055

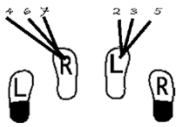
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



Right eye Left eye

38/30 **One Leg Stand** 41/30

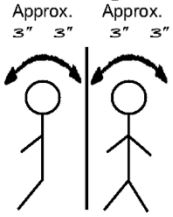


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
3	3	Puts foot down

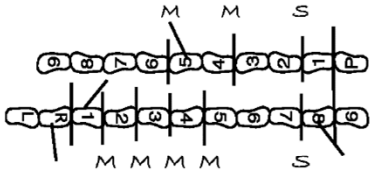
Both stopped for safety reasons

Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Walk and Turn Test



Slow, wobbly movements

Cannot keep balance ✔

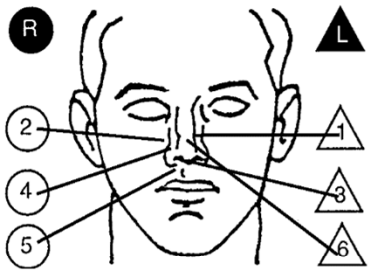
Starts too soon

	1st Nine	2nd Nine
Stops walking	✔	✔
Misses heel-toe	✔✔✔✔	✔✔
Steps off line	✔✔	✔
Raises arms	✔✔	✔✔✔
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
42 estimated as 30 seconds	Walking turn. Used both feet	N/A	Lace-up shoes

Finger to Nose

(Draw lines to spots touched)



Slow movements. Searched for tip of nose

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	3.0	4.0	2.5
Right Eye	3.0	4.0	2.5

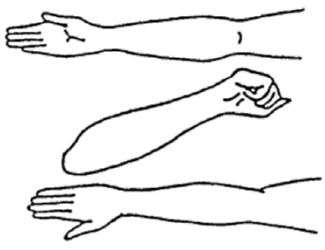
Nasal area: Clear

Oral cavity: Clear

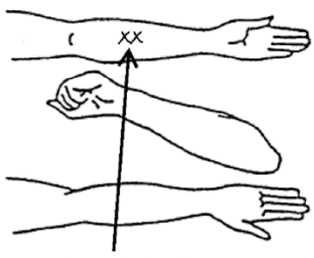
Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to none

RIGHT ARM



LEFT ARM



Two fresh injection marks

Blood Pressure	Temperature
122/ 68	98.0 °F

Muscle Tone: ☐ Near ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I didn't use anything."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
07/18/14 / 1915	1948	2020	2105	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

Suspect: **Jackson, Scott**

1. **Location:** The drug influence evaluation was conducted at the Sedgwick County Jail, 141 West Elm Street, Wichita, Kansas. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Trooper Mark Crump (Kansas Highway Patrol). Detective Karrina Brasser (Sedgwick County Sheriff's Office) was the scribe.

3. **Breath Test:** A breath test was administered to Jackson with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** I was notified to contact Trooper Crump of the Kansas Highway Patrol at the Sedgwick County Jail reference to a drug influence evaluation. I was on-duty and responded to his location. Upon my arrival, Trooper Crump advised he had observed the suspect's vehicle driving under the posted speed and drifting in and out of his lane. When he attempted to stop the suspect, the driver continued for over a mile before stopping. When he finally made contact with the driver, his speech was thick and slow. The driver had poor coordination, was unable to complete the SFSTs as directed, and was subsequently arrested and transported to the Sedgwick County Jail. When the breath test revealed no alcohol causing the impairment, Trooper Crump summoned a DRE for further investigation.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the jail. Jackson appeared pale and his face was droopy, he was cooperative, and had slow, thick speech. When walking to the evaluation room, I noticed his coordination was poor and he was unsteady on his feet. He almost fell several times while walking. His eyes were normal, pupils were equal and slightly constricted, and his eyes tracked together.

6. **Medical Problems/Treatment:** Jackson stated he had no physical problems and none were observed.

7. **Psychophysical Tests:**

   Modified Romberg Balance: During the Modified Romberg balance test, Jackson estimated the passage of 30 seconds when 42 seconds actually elapsed. During this test he exhibited a 3 inch in every direction.

   Walk and Turn: During the Walk and Turn test, Jackson lost his balance once while listening to instructions. During the walking stage he stopped while walking one time in each direction (#7 on first set of nine steps, #1 for second sent of nine steps), missed heel to toe four times during the first set of nine steps (#2, #3, #4, #5) and two times during the second set of nine steps (#4, #6), stepped off the line two times during the first set of nine steps (#1, #8), and one time during the second set of nine steps (#5), and raised his arms for balance two times in the first set of nine steps and three times during the second set of nine steps. He turned by using both feet in a walking turn. He was wearing lace-up shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice - once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,004, 1,006, and 1,007. Jackson appeared to be in danger of falling and this test was terminated early for his safety. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,002, 1,003, and 1,005. Again, this test was terminated early for Jackson's safety. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Jackson missed the tip of his nose five times (#1, #2, #4, #5, #6). His movements were slow and he appeared to search for the tip of his nose.

8. **Clinical Signs:** Jackson had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Jackson was able to converge his eyes. Jackson' pulse was measured three times during the course of the evaluation: 1) at 2032 hours it was 54 beats per minute; 2) at 2040 hours it was 54 beats per minute; and 3) at 2055 hours it was 52 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 122/68, which was below the DRE average ranges. His body temperature was measured at 98.0°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 3.0 and 3.0, near total darkness at 4.0 and 4.0 and in direct light at 2.5 and 2.5. The near total darkness sizes are below the DRE normal ranges, and the other two lighting conditions were at the lower end of the DRE normal ranges. Rebound dilation was not present. He had little to no reaction to light. His muscle tone was flaccid.

9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were two fresh injection marks on the left medial forearm.

10. **Statements:** Trooper Crump advised Jackson of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated "I didn't use anything."

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Jackson is under the influence of a ***Narcotic Analgesic*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist and witnessed by Trooper Crump. The sample was sealed with evidence tape and submitted into evidence by Trooper Crump for laboratory testing.

13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sgt Paul Kotter	10262	14-11-120	Utah Highway Patrol	Session XVIII-#5

Recorder/Witness	Crash	Arresting Officer's Agency
Trooper Jason Marshall Utah HP	☒ None ☐ Fatal ☐ Injury ☐ Property	Utah Highway Patrol

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Stevens, William A.	4/14/85	M	W	Trooper Janet Miller #15746

Date Examined / Time /Location	Breath Test	Chemical Test
11/17/14 1900 County Intake	Results: 0.00 Test Refused ☐ Instrument #: 55665	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Given by: Tpr Miller	☒ Yes ☐ No	Ham sandwich	Noon	"Just some water" N/A	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
6:30 pm/ 1915	Last night	8 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No Dr. Frank for anxiety issues

Are you taking any medication or drugs?	Attitude:	Coordination:
☒ Yes ☐ No "Some kind of anxiety pills"	Cooperative	Poor, unsteady

Speech:	Breath odor:	Face:
Slurred, thick	Normal	Normal

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☒ Normal ☐ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☒ Yes ☐ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

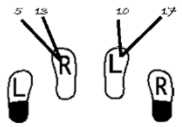
1. 58 / 1923
2. 58 / 1935
3. 56 / 1945

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	30	30

Convergence

Right eye Left eye

24/30 **One Leg Stand** 26/30

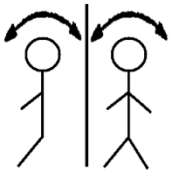


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
2	2	Puts foot down

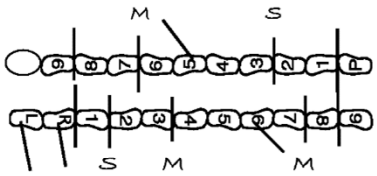
Counted slowly

Modified Romberg Balance

Approx. 2" 2" Approx. 3" 3"



Walk and Turn Test



Slow movements

Cannot keep balance ✓✓

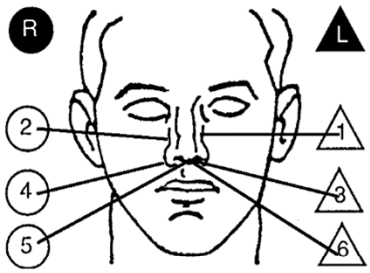
Starts too soon

	1st Nine	2nd Nine
Stops walking	✓	✓
Misses heel-toe	✓✓	✓
Steps off line	✓	✓
Raises arms	✓✓✓	✓✓
Actual steps taken	9	10

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
38 estimated as 30 seconds	Lost balance to the right	N/A	Dress shoes

Finger to Nose

(Draw lines to spots touched)



Slow hand and arm movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	4.0
Right Eye	4.5	6.5	4.0

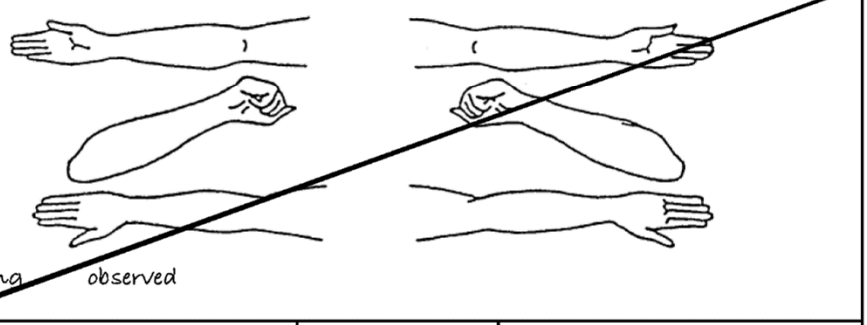
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
120/ 66	99.3 °F

Muscle Tone: ☐ Near ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Some medicine for anxiety. I have a prescription."	"Just a couple"	About 5 pm	Home

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
11/17/14 / 1845	1910	2005	0030	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☒ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Suspect: **Stevens, Scott**

1. **Location:** The drug influence evaluation was conducted at the Salt Lake County Metro Jail, 3415 S 900 W, Salt Lake City, Utah. The darkroom examinations were conducted inside a bathroom at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.

2. **Witnesses:** The evaluator was Trooper Janet Miller (Utah Highway Patrol). Trooper Jason Marshall (Utah Highway Patrol) was the scribe.

3. **Breath Test:** A breath test was administered to Stevens with an approved evidential breath-testing device with the results of .000.

4. **Notification/Interview:** I was notified to contact Trooper Miller of the Kansas Highway Patrol at the Sedgwick County Metro Jail reference to a drug influence evaluation. I was on-duty and responded to his location. Upon my arrival, Trooper Miller advised she had observed the suspect's vehicle stopped partially in a travel lane on Highway 48. The suspect was sitting in the driver's seat and had a drunk-like appearance. His speech was thick, slurred, and slow. She requested he perform SFSTs and he complied. He had six clues of HGN and VGN, but she was unable to detect the odor of an alcoholic beverage. Stevens had great difficulty performing the SFSTs and was arrested for DUI.

5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the jail. Stevens had a normal appearance, he was cooperative, and had slurred, thick speech. His coordination was poor and unsteady. His eyes were normal, pupils were equal, and his eyes tracked together.

6. **Medical Problems/Treatment:** Stevens stated he was seeing Doctor Frank for anxiety-related issues. Stevens stated had no other physical problems and none were observed.

7. **Psychophysical Tests:**
   Modified Romberg Balance: During the Modified Romberg balance test, Stevens estimated the passage of 30 seconds when 38 seconds actually elapsed. During this test he exhibited a 2 inch in a circular motion.
   Walk and Turn: During the Walk and Turn test, Stevens lost his balance twice while listening to instructions. During the walking stage he stopped while walking one time in each direction (#1 on first set of nine steps, #1 for second sent of nine steps), missed heel to toe two times during the first set of nine steps (#4, #8) and one time during the second set of nine steps (#7), stepped off the line one time in each direction (#6 on the first set of nine steps, #5 on the second set of nine steps), raised his arms for balance three times in the first set of nine steps and two times during the second set of nine steps, and took an extra step on the second set of steps. While turning, he lost his balance to the right. He was wearing dress shoes during this test.
   One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, hopped once, and put his foot down at 1,005 , and 1,013. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,010, and 1,017. He counted slowly both times, only reached 1,024 during the first test and 1,026 during the second test. He was wearing dress shoes during this test.

Finger to Nose: During the Finger to Nose test, Stevens missed the tip of his nose three times (#1, #2, #4). He had slow hand and arm movements during this test.

8. **Clinical Signs:** Stevens had all clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 30 degrees. Stevens also had Vertical Gaze Nystagmus. Stevens was not able to converge his eyes. Stevens' pulse was measured three times during the course of the evaluation: 1) at 1923 hours it was 58 beats per minute; 2) at 1935 hours it was 58 beats per minute; and 3) at 1945 hours it was 56 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 120/66, which was below the DRE average range for the diastolic reading, and at the lower end of normal for the systolic reading. His body temperature was measured at 99.3°, which was normal. During the pupil size examinations, his eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5 and in direct light at 4.0 and 4.0. These sizes are within the DRE normal ranges. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was flaccid.

9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were no indicators of injection sites.

10. **Statements:** Trooper Miller advised Stevens of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated he had taken "some medicine for anxiety," but insisted he was legal to drive because he had a prescription from his doctor to use the drug. He stated he had taken "just a couple" pills at home around 5 pm. He could not recall the name of the drug he took.

11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Stevens is under the influence of a ***CNS Depressant*** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist and witnessed by Trooper Miller. The sample was sealed with evidence tape and submitted into evidence by Trooper Miller for laboratory testing.

13. **Miscellaneous:** None.

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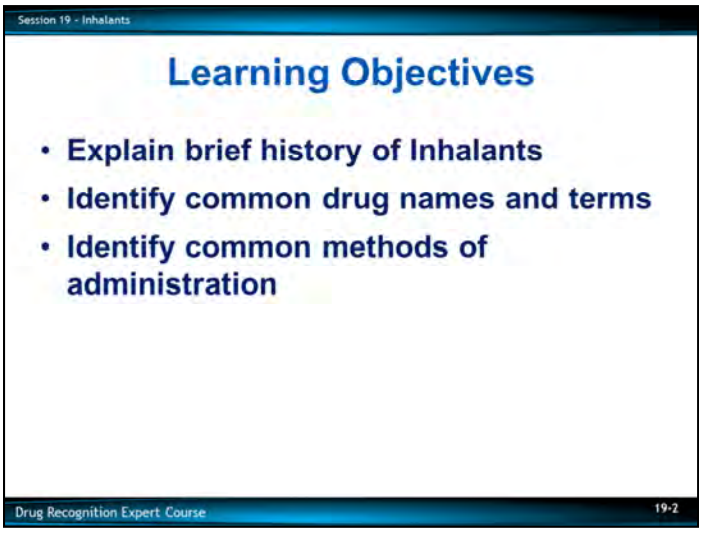
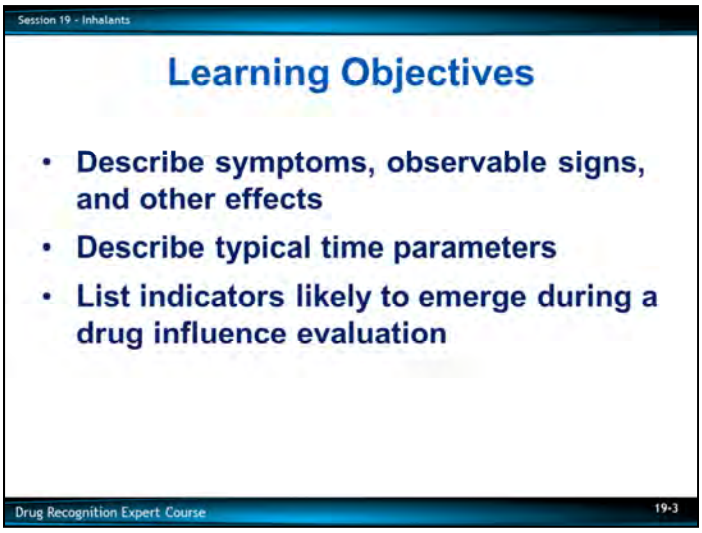
Session 19 - Inhalants
1 Hour, 35 Minutes
Session 19
Inhalants
RUSH
PURPLE
D & E
TSI
NHTSA
Drug Recognition Expert Course
19-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of the Inhalant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category



- Describe the symptoms, observable signs and other effects associated with this category
- Describe the typical time parameters, i.e., onset and duration of effects associated with this category
- List the clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects
C. Onset and Duration of Effects
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentations
Slide Presentations
Review of the Drug Evaluation and Classification (DEC) Program Exemplars

A. <u>Overview of the Category</u>

Inhalants are breathable chemicals that produce mind-altering results.

Inhalants are sometimes called "Deliriants," in that they may produce delirium. Delirium is usually a brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

Inhalants vary widely in terms of the chemical involved and the specific effects produced.

Depending on the nature of the particular Inhalant, the effects produced may be similar to those of Central Nervous System (CNS) Stimulants, CNS Depressants, or Hallucinogens.

There are three major subcategories of Inhalants:

- Volatile Solvents
- Aerosols
- Anesthetic Gases

"Volatile" Solvents

The Volatile Solvents include a large number of readily available substances, none of which are intended by their manufacturers to be used as drugs.

"Volatile" means they evaporate easily to produce fumes.

Ask participants to name a Volatile Solvent often abused as a drug.

One widely abused Volatile Solvent is plastic cement, or "model airplane glue."

Plastic cement includes the following volatile chemicals:

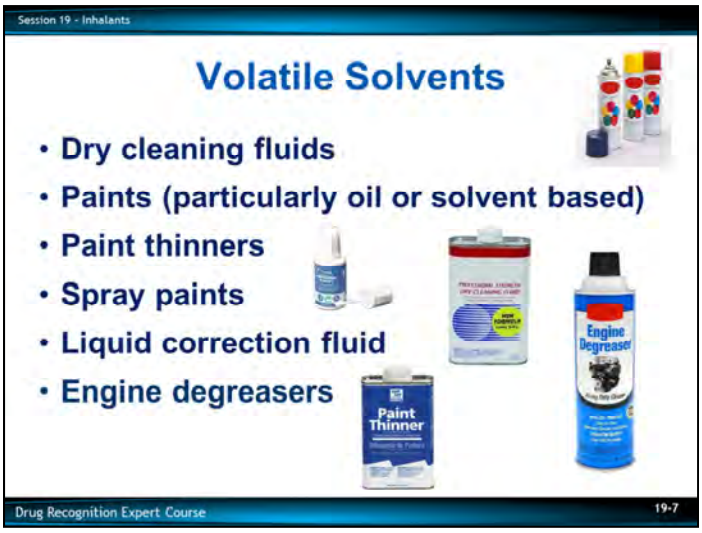
- Toluene
- Acetone
- Naphtha
- Aliphatic Acetates (straight-chained hydrocarbons)
- Hexane
- Cyclohexane
- Benzene

Other frequently-abused Volatile Solvents include:

- Fingernail polish remover (contains Acetone)
- Household cements and glues (rubber cements contain Benzene)
- Lighter fluid (contains Naphtha)

Petroleum products:

- Various glues (model airplane glue)
- Gasoline
- Kerosene



- Dry cleaning fluids
- Paints (particularly oil or solvent based)
- Paint thinners
- Spray paints
- Liquid correction fluid
- Engine degreasers

Aerosols
Aerosols are chemicals discharged from a pressurized container by the propellant force of a compressed gas.

Commonly-abused Aerosols include hair sprays, deodorants, insecticides, glass chillers (freeze spray), and vegetable frying pan lubricants.
If available, display slides of typically abused Aerosols.

All of these abused Aerosols contain various hydrocarbon gases that produce drug effects.

The overwhelming majority of abusers of Volatile Solvents and Aerosols are pre-teens and teenagers.

Some reasons:

- These substances appear in nearly every household
- They are inexpensive and readily accessible

Anesthetic Gases

The third subcategory is Anesthetic Gases. Anesthetic Gases are drugs that abolish pain. They are used medically during surgical procedures such as childbirth, dental surgery, etc.

Adults may be more frequent users of the Anesthetic Gases subcategory than of the Aerosols or Volatile Solvents.

Anesthetic Gases that sometimes are abused as Inhalants:

- Ether
- Nitrous Oxide

Many of these substances have a long history of medical and illicit use, e.g., Ether abuse dates to the 1790's in England.

Nitrous Oxide has been used since 1845. It is still used in certain dental procedures.

Nitrous Oxide is a propellant for whipped cream. Drug paraphernalia stores often sell Nitrous Oxide in cartridges identical to carbon dioxide containers. They are termed by users "whippets" and are allegedly sold to purchasers as devices to propel whipped cream.

Other common Inhalants in this subcategory are:

- Amyl Nitrite
- Butyl Nitrite (Isobutyl Nitrite)

Nitrites are vasodilating substances, formally used medically to relieve heart-related chest pain. They have since been replaced by other medications. Isobutyl Nitrite and Butyl Nitrite have essentially identical effects of Amyl Nitrite.

Anesthetic gases can dilate the blood vessels around the heart thus causing a lowered blood pressure.

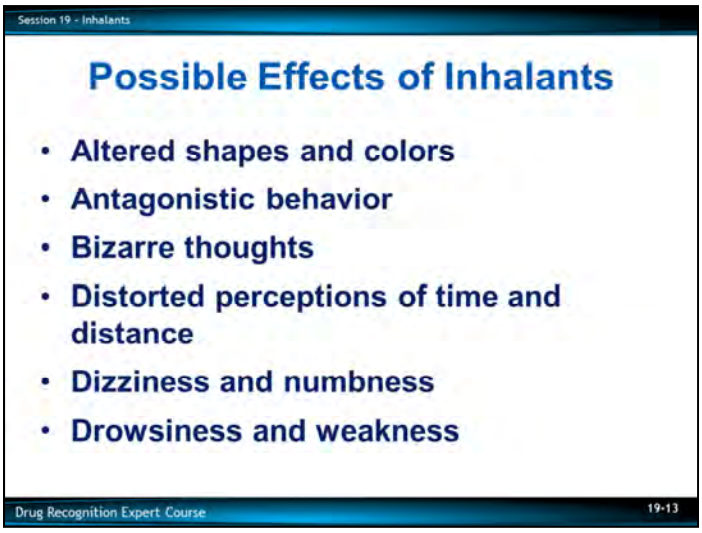
Common slang and brand names for the Nitrites are: “Rush” and “Locker Room.”

- Examples: Amyl Nitrite and Butyl Nitrite are sold in small glass bottles or bulbs
  - The user simply opens the bottle and breathes in the fumes
  - They have been marketed in drug paraphernalia stores as room deodorizers

Inhalants obviously are ingested by breathing, or inhaling the fumes.

- Some are ingested directly from the source
- Some are soaked into rags, handkerchiefs, or tissue paper for repeated inhalation
- Some are placed in paper or plastic bags which the user places over the face or head
  - These may be placed in twist lock beverage containers
- Some are used by breathing the fumes or vapors from balloons

Some common street names Inhalant users use are: huffing, hacking, ballooning and glading.
Solicit participants' comments or questions concerning this overview of Inhalants.

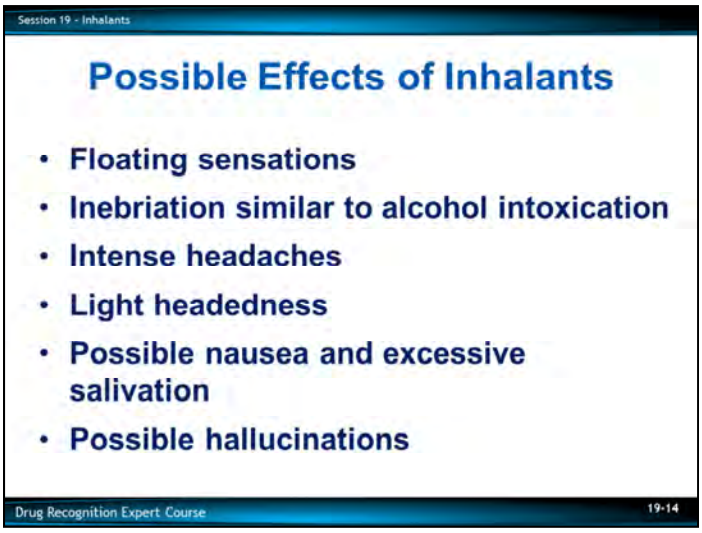


B. <u>Possible Effects</u>

The effects of Inhalants vary somewhat from one substance to another.

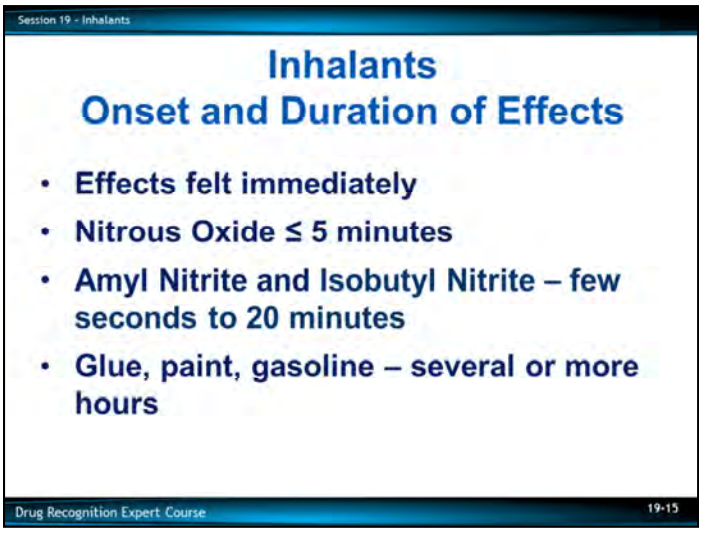
In fact, many of the Inhalants are classified as Depressants in medical texts. Their effects, consequently, often mirror alcohol intoxication.

Common effects of Inhalants include:
- Altered shapes and colors
- Antagonistic behavior
- Bizarre thoughts
- Distorted perceptions of time and distance
- Dizziness and numbness
- Drowsiness and weakness



- Floating sensations
- Inebriation similar to alcohol intoxication
- Intense headaches
- Light headedness
- Possible nausea and excessive salivation
- Possible hallucinations

Persons under the influence of Inhalants generally will appear confused and disoriented and their speech will be slurred.



C. <u>Onset and Duration of Effects</u>

Inhalants' effects are felt virtually immediately.
Point out the route of passage of the drugs from lungs to brain can be traveled very quickly.

Duration depends on the particular substance.
- The effects of Nitrous Oxide last 5 minutes or less
- Amyl Nitrite and Isobutyl Nitrite produce effects that last a few seconds up to 20 minutes

Users claim these substances enhance sexual excitement. This may occur from dilation of genital arteries (vasodilation) and relaxation of other smooth muscles.

Inhalation of these produces a distinct "rush" similar to that of the related substance, Nitrous Oxide.

Glue, paint, gasoline, and other commonly-abused Inhalants produce effects that last several or more hours. (Generally 6 – 8 hours for most Volatile Solvents depending on exposure).
Point out residue of these substances may be deposited inside the nostrils causing the user to breathe the fumes constantly.
Solicit participants' comments and questions concerning the time parameters of Inhalants.

_____

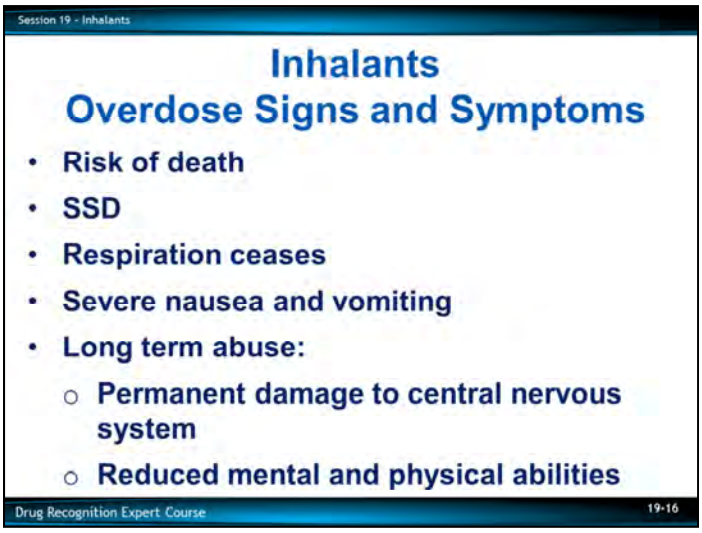
_____

_____

_____

_____

_____



D. <u>Overdose Signs and Symptoms</u>

There is a risk of death due to overdose of Inhalants.

All Volatile Solvents make the heart more sensitive to adrenaline. This sometimes causes a dangerous cardiac arrhythmia. The term "sudden sniffing death" (SSD) has been used to describe death resulting from physical exertion and the breathing of Inhalants in an enclosed, poorly-ventilated space.

Some Inhalants will depress the central nervous system to the point where respiration ceases. Others can produce instant death from heart failure.

Overdoses of Inhalants frequently induce severe nausea and vomiting. If the user vomits while he or she is unconscious, death can result from aspiration of the vomitus.

Death can also result indirectly, if a person places a plastic bag over the head, loses consciousness, and suffocates.

Long-term abuse of Inhalants can cause permanent damage to the central nervous system and greatly reduce mental and physical abilities.

Evidence also exists of liver, kidney, bone, and bone marrow damage resulting from long-term Inhalant abuse.

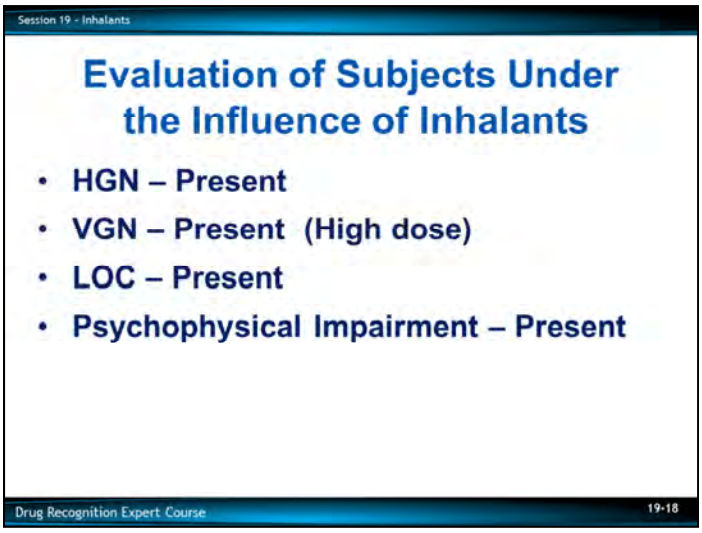
There are no well-defined withdrawal symptoms for these substances. Physical dependence has not been documented, although habituation is common.
Solicit questions and comments concerning overdose signs and symptoms.

_____

_____

E. <u>Expected Results of the Evaluation</u>

With Inhalants, there is significant variation in effects from one substance to another.



Observable Evidence of Impairment

Eye Exam

- Horizontal Gaze Nystagmus (HGN) will generally be present

Point out immediate Onset of Nystagmus may be observed.

- Vertical Gaze Nystagmus (VGN) may be present

Point out high doses (for that individual) of Inhalants may cause VGN.

- Lack of Convergence (LOC) will be present

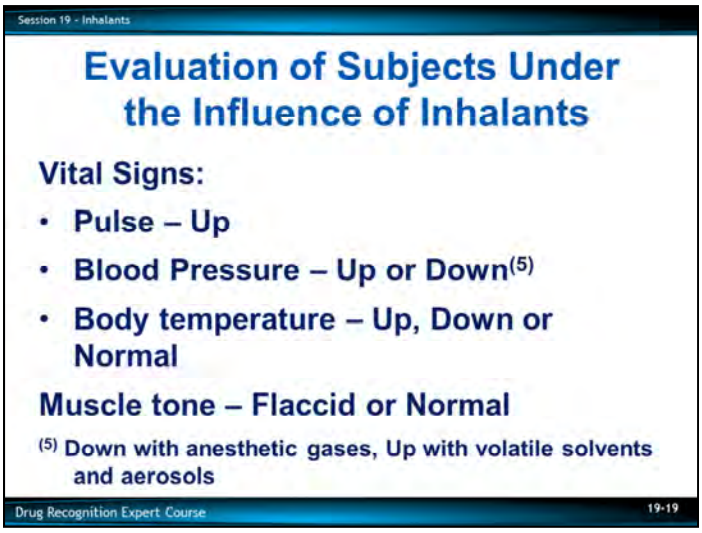
Psychophysical Exercise

Drug Evaluation Tests

Performance on the Modified Romberg Balance (MRB), Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) tests will generally be impaired.

Point out subjects may sway when performing the MRB, OLS, and FTN tests.

Point out subjects may take slow, deliberative steps on the WAT and will tend to stagger.



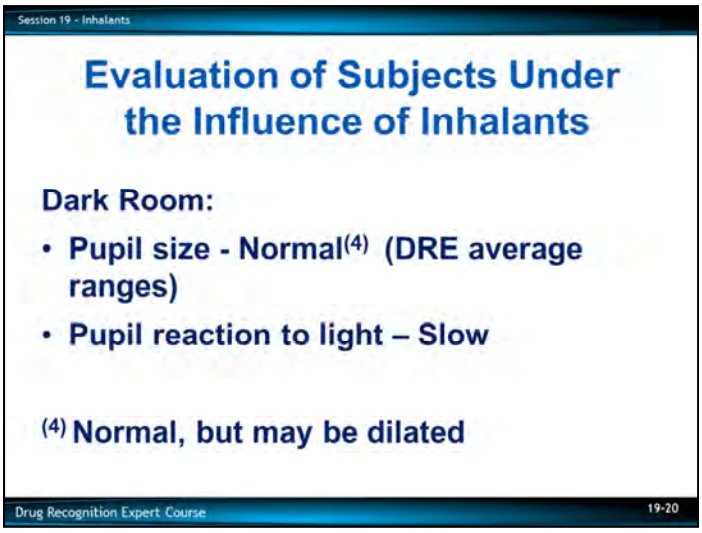
Vital Signs
Pulse will be up.

Pulse increase is due to many factors, including oxygen displacement. The heart may beat faster in order to supply body tissues with a sufficient supply of oxygen.

Blood pressure will be up or down.
Mention the Anesthetic Gases generally lower blood pressure while elevating pulse rate. The Volatile Solvents and the Aerosols usually elevate both blood pressure and pulse rate.

The lowering of blood pressure by Anesthetic Gases is due to their vasodilation effect. The heart compensates for this vasodilation by increasing its heart rate.

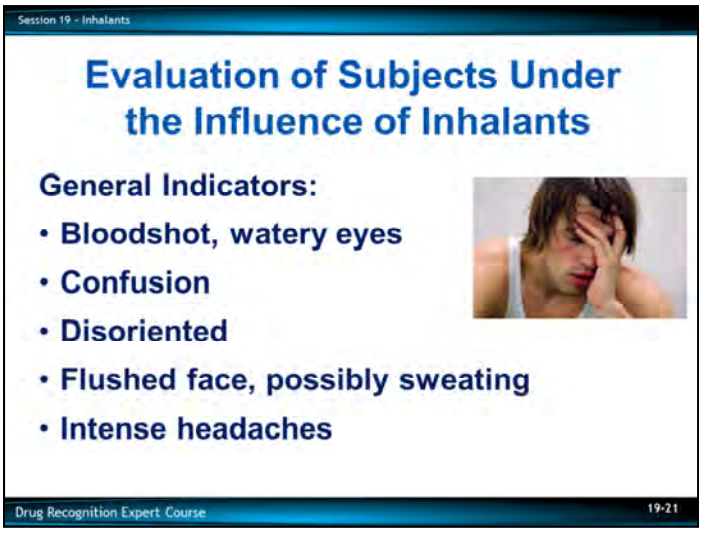
Effect on body temperature may be up, down, or DRE average range.
Point out muscle tone can be either normal or flaccid. Anesthetic gases normally cause the muscles to be flaccid.



Dark Room
Pupil size will be normal (DRE Average Ranges) but may be dilated.

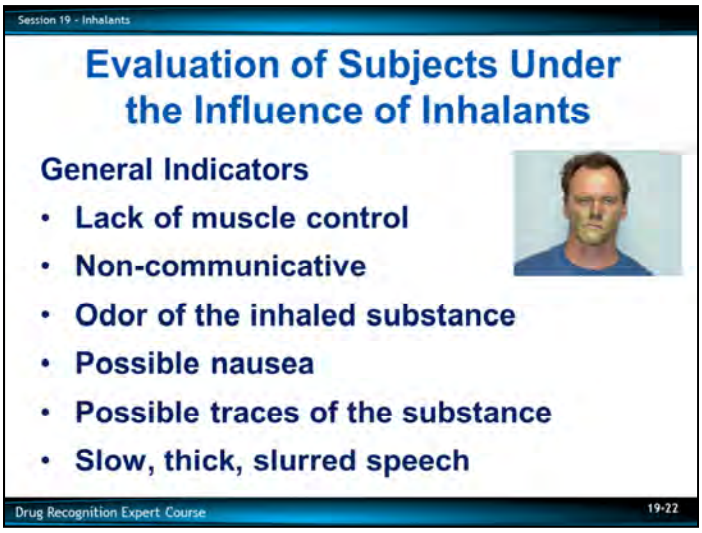
Reaction to light generally will be slow.

Anesthetic Gases may produce some dilation, although usually not to the extent seen with CNS Stimulants or Hallucinogens. No Inhalants produce pupillary constriction.



General Indicators

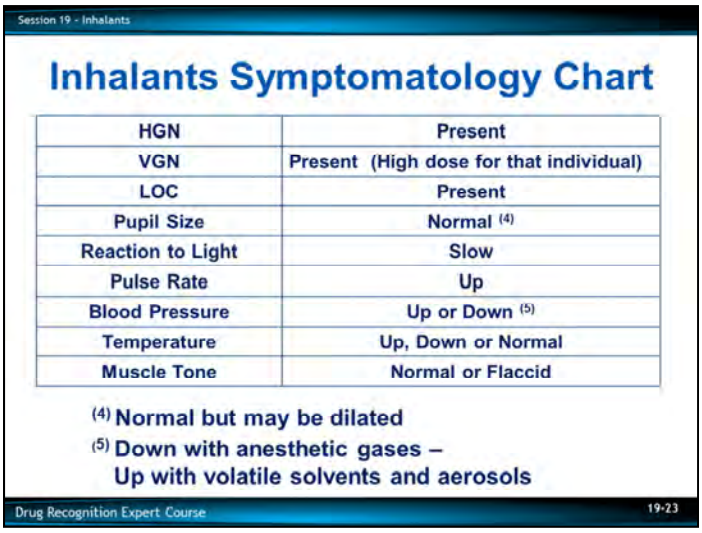
- Bloodshot, watery eyes
- Confusion
- Disoriented
- Flushed face, possibly sweating
- Intense headaches



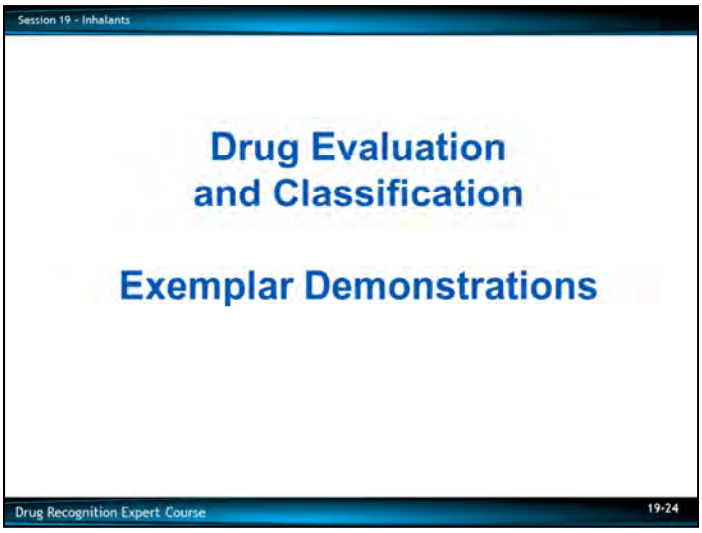
General Indicators

- Lack of muscle control
- Non-communicative
- Normal or Flaccid muscle tone
- Odor of the inhaled substance
- Possible nausea
- Residue of the substance around the face and nose and on the hands or clothing
- Slow, thick, slurred speech

Speech usually clears up quickly when substance is no longer being inhaled.



Point out "Normal" referenced in the pupil size indicates the DRE averages or "expected values" for the pupil sizes.



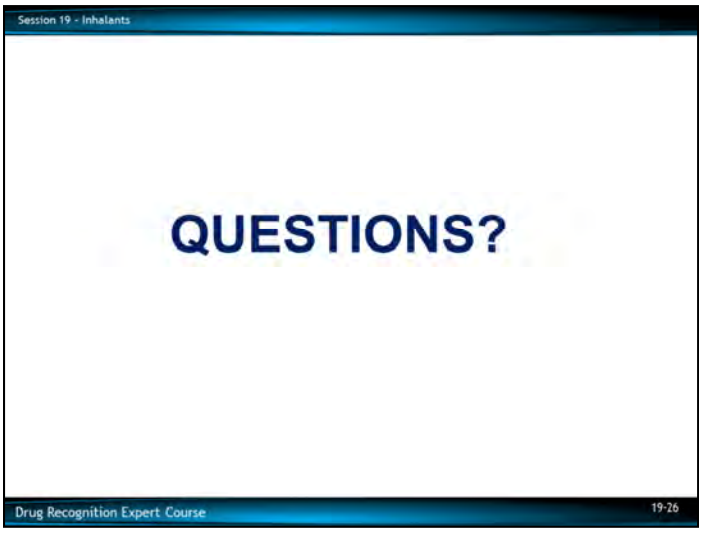
F. <u>Classification Exemplars</u>

Refer students to the exemplars found at the end of Session 19 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

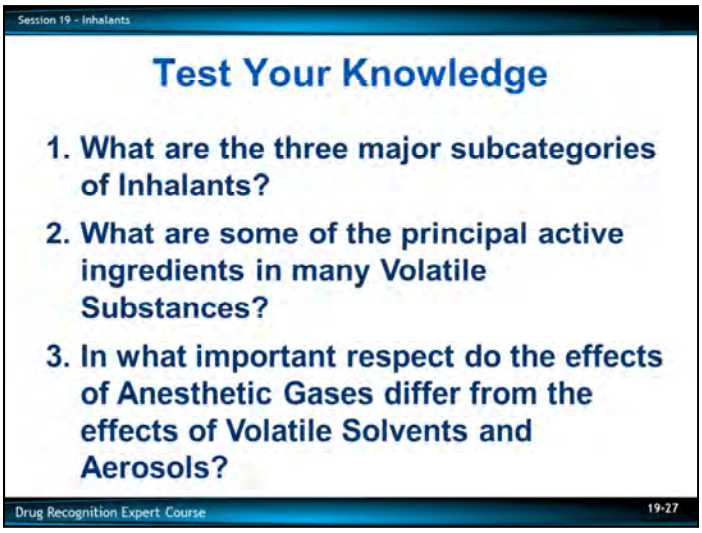
The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Relate the items on the exemplars to the Inhalants Symptomatology Chart.

Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of an Inhalant.
(Approximately 20 minutes).



Solicit participants' comments and questions concerning expected results of the evaluation of subjects under the influence of Inhalants.

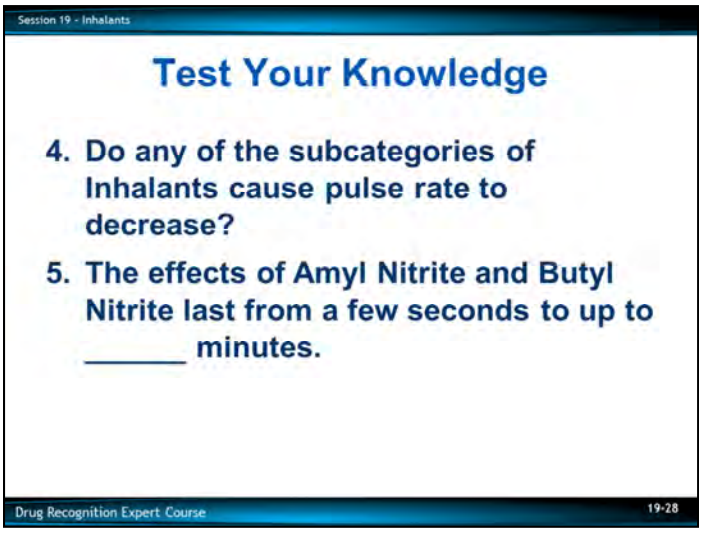


Test Your Knowledge

1. What are the three major subcategories of Inhalants?
Volatile Solvents, Aerosols, Anesthetic Gases

2. What are some of the principal active ingredients in many Volatile Substances?
Toluene, Acetone, Naphtha, Aliphatic Acetates, Hexane, Cyclohexane, Benzene

3. In what important respect do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?
Anesthetic gases lower blood pressure while keeping the pulse rate elevated, Volatile Solvents and Aerosols elevate blood pressure and pulse.



4. Do any of the subcategories of Inhalants cause pulse rate to decrease?
No

5. The effects of Amyl Nitrite and Butyl Nitrite last from a few seconds to up to _____ minutes.
20

DRUG INFLUENCE EVALUATION

Evaluator: Sergeant Charlie Files	DRE #: 17809	Rolling Log #: 17-09-79	Evaluator's Agency: Las Lunas Police Department	Case #: 17-3147 (Session XIX - 1)
Recorder/Witness: Officer Robert Liccione, Albuquerque PD	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Los Lunas Police Department	
Arrestee's Name (Last, First, Middle): Whippets, Walter L.	Date of Birth: 6/08/1996	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Ryan Gray #23480
Date Examined / Time /Location: 9/04/2017 / 2205 / Las Lunas PD	Breath Test: Results: 0.000	Test Refused ☐ Instrument #: 32344	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Officer Gray	☒ Yes ☐ No	What have you eaten today? "Couple hot dogs"	When? 4 pm	What have you been drinking? How much? Dr. Pepper 2-3	Time of last drink? N/A
Time now/ Actual: About 11pm / 2210	When did you last sleep? This morning	How long? 4-5 hours	Are you sick or injured? ☐ Yes ☒ No		Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No "What's that?"	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No		
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative		Coordination: Poor, Unsteady		
Speech: Slurred	Breath odor: Rancid		Face: Flushed, Gold paint on chin		
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right		Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No		Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1.	104	2215
2.	100	2226
3.	96	2240

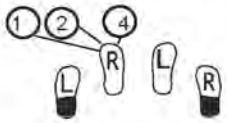
HGN

	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	30	30

Convergence

Right eye Left eye

4/30 One Leg Stand /30

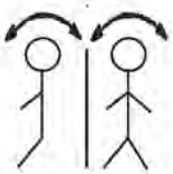


L	R	
All		Sways while balancing
All		Uses arms to balance
1		Hopping
3		Puts foot down

Nearly fell numerous times. Tests stopped.

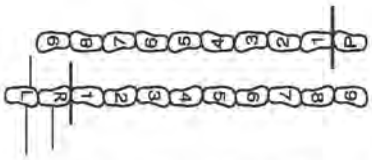
Modified Romberg Balance

Approx. Approx.



Tests stopped for safety.

Walk and Turn Test



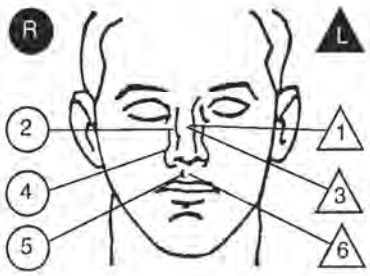
Fell off line three times. Test was stopped for safety reasons.

	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation N/A estimated as 30 seconds	Describe turn N/A	Cannot do test (explain) Unable to stand heel-to-toe.	Type of footwear: Skate shoes

Finger to Nose

(Draw lines to spots touched)



Seated during test for safety reasons.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.0	7.0	3.5
Right Eye	4.0	7.0	3.5

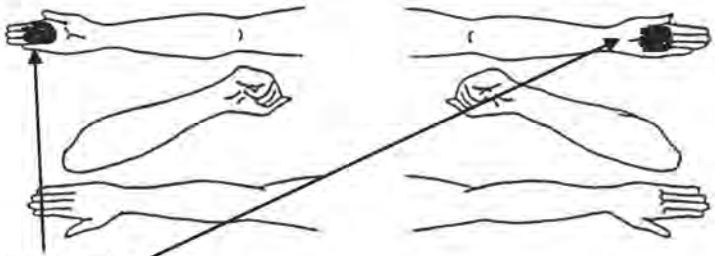
Nasal area: Redness

Oral cavity: Red

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Gold paint on hands.

Blood Pressure: 158 / 92	Temperature: 98.6 °F		
Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid	Comments:		
What drugs or medications have you been using? "I did a little Gold, but nothing else."	How much? "About two cans"	Time of use? Prior to stop	Where were the drugs used? (Location) "In the park in my car."

Date / Time of arrest: 9/04/2017 / 2135	Time DRE was notified: 2145	Evaluation start time: 2205	Evaluation completion time: 2255	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
Officer's Signature: *Charles Files*	Reviewed/approved by / date:			DRE # 17809

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☒ Inhalant	
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis	

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Whippets, Walter

1. **Location:** The evaluation was conducted in the Booking Room at the Las Lunas Police Department. The Booking Room is well illuminated and has a concrete floor with no obstructions. The darkroom examinations were conducted in an adjacent interview room.

2. **Witnesses:** Officer Robert Liccione of the Las Lunas Police Department observed and recorded the evaluation.

3. **Breath Alcohol Test:** The arresting officer, Officer Ryan Gray administered a breath test to the suspect prior to my arrival obtaining a result of 0.00%.

4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Officer Gray at the Las Lunas PD for a drug evaluation. Upon my arrival, Officer Gray advised he had observed the suspect's vehicle driving without headlights and traveling 15 mph under the posted speed on Main Street near I-25. Officer Gray advised that during personal contact, the suspect did not have an odor of an alcoholic beverage on his breath, but he observed that the suspect had gold paint on his chin and hands. He also observed that the suspect's speech was slurred and he appeared to be very confused. When asked where he was, the suspect thought he was in Albuquerque. Officer Gray had the suspect exit his vehicle and noticed that he had poor balance and coordination. After confirming that he had no medical conditions, injuries, or physical defects, he requested that the suspect perform SFSTs. Officer Gray conducted the Horizontal Gaze Nystagmus (HGN), but was unable to administer any other tests due to the suspect's poor balance. He reported observing six clues on HGN, and Vertical Gaze Nystagmus (VGN) was also present. Officer Gray requested the suspect to count backwards from 79 to 59 and the suspect was not able to count correctly. Officer Gray arrested the suspect for DWI, administered Miranda warnings, and transported him to the Los Lunas PD for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Booking Room at the Las Lunas PD. His speech was slurred and he was mumbling his words. He was exhibiting poor balance while standing and several times used the wall to steady himself. I noted that he was wearing black cargo shorts, a gray sweatshirt, and soiled athletic shoes. I also noted that he had gold paint smears on his hands and had gold paint marks on his shirt sleeve. I introduced myself and asked if he would consent to a drug evaluation, which agreed to do. I confirmed that he had been informed of his Miranda warnings and asked if he had any physical injuries or defects, and he indicated that he did not. He advised that he was not under the care of a doctor or dentist. He told me that he had eaten a couple of hot dogs around 4 pm and had drank 2-3 Dr. Peppers earlier. When asked if he was taking any medication or drugs, he indicated he was not, but when asked if he took insulin, he responded "What's that?" The suspect advised that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept, he stated, "This morning." When asked for how many hours he indicated "about 4-5 hours." During my initial contact with the suspect, his coordination remained poor, slow, and he was unstable on his feet. He also complained several times of having a headache.

6. **Medical Problems and Treatment:** The suspect was asked about any injuries or physical conditions and he indicated that he had none. Other than his comments about a headache, none were reported or detected during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. Prior to attempting each test, the suspect advised that he understood them. The following tests were administered to the suspect:

   Modified Romberg Balance: The suspect attempted the test but nearly fell several times, and the test was stopped for safety reasons.

Walk & Turn: During this test, the suspect started out in the instructional position. However, while in the instructions stage, he lost his balance three times and the test was stopped for safety reasons.

One Leg Stand: During this test, when the suspect attempted to stand on his left foot and raise his right foot, he quickly put his foot down on counts 1,001, 1,002, and 1,004 to maintain his balance. He also swayed and used his arms to balance. When he started hopping at count 1,004 and lost his balance, the test was stopped for safety reasons. The second part of the test, having the suspect stand on his right foot and raise his left foot was not attempted due to his balance problems and for safety reasons.

Finger to Nose: For safety reasons, the suspect was allowed to do this test while seated. During this test, the suspect was not able to touch the tip of his nose with tip of his index finger as instructed on all six attempts.

8. **Clinical Indicators of Impairment:**

Eye Signs: All six clues of HGN were observed with an estimated angle of onset of 30 degrees. VGN and a Lack of Convergence were also present. His pupil sizes were within the DRE average ranges in all three lighting levels, estimated at 4.0 mm in both eyes in Room Light, 7.0 mm in both eyes in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. The suspect's pupil reaction to light was slow. His eyes were red and bloodshot. Rebound dilation was not observed.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were 104 beats per minute (bpm), 100 bpm and 96 bpm. All three were above the DRE average range. The suspect's blood pressure of 158/92 was also above the DRE average ranges. The suspect's body temperature of 98.6 degrees Fahrenheit was within the DRE average. The suspect's muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect had a paint-like odor on his breath. Gold paint residue was located on the palms of both his hands and was visible on his shirt sleeve. His nasal area was red and inflamed and his oral cavity was red.

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He claimed he did not use any drugs, but stated, "I huffed some Gold in the park." The suspect freely provided detailed information about his use of various inhalants and indicated that he has been using them for years.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Whippets is under the influence of an Inhalant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample which was submitted into evidence pending analysis by the State Crime Laboratory.

13. **Miscellaneous:** Due to the suspect's poor balance and nearly falling numerous times, he was released to a family member and not lodged.

DRUG INFLUENCE EVALUATION

Evaluator: Sgt. Robert Arman	DRE #: 11603	Rolling Log #: 17-06-023	Evaluator's Agency: North Dakota HP	Case #: 17-8895 (Session XIX - 2)
Recorder/Witness: Sgt. Travis Skar North Dakota HP	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Fargo Police Department	
Arrestee's Name (Last, First, Middle): Poppers, Jack B.	Date of Birth: 9/01/1999	Sex: M	Race: NA	Arresting Officer (Name, ID#): Officer Troy Neilson #11594
Date Examined / Time /Location: 6/24/2017 / 0130 / Fargo Police Dept.	Breath Test: Results: 0.000	Test Refused ☐ Instrument #: 78785	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: Given by: Officer Neilson	☒ Yes ☐ No	What have you eaten today? Fried Chicken Dinner	When? 6 pm	What have you been drinking? Water — How much? 2 bottles — Time of last drink? N/A
Time now/ Actual: Midnight / 0135	When did you last sleep? Yesterday afternoon	How long? 4 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative		Coordination: Poor, Staggering	
Speech: Slow, Slurred	Breath odor: Chemical-like		Face: Flushed, Sweaty	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☒ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

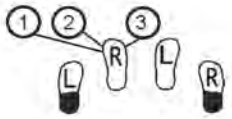
1. 98 / 0143
2. 96 / 0155
3. 92 / 0210

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	35	35

Convergence

Right eye / Left eye

N/A **One Leg Stand** N/A

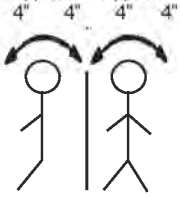


L	R	
3		Sways while balancing
3		Uses arms to balance
		Hopping
3		Puts foot down

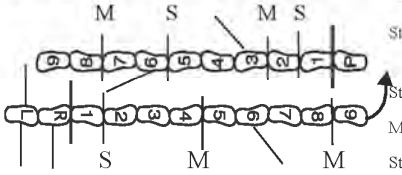
Nearly fell. Tests stopped.

Modified Romberg Balance

Approx. 4" 4" Approx. 4" 4"



Walk and Turn Test



Cannot keep balance ✓✓✓

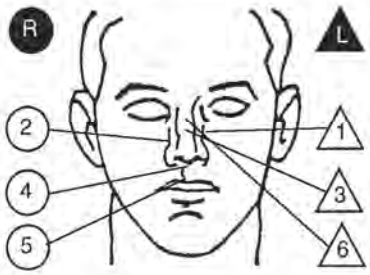
Starts too soon

	1st Nine	2nd Nine
Stops walking	✓	✓✓
Misses heel-toe	✓✓	✓✓
Steps off line	✓	✓✓
Raises arms		
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
38 estimated as 30 seconds	Lost balance, Staggered	N/A	Lace-up boots

Finger to Nose

(Draw lines to spots touched)



Wrong hands on attempts 5 and 6.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	6.0	4.0
Right Eye	5.0	6.0	4.0

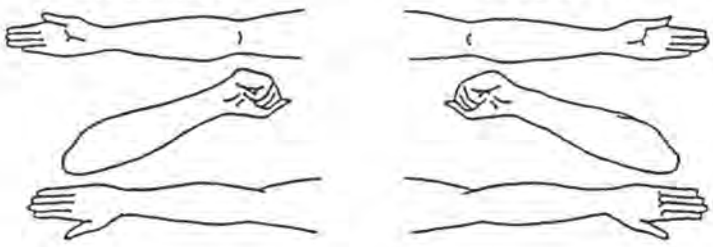
Nasal area: Redness, Runny nose

Oral cavity: Redness

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
144 / 94	99.0 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing"	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
6/24/17 / 0100	0110	0130	0220	

Officer's Signature: Robert Arman — Reviewed/approved by / date: — DRE #11603

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☒ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Poppers, Jack B.

1. **Location:** The evaluation was conducted in the Interview Room at the Fargo Police Department. The Interview Room is well illuminated and has a smooth tile floor with no obstructions. The darkroom examinations were conducted in the staff restroom.

2. **Witnesses:** Sergeant Travis Skar of the North Dakota HP observed and recorded the entire evaluation. The arresting officer, Officer Troy Neilson observed the psychophysical tests.

3. **Breath Alcohol Test:** The arresting officer, Officer Neilson administered a breath test to the suspect prior to my arrival and obtained a 0.00% BAC result.

4. **Notification and Interview of the Arresting Officer:** While on duty on 6/24/17, at approximately 0110 hours, I was requested to contact Officer Neilson at the Fargo Police Department for an agency assist in conducting a DRE drug evaluation. After contacting Officer Neilson, it was determined that he had observed the suspect's vehicle drifting over the center divider line numerous times on 45th Street. When Officer Neilson activated his emergency lights to stop the suspect's vehicle, the vehicle continued for approximately three blocks without stopping, and continued drifting in and out of the traffic lane. Officer Neilson further advised that during the personal contact, he did not detect an odor of an alcoholic beverage coming from the suspect's breath. However, he did detect a distinct chemical-like odor coming from the vehicle. Officer Neilson also observed that the suspect was slow to respond to questions, and appeared to be confused and disoriented. Officer Neilson SFSTs to the suspect which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS), and the Finger to Nose tests. According to Officer Neilson, he observed six clues on the HGN test and five clues on the W&T. The suspect was not able to do the OLS due to his poor balance and the test was stopped for safety reasons. According to Officer Neilson, the suspect also had great difficulty trying to touch the end of his nose during the Finger to Nose test. The suspect indicated he had not drank any alcohol or drugs, but occasionally liked to inhale Dust Off to help him relax. Officer Neilson arrested the suspect for DWI and transported him to the Fargo PD for processing. After obtaining a 0.00 BAC, he requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Fargo Police Department. His speech was slow and slurred. When up and moving around the room, he had difficulties with his coordination and staggered several times and twice used the wall to steady himself. His eyes were watery and appeared to be bloodshot. The suspect was wearing blue jeans, a black tee-shirt, and lace-up boots. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to. I asked him if he had been informed of his Miranda rights and he stated "Uh-huh. I already know them." I asked him if he had any injuries or physical defects and he said he did not. He also stated that he was not under the care of a doctor or dentist. He told me he had eaten a fried chicken dinner around 6 pm and had drank two bottles of water at that time. When asked if he was taking any medication or drugs, he responded "Nope." He also told me that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept he stated, "Yesterday afternoon." I asked him for how many hours and he stated "4 hours." During my initial conversation with the suspect, his coordination was poor and he was very unstable on his feet.

6. **Medical Problems and Treatment:** The suspect stated he felt light-headed, but declined medical assistance when asked if he needed medical care. The suspect did not report any other medical conditions and none were observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Prior to each test, I explained and demonstrated the test to the suspect. Each time he acknowledged that he understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect swayed approximately 4" front to back and 4" side to side. He estimated the passage of 30 seconds in 38 seconds. When asked how he estimated the time, he said, "One Mississippi, two Mississippi, but I got messed up."

Walk & Turn: During this test, the suspect lost his balance three times during the instructions stage. Once he began the walking stage, he missed touching heel to toe four times. He also stopped while walking three times, stepped off the line three times, and lost his balance and staggered during the turn. The suspect was asked prior to the test about removing his boots, and he said they were okay, and wanted to leave them on for the test.

One Leg Stand: When the suspect stood on his left foot raised his right foot, he swayed while attempting to balance and used his arms to balance during the entire time his foot was up. However, he put his foot down on counts 1,001, 1,002, and 1,003 and nearly fell. Therefore, the test was stopped for safety reasons. When attempting to stand on his right foot and raise his left foot, he again lost his balance nearly falling, and the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect missed the tip of his nose with the tip of his index finger on five of the six attempts. He also used his left hand when instructed to use his right hand on attempt #5, and used his right hand when instructed to use left hand on attempt #6.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect had six clues of HGN with an approximate 35-degree angle of onset. Vertical Gaze Nystagmus was not present. A Lack of Convergence was present. His pupils were estimated in three lighting levels and were estimated at 5.0 mm in both eyes in Room Light, 6.0 mm in both eyes in Near Total Darkness and 4.0 mm in both eyes in Direct Light. All three were within the DRE average ranges. The suspect's pupils showed a slow reaction to light. Rebound dilation was not observed.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were measured at 98 beats per minute (bpm), 96 bpm, and 92 bpm. All three were above the DRE average ranges. The suspect's blood pressure was measured at 144/94, which was also above the DRE average ranges. The suspect's body temperature was measured at 99.0 degrees, which was within the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect had a chemical odor on his breath and clothes. He also had a redness in his oral cavity. His nasal area was also red and he had a runny nose.

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He admitted being with some friends using "Dust Off and some other stuff." He first claimed he didn't use any of it because it made him light-headed, but then later admitted using some.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Poppers is under the influence of an Inhalant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample, which was submitted as evidence and will be submitted to the state crime laboratory for analysis.

13. **Miscellaneous:** Refer to Officer Neilson's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Officer Frank Enko	3638	17-06-560	Baltimore County Police	17-8097 (Session XIX - 3)

Recorder/Witness	Crash	Arresting Officer's Agency
Sgt. Corey Steffy, Maryland State Police	☒ None ☐ Fatal ☐ Injury ☐ Property	Howard County Police Department

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Huffer, Misty K.	9/10/1998	F	W	Sgt. Christopher Valentine #16602

Date Examined / Time /Location	Breath Test	Test Refused	Chemical Test
6/14/2017 / 2135 / Baltimore Co. Detention	Results: 0.000	☐ Instrument #: 34873	Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given / Given by: Ofc Enko	☒ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		Pizza	7 pm	Water and some juice	N/A	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
Midnight / 2140	Last night	8 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "I don't do drugs"	Cooperative, Indifferent	Poor

Speech:	Breath odor:	Face:
Slurred, Rambling	Chemical-like	Flushed

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☐ Normal ☒ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

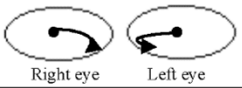
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☒ Normal ☐ Droopy

Pulse and Time

1. 96 / 2145
2. 94 / 2155
3. 92 / 2208

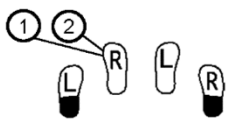
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	35	35

Convergence



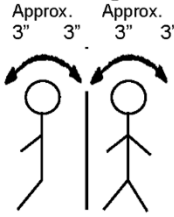
Right eye Left eye

N/A **One Leg Stand** N/A

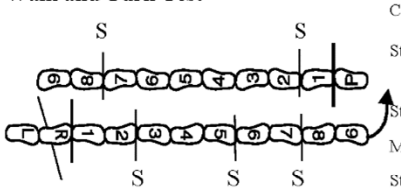


Modified Romberg Balance

Approx. 3" Approx. 3" 3" 3"



Walk and Turn Test



	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon	✓	
Stops walking	✓✓✓	✓✓
Misses heel-toe		
Steps off line		
Raises arms	✓✓✓	✓✓✓✓
Actual steps taken	9	9

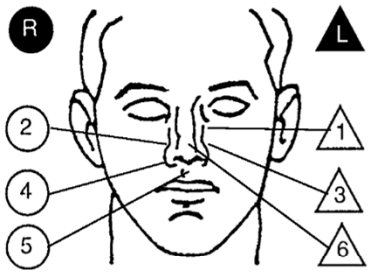
L	R	
2		Sways while balancing
2		Uses arms to balance
1		Hopping
2		Puts foot down

Test stopped after she nearly fell.

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
22 estimated as 30 seconds	Slow and deliberate	N/A	Athletic running shoes

Finger to Nose

(Draw lines to spots touched)



Pronounced sway.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	7.5	3.5
Right Eye	5.0	7.5	3.5

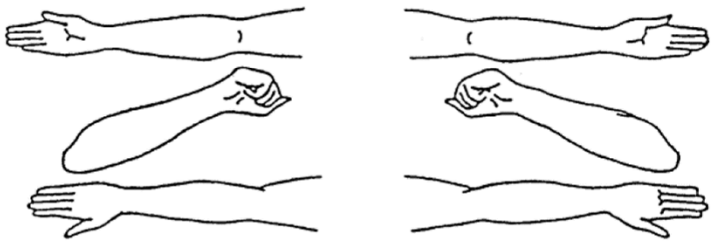
Nasal area: Redness

Oral cavity: Red

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
110 / 62	98.0 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I did a little nitrous with friends"	"I don't remember."	"About 8 pm?"	At friend's house.

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
6/14/2017 / 2055	2115	2135	2215	

Officer's Signature: Frank Enko	Reviewed/approved by / date:	DRE # 3638

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☒ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Huffer, Misty

1. **Location:** The evaluation was conducted in the Booking Area at the Baltimore County Detention Center. The room adequate lighting and has a smooth concrete floor with no obstructions. The darkroom room examinations were conducted in the staff restroom.

2. **Witnesses:** Sergeant Corey Steffy of the Baltimore State Police observed and recorded the evaluation.

3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered prior to my arrival by the arresting officer, Sergeant Christopher Valentine of the Howard County Police Department.

4. **Notification and Interview of the Arresting Officer:** On 6/14/17 at 2155 hours, I was requested to contact Sergeant Valentine for a drug evaluation at the Baltimore County Detention Center. After arriving at the Detection Center, Sergeant Valentine advised he had observed the suspect's vehicle fail to stop at red light. The suspect was slow to respond to his emergency lights, and was unable to maintain a single lane of travel. Sergeant Valentine told me that during personal contact, the suspect did not have an odor of an alcoholic beverage coming from her breath, but she did have a chemical-like odor on her clothing and breath. Officer Valentine observed that the suspect had difficulty locating her driver's license and other documents. She was slow to respond to his questions and requests. She also had poor coordination, and her speech was slurred. He also noted that she had a flushed face. Sergeant Valentine indicated that the suspect consented to SFSTs at roadside which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing six clues on the HGN test, three clues on the W&T, and four clues on the OLS (Refer to Sergeant Valentine's DWI report). After completing the SFSTs, he arrested the suspect for DWI and transported her to the Baltimore County Detention Center for processing. After obtaining a 0.00 BAC, he requested a DRE to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Booking Area, and she appeared to be disoriented and she responded very slowly to questions. Her speech was slurred and rambling. Her face was flushed, and she had red bloodshot eyes. The suspect was wearing a brown skirt, light blue blouse, and athletic running shoes. I introduced myself and asked if she would consent to a drug evaluation. She agreed to the evaluation by stating, "Okay" after a long pause before answering. I asked the suspect if she had been informed of her Miranda rights and she stated "no." I then informed her of her Miranda rights at 2130 hours. I asked the suspect if she had any physical injuries or defects and she said she did not. She also stated that she was not under the care of a doctor or dentist. She told me that she had eaten pizza around 7 pm and had drank some water and juice at that time. When asked if she was taking any medication or drugs, she responded "I don't do drugs." The suspect told me that she was not blind in either eye and did not wear corrective lenses. When I asked her when she last slept, she stated, "last night." I asked her for how many hours and she stated "8 hours."

6. **Medical Problems and Treatment:** The suspect indicated that she did not have any injuries or physical problems, and none were observed or mentioned during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. Each time she indicated that she understood the test and agreed to attempt the test. The following tests were administered to the suspect:

   Modified Romberg Balance: For this test suspect swayed approximately three inches front to back and three inches side to side. Her time estimation was fast, estimating 30 seconds in 22 seconds.

Walk & Turn: This test had to be explained and demonstrated to the suspect twice. After the second explanation, she stated she understood the instructions. During this test, the suspect lost her balance twice during the instructions stage. She also started too soon once during the instruction stage. During the walking stage, she raised her arms for balance three times on the first nine steps and four times on the second nine steps. She also stopped while walking three times on the first nine steps and twice on the second nine steps. On the turn, she was slow and deliberate with her movements, but made the turn as instructed.

One Leg Stand: On this test, when the suspect stood on her left foot and raised her right foot, she swayed side to side and front to back approximately four inches. She used her arms for balance during the entire time her foot was up. She put her foot down quickly at counts 1,001 and 1,002 and nearly fell, and the test was stopped for safety reasons. When attempting to stand on her right foot and raise her left foot, she nearly fell again and the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect missed the tip of her nose with the tip of her index finger on all six attempts. She also had a pronounced sway throughout the test.

8. **Clinical Indicators of Impairment:**

Eye Signs: During this test, the suspect exhibited all six clues of HGN with an approximate 35-degree angle of onset. VGN was not observed. She was not able to converge her eyes as instructed. Her pupil sizes were estimated in the three lighting levels and estimated at 5.0 mm in both eyes in Room Light, 7.5 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All three were within the DRE average ranges. The suspect exhibited a slow reaction to light. Rebound dilation was not present.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation. All three were above the DRE average range, at 96, 94 and 92 beats per minute (bpm). The suspect's blood pressure was measured at 110/62, which was below the DRE average ranges. The suspect's body temperature was measured at 98.0 degrees using a standard oral thermometer. The suspect's muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were red and inflamed. She had a chemical-like odor on her breath. When asked about the odor on her breath and clothing, she indicated that she was hanging out with some friends who "might have been doing some nitrous."

10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked her about drug use. She stated she "did a little nitrous with friends" just before she got stopped. She said she likes to use nitrous because it relaxes her.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of an Inhalant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect, which was submitted as evidence pending delivery to the Crime Lab for analysis.

13. **Miscellaneous:** Refer to Sergeant Valentine's arrest report for additional details.

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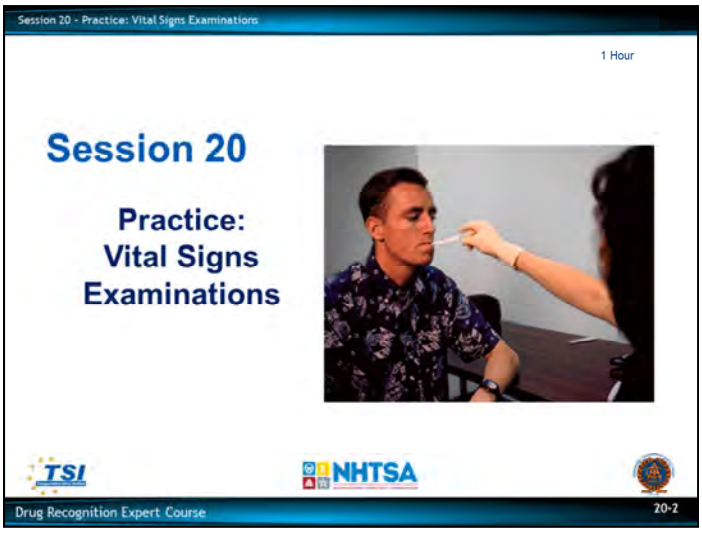
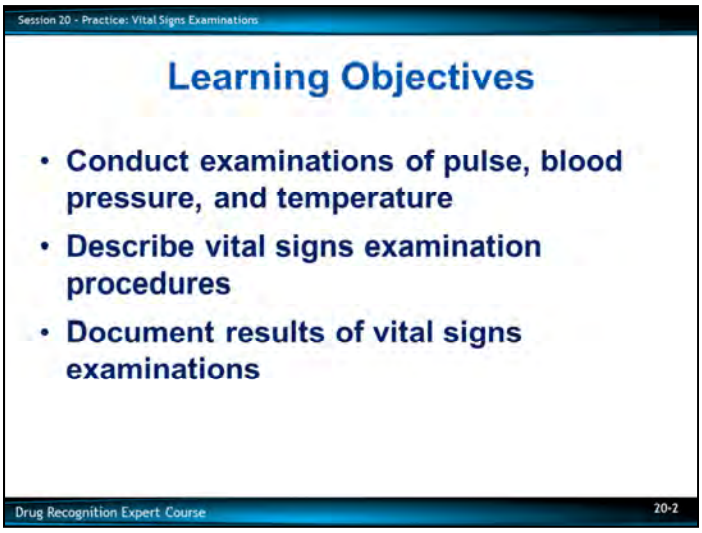

Session 20 - Practice: Vital Signs Examinations
1 Hour
Session 20
Practice:
Vital Signs
Examinations
TSI
NHTSA
Drug Recognition Expert Course
20-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

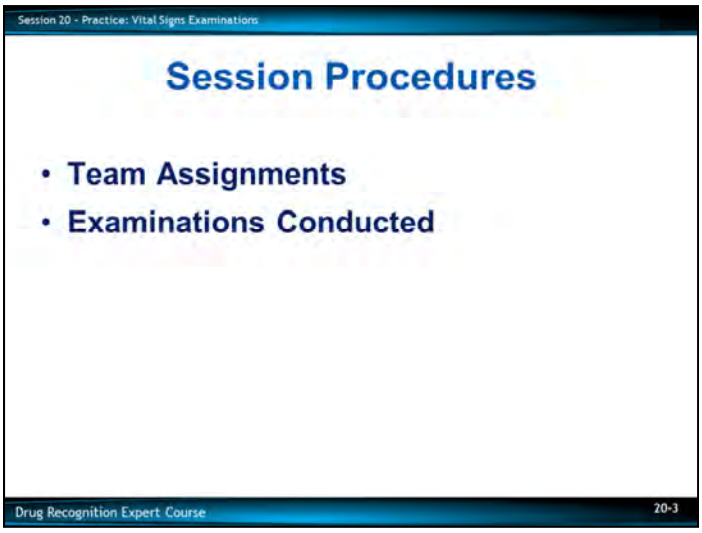
- Conduct examinations of pulse, blood pressure, and temperature
- Describe the vital signs examination procedures
- Document the results of the vital signs examinations

CONTENT SEGMENTS

A. Procedures for this Session
B. Pulse Measurements
C. Blood Pressure Measurements
D. Temperature
E. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Participant Hands-On Practice
Instructor-Led Coaching
Participant-Led Coaching



A. <u>Procedures for this Session</u>
Refer to Session 7 if there are any questions on vital signs.

Team Assignments
Participants will work in three or four member teams.
Make team assignments.

At any given time, one member of the team will be engaged in conducting and recording vital signs examinations of another member.

The remaining member(s) will help coach and critique the participant who is conducting the examinations.
Emphasize participants can help each other learn by pointing out errors of omission or commission.

Participants will take turns serving as test administrator, test subject, and coach.

Participants will record their measurements using the *Vital Signs Examination Data Sheet.*

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B. <u>Pulse Measurements</u>

Vital Signs Practice
Teams initially will practice taking one another's pulse.
Point out the participant who is "coaching" should simultaneously take the subject's pulse along with the test administrator.
Example: Administrator can take pulse at subject's left wrist, coach can take it at subject's right wrist.
Then, the administrator and coach can compare the measurements they obtain.
Demonstrate this, using a participant-subject and two instructors.
Hand out copies of the Vital Signs Examination Data Sheet to each participant. Solicit participants' questions concerning procedures for this practice session.

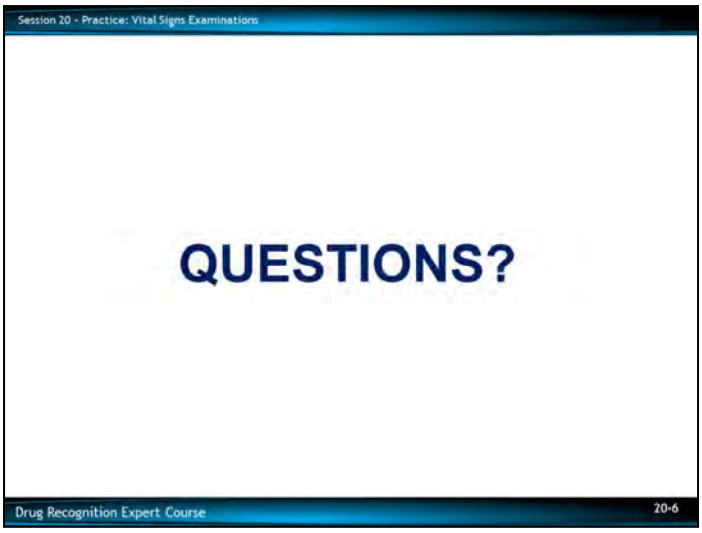
Pulse Measurements
Monitor teams and coach participants as necessary and appropriate.
Terminate this segment after 20 minutes or after each participant has administered a pulse measurement to each of their team members (whichever comes first)

C. <u>Blood Pressure Measurements</u>

Teams subsequently will practice taking one another's blood pressure.
If specially-designed training stethoscopes are available, the participant coach can "listen in" on the blood pressure measurements being taken by the participant-administrator.
Monitor teams and coach participants as necessary and appropriate
Terminate this segment after 25 minutes, or after each participant has measured the blood pressure of each member of their team (whichever comes first).

D. <u>*Temperature*</u>

Allow participants to practice taking temperatures



E. <u>Session Wrap-Up</u>

Offer appropriate comments and observations about the participants' performance.
Solicit participants' comments concerning the practice session.

VITAL SIGNS EXAMINATIONS DATA SHEET

EXAMINER'S NAME: _____

DATE _____/_____/_____

PULSE MEASUREMENTS	BLOOD PRESSURE MEASUREMENTS
SUBJECT'S NAME _____	SUBJECT'S NAME _____
TIME _____	TIME _____
PULSE POINT USED _____	SYSTOLIC/DIASTOLIC_____
BEATS PER MINUTES _____	TEMPERATURE_____
SUBJECT'S NAME _____	SUBJECT'S NAME _____
TIME _____	TIME _____
PULSE POINT USED _____	SYSTOLIC/DIASTOLIC_____
BEATS PER MINUTES _____	TEMPERATURE_____
SUBJECT'S NAME _____	SUBJECT'S NAME _____
TIME _____	TIME _____
PULSE POINT USED _____	SYSTOLIC/DIASTOLIC_____
BEATS PER MINUTES _____	TEMPERATURE_____

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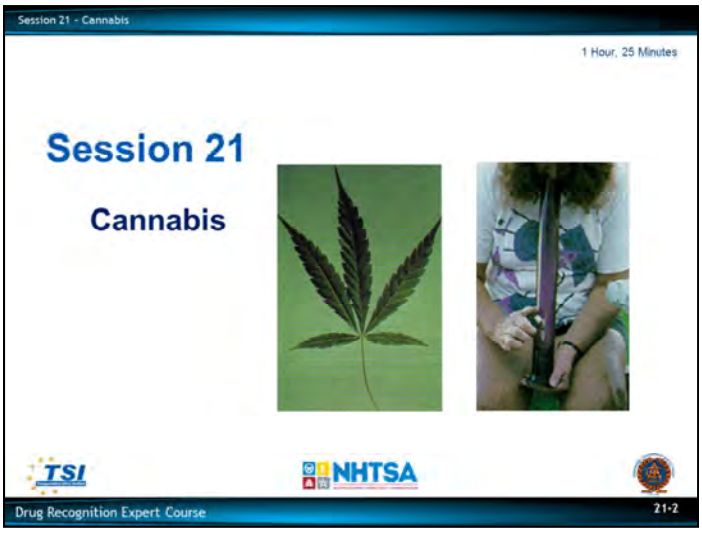
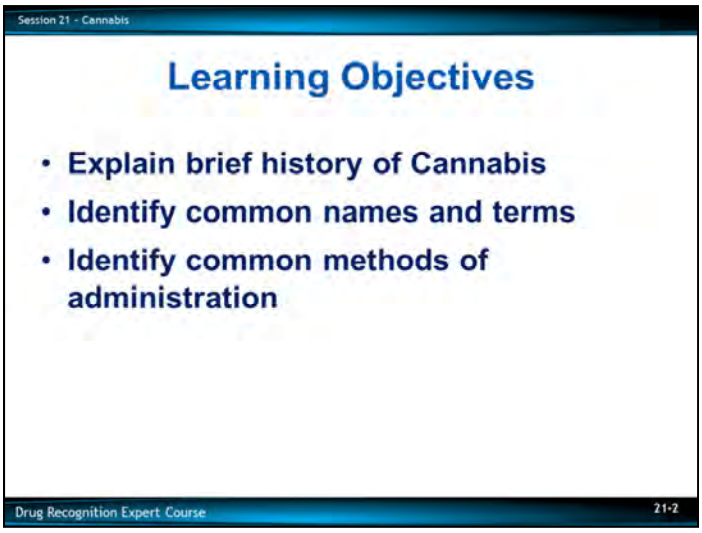
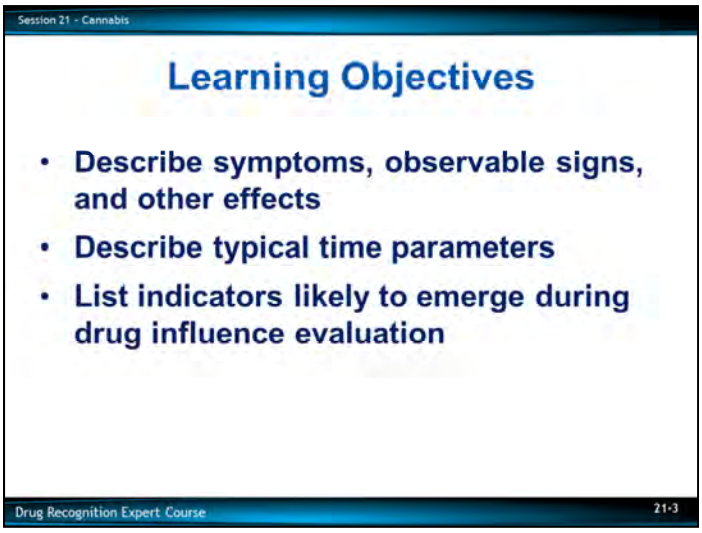

Session 21 - Cannabis
1 Hour, 25 Minutes
Session 21
Cannabis
TSI
NHTSA
Drug Recognition Expert Course
21-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of Cannabis
- Identify common names and terms associated with Cannabis
- Identify common methods of administration for Cannabis



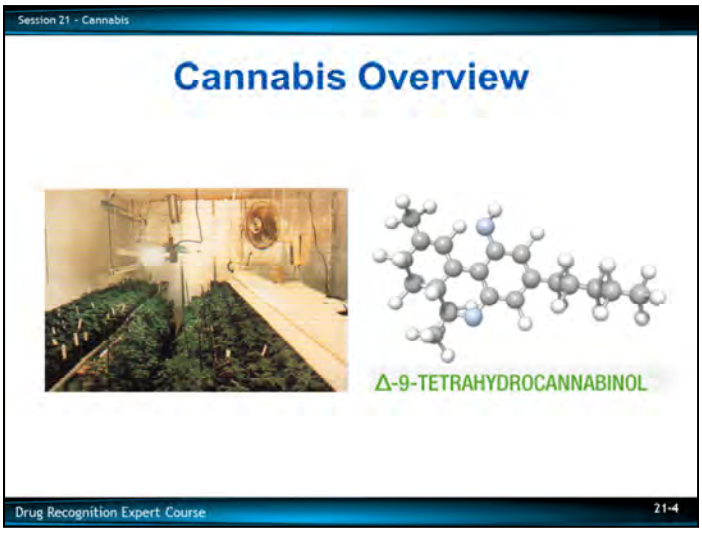
- Describe the symptoms, observable signs, and other effects associated with this category
- Describe the typical time parameters, i.e., onset and duration of effects associated with Cannabis
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of Cannabis

CONTENT SEGMENTS

A. Overview of the Category
B. Possible Effects of Cannabis
C. Onset and Duration of Effects
D. Overdose Signs and Symptoms
E. Expected Results of the Evaluation
F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentation
Slide Presentations
Review of the DEC Program Exemplars



A. <u>Overview of the Category</u>
If available, display slides of Cannabis plants, leaves, flowers, etc.

"Cannabis" is a category of drugs derived primarily from various species of plants, such as Cannabis Sativa, which generally grow tall and thin, outdoors and Cannabis Indica plants, which generally grow short and wide and are better grown indoors. Cannabis grows readily throughout the temperate zones of the world.

No matter its form or label, all Cannabis products contain the primary psychoactive (mind-altering) chemical delta-9-tetrahydrocannabinol (THC). Marijuana contains more than 400 other chemicals. THC is the chemical in Marijuana responsible for producing the euphoria or "the high." Cannabidiol (CBD) another chemical in Marijuana is considered non-psychoactive and lacks the intoxicating properties of THC. There is some evidence CBD may hold medicinal value to treat several medical conditions such as neurological disorders (i.e., seizures and epilepsy), psychosis, and anxiety.

Although the current national THC average level of marijuana is approximately 11%, Colorado and Washington State's recreational marijuana is approximately 17%, with some samples testing at 30%. This does not include high-potency extract concentrates, which can have 80-90% THC.
(Source: United Nations of Drugs and Crime (2016), World Drug Report)

Print "△ - 9 THC" on dry erase board or easel/easel pad.
The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol.

THC is found principally in the leaves and flowers of the plant, rather than in the stem or branches.

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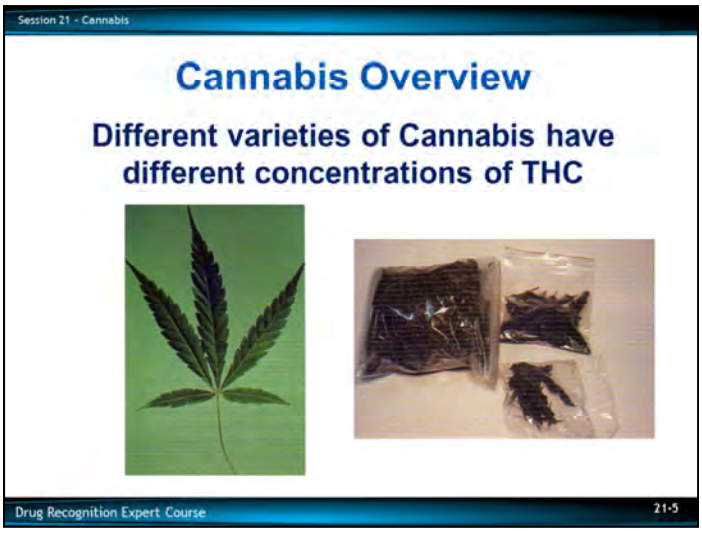


Point out the highest known THC content is 37.2% from a sample of Marijuana analyzed in a DEA lab in California in 2008.
Source: Drug Identification Bible, 2014-2015
Different varieties of the Cannabis have different concentrations of THC.
Source: Drug Identification Bible, 2014-2015

One variety that has a relatively high concentration of THC is Sinsemilla, which is the unfertilized female Cannabis Sativa plant.

- Explanatory note: "Sinsemilla" in Spanish means "without seeds"

Sativa, Indica, and Hybrid Cannabis

- Sativa Cannabis is knows for causing an energetic and emotional uplifted high
  - Often referred to as a "cerebral high."
- Indica Cannabis is better known for having a "body high"
  - Reported to cause deep relaxation often leading to a term called "couch-lock"
- Hybrids are a combination of the two types

Source: Oregon Cannabis Connection www.occnewspaper.com

Forms of Cannabis

There are four principal forms of Cannabis.

- Marijuana – the dried leaves of the plant

- Hashish – a form of Cannabis made from the dried and pressed resin of a Marijuana plant

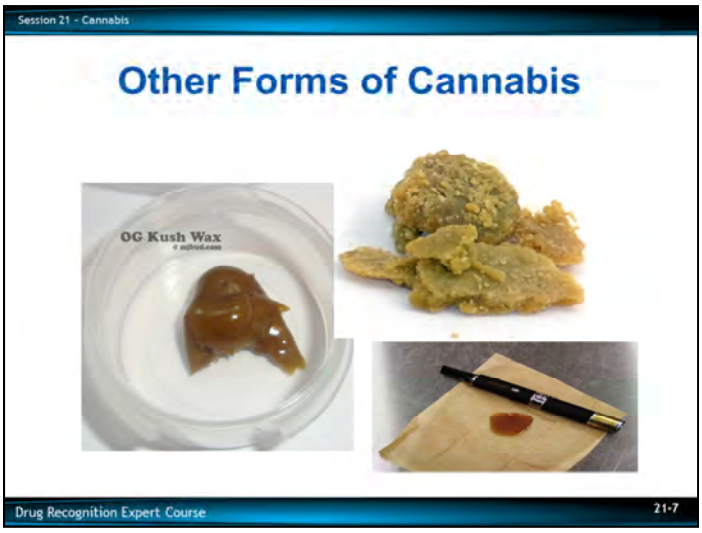
- Hash Oil – sometimes referred to as "Marijuana Oil," it is a highly concentrated syrup-like oil extracted from Marijuana
  - It is normally produced by soaking Marijuana in a container of solvent, such as acetone or alcohol for several hours until the solvent has evaporated
  - A thick syrup-like oil is produced with a higher THC content
  - The average THC content of hash oil seized in the U.S. in 2010 was 30.3%

Source: Drug Identification Bible, 2014-2015.

- Marinol (or trade name of Dronabinol) – a synthetic form of THC
  - This is a prescription drug used to treat nausea and vomiting
  - It is prescribed for certain cancer patients undergoing chemotherapy

- "Dronabinol" is the generic or chemical name for the synthetic THC

- "Nabilone – an analog of Dronabinol used as an anti-vomiting agent; Trade name: Cesamet



Sources indicate “waxy Marijuana” or “dabbing” is the purest form of Cannabis. It involves the use of butane or other various chemicals to heat and refine the THC into “BHO” or butane hash oil. It contains anywhere from 82-99% THC making it several times more potent than a Marijuana bud on a Cannabis plant which usually contains 5-28% THC. The “waxy Marijuana” is then heated or put into a vaporizing pen and inhaled. Dabbing is a way to get the quickest, long-lasting high with a single inhale. A single puff form a pipe or vaping pen can give the effect of smoking many joints. Typical wax Marijuana is golden in color and crumbly; though texture may vary based on type. Unfortunately for parents, teachers, and law enforcement, the new vaping pens make it extremely difficult to see, smell, or detect.
Mention Wax is also known as Butane Hash Oil and/or Dabs.

Cannabis tinctures, sometimes knows as **green dragon**, is an alcohol-based extract of cannabis and sometimes used in the production of specific extracts. The tincture is typically made by soaking the dried flowers of the female hemp plant (marijuana) in ethanol. The tetrahydrocannabinol (THC0 and other cannabinoids dissolve into the alcohol. Some preparations also extract some of the water-based plant products such as chlorophyll, resulting in a dark green or brown liquid. Baking or dying the cannabis to decarboxylate prior to the alcohol bath increases the amount of THC in the resulting preparation.

Topical cannabis, or topicals, are simply cannabis-infused products for use on the surface of the skin. They can come in the form of balms, lotions, oils, tinctures, or personal lubricants and can be applied directly to the skin.

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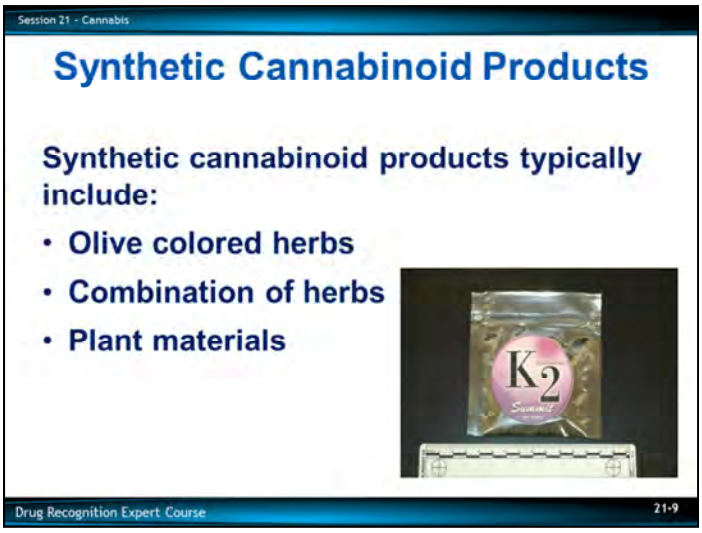
Edibles are food products infused with Marijuana. Though smoking Marijuana is the most prevalent method of consumption, eating Marijuana is quickly becoming a popular way to consume the drug. In addition to placing Marijuana directly in food, Marijuana-infused cooking oil can be used when frying or searing food and Marijuana-infused butter can be spread directly on prepared food. These Marijuana edibles are more common in States that have legalized Marijuana and also States that permit medical Marijuana use. The amount of THC is very difficult to measure and is often unknown in these food products.

Source: ***https://www.justthinktwice.gov/article/drugs-alert-marijuana-edibles accessed 8/30/17***



Synthetic Cannabinoid Products

Synthetic Marijuana or synthetic Cannabinoids have quickly become a worldwide concern. They quickly came on the market in the early 2000's and continue to evolve. These products go by many different names or identifiers. Spice, which is sometimes also called K2, herbal incense, or "fake weed," is one of the more popular or more familiar synthetic Cannabinoids.

Spice and similar products consists of shredded dried plant material that has been sprayed with chemicals designed to act on the same brain cell receptors as THC, but are often much more powerful and unpredictable. These products are typically labeled "not fit for human consumption," and most are illegal. But their manufacturers are constantly creating new chemical compounds to sidestep legal restrictions.

When smoked, synthetic Cannabinoid products can also produce stimulant and/or hallucinogenic effects.

Point out there are literally hundreds of different chemical synthetic cannabinoids and hundreds of names for the synthetic cannabinoids.

Common brand names for synthetic Cannabinoids include K2, Spice, Spice Gold, Spice Diamond, Yucatan Fire, Solar Flare, K2 Summit, Genie, PEP Spice, and Fire n Ice, to name a few.

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Synthetic Cannabinoid Products Effects

They have many adverse effects that include:

- Panic attacks
- Agitation
- Tachycardia (range of 110 to 150 BPM)
- Elevated blood pressure
- Anxiety
- Pallor (pale appearance)
- Numbness and tingling

Users report effects lasting between 30 minutes and 2 hours.

Possible Cannabis Applications

Cannabis may have some limited medical applications, however, many experts vary in their opinions on them. Some possible applications may include:

- Lowering of intraocular pressure, which can be helpful for glaucoma patients
  - "Intraocular" – within the eyeball
  - Cannabis lowers the intraocular pressure by dilating in size the blood vessels of the eyes (more size – less pressure)
  - This causes red, bloodshot eyes

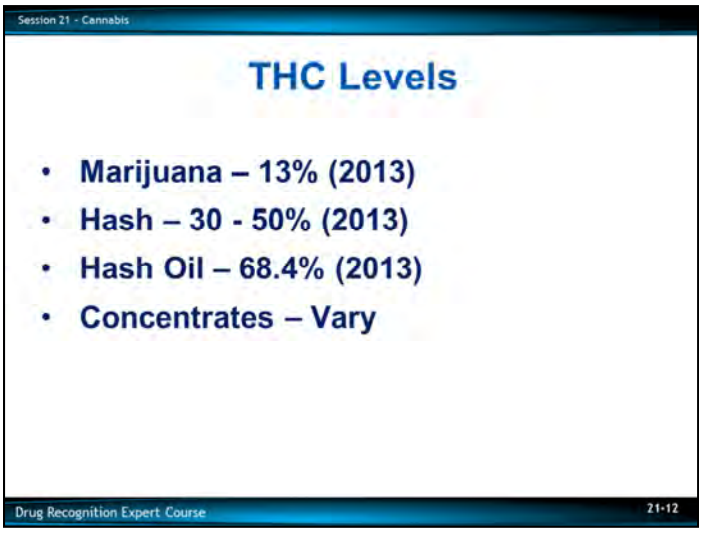
- Suppressing nausea and sometimes is recommended for cancer patients to relieve the nausea accompanying chemotherapy

- Cannabidiol, a non-psychoactive ingredient found in Cannabis, is used in treating Epilepsy; it helps to inhibit seizures

- An appetite enhancer

- A muscle relaxant

- A tumor growth retardant



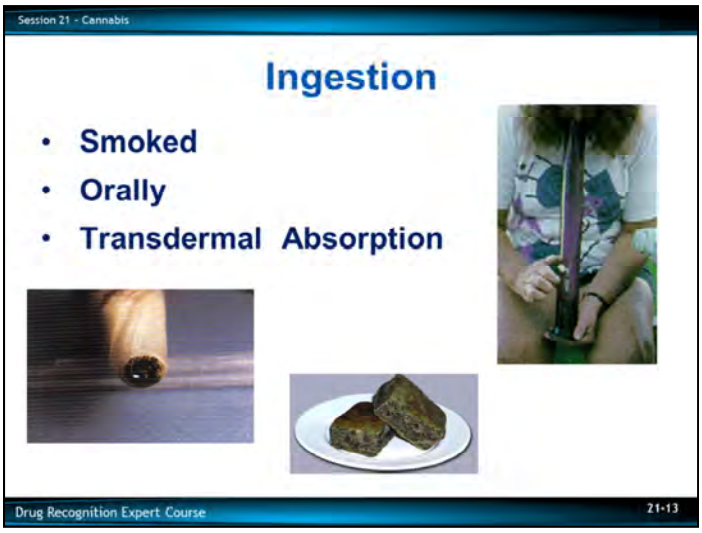
Potency, Purity and Dose
Average THC concentration in Marijuana:

- Marijuana – 13.0% (2013)
- Hash – 30 – 50% (2013)
- Hash Oil – 68.4% (2013)
- Concentrates - Vary

Source: Drug Identification Bible, 2014-2015
THC levels can vary greatly depending upon areas of the country.

Recreational doses are highly variable.

The lower the THC, the more hits required to achieve desired effects.

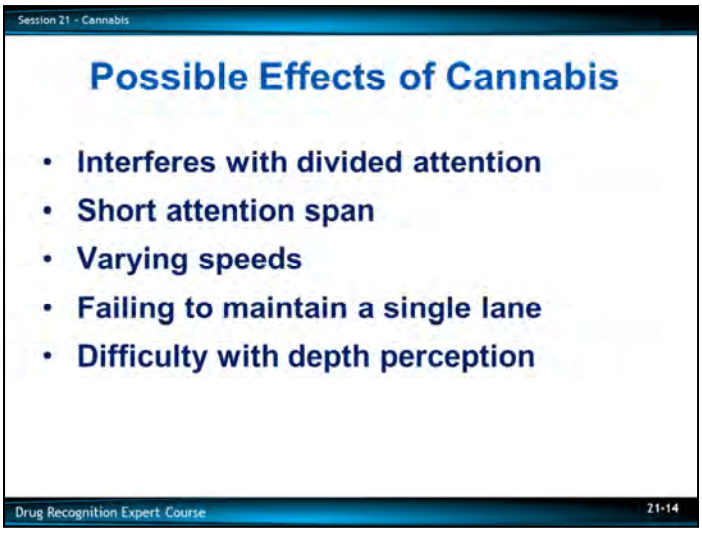


Marijuana usually is smoked.

Marijuana, Hash, and Hash Oil also can be ingested orally, for example, baked in cookies or brownies and eaten.

THC can also be absorbed through the skin using transdermal absorption patches or rub-on ointments.

Research related to passive inhalation of Marijuana smoke causing behavioral effects as well as measurable amounts in toxicology samples is mixed and is generally dependent on the amount of smoke inhaled.
Source: Drug Identification Bible, 2014-2015
Solicit participants' comments and questions concerning this overview of Cannabis.



B. <u>Possible Effects of Cannabis</u>

One major effect of Cannabis is it appears to interfere with a person's ability to divide attention.

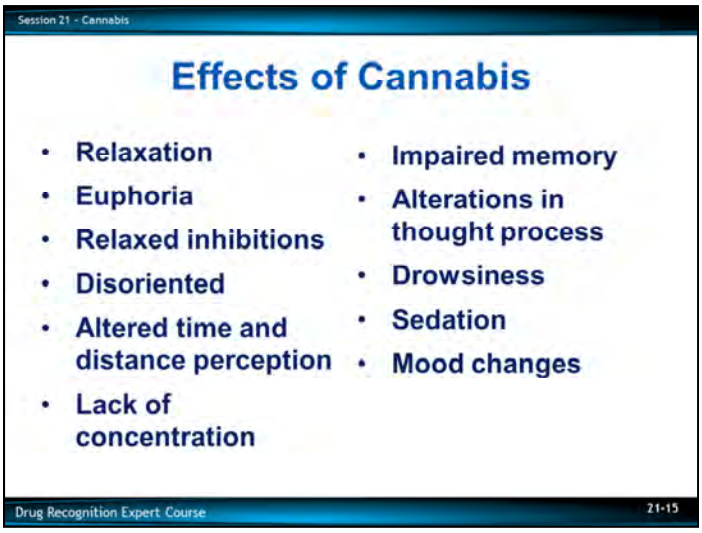
People under the influence of Cannabis have difficulty paying attention, with brief attention spans. In particular, they do not divide their attention very successfully. **Clarification: They have a difficult time dealing with more than one or two tasks at once.** This can make them very unsafe drivers since driving requires the ability to divide attention among many simultaneous tasks. Short attention span would be indicated by varying speeds, failing to maintain a single lane, and difficulty with depth perception. Because Cannabis impairs attention, the Standardized Field Sobriety Tests (SFSTs) like Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) are excellent tools for recognizing people under the influence of Cannabis. People under the influence of Cannabis may attend to one or a few of these driving tasks, but simply ignore the other tasks.

Ask participants: "What are some of the things drivers have to do simultaneously?"
Steering, Operating the accelerator, Signaling, Observing other traffic, Recognizing traffic control devices, Shifting

Loss of depth perception would be demonstrated by stopping improperly.

According to a study by the British Medical Journal (2005) even small amounts of Marijuana can double the chances of a driver's involvement in a motor vehicle crash and larger doses can more than triple the risk.
Source: "Cannabis Use Doubles Chances if Vehicle Crash", BMJ-British Medical Journal, February 2012

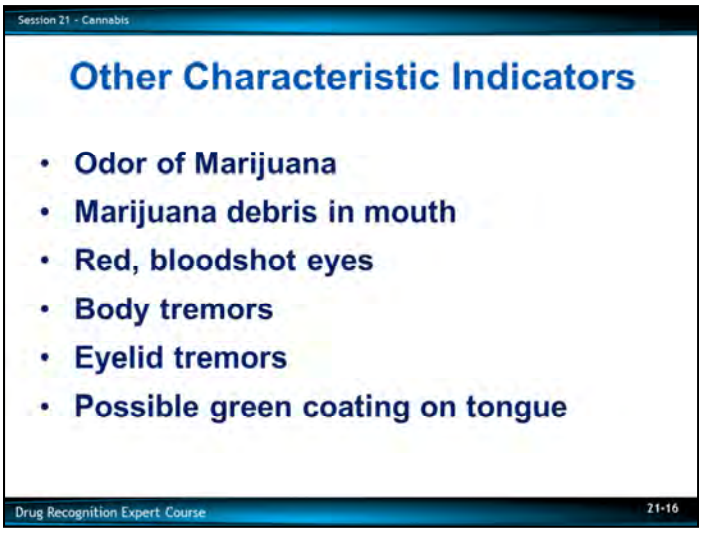
According to the Columbia University School of Public Health, the risk of an automobile crash is almost 2.7 time higher among Marijuana users than non-users. The more Marijuana smoked in terms of frequency and potency, the greater likelihood of a crash.
Source: "Marijuana Use and Motor Vehicle Crashes" Epidemiological Reviews; G. Li, et al., Columbia University, Mailman School of Public Health, October 2011



Pharmacological Effects of Cannabis:
Effects will vary with dose, route of administration, experience of user, and other factors. At recreational doses, effects include:

- Relaxation
- Euphoria
- Relaxed inhibitions
- Disoriented
- Altered time and distance perception
- Lack of concentration
- Impaired memory
- Alterations in thought process
- Drowsiness
- Sedation
- Mood changes

Point out that effects can vary depending on the user's experience with the drug.



Other characteristic indicators:

- Odor of Marijuana
- Marijuana debris in the mouth
- Red, bloodshot eyes
- Body tremors
- Eyelid tremors

Point out this may become evident during the Modified Romberg Balance (MRB) and Finger to Nose (FTN) tests.

- Possible green coating on the tongue

A greenish coating on the tongue has been documented in two peer-reviewed articles.

- ***"The Drug Evaluation Classification Program: using ocular and other signs to detect drug intoxication;" Journal of American Optometric Association, Edward Kosnoski, Robert Yolton, Karl Citek, Charles Hayes, and Richard Evans; Vol. 69/Number 4; April 1998***
- ***"A Two-Year Study of Delta 9 Tetrahydrocannabinol Concentrations in Drivers; Part 2; Physiological Signs on Drug Recognition Expert (DRE) and non-DRE Examinations;" Journal of Forensic Sciences, Kari Declues, Shelli Perez, and Ariana Figueroa; 2017 doi:10.1111/1556-4029.13550***

***Solicit participants' comments or questions concerning possible effects of Cannabis*.**

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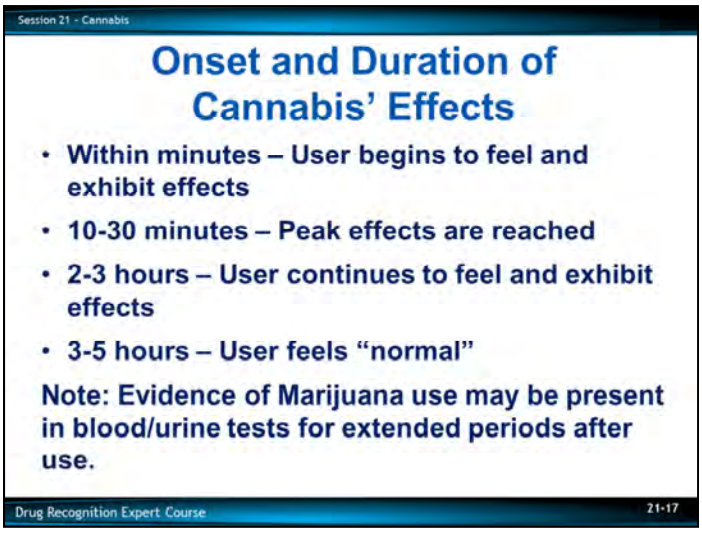

C. <u>Onset and Duration of Effects</u>

Effects from smoking Cannabis are felt within minutes and reach their peak in 10-30 minutes after smoking. Typical Marijuana smokers experience a high that lasts approximately 2 hours. Most behavioral and physiological effects return to baseline within 3-5 hours after drug use, although some residual effects in specific behaviors can last up to 24 hours.
Source: Drugs and Human Fact Sheets, April 2014, DOT HS 809 725

The effects reach their peak within 10–30 minutes.

- A 1985 Stanford University study showed pilots had difficulty in holding patterns and in lining up with runways for up to 24 hours after using Marijuana

Depending on the amount smoked and on the concentration of THC in the Marijuana, the person will continue to feel and exhibit the effects for 2–3 hours.

- In 1990, a second Stanford University study showed Marijuana-impaired performance at .25, 4, 8, and 24 hours after smoking
  - While 7 of the 9 pilots showed some degree of impairment at 24 hours after smoking Cannabis, only one reported any awareness of the drug's effects

Generally, the person will feel "normal" within 3–5 hours after smoking Marijuana.

- The user may be impaired long after the euphoric feelings have ceased

Edibles, however, take between 1-3 hours to reach their peak because food is absorbed into the bloodstream through the liver. Because it takes longer, the user may end up consuming longer amounts of the drug while thinking the drug isn't working.
Source: <u>https://www.justthinktwice.gov/article/drug-alert-marijuana-edibles accessed 8/30/17</u>
Solicit participants' comments and questions concerning onset and duration factors.

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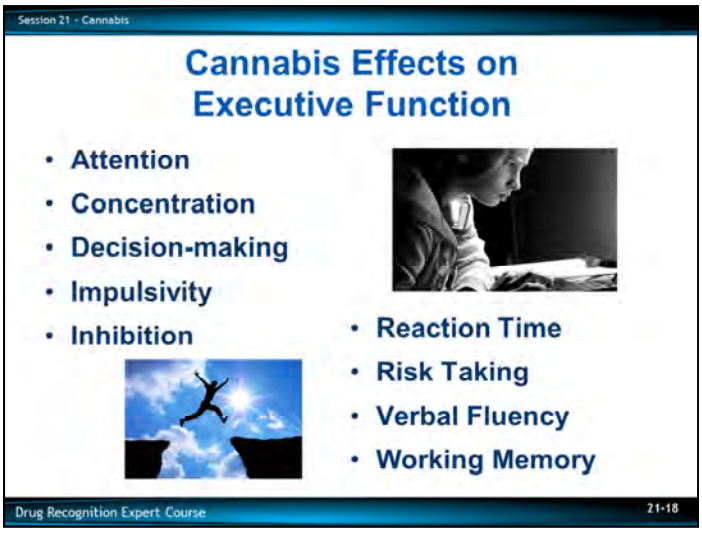


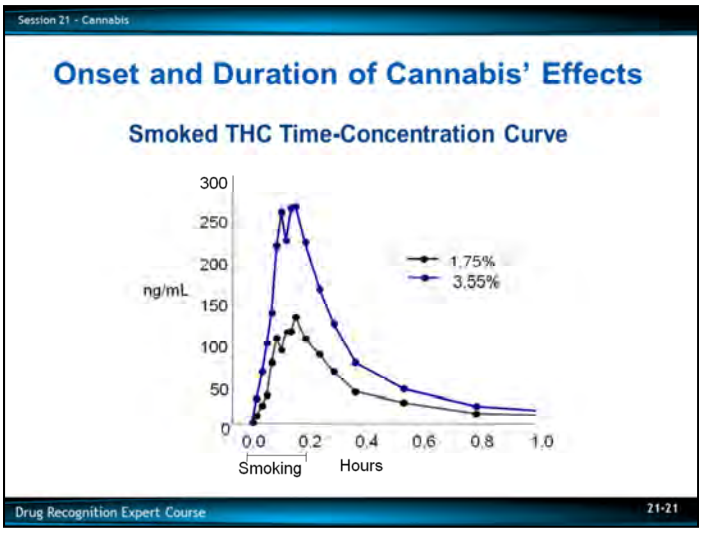
Executive Function involves:

- Cognitive processes such as task switching and planning
- Mental skills – organize and act
- Working memory

Source: Rebecca Elliott, Executive Functions and Their Disorders: Imaging in Clinical Neuroscience. Br Med Bull (2003) 65 (1): 49-59 doi:10.1093/BMB/65.1.49

Cannabis has shown to effect the executive function in the following areas:

- Attention - Selectively attending to one cue while ignoring others, including divided and sustained attention
- Concentration - Intense mental application
- Decision-making - Process of selecting a course of action
- Impulsivity - Initiation of behavior without adequate forethought
- Inhibition - Imposing restraint on behavior or another mental process
- Reaction Time - Lapse of time between presentation of a stimulus and a response
- Risk Taking - Engaging in behaviors that have the potential to be harmful or dangerous
- Verbal Fluency - Generating multiple, verbal responses associated with specified conceptual category
- Working Memory - Ability to hold and manipulate information and remember it after a short delay



Generally, THC levels in the blood will decline rapidly within 30 minutes of inhalation. THC concentrations fall:

- To about 60% of their peak within 15 minutes after the end of smoking
- To about 20% of their peak 30 minutes after the end of smoking

Point out the curve on the slide emphasizing the rapid increase and immediate decline in the THC level in the blood.

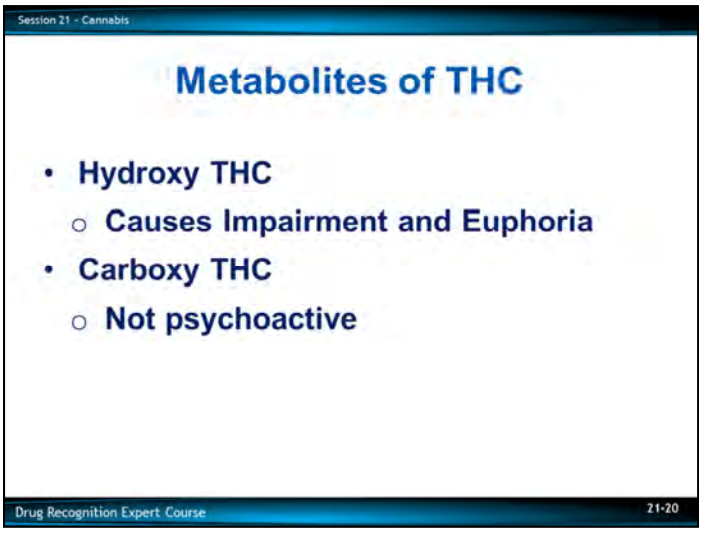
However, blood and urine tests may continue to disclose evidence of the use of Cannabis long after the effects of Cannabis have disappeared.

- Blood tests may disclose Cannabis use for up to 3 days after smoking
  - This could vary depending upon the frequency of use

Source: NIDA Study, "Blood Brain Barrier"

- Urine tests may indicate the presence of inactive THC metabolites for up to a month
  - This could vary depending upon the frequency of use

Inform participants it can take as long as four hours for THC to appear in the urine at sufficient levels to trigger a positive drug screen following smoking.



There are two important metabolites, or chemical byproducts, of THC.

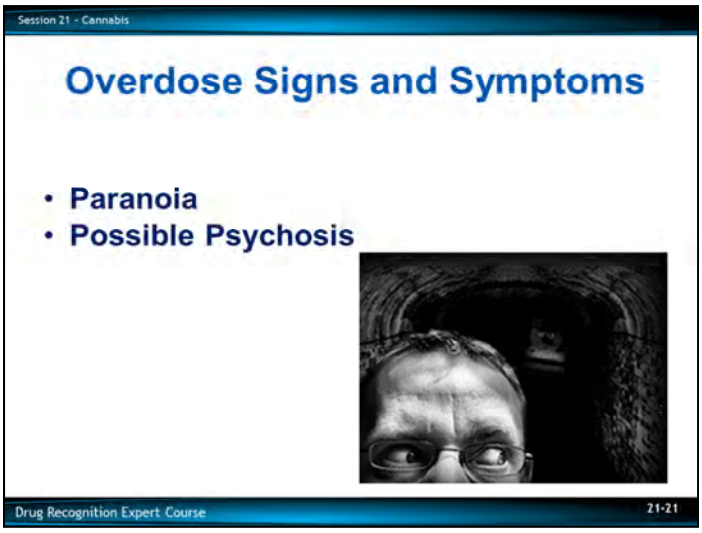
Write "Hydroxy THC: Causes Impairment and Euphoria" on the dry erase board or easel/easel pad.

- Hydroxy THC, which causes the user to feel euphoric
  - Hydroxy THC is the main psychoactive metabolite of THC formed in the body after Marijuana consumption
  - Also referred to as 11-Hydroxy-THC
  - Hydroxy THC usually is eliminated from the blood plasma within six hours

- Carboxy THC, there is no evidence at this time it is psychoactive
  - Carboxy THC may be found in the blood plasma for several days following Marijuana use

Cannabis is a fat soluble (i.e., it dissolves easily into fatty tissue); therefore, it can remain for long periods in the brain tissue, which is about one-third fat.

Cannabis principally is eliminated from the body in feces and urine.

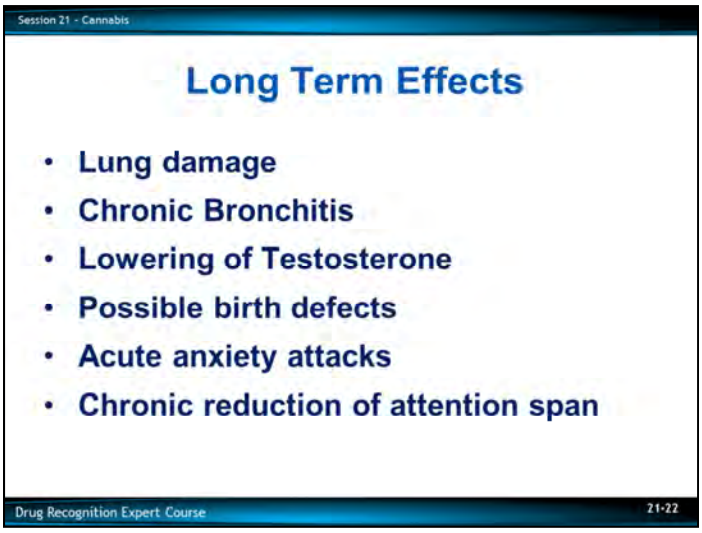


D. <u>Overdose Signs and Symptoms</u>

Ask participants: "Is there danger of death from Cannabis overdose?"
Answer: It is not likely there is a direct risk of death from overdose; however, persons impaired by Cannabis may behave in foolishly dangerous ways and become injured or killed as a result.

Excessive or long-term use of Marijuana can have very undesirable consequences. Marijuana has been observed to produce sharp personality changes, especially in adolescent users.

Overdose signs and symptoms can include paranoia and possible psychosis.



Long term effects include:

- Lung damage
- Chronic Bronchitis
- Lowering of Testosterone (male sex hormone)
- Possible birth defects, still births and infant deaths
- Acute anxiety attacks
- Chronic reduction of attention span

Research indicates life threatening overdoses rarely if ever occur.

Withdrawal – is similar to alcohol dependence withdrawal.

Physical dependence can occur with chronic use.

- Cannabinoid Hyperemesis Syndrome (may include excessive vomiting, compulsive bathing, abdominal pain, nausea, and excessive thirst)

Source: The Journal of the American Osteopathic Association, Vol. 111, 169-169, March 2011
Cannabinoid Hyperemesis Syndrome as the Underlying Cause of Intractable Nausea and Vomiting
http://jaoa.org/article.aspx?articleid=2094175

Solicit participants' questions concerning signs and symptoms of long term Cannabis use.

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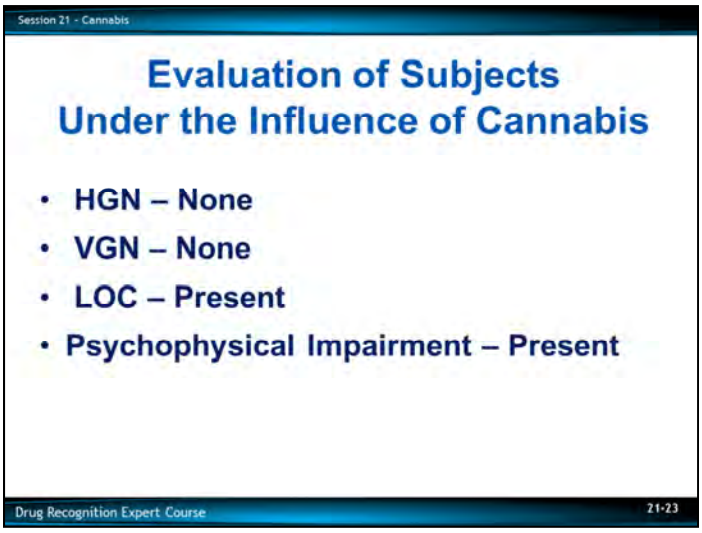

E. <u>Expected Results of the Evaluation</u>

Observable Evidence of Impairment
Clinical Indicators

- Neither Horizontal Gaze Nystagmus (HGN) or Vertical Gaze Nystagmus (VGN) will generally be present

Remind participants Marijuana users often drink alcohol in conjunction with their smoking and others often lace their Marijuana with PCP. Either combination would cause nystagmus.

- Lack of Convergence (LOC) will generally be present

- Performance on the Modified Romberg Balance (MRB), WAT, OLS, and FTN tests will generally be impaired

Source: Hartman, R., Richman, J., Hayes, C., Huestis, M., Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. Accident Analysis and Prevention. May, 2016

Remind participants to be especially alert for evidence of the subject's distorted perception of time when performing the MRB test.

Point out, with subjects under the influence of Cannabis, poor performance on these tests usually will result principally from their inability to divide attention, and less so from impaired coordination or balance.

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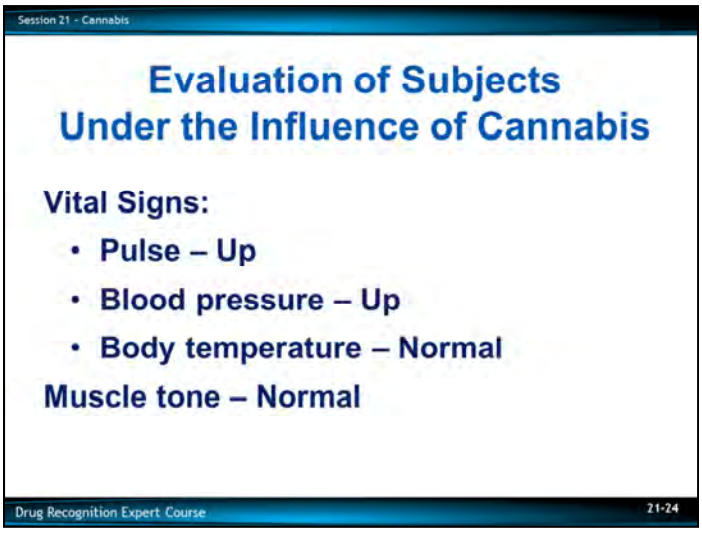
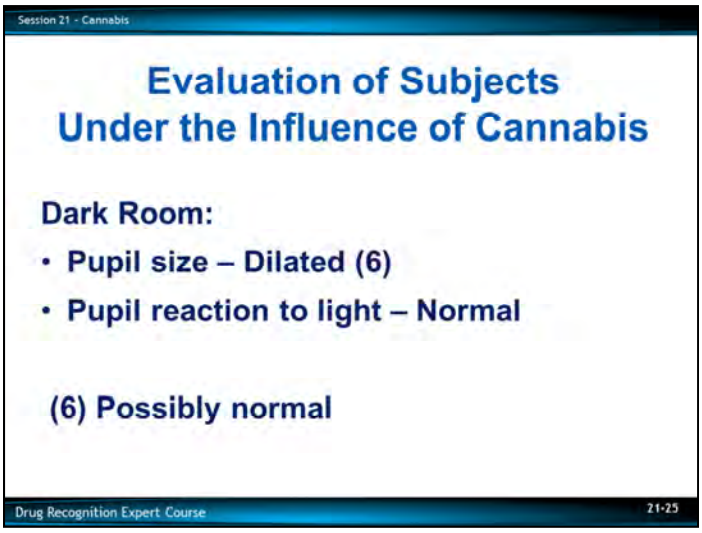


Vital Signs:

- Pulse will generally be elevated
- Blood pressure will generally be elevated
- Body temperature will generally be normal

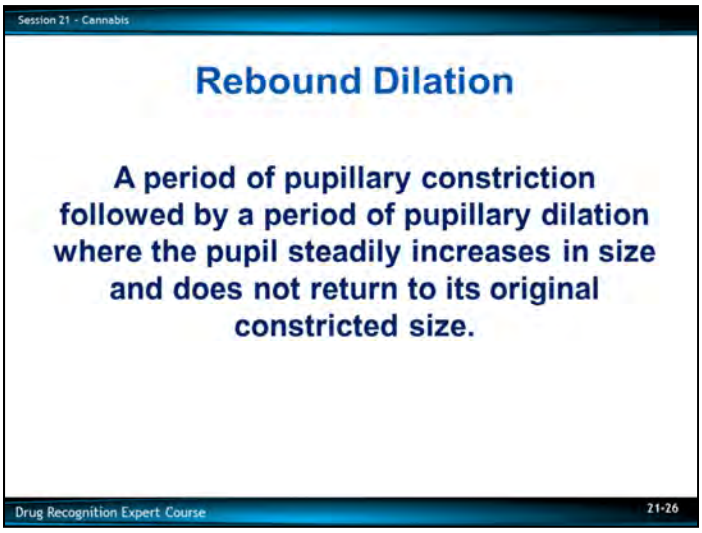
Muscle tone will generally be normal.



Pupil size will generally be dilated or possibly normal (within DRE average ranges).

- The content and potency could affect pupil size
  - The higher THC content may increase the likelihood of pupil dilation
  - Cannabis does not normally cause pupil constriction

Pupil reaction to light will generally be normal.

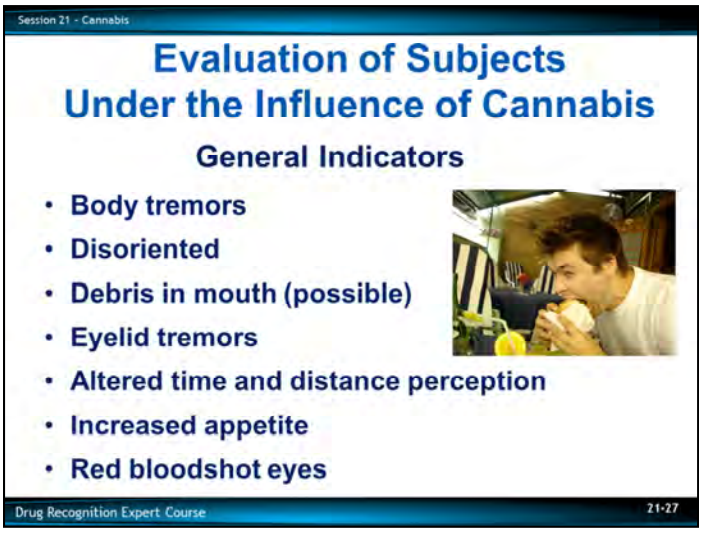


DREs report a phenomenon termed "Rebound Dilation" in subjects under the influence of Cannabis.

- Clarification: "Rebound Dilation" is a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size
  - In a controlled study analyzing 302 Cannabis DRE evaluations, Rebound Dilation was present in 204 of the 302 cases (70.9%).

Source: Hartman, R., Richman, J., Hayes, C., Huestis, M., Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. Accident Analysis and Prevention. May, 2016
Draw an eye on the balloon and squeeze it to demonstrate Rebound Dilation.

Remind participants the final size determination being estimated is at the end of the 15 second time period when the light from the pen-light is directed into the eye.



General Indicators

- Body tremors
- Disoriented
- Debris in the mouth

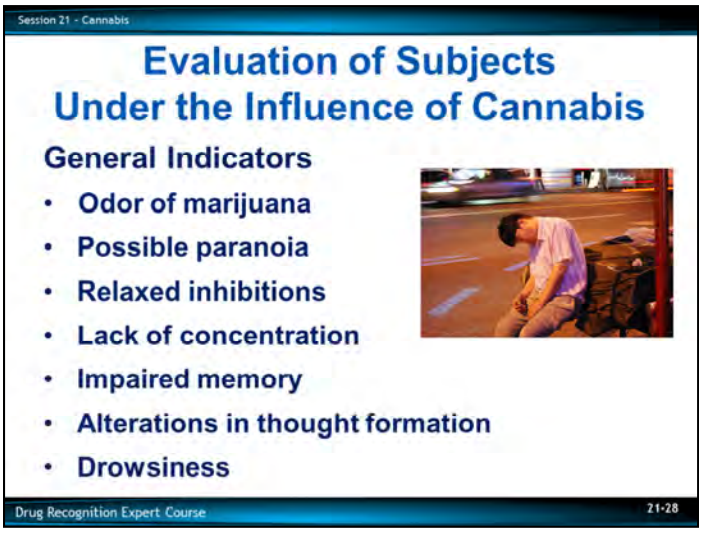
Mention occasionally some users of Marijuana have displayed a green coating on their tongue after recent use. However, this does not occur with all users.

- Eyelid tremors
- Altered time and distance perception
- Increased appetite
- Red bloodshot eyes

Blood vessels of the sclera (the "white" of the eyes) typically dilate from Cannabis use which results in red, bloodshot eyes in the user. The reddening or bloodshot appearance is typically very pronounced.

Point out this should not be confused with conjunctivitis which is a disease of the eye. The vasodilation is the primary cause of the reddening of the eyes not the Cannabis smoke.

Visine causes vasoconstriction in the eyes and is often used to reduce reddening.



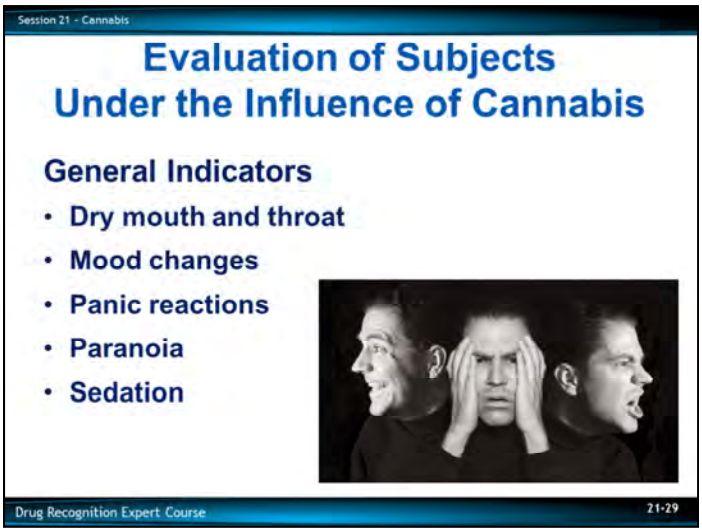
General Indicators

- Odor of Marijuana
- Possible paranoia
- Relaxed inhibitions
- Lack of concentration
- Impaired memory
- Alterations in thought formation
- Drowsiness

In addition, the user may experience:

- Sedation
- Mood changes
- Panic reactions
- Paranoia

Source: Drugs and Human Performance Fact Sheets, April 2014



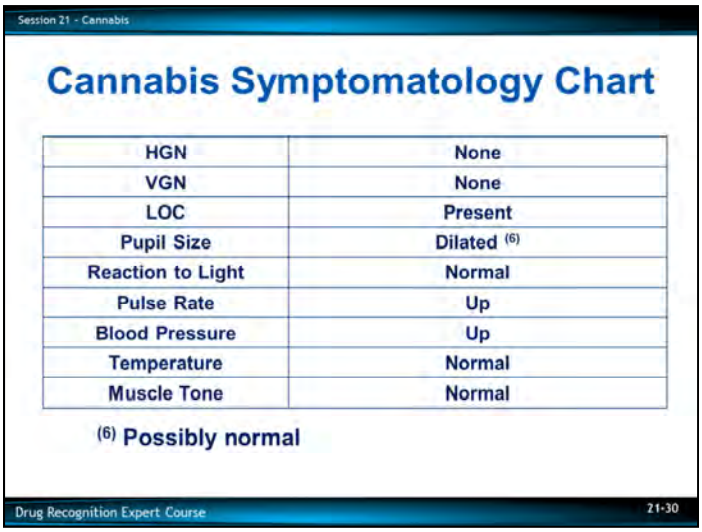
General Indicators

- Dry mouth and throat
- Mood Changes
- Panic reactions
- Paranoia
- Sedation

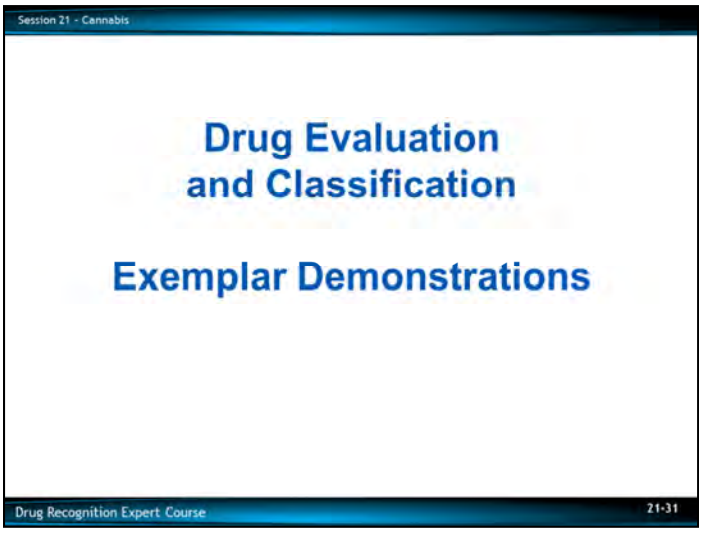
Source: Drugs and Human Performance Fact Sheets, April 2014

Overdose signs may include:

- Fatigue
- Paranoia
- Possible psychosis



Symptomatology Matrix



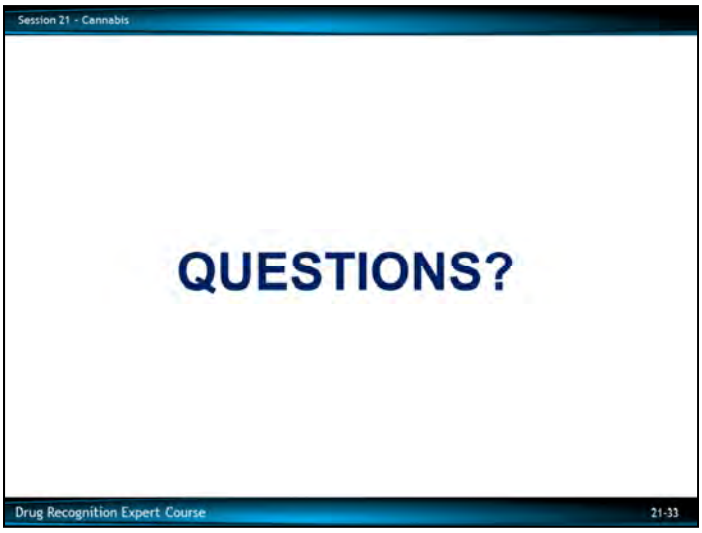
F. <u>Classification Exemplars</u>

Refer students to the exemplars found at the end of Session 21 of their Participant Manuals. Point out the exemplars are examples and serve as a guide.

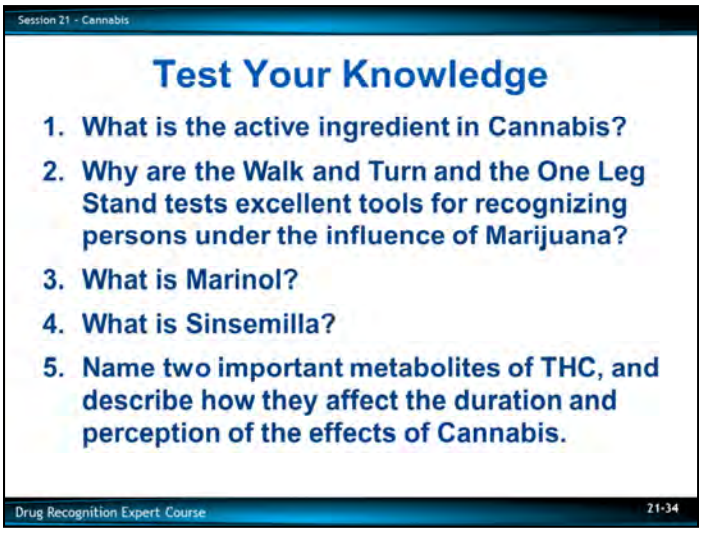
The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Relate the items on the exemplars to the Cannabis Symptomatology Chart.

Click video to begin
VIDEO DEMONSTRATION
Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.
Show video example of subject under the influence of a Cannabis .
(Approximately 24 minutes).



Solicit participants' comments and questions concerning expected results of the evaluation.



Test Your Knowledge

1. What is the active ingredient in Cannabis?

Delta 9 THC

2. Why are the Walk and Turn and the One Leg Stand tests excellent tools for recognizing persons under the influence of Marijuana?

Cannabis appears to interfere with a person's ability or willingness to pay attention. People under the influence of Marijuana do not divide their attention very well. Walk and Turn and the One Leg Stand tests are divided attention tests.

3. What is Marinol?

A synthetic form of THC not derived from Cannabis plants. It is a prescriptive drug sometimes administered to cancer patients to suppress nausea that may accompany chemotherapy. Also known as Dronabinol.

4. What is Sinsemilla?

The unpollinated female Cannabis plant, having a relatively high concentration of THC.

5. Name two important metabolites of THC, and describe how they affect the duration and perception of the effects of Cannabis.

Hydroxy THC – causes the user to feel euphoric so they are aware of the effects. Carboxy THC – there is no evidence at this time this metabolite is psychoactive.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sgt Glenn Glaser	9701	17-08-118	California Highway Patrol	17-58775 Session XXI – 1

Recorder/Witness	Crash	Arresting Officer's Agency
Officer Gary Martens California HP	☒ None ☐ Fatal ☐ Injury ☐ Property	California Highway Patrol

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Blunt, Mary Jane	05/24/1990	F	W	Officer Kevin Craig #7340

Date Examined / Time /Location	Breath Test	Chemical Test
08/05/2017 / 1753 / Valley CHP Office	Results: 0.00% Test Refused ☐ Instrument #: 13430	Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?
Given by: Officer Craig	☒ Yes ☐ No	Chips/cookies "Maybe 1 hour ago"	"Just water" "A lot"	N/A

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
7:30 pm / 1755	Last night "Maybe 8 hours"	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "I don't do drugs. Just marijuana."	Cooperative, Carefree	Poor, Swaying

Speech:	Breath odor:	Face:
Slow, Thick	Odor of burnt marijuana	Normal

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☐ Normal ☒ Bloodshot ☐ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☐ Normal ☒ Droopy

Pulse and Time

1. 104 / 1800
2. 102 / 1807
3. 102 / 1837

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence

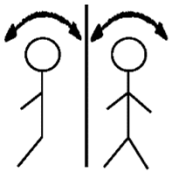
25/30 **One Leg Stand** 26/30

L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
		Puts foot down

Laughing. Leg tremors

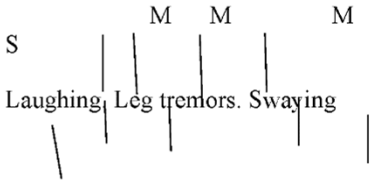
Modified Romberg Balance

Approx. 3" Approx. 3" 3"



Circular sway/Eyelid tremors

Walk and Turn Test



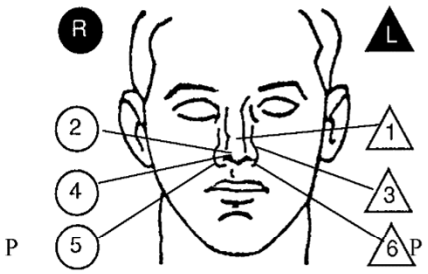
Laughing, Leg tremors. Swaying

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops walking	✓	
Misses heel-toe	✓✓✓	✓✓✓✓
Steps off line		
Raises arms	✓	✓✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
43 estimated as 30 seconds	Stopped and asked what to do	N/A	Sandals

Finger to Nose

(Draw lines to spots touched)



Laughing. Eyelid tremors. Slow movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.5	9.0	5.0 - 6.5
Right Eye	5.5	9.0	5.0 - 6.5

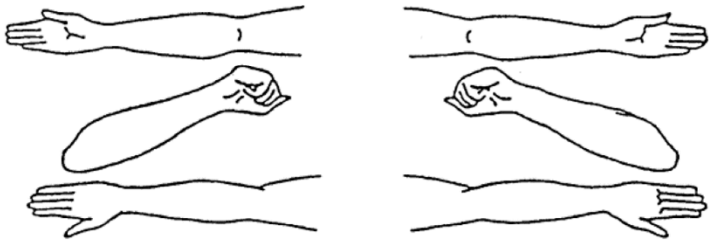
Rebound Dilation: ☒ Yes ☐ No

Nasal area: Clear

Oral cavity: Green coating on tongue

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



None observed

Blood Pressure	Temperature
154 / 106	98.6 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I smoked a little pot. What's the big deal?"	"Small baggie"	Around 3 pm	Rest area and in car

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
08/05/17 / 1620	1720	1750	1855	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature: *Glen Glaser* Reviewed/approved by / date: DRE # 9701

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☒ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Blunt, Mary Jane

1. **Location:** The evaluation was conducted in the Interview Room at the California Highway Patrol Valley Division Office in Sacramento. The room is well illuminated and has a tile floor with no obstructions. The darkroom examinations were conducted in the adjacent staff restroom.

2. **Witnesses:** Officer Gary Martens of the California Highway Patrol was present and recorded the evaluation. The arresting officer, Officer Kevin Craig of the CHP, observed the dark room examinations.

3. **Breath Alcohol Test:** A breath test was administered to the suspect by Officer Craig prior to my arrival. The result was a 0.00% BAC.

4. **Notification and Interview of the Arresting Officer**: I was on-duty and requested to assist Officer Craig with a drug influence evaluation at the Valley Division CHP Office in Sacramento. It was determined that Officer Craig had arrested Ms. Blunt for driving under the influence and her breath test result was negative for alcohol. According to Officer Craig, he observed her vehicle traveling southbound on I-5, north of the Del Paso Road exist. Her vehicle was drifting in and out of the outside traffic lane and was traveling approximately 15 miles per hour over the posted speed limit. After contacting the suspect, Officer Craig observed that she seemed unconcerned about her driving and told him that she was a little tired and that "everything was cool." Officer Craig noted that she had bloodshot eyes and droopy eyelids. He also detected an odor of burnt marijuana coming from inside her vehicle. After determining that she did not have any medical issues and or injuries, he requested that she perform SFST's, which she agreed to do. Officer Craig administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests to the suspect. Officer Craig advised he did not observe any clues of HGN, but noted that on the W&T test, she had difficulty maintaining her balance and a total of four clues were observed. On the OLS test, the suspect again had difficulty with her balance. Several times she started laughing as she attempted the test, and three clues were observed. Officer Craig also administered the Modified Romberg Balance test and the Finger-to-Nose test and the suspect had difficulty maintaining her balance and was not able to touch her nose as directed. After placing her under arrest for DWI and securing her vehicle, he observed a marijuana pipe between the seats of her vehicle. The pipe was warm to the touch and smelled of marijuana. After advising the suspect of her Miranda warnings, he asked the suspect about the pipe. She stated, "It's mine. I've been driving a longways, and I decided I needed to relax a little." Due to Officer Craig's training and suspecting possible Cannabis impairment, and having received training about the rapid dissipation of THC in a person's blood, he took the suspect to the hospital for a blood draw immediately after the arrest. After obtaining the blood sample, he administered a breath test to the suspect which confirmed that alcohol was not involved. He then requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the CHP Valley Division Office. At times, she was laughing and seemed unconcerned about her circumstances. She commented several times to Officer Craig, "You know that marijuana is legal?" I observed that she had red bloodshot eyes and droopy eyelids. Her pupils appeared dilated, and her speech was slow and thick. The suspect was wearing cut-off blue jean shorts, a green tee-shirt and sandals. When she stood up from her chair, she swayed and appeared to have balance problems. I introduced myself to the suspect and requested that she participate in a drug evaluation. She stated, "Why? Do you think I'm a druggie?" After some discussion about the observations made by Officer Craig, and the drug evaluation process, she agreed to do the evaluation, but said, "I don't know why I'm doing this, they already got my damn blood."

6. **Medical Problems and Treatment:** During the preliminary questions, the suspect indicated she was not sick or injured and claimed she was an avid hiker. She also advised that she was not under the care of a doctor or dentist, and did not have any injuries or other physical conditions. I asked her if she was taking any medication or drugs, and she stated. "Just marijuana."

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests where explained and demonstrated to the suspect prior to her attempting them. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: During this test, the suspect had an approximate three-inch circular sway. Pronounced eyelid tremors were present. Her time estimation was slow, estimating 30 seconds in 43 seconds.

   Walk and Turn: For this test, a line on the tile floor was used. During the instructions stage, the suspect swayed and lost her balance moving her right foot off the line to regain her balance. During the walking stage, the suspect missed touching heel to toe three times, and used her arms for balance once during the first nine steps. At the end of the first nine steps, she stopped and asked what to do next. I instructed her again on how to make the turn and she continued with the test. She missed touching heel to toe four times and used her arms for balance twice during the second nine steps. Several times she started laughing during the test. I also observed that she had leg tremors during the test. She was given the opportunity to remove her sandals prior to attempting the test and she indicated that she'd prefer to keep them on.

   One Leg Stand: While raising her right foot and standing on her left foot, the suspect swayed and used her arms to balance. She started laughing during the test and leg tremors were observed. When raising her left foot and standing on her right foot, the suspect swayed and used her arms for balance. She was also laughing during portions of the test.

   Finger to Nose: On this test, the suspect missed touching the tip of her nose with the tip of her index finger as instructed on four of the six attempts. She did touch the tip of her nose with the tip of her index finger on attempts #2 and #4. She used the pads of her fingers on attempts #5 and #6. The suspect was slow to react to which hand to lift on all the commands. She again laughed several times while doing the test. Eyelid tremors were also present during the test.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The suspect's pupil sizes were estimated in three lighting levels. In Room Light, the suspect's pupils were estimated at 5.5 mm in both eyes. In Near Total Darkness, they were estimated at 9.0 mm in both eyes. In Direct Light, the suspect exhibited Rebound Dilation with her pupil sizes ranging from 5.0 mm and then expanding to 6.5 mm in each eye. All three estimates were above the DRE average ranges for the lighting levels. Her pupil reaction to light was normal, and she was not able to converge her eyes as directed.

   Vital Signs: The suspect's pulse rates were checked three times during the evaluation. All three were above DRE average ranges and found to be 104, 102, and 102 beats per minute. Her systolic and diastolic blood pressures were also both above the DRE average ranges, measured at 154/106 mm/hg. Her body temperature was checked at 98.6 degrees, which was within the DRE average range. Her muscle tone was normal.

9. **Signs of Ingestion:** The suspect had a greenish coating on the back of her tongue. When asked about the greenish color on her tongue, she replied, "I don't know. You tell me."

10. **Suspect's Statements:** The suspect admitted to smoking marijuana in her car just prior to being stopped. She asked, "what the big deal was" and felt it was okay to drive after smoking marijuana.

11. **DRE's Opinion**: It is the opinion as a certified Drug Recognition Expert that the suspect, Mary Jane Blunt, is under the influence of Cannabis and is unable to operate a motor vehicle safely.

12. **Toxicological Sample:** The suspect was transported to the hospital by the arresting officer soon after her arrest where she provided a blood sample. The sample was submitted as evidence by Officer Craig.

13. **Miscellaneous:** Refer to Officer Craig's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Sergeant Robert Hayes	6606	17-09-188	Albany Police Department	17-90883 Session XXI #2

Recorder/Witness	Crash	Arresting Officer's Agency
Lt. Michael Iwai, Oregon State Police	☐ None ☐ Fatal ☐ Injury ☒ Property	Oregon State Police

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
Toker, Bud	2/21/1985	M	W	Trooper Donald Rummer #17144

Date Examined / Time /Location	Breath Test	Chemical Test
09/21/17 / 2014 / Linn County Jail	Results: 0.00% Test Refused ☐ Instrument #: 66454	Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐

Miranda Warning Given		What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
Given by: Trooper Rummer	☒ Yes ☐ No	"Couple of burgers"	5 pm	Coke	2 cans	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
About 6 pm/ 1950	Last night	About 7 – 8 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☒ Yes ☐ No "I smoke pot"	Cooperative, Carefree	Slow, Swaying, Unsteady

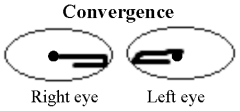
Speech:	Breath odor:	Face:
Slow, Thick	Marijuana	Normal appearance

Corrective Lenses:	Eyes:	Blindness:	Tracking:
☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	☐ Normal ☒ Bloodshot ☒ Watery	☒ None ☐ Left ☐ Right	☒ Equal ☐ Unequal

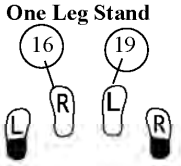
Pupil Size:	Resting Nystagmus	Vertical Nystagmus	Able to follow stimulus	Eyelids
☒ Equal ☐ Unequal (explain)	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No	☐ Normal ☒ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 94 / 1955	Lack of Smooth Pursuit	None	None
2. 92 / 2008	Maximum Deviation	None	None
3. 92 / 2225	Angle of Onset	None	None

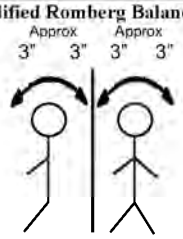
Convergence



28/30 **One Leg Stand** 24/30

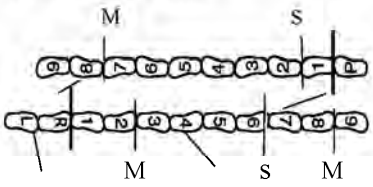


Modified Romberg Balance



Circular sway, Eyelid tremors

Walk and Turn Test



Leg tremors throughout. Walked slow

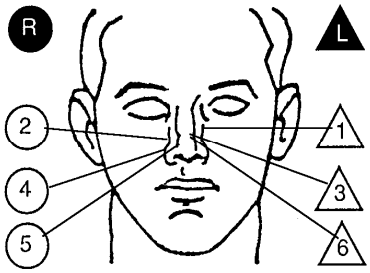
	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops walking	✓	✓
Misses heel-toe	✓✓	✓
Steps off line	✓	✓
Raises arms		
Actual steps taken	9	9

L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
✓	✓	Puts foot down

Leg tremors

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
18 estimated as 30 seconds	Slow steps. As instructed.	N/A	Lace-up boots

Finger to Nose
(Draw lines to spots touched)



Eyelid tremors

PUPIL SIZE	Room light	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	9.0	6.0 – 7.5
Right Eye	6.5	9.0	6.0 – 7.5

Rebound Dilation: ☒ Yes ☐ No

Nasal area: Clear

Oral cavity: Green coating on tongue. Dry mouth.

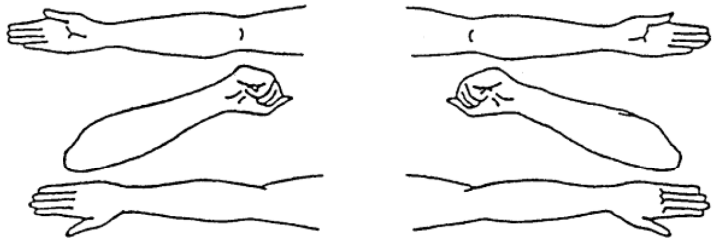
Reaction to Light: Normal

Blood Pressure	Temperature
168 / 100	98.4 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

RIGHT ARM **LEFT ARM**



Nothing observed

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I smoke pot. I'm not going to lie to you."	"A pretty good sized bowl"	"About 6 pm"	"South of Salem in my car"

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
06/18/17 /	2110	2130	2225	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #6606
Robert Hayes		

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☒ Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Toker Bud

1. **Location:** The drug evaluation was conducted in the booking area at the Linn County Jail in Albany, Oregon. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and both have a smooth concrete floor.

2. **Witnesses:** The evaluation was witnessed and recorded by Lieutenant Michael Iwai of the Oregon State Police. The arresting officer, Trooper Donald Rummer of the Oregon State Police witnessed the psychophysical tests.

3. **Breath Alcohol Concentration:** Trooper Rummer administered the breath test to the suspect prior to my arrival. Using the Intoxilyzer 9000, he obtained a 0.00% BAC.

4. **Notification and Interview of the Arresting Officer**: I was on-duty and requested to contact Trooper Rummer at the Linn County Jail for a drug evaluation. It was determined that the suspect had been reported as a possible DUI driver, and was unable to maintain a single lane of travel on I-5. Trooper Rummer advised that he located the suspect's vehicle at MP 142 on I-5. The vehicle was drifting in and out of the outside lane of I-5 and at times, crossed over the painted fog line. After stopping the suspect's vehicle, he noted that the suspect appeared relaxed and seemed unconcerned about being stopped. Trooper Rummer also noted that the suspect had difficultly retrieving his operator's license, vehicle registration and proof of insurance. According to Trooper Rummer, the suspect had red, bloodshot eyes, and his pupils appeared to be dilated. He also had difficulty with his balance and used the side of his vehicle for support when he exited the vehicle. After determining that the suspect was not injured and had no physical problems, he administered SFSTs. According to Trooper Rummer, the suspect had difficulty performing and completing the SFSTs as directed. Clues of Horizontal Gaze Nystagmus (HGN) were not observed. However, four clues on the Walk and Turn (W&T) test and two clues on the One Leg Stand (OLS) test were observed. Trooper Rummer also had the suspect complete several other tests which also demonstrated poor balance and coordination. Trooper Rummer arrested the suspect for DUI and transported him to the jail for processing. After obtaining a 0.00 BAC, Trooper Rummer requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the County Jail. He appeared to be calm, relaxed and carefree acting. His eyes were red, bloodshot and watery. His pupils appeared to be dilated. When he stood, his movements were slow and deliberate. Several times he used the interview table to steady himself. I noted that the suspect was wearing brown shorts, a black Bob Marley tee-shirt and lace-up black boots. He was also wearing a ballcap with the words "Green Leaf Dispensary" on the front. I introduced myself and advised that I had been requested to conduct a drug influence evaluation. The suspect seemed unconcerned and said, "Sure, whatever."

6. **Medical Problems and Treatment:** The suspect indicated that he was not sick, injured and had no conditions that would interfere with his ability to do the evaluation. He told me he was not under the care of a doctor or dentist. When asked if he was taking any medication or drugs, he replied "I smoke pot. I'm not going to lie." He further related that he was not taking any other medication or drugs and had not been consuming any alcoholic beverages.

7. **Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, I gave the suspect verbal instructions and demonstrated each test. I confirmed with the suspect that he understood the instructions prior to having him attempt each test. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the subject had an approximate three-inch circular sway. His time estimation was fast, estimating 30 seconds in 18 seconds. I asked how he estimated the 30 seconds and he stated he "counted in his head." Eyelid tremors were present during the test.

Walk and Turn: For this test, a painted line of the floor was used. The suspect lost his balance once during the instructions and stepped out of position with his right foot. After starting the walking stage, the suspect missed heel to toe between steps two and three. He stepped off the line, to his right, on step four. He stopped walking between steps six and seven, and then stepped off the line to his left on step seven. He also missed touching heel to toe between steps eight and nine. He made a slow, but correct turn. During the second nine steps, the suspect stopped after step one to steady himself. He missed heel to toe between steps seven and eight and stepped off the line to his left on step eight. Leg tremors were observed throughout the test along with a slow, deliberate walk.

One Leg Stand: While standing on his left foot and raising his right foot, the suspect swayed, used his arms to balance, and put his foot down at the count of 1,016. He counted to 1,024 in the 30 second time-period. While standing on his right foot and raising his left foot, he swayed, used his arms to balance, and put his foot down at the count of 1,019. Leg tremors were present during the test.

Finger to Nose: During this test, the suspect missed the tip of his nose with the tip of his index finger on all six attempts. On attempt #1 he touched the bridge of his nose. On attempt #2, he touched the side of his nose. On attempt #3 he again touched his upper nose. He touched the outside of his right nostril on attempt #4. On attempt #5, he touched the outside edge of his right nostril, and on attempt #6, he touched his upper nose area. Eyelid tremors were present during the test.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The suspect had watery, red, bloodshot eyes. A lack of convergence was observed. His pupils were dilated in all three lighting levels estimated at 6.5 mm in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness. He had Rebound Dilation in Direct Light, with his pupils dilating from 6.0 mm to 7.5 mm in both eyes. His pupil reaction to light was normal.

   Vital Signs: The suspect's pulse rates where checked three times and were 94 beats per minute (bpm), 92 bpm, and 92 bpm. All were above the DRE average ranges. His blood pressure of 168/100 mm Hg was above the DRE average ranges. His body temperature of 98.4 degrees was within DRE average ranges. His muscle tone was normal.

9. **Signs of Ingestion:** The suspect had a greenish coating on his tongue. When asked about it, the suspect stated it was "Probably from the pot I smoked." No injection indicators were observed.

10. **Suspect's Statements:** The suspect admitted smoking marijuana about 6 pm. When asked how much he had smoked, he stated, "It was a good-sized bowl." When asked if he felt the effects of the marijuana, he said, "Well, it relaxed me. I've been driving most of the day."

11. **DRE's Opinion**: It is my opinion as a certified Drug Recognition Expert that Toker is under the influence of Cannabis and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect by Trooper Rummer and will be forwarded to the Oregon State Police Crime Laboratory for analysis.

13. **Miscellaneous**: The suspect was found to be driving while suspended from a previous DUI arrest. He was cited for DWS. Refer to Trooper Rummer's arrest report for additional information.

DRUG INFLUENCE EVALUATION

Evaluator: Officer Jonathon Huber	DRE # 12367	Rolling Log # 17-06-118	Evaluator's Agency: Seattle Police Department	Case # 17-90883 Session XXI #3
Recorder/Witness: Deputy Steve Johnson King County S.O.	Crash: ☐ None ☐ Fatal ☐ Injury ☒ Property		Arresting Officer's Agency: Washington State Patrol	
Arrestee's Name (Last, First, Middle): Duby, Sharon A.	Date of Birth: 12/20/95	Sex: F	Race: W	Arresting Officer (Name, ID#): Trooper John Axtman #17144
Date Examined / Time /Location: 06/18/17 / / King County Jail	Breath Test: Results: 0.00%	Test Refused ☐ Instrument #: 47755	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Trooper Axtman	☒ Yes ☐ No	What have you eaten today? Potato chips & cookies	When? 6 pm	What have you been drinking? How much? Energy drinks 2 cans / Time of last drink? 3-4 hours ago
Time now/ Actual: About 10 pm/ 2135	When did you last sleep? Last night	How long? About 7 – 9 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☒ Yes ☐ No "Medical marijuana"	Attitude: Cooperative, Relaxed, Uninhibited		Coordination: Slow, Unsteady	
Speech: Slow, Thick	Breath odor: Marijuana		Face: Normal	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time

1.	96	2140
2.	96	2156
3.	94	2210

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

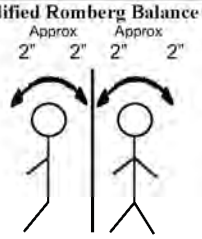
Convergence ☒ Right

25/30 **One Leg Stand** 24/30

L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
		Puts foot down

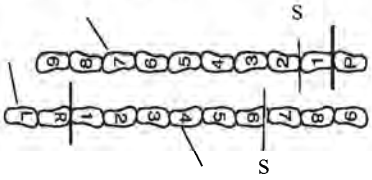
Leg tremors

Modified Romberg Balance



Eyelid tremors

Walk and Turn Test

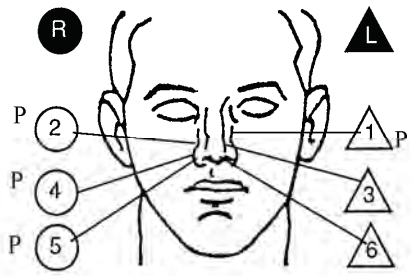


Slow movements. Leg tremors

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops walking	✓	✓
Misses heel-toe		
Steps off line	✓	
Raises arms	✓✓	✓✓
Actual steps taken	9	9

Time Estimation 22 estimated as 30 seconds	Describe turn Slow steps	Cannot do test (explain) N/A	Type of footwear: Slip on canvas shoes

Finger to Nose
(Draw lines to spots touched)



Eyelid tremors, laughing

PUPIL SIZE	Room light	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	8.5	5.0 – 7.0
Right Eye	6.0	8.5	5.0 – 7.0

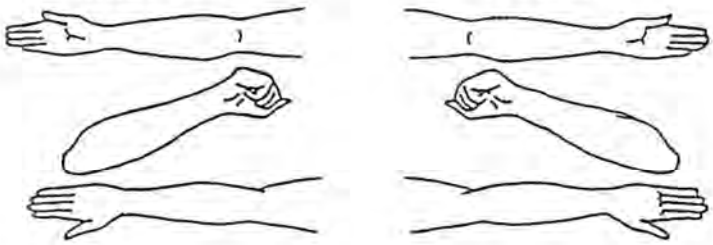
Rebound Dilation: ☒ Yes ☐ No

Nasal area: Clear

Oral cavity: Green coating on tongue. Green matter in teeth.

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure	Temperature
148 / 92	98.0 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
Medical Marijuana	2 or 3 grams	2 hours ago	At home

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
06/18/17 / 2005	2110	2130	2225	

Officer's Signature: Jonathan Huber

Reviewed/approved by / date:

DRE # 12367

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant	
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☒ Cannabis	

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Duby, Sharon A.

1. **Location:** The drug evaluation was conducted in the booking area of the King County Jail. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting and have a smooth concrete flooring with no obstructions.

2. **Witnesses:** The evaluation was observed and recorded by Deputy Steve Johnson from the King County Sheriff's Office.

3. **Breath Alcohol Test:** The suspect provided a breath test to Trooper Axtman prior to my arrival with a 0.00 BAC result.

4. **Notification and Interview of the Arresting Officer**: I was on duty and requested to contact Trooper Axtman of the Washington State Patrol for a drug evaluation at the King County Jail. When contacted, Trooper Axtman explained that Ms. Duby had rear-ended another vehicle at a stop light on Highway 99. She was not injured and did not require medical treatment. An odor of marijuana was detected coming from the interior of her vehicle. She claimed to possess a Washington medical marijuana card and admitted smoking marijuana a short time prior to the crash. He observed that her eyes were red and bloodshot, and her speech was slow and thick. After confirming that she was not injured, Trooper Axtman administered SFSTs to her. According to Trooper Axtman, he administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests. Trooper Axtman did not observe any clues of HGN, but did observe two clues on the W&T, and three clues on the OLS. Trooper Axtman also administered the Finger to Nose (FTN) and Modified Romberg Balance tests. On the FTN test, she had difficulty maintaining her balance and was not able to touch her nose as directed. She also had distinct eyelid tremors. Trooper Axtman suspected that Duby was impaired by Cannabis and arrested her for DWI. Based on Trooper Axtman's training regarding the quick dissipation of THC in a person's blood, he transported her to the Harborview Hospital and requested a blood specimen. After obtaining a telephonic search warrant, she consented to the blood draw. After obtaining the blood sample, Trooper Axtman transported her to the King County Jail and requested a DRE.

5. **Initial Observation of the Suspect:** My first contact with Ms. Duby was upon entering the booking area at the King County Jail. She appeared to be relaxed and had a dazed appearance. Her eyes were red and bloodshot, and her pupils appeared dilated. She also had droopy eyelids. She was displaying poor balance and several times leaned against a chair to steady herself. Her speech was slow and thick. I introduced myself to her and requested that she complete a drug evaluation. She at first was hesitant, but then agreed to do the evaluation. I noted that she was wearing blue jeans, a blue Seattle Seahawks tee-shirt and slip-on canvas shoes.

6. **Medical Problems and Treatment:** Duby indicated that she occasionally gets migraine headaches and uses marijuana for them. She indicated she was not diabetic, not epileptic and had no injuries or physical defects. She also indicated that she was not injured in the crash earlier in the evening. She indicated that she was not under the care of a doctor or dentist. When asked if she was taking any medication or drugs, she indicated she only uses marijuana. When asked how often she uses it, she indicated "at least once a day."

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Duby prior to her attempting them. After each demonstration, she confirmed that she understood the instructions. The following tests were administered to Duby:

   Modified Romberg Balance: During this test, she had an approximate two-inch front to back and side to side sway. While doing the test, she exhibited eyelid tremors. She opened her eyes at 22 seconds. I asked her how long she had her eyes closed and she indicated, "About 30 seconds." I asked how she estimated the time and she told me she "just counted in her head."

Walk and Turn: For this test, a painted line of the floor was used. During the instruction stage, Duby lost her balance and stepped off the line to her left with her left foot. During the walking stage on the first nine steps, she used her arms for balance twice. She stopped while walking once at step seven. When she got to ninth step, she seemed unsure of what to do next. After a short pause, she made an incorrect turn by taking a series of slow steps. On the second nine steps, she stopped after her first step. She used her arms to balance twice, and stepped off the line to her right on step seven. Duby was given the opportunity to remove her shoes for this test and she requested to keep them on.

One Leg Stand: During this test and while raising her right foot, Duby swayed and used her arms for balance. Leg tremors were observed. When standing on her right foot and raising her left foot, she swayed and used her arms for balance. She also had significant leg tremors. Her counting was slow and was only able to get to 1,025 and 1,024 in the 30 seconds.

Finger to Nose: During this test, Duby exhibited eyelid tremors and at one point, started laughing. She did not touch the tip of her nose with the tip of her index finger as instructed on five of the six attempts. On the first attempt, she touched the left side of her nose with the pad of her finger. She touched the right side of her nose with the pad of her finger on the second attempt. She used the pad of her finger on attempts four and five, touching the side of her right nostril. She did touch the tip of her nose with the tip of her index finger on the sixth attempt.

8. **Clinical Indicators of Impairment:**
   Eye Signs: Duby's eyes were bloodshot and she had droopy eyelids. She had a lack of convergence in both eyes. Her pupils were dilated in all three lighting levels, estimated at 6.0 mm in both eyes in Room Light, and estimated at 8.5 mm in both eyes in Near Total Darkness. Rebound dilation was present in Direct Light with her pupils going from 5.0 mm to 7.0 mm in both eyes. Her reaction to light was normal.
   Vital Signs: All three of Duby's pulse rates were above the DRE average ranges, at 96, 96 and 94 beats per minute (bpm). Her blood pressure was also above the DRE average ranges and was measured at 148/92 mm Hg. Her temperature was measured at 98.0 degrees and was within the DRE average range. Her muscle tone was near normal.

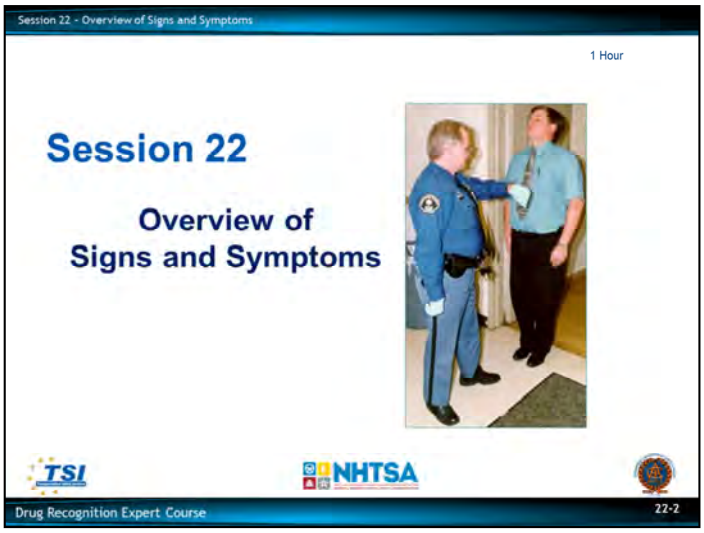
9. **Signs of Ingestion:** Duby had a greenish coating on her tongue and had several pieces of green matter in her teeth. No other signs of ingestion or injection were observed.

10. **Suspect's Statements:** Duby was asked if she remembered Trooper Axtman advising her of her Miranda rights. She indicated that she did. When asked about her self-medicating with marijuana to treat her migraines, she admitted to smoking 2-3 grams of marijuana at home about two hours before the crash. She said she needed to run some errands and did not think the marijuana had affected her, so she drove. She admitted to smoking marijuana at least once a day and has been smoking marijuana for the past 5 to 6 years. When asked what strain she usually smokes, she said she prefers Indica because of the relaxing effects. When asked about the crash she was in earlier, she indicated she was "just not paying attention" and when a car stopped in front of her at traffic light, she couldn't stop in time and "bumped" the car in front of her.

11. **DRE's Opinion**: It is my opinion as a certified Drug Recognition Expert that Duby is under the influence of Cannabis and is unable to operate a vehicle safely.

12. **Toxicological Sample:** As previously reported, Trooper Axtman obtained a blood sample from the suspect prior to the start of my evaluation. Trooper Axtman collected the blood sample at approximately 2030 hours and submitted it as evidence pending analysis by the Washington State Patrol Forensic Laboratory.

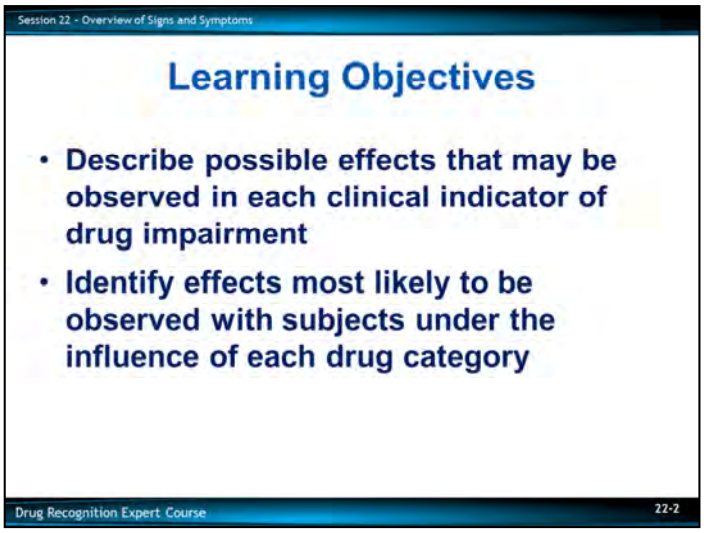
13. **Miscellaneous**: Refer to Trooper Axtman's arrest report for additional details.



This exercise will be an interactive activity involving all the participants. Prior to the start of this session, draw the following matrix on a dry erase board or easel/easel pad. This will be used to lead the participants in listing the Clinical Indicators and completing the form in their participant manuals. This will be done for both Clinical and General Indicators.

A completed drug symptomatology chart is provided at the end of this session for the participants, but should not be used until after completing the blank charts.

MAJOR INDICATORS	POSS EFFECTS	CNS DEPRESS	CNS STIM	HALLUC	DISS ANESTHETIC	NARC ANALGESIC	INHALANT	CANNABIS
HGN								
VGN								
LOC								
PUPIL SIZE								
REACTION TO LIGHT								
PUSE RATE								
BLOOD PRESSURE								
BODY TEMPERATURE								
MUSCLE TONE								



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

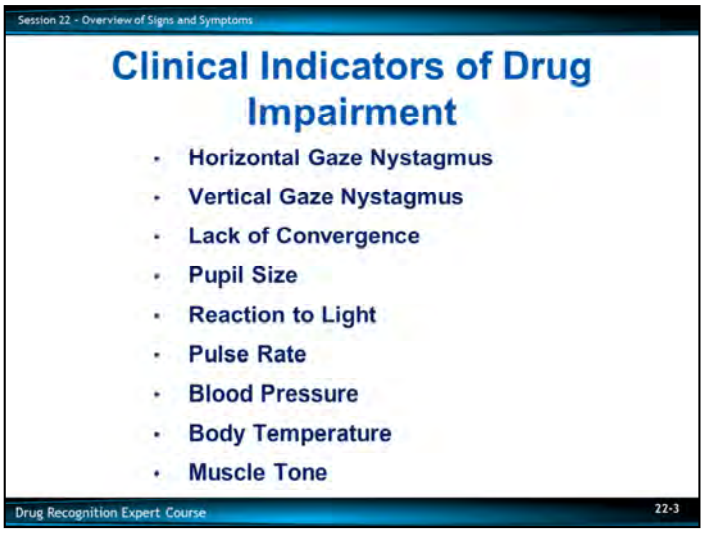
- Describe the possible effects that may be observed in each clinical indicator of drug impairment
- Identify the effects that will most likely be observed with subjects under the influence of each drug category

CONTENT SEGMENTS

A. The Clinical and General Indicators and their Possible Effects Associated with the Drug Categories
B. Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix

LEARNING ACTIVITIES

Interactive Discussions
Participant Activity



A. The Clinical and General Indicators and their Possible Effects Associated with the Drug Categories

Clinical and General Indicators

- For Drug Recognition Expert (DRE) purposes, Clinical Indicators are physiological signs specifically addressed and are, for the most part, involuntary; reflecting the status of the Central Nervous System (CNS) homeostasis

- For DRE purposes, General Indicators are behaviors or observations of the subject observed and not specifically tested for

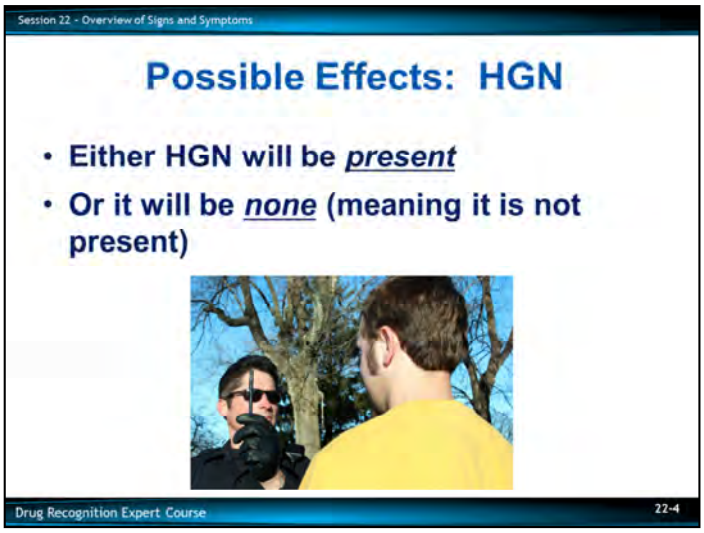
Both are of equal value in making a decision in the totality of the evaluation.

Clinical Indicators of Drug Impairment

The Clinical Indicators of drug impairment are (point to the Clinical Indicators on the matrix):

- Horizontal Gaze Nystagmus (HGN)
- Vertical Gaze Nystagmus (VGN)
- Lack of Convergence (LOC)
- Pupil Size
- Reaction to Light
- Pulse Rate
- Blood Pressure
- Body Temperature
- Muscle Tone

Point out the first five Clinical Indicators concern the eyes and three of the last four Clinical Indicators concern the vital signs.
Announce to the participants: "We will now review all of the possible effects we might observe with each Clinical Indicator."



Possible Effects: HGN

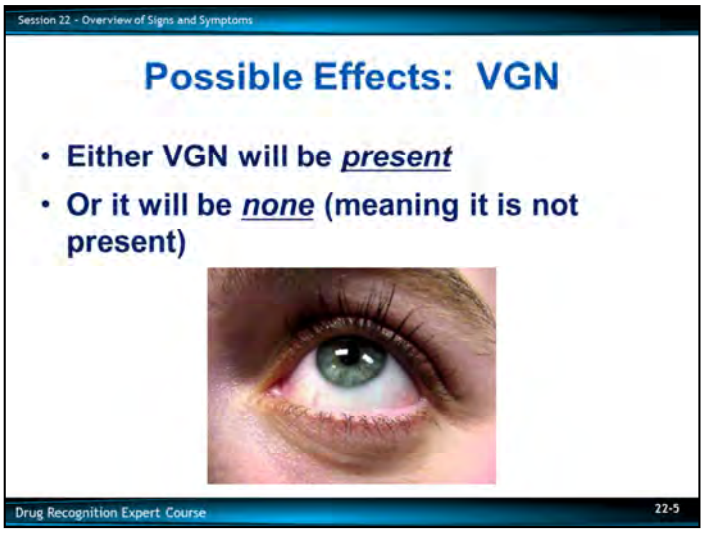
Possible effects that might be observed with **nystagmus**. With HGN, there are only two possible effects that might be observed.

- Either HGN will be **present**
- Or it will be **none (meaning it is not present)**

Under the "Possible Effects" column of the matrix, opposite "HGN," write:

PRESENT OR NONE

There is no drug that stops HGN. Some drugs cause HGN to be present, others do not; but there is no drug that "cures" HGN.



Possible Effects: VGN

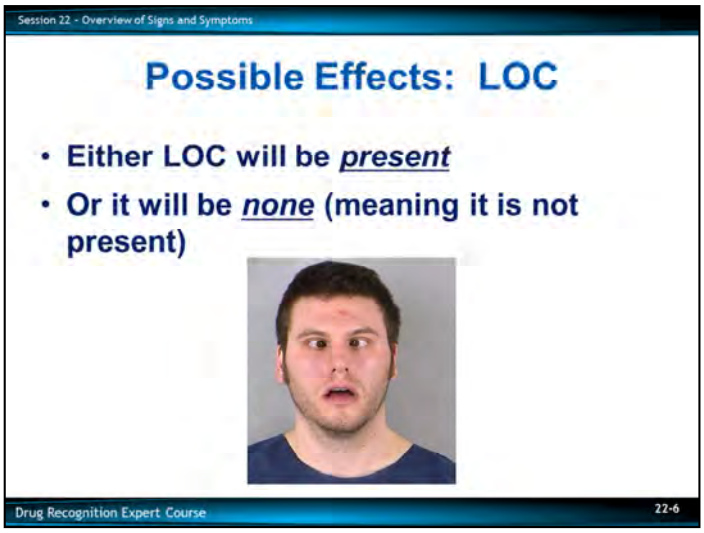
Ask participants: "What are the possible effects we might observe with VGN?"

With VGN, there are also only two possible effects.

- Either it will be **present**
- Or it will be **none (meaning it is not present)**

Opposite "VGN," write:

PRESENT OR NONE



Possible Effects: LOC

Ask participants: "What effects might we observe with LOC?"

For **LOC**, there are also only two possible effects.

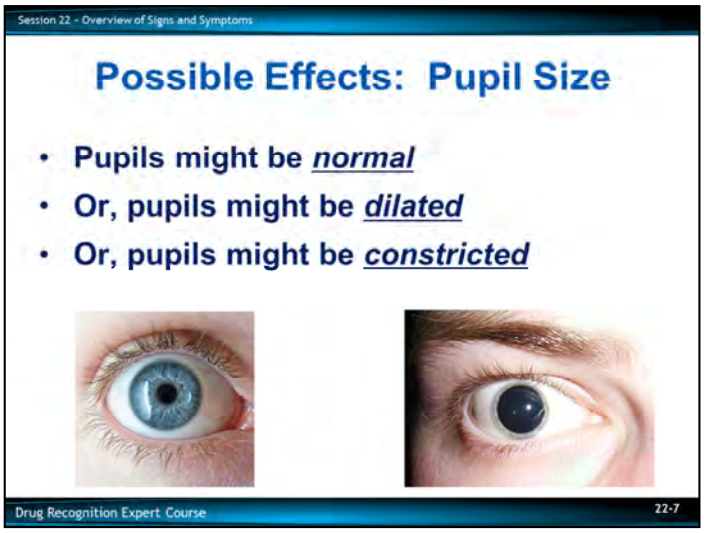
- Either LOC will be **present**
- Or it will be **none (meaning it is not present**)

Opposite "Lack Conv." write:

PRESENT OR NONE

Point out, when we say "Lack of Convergence is present," we mean the eyes are unable to converge or cross properly.

Just as with nystagmus, there is no drug that "cures" LOC.



Possible Effects: Pupil Size

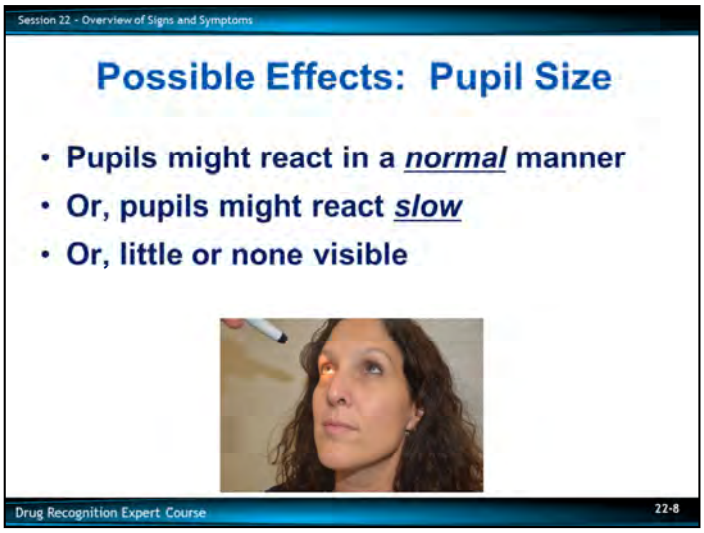
Ask participants: "What effects might we observe with Pupil Size?"

For **Pupil Size**, there are three possible effects that might be seen.

- The pupils might be **normal** (within the DRE average ranges)
- Or, the pupils might be **dilated**
- Or, they might be **constricted**

Opposite "Pupil Size," write:

NORMAL OR DILATED OR CONSTRICTED



Possible Effects: Reaction to Light

Ask participants: "What effects might we observe with the pupils' Reaction to Light?"

There are a number of effects that might be observed in the pupils' **Reaction to Light**.

- The pupils might react in a **normal** manner, i.e., by constricting somewhat in one second or less
- Or, the pupils might react **slow**, i.e., by constricting somewhat, but requiring more than one second to do so
- Or, little or none visible

Opposite "React to Light," write:

NORMAL OR SLOW OR LITTLE OR NONE VISIBLE

Inform participants we should not report the "pupils did not react at all," but rather we should report "no visible reaction."

In some instances, you may observe very little, or no visible Reaction to Light. If there is a visible reaction of the pupils, it is possible Rebound Dilation was present.

Possible Effects: Vital Signs

For each of the **Vital Signs**, there are three possible effects.

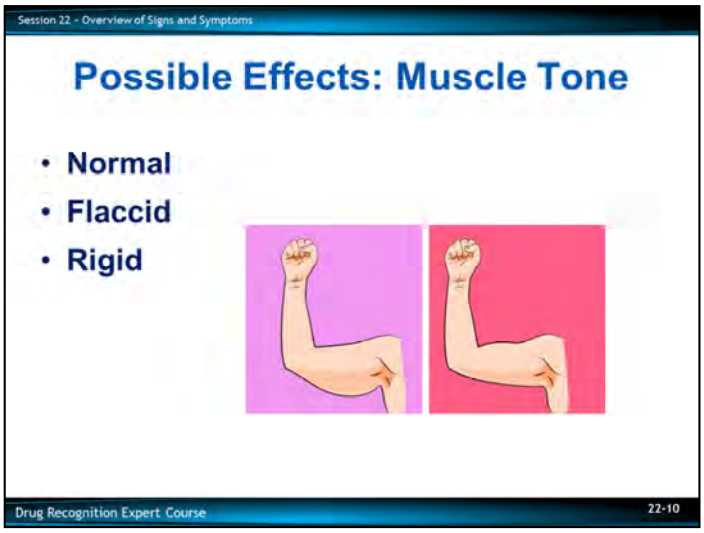
The pulse rate, or blood pressure, or body temperature could be NORMAL (within the DRE average ranges).

- Or, it could be **UP**
- Or, it could be **DOWN**

Opposite "Pulse Rate," write:

NORMAL OR UP OR DOWN

Write exactly the same things opposite "Blood Press" and "Body Temp."



Possible Effects: Muscle Tone

Ask participants: What effects might we observe with Muscle Tone?

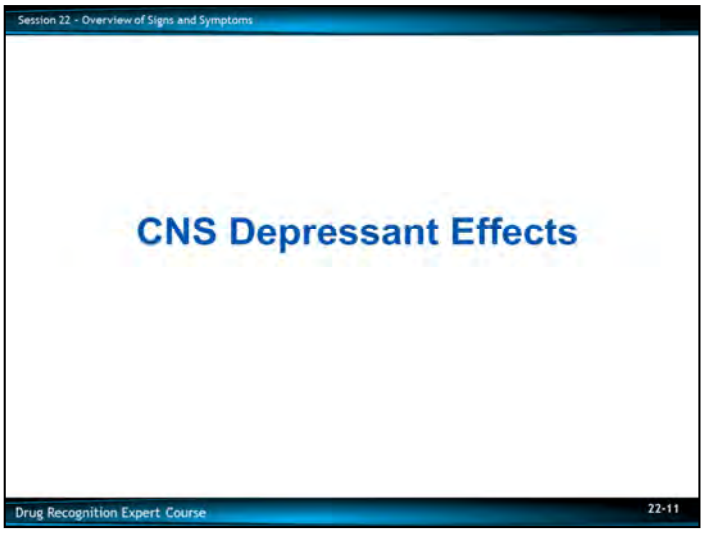
For **Muscle Tone**, there are three possible effects that might be seen.

- Normal (meaning nothing unusual)
- Flaccid
- Rigid

Opposite "Muscle Tone," write:

NORMAL OR FLACCID OR RIGID

Solicit participants' comments and questions about the possible effects of the eight Clinical Indicators.



B. <u>Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix</u>

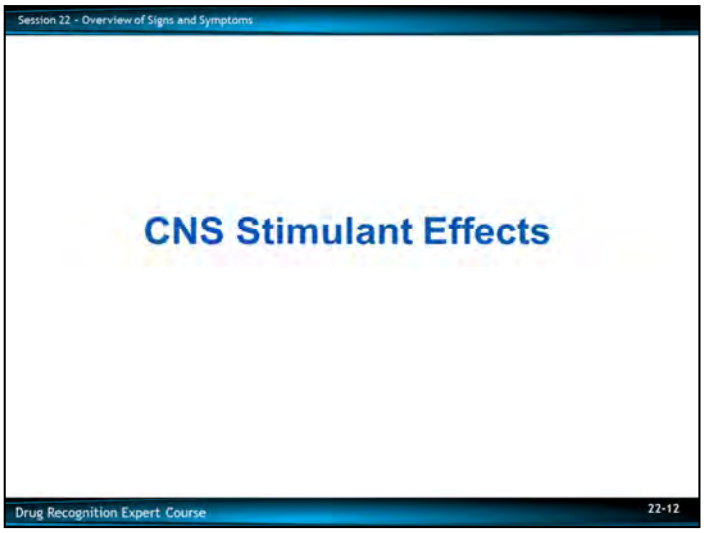
CNS Depressants

Ask for a participant to volunteer to state the effects that usually will be seen in a subject under the influence of a CNS Depressant.

Correct the participants' responses, as necessary, and write the correct effects on the matrix under the CNS Depressant column.

- HGN: **present**
- VGN: **present** (i.e., at high doses for that individual)
- LOC: **present**
- Pupil Size: **normal** (within the average DRE ranges) <u>except</u> Soma, Quaaludes (Methaqualone), and some antidepressants usually **dilate** pupils
- Reaction to Light: **slow**
- Pulse Rate: **down** <u>except</u> Quaaludes (Methaqualone), ETOH, and some antidepressants may **elevate**
- Blood Pressure: **down**
- Body Temperature: **normal** (within the average DRE ranges)
- Muscle Tone: **flaccid**

Emphasize these are the usual effects that will be observed with CNS Depressants, but we cannot always be certain all of these effects will be seen. Thank the "volunteer" participant for their help.

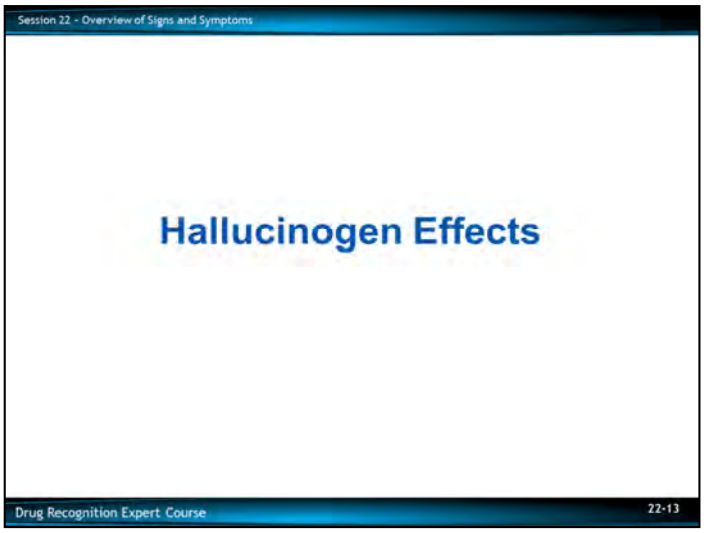


CNS Stimulants

Select another volunteer to help with the CNS Stimulant category effects.
Correct the participant's responses as necessary, and write the correct effects under the "Stimulant" column.

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **dilated**
- Reaction to Light: **slow**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**

Emphasize these are the effects usually seen with CNS Stimulants but we can't guarantee all of these effects will be observed in each and every case.
Thank the "volunteer" participant for his or her help.



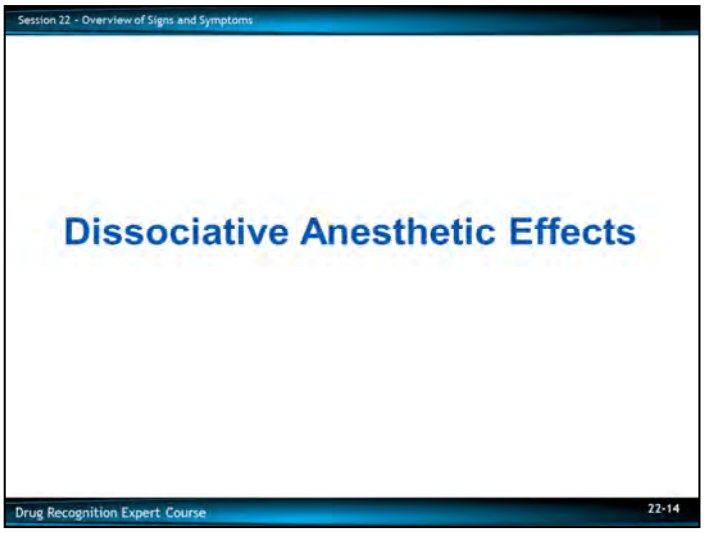
Hallucinogens

Select another volunteer to help with identifying the usual effects of the Hallucinogen category. Correct the participant's responses as necessary, and write the correct effects under the "Hallucinogens" column.

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **dilated**
- Reaction to Light: **normal**, certain psychedelic amphetamines may cause slowing
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**

Point out "Reaction to Light" is the only clinical indicator that distinguishes Hallucinogens from CNS Stimulants and "Reaction to Light" is a relatively subtle clue. For this reason, it can be very difficult to differentiate between these two categories.

Thank the "volunteer" for their help with the Hallucinogen effects.

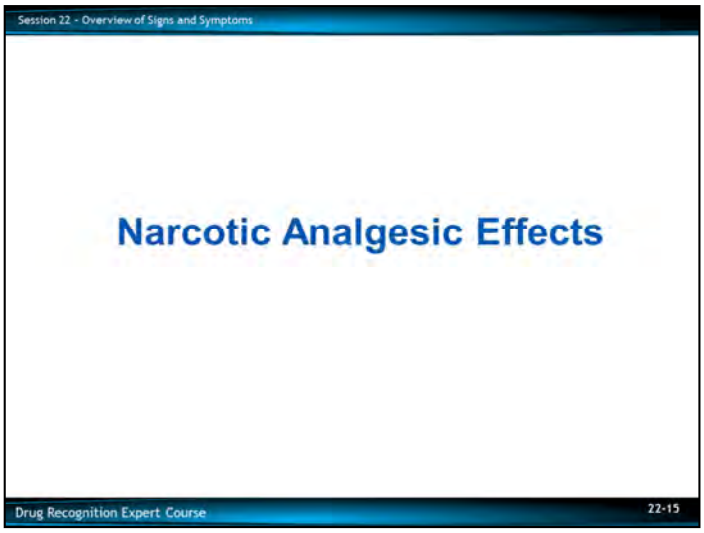


Dissociative Anesthetics

Select another volunteer to help with the Dissociative Anesthetic category effects. Correct the participant's responses as necessary, and write the correct effects under the "D/A" column.

- HGN: **present**
- VGN: **present** (i.e., at high doses; however, it is more common to see VGN in someone under the influence of a **Dissociative Anesthetic**)
- LOC: **present**
- Pupil Size: **normal** (within the DRE average ranges)
- Reaction to Light: **normal**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**

Thank the "volunteer" for their help with the Dissociative Anesthetic effects.

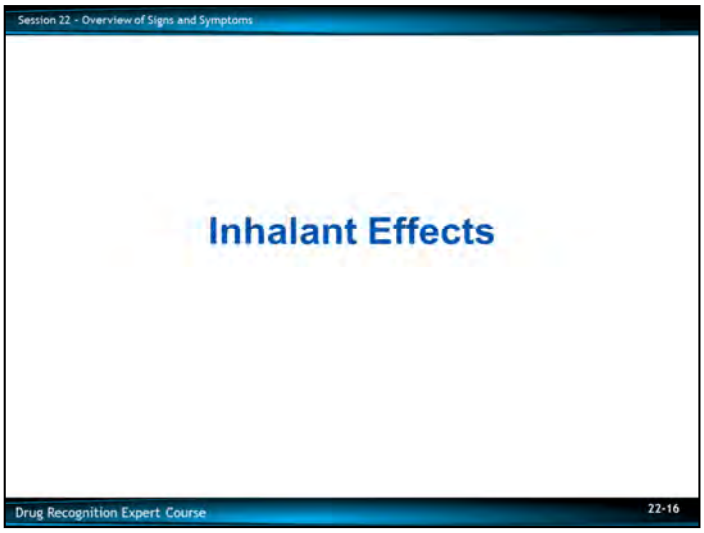


Narcotic Analgesics

Select another volunteer to help with the Narcotic Analgesic category.
Correct the participant's responses as necessary, and write the correct effects under the "Narcotic Analgesics" column.

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **constricted**
- Reaction to Light: **little or none visible**
- Pulse Rate: **down**
- Blood Pressure: **down**
- Body Temperature: **down**
- Muscle Tone: **flaccid**

Thank the "volunteer" for their help with the Narcotic Analgesic effects.



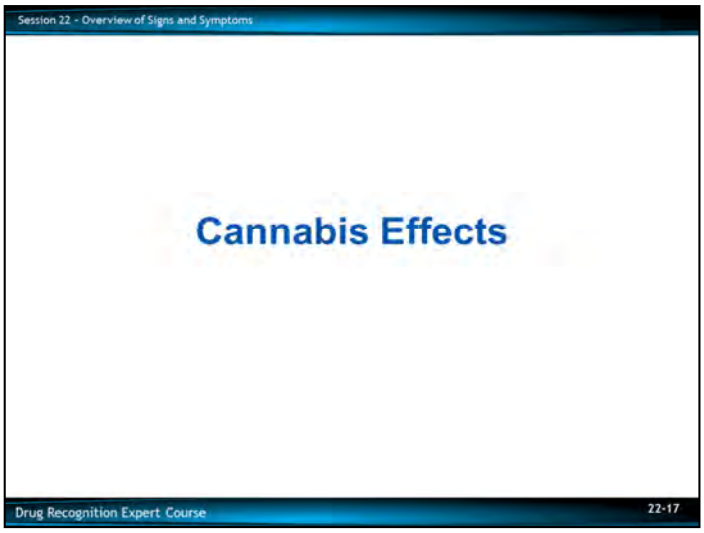
Inhalants

Select another volunteer to help with the Inhalant category. Remind volunteer, with Inhalants, many of the effects noted on the Clinical Indicators will depend upon the specific substance inhaled.

Correct the participant's responses as necessary, and write the correct effects under the "Inhalants" column.

- HGN: **present**
- VGN: **present** (high dose for that individual)
- LOC: **present**
- Pupil Size: **normal** (within the DRE average ranges) but may be dilated
- Reaction to Light: **slow**
- Pulse Rate: **up**
- Blood Pressure: **up/down** (the Volatile Solvents and the Aerosols usually cause blood pressure to be **above the average ranges**; but the Anesthetic Gases can cause blood pressure to be **below the average ranges**, even though they **elevate** the pulse rate)
- Body Temperature: **up/down/normal**
- Muscle Tone: **normal or flaccid**

Thank the "volunteer" for their help with the Inhalant effects.

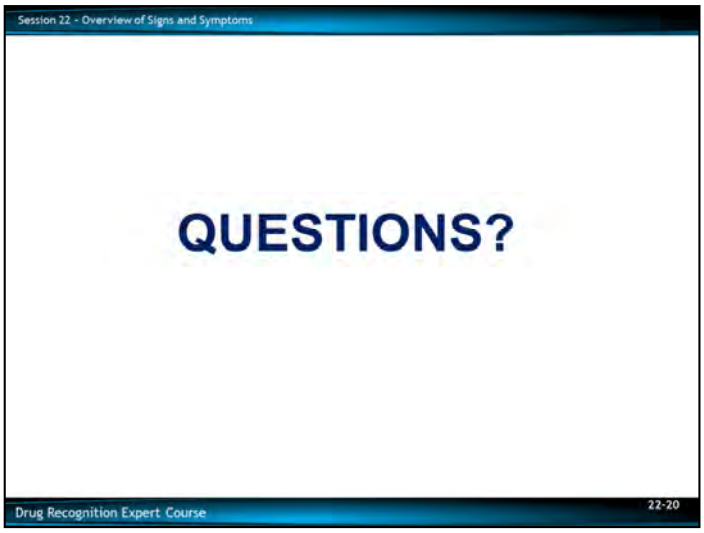


Cannabis

Select another volunteer to help with the Cannabis category effects.
Correct the participant's responses as necessary, and write the correct effects under the "Cannabis" column.

- HGN: **none** (not present)
- VGN: **none** (not present)
- LOC: **present**
- Pupil Size: **dilated or possibly normal** (within the DRE average ranges)
- Reaction to Light: **normal**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **normal** (within the DRE average ranges)

Thank the "volunteer" for their help with the Cannabis effects.



Solicit participants' comments or questions about the drug categories.
Drug Symptomatology Sources

Literature on LOC was approved for addition into the addendum by the IACP Technical Advisory Panel (TAP), November 2008.

Stress not all symptoms associated with a drug category will be observed in all subjects in all cases. The excerpts from the references are consistent with DRE instruction and experience.
Refer participants to the addendum at the end of Session 13 describing some available scientific literature dealing with drug influence symptomatology. The sources are considered to be reliable sources of drug symptomatology.

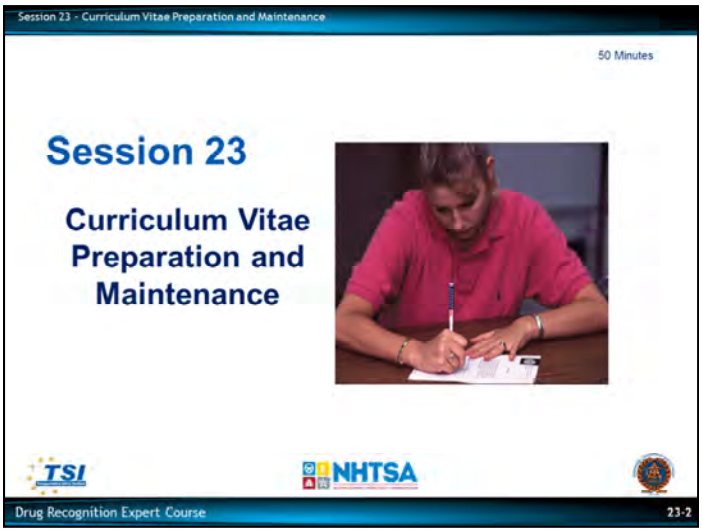
INDICATORS CONSISTENT WITH DRUG CATEGORIES

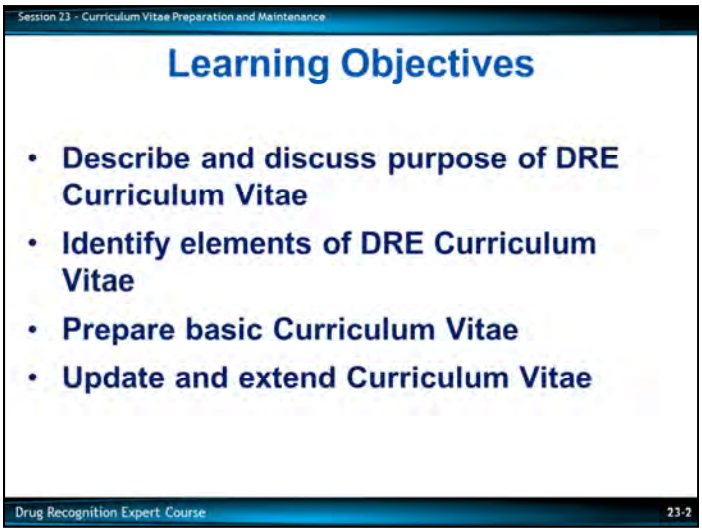
	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
HGN	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	NONE
VGN	PRESENT (HIGH DOSE)	NONE	NONE	PRESENT	NONE	PRESENT (HIGH DOSE)	NONE
LACK OF CONVERGENCE	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	PRESENT
PUPIL SIZE	NORMAL (1)	DILATED	DILATED	NORMAL	CONSTRICTED	NORMAL (4)	DILATED (6)
REACTION TO LIGHT	SLOW	SLOW	NORMAL (3)	NORMAL	LITTLE OR NONE VISIBLE	SLOW	NORMAL
PULSE RATE	DOWN (2)	UP	UP	UP	DOWN	UP	UP
BLOOD PRESSURE	DOWN	UP	UP	UP	DOWN	UP/DOWN (5)	UP
BODY TEMPERATURE	NORMAL	UP	UP	UP	DOWN	UP/DOWN/ NORMAL	NORMAL
MUSCLE TONE	FLACCID	RIGID	RIGID	RIGID	FLACCID	NORMAL OR FLACCID	NORMAL

FOOTNOTE: These indicators are those most consistent with the category, keep in mind that there may be variations due to individual reaction, dose taken and drug interactions.

(1) Soma, Quaaludes and some antidepressants usually dilate pupils
(2) Quaaludes, ETOH and some antidepressants may elevate
(3) Certain psychedelic amphetamines may cause slowing
(4) Normal, but may be dilated
(5) Down with anesthetic gases, up with volatile solvents and aerosols
(6) Pupil size possibly normal

MAJOR INDICATORS	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
GENERAL INDICATORS	Disoriented Droopy eyelids Drowsiness Drunk-like behavior Slow, sluggish reactions Thick, slurred speech Uncoordinated Unsteady walk	Anxiety Body tremors Dry mouth Euphoria Exaggerated reflexes Excited Eyelid tremors Grinding teeth Increased alertness Insomnia Irritability Redness to nasal area Restlessness Runny nose Talkative	Body tremors Dazed appearance Difficulty with speech Disoriented Flashbacks Hallucinations Memory loss Nausea Paranoia Perspiring Poor perception of time and distance Synesthesia Uncoordinated NOTE: With LSD, Piloerection may be observed (goose bumps, hair standing on end).	Blank stare Confusion Chemical odor (PCP) Cyclic behavior Difficulty with speech Disoriented Early HGN Onset Hallucinations Incomplete verbal responses Increased pain threshold "Moon Walking" Non-communicative Perspiring Possibly violent Sensory distortions Slow, slurred speech Warm to touch	Constricted pupils Depressed reflexes Droopy eyelids Drowsiness Dry mouth Euphoria Itching Nausea "On the Nod" Puncture marks Slow, low, raspy speech Slowed breathing NOTE: Tolerant users exhibit relatively little psychomotor impairment.	Bloodshot eyes Confusion Disoriented Flushed face Intense headaches Lack of muscle control Non-communicative Odor of substance Possible nausea Residue of substance Slow, thick, slurred Speech Watery eyes	Altered time/distance perception Alterations in thought formation Body tremors Bloodshot eyes Debris in mouth Disoriented Drowsiness Eyelid tremors Impaired memory Increased appetite Lack of concentration Mood changes Odor of Marijuana Panic reactions Paranoia Possible paranoia Possible vomiting Relaxed inhibition Sedation
DURATION OF EFFECTS	Ultra-Short: A few minutes Short: Up to 5 hours Intermediate: 6-8 hours Long: 8-14 hours	Cocaine: 5-90 minutes Amphetamines: 4-8 hours Meth: 12 plus hours	Duration varies widely from one hallucinogen to another. LSD: 10 - 12 hours Psilocybin: 2-3 hours	PCP Onset: 1-5 minutes Peak Effects: 15-30 minutes Exhibits effects up to 4-6 hours DXM: Onset 15-30 min. Effects 3-6 hours	Heroin: 4-6 hours Methadone: Up to 24 hours Others: Vary	6-8 hours for most volatile solvents Anesthetic gases and aerosols – very short duration	2-3 hours – exhibit and feel effects (Impairment may last up to 24 hours, without awareness effects.)
USUAL METHODS OF ADMINISTRATION	Injected (occasionally) Insufflation Oral	Insufflation Injected Oral Smoked	Injected Insufflation Oral Smoked Transdermal	Eye drops Injected Insufflation Oral Smoked	Injected Insufflation Oral Smoked	Insufflation	Oral Smoked Transdermal
OVERDOSE SIGNS	Clammy skin Coma Dilated pupils Rapid, weak pulse Shallow breathing	Agitation Hallucinations Increased body temperature	Long intense "trip"	Long intense "trip"	Cold, clammy skin Coma Convulsions Slow, shallow breathing	Cardiac arrhythmia Possible psychosis Respiration ceases Severe nausea/vomiting Risk of death	Excessive vomiting Fatigue Paranoia Possible psychosis


Session 23 - Curriculum Vitae Preparation and Maintenance
50 Minutes
Session 23
Curriculum Vitae Preparation and Maintenance
TSI
NHTSA
Drug Recognition Expert Course
23-2



Briefly review the objectives, content segments, and learning activities of this session.

Upon successfully completing this session, the participant will be able to:

- Describe and discuss the purpose of the Drug Recognition Expert (DRE) Curriculum Vitae (CV)
- Identify the elements of a DRE Curriculum Vitae
- Prepare a basic Curriculum Vitae summarizing their relevant training, education, experience, and accomplishments to date
- Update and extend the Curriculum Vitae as relevant achievements continue to expand

CONTENT SEGMENTS

A. Purpose of the Curriculum Vitae
B. Preparation for Court Qualification
C. Curriculum Vitae Content
D. Guidelines for Curriculum Vitae Preparation and Maintenance

LEARNING ACTIVITIES

Instructor-Led Presentations
Group Work Session
Reading Assignments

A. <u>Purpose of the Curriculum Vitae (CV)</u>

The basic purpose of the CV is to record education, training, and experience in a single document for use in establishing qualifications when testifying in court.

Generally a witness can testify only to personal knowledge.
Point out this generally consists of facts which they observed or witnessed.
Witness cannot give an opinion on a matter.
Point out opinions are allowed only if the witness is qualified as an expert.

Basic rule is a person skilled in some art, trade, science, or profession, having a knowledge of matters not within the knowledge of persons of average education, learning, and experience may assist the jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge.
Source: People vs. Willis, 70 Cal APP. 465

A witness is not qualified as an expert witness unless it is shown he or she is familiar with the subject upon which he or she is asked to give an opinion.
Source: People vs. McLean, 56 Cal 2d 660

Only the court can determine whether a witness is qualified to testify as an expert.

Where a witness is qualified to give expert testimony, any question as to degree of knowledge goes to weight rather than admissibility.
Source: People vs. Perry, 44 Cal 2d 861

Witnesses' qualification is achieved through Voir Dire Examination.

- Voir Dire – literally, French for "to see, to say;" loosely translated as "to seek the truth"

B. <u>Preparation for Court Qualification</u>

Being qualified as an expert may be as simple as stating your occupation, or take several hours of exhausting questioning by both the prosecutor and the defense attorney.

Although knowledge only greater than what the public has is required to qualify you as an expert, your testimony will carry much more "weight" if you have good credentials.

Accurate, up-to-date information is essential for an officer who is called upon to give his or her qualification as an expert in any field.
Point out it is imperative each officer maintain an ongoing CV to establish their credentials as an expert.

DREs will base their expertise on the following areas:

- Formal education and training
- Relevant experience
- Outside readings and studies

C. <u>Curriculum Vitae Content</u>

Formal Education

Provide a list of formal education, beginning with the most recent:

- Specialized College
  - List dates, length, major topics covered, etc.
  - Highlight classes which provided knowledge or skills in the area of drugs
- University-level courses
  - List dates, instructor, subject(s) covered, credits, etc.
- Colleges and Universities attended
  - List dates, instructor, subject(s) covered, credits, etc.
- High School(s) attended
  - List dates – highlight classes which provided knowledge in the area of drugs

Formal Training

Provide a list of formal training, beginning with the most recent:

- Lectures and seminars
  - List dates, length, instructor(s), subject(s) covered, etc.
  - Highlight training which provided knowledge or skills in the area of drugs
- Specialized police training or in-service training
  - List dates, length, instructor(s), subject(s) covered, etc. beginning with the most recent
  - Highlight training which provided knowledge or skills in the area of drugs
- Other specialized training
- Police Academy (recruit training)
- Military training

Experience

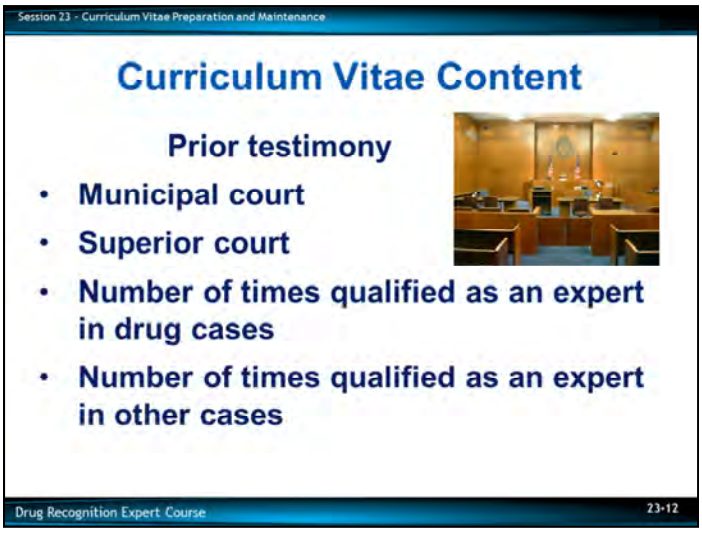
Provide a list of job experience, beginning with the most recent position/assignment:

- Job experience – years
  - List dates, division, duties, etc., include loans to specialized units
- Assignments
- List agencies, dates, assignments, etc.
- Prior law enforcement experience
  - List employer, dates, duties, assignments, etc. which provided experience in the area of drugs
- Other job related experience

Drug enforcement/evaluation experiences:

- Total vehicle stops
- Total DWI investigations
- Total DWI arrests
- Total drug evaluations
- Total filings
- Total convictions

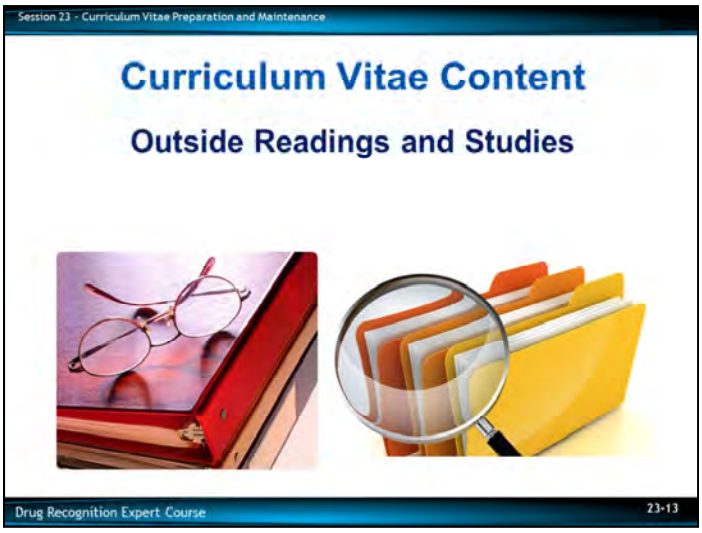
Point out it is important to maintain accurate records of all enforcement activities; documentation of the ratio of stops to investigations and investigations to arrests is essential. Not all stops result in arrests; demonstrate the officer is fair and impartial and each case is decided on individual merits.



Prior Testimony

- Municipal court
- Superior court
- Number of times qualified as an expert in drug cases
- Number of times qualified as an expert in other cases

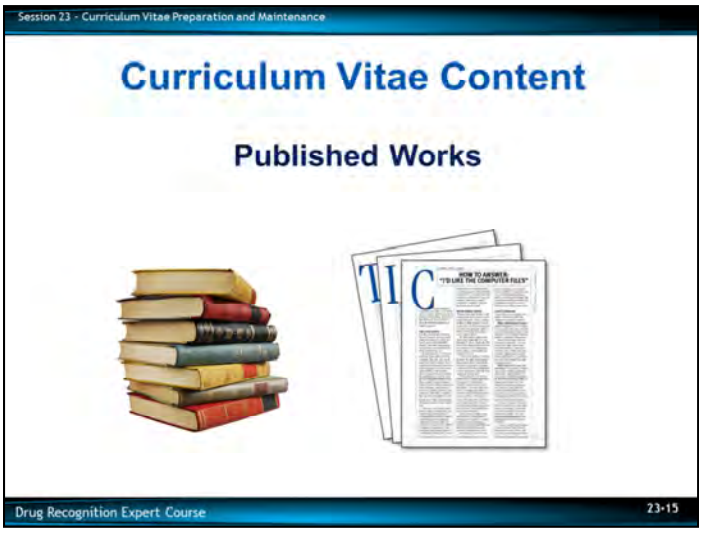
For bulleted items above: list dates, courts, judges, charges, areas qualified, etc.



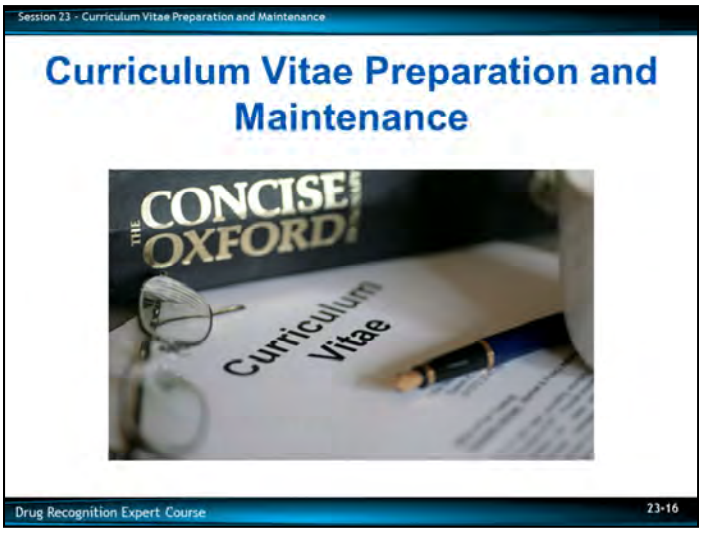
Outside Reading and Studies

- Drug-related texts read
- List title(s), author(s), subject(s), etc.
- Departmental training bulletins
- Journals
- Research papers
- Drug-related videos viewed

Training or Research Conducted (if applicable)
List classes, briefings, training officer assignments, etc. where you served as an instructor or coach, etc. or conducted or participated in research, e.g., Alcohol Workshop.



Published Works (if applicable)
List all relevant writings you authored or co-authored, including departmental briefing papers, training manuals/bulletins, magazine articles, books, etc.

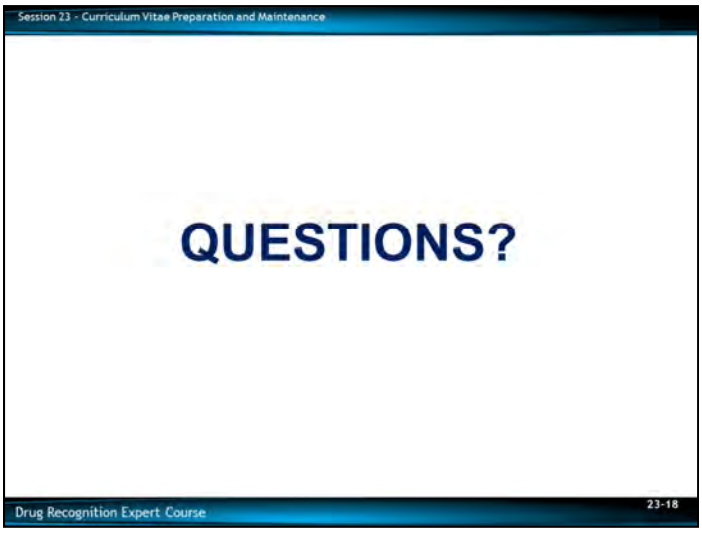


D. <u>Guidelines for Curriculum Vitae Preparation and Maintenance</u>

Refer participants to CV examples in their manuals and review steps for preparing the CV and keeping it up-to-date.

- List information in chronological order
  - Formal education should be normal chronological order
  - Advanced/specialized training should be in reverse chronological order (most recent training first)
- Review and update CV frequently and record date of review

Review the CV examples with the participants.



Solicit participants' comments or questions about Curriculum Vitae Preparation and Maintenance.

Sample Curriculum Vitae

SAMPLE Curriculum Vitae NUMBER ONE

The Curriculum Vitae of:

Sgt. David C. Regan

Latest Update: 4/25/17

Sgt. David C. Regan

Introduction

Sergeant David Carroll Regan is a supervisor in the Traffic Division, Shelton Police Department. He currently co06ands the special Impaired Driving Enforcement Activities Squad (IDEAS), a unit he was instrumental in forming. Sgt. Regan is a 15-year veteran of law enforcement. Prior to joining the Shelton Police Department ten years ago, he served for five years as a deputy with the Fairfield County Sheriff's Department.

Sergeant Regan has been assigned to the Traffic Division since his promotion to sergeant on 11/18/15. His duties have included coordination of speed and DWI enforcement activities, the Joint Shelton-Derby Task Force for Sobriety Checkpoints, the Officer Friendly Program, the Motorcycle Safety Education Project, and general supervision of Traffic Division officers. He also serves as the Department's principal instructor for radar speed measurement, Standardized Field Sobriety Testing and Drug Recognition Expert training.

Sergeant Regan holds a Bachelor's Degree in the Administration of Justice from Fairfield University, and currently is a candidate for a Master's Degree in Police Science and Administration at the University of Stratford. He also holds an Instructor Certificate from the State Law Enforcement Training Board.

Sergeant Regan has served on two co06ittees of the Governor's Task Force to Prevent Drunk Driving: The Standardized Field Sobriety Tests Co06ittee and The Paperwork Reduction Co06ittee. The one page Standard Notetaking Guide for Field Sobriety Testing that is employed by all departments statewide was designed by him.

Law Enforcement Experience

11/18/15 to Present	Sergeant, Traffic Division Shelton Police Department Supervisor, IDEAS Unit Drug Recognition Expert Program Coordinator
7/8/12 to 11/17/15	Patrol Officer First Class Training and Operations Shelton Police Department Unit Supervisor, Traffic Law Enforcement Training Branch
9/11/08 to 7/7/12	Patrol Officer Third Precinct, Motorcycle Shelton Police Department

Sgt. David C. Regan

Law Enforcement Experience (continued)

11/5/06 to 9/10/08	Patrol Officer First Precinct Shelton Police Department
10/10/05 to 11/4/06	Deputy Traffic Patrol Fairfield County Sheriff's Department

Special Police Training

10/14	NHTSA/IACP **DRE Instructor Training** (Certified as a DRE Instructor on 11/12/08)
8/13	Drug Enforcement Administration **Drug Interdiction Seminar**
11/11	NHTSA/IACP **Drug Evaluation and Classification Training: DRE School** (Certified as a DRE on 1/28/12)
10/11	NHTSA/IACP **Drug Evaluation and Classification Training: PRE School**
3/11	Southeastern University Institute of Police Technology **Special Conference: Managing DWI Squads**
4/10	International Association of Chiefs of Police **Instructor Training in Horizontal Gaze Nystagmus and Divided Attention Field Sobriety Tests**
10/09	University of Stanford, Northern Police Institute **Standardized Field Sobriety Testing**
6/09	Acme Scientific Instruments, Inc. (Certified to perform inspection and repair of the Intoxotector J2Z breath testing instrument on 6/22/09)

Sgt. David C. Regan

Court Qualification Record

8/17	Qualified as Drug Recognition Expert in a case involving Phencyclidine impairment. (Judge Sally Grey, 8th District)
11/15	Qualified as Drug Recognition Expert in a case involving a combination of CNS Stimulant and Narcotic Analgesic. (Judge Lewis Buchanan, Superior Court)
3/14	Qualified as Drug Recognition Expert in a case involving Cannabis impairment. (Judge Sally Grey, 8th District)
9/12	Qualified as Drug Recognition Expert in a case involving Narcotic Analgesic impairment. (Judge Jerome Byrnes, 8th District)

Specialized Readings

Title	Author
A Primer of Drug Action	Robert Julien, Ph.D.
The Practitioner's Guide to Psychoactive Drugs	Alan J. Gelenberg and Ellen L. Bassuk, M.D.
Drug Abuse: A Manual for Law Enforcement Officers	Donald K. Fletcher
Licit and Illicit Drugs	Edward M. Brecher
Chocolate to Morphine	Andrew Weil, M.D. and Winifred Rosen
The Brain & the Actions of Cocaine Opiates, and Marijuana	National Institute on Drug Abuse
Marijuana Alert	Peggy Mann

SAMPLE Curriculum Vitae NUMBER TWO

TRUMBULL POLICE DEPARTMENT

The Curriculum Vitae of:

OFFICER ANN MARIE REED
Drug Recognition Expert

Latest Update: 4/25/17

Officer Ann M. Reed

Introduction

Officer Ann Marie Reed is an eight-year veteran with the Trumbull Police Department. She is currently assigned to the Special Operations Branch of the Administrative Division, where she serves as a Narcotics Enforcement Officer. Previously, she has served in the same Branch as a Vice Enforcement Officer, and as a patrol officer in the Department's first and second precincts.

Officer Reed is a graduate of Monroe College, with the Bachelor's Degree in Police Science and Administration. She is currently a candidate for the JD Degree at the Law School of the University of Bridgeport.

Law Enforcement Experience

5/12/16 to Present	Narcotics Enforcement Officer and Drug Recognition Expert Special Operations Branch Trumbull Police Department
3/26/14 to 5/11/16	Vice Enforcement Officer Special Operations Branch Trumbull Police Department
9/23/08 to 3/25/14	Patrol Officer First Precinct Trumbull Police Department
8/28/07 to 9/22/08	Patrol Officer Second Precinct Trumbull Police Department
5/15/07 to 8/25/07	Trainee Fairfield County Regional Police Academy (Graduated 8/25/07)

Special Police Training

2/15	University of Norwalk, Police Science Institute **Seminar: Packaging and Transport of Illicit Drugs**
10/14	University of Norwalk, Police Science Institute **Seminar: Suppression of Drug-related Crime**
3/12	NHTSA/IACP **Drug Evaluation and Classification Training: DRE School** (Certified as a DRE on 5/22/12)

Officer Ann M. Reed

Special Police Training (Continued)

2/12	Fairfield County Regional Police Academy **Drug Evaluation and Classification Training: PRE-School**
10/08	Fairfield County Regional Police Academy **Standardized Field Sobriety Testing**

Publications Authored

Reed, Ann M. and Cockroft, Robert S., "Narcotics Enforcement Tactics for the Medium-sized Department"; The Police Chief. January 17, 2017.

Reed, Ann M., Procedures for Requesting Drug Recognition Expert Services; Training Bulletin for the Trumbull Police Department. 6/13.

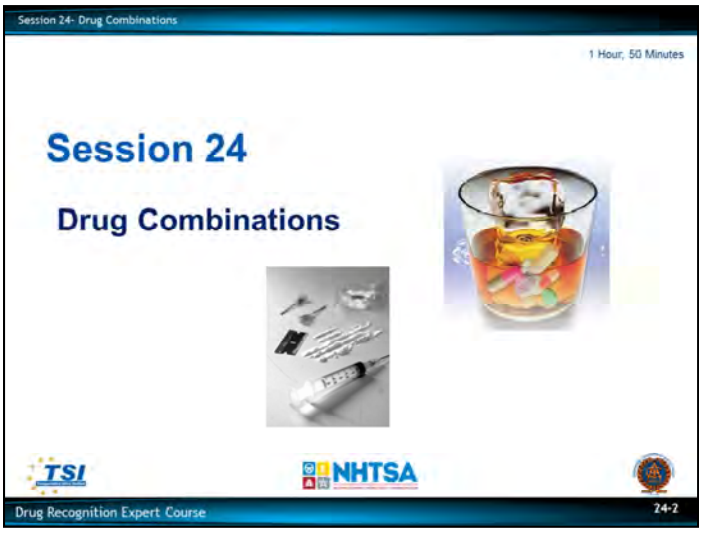
Reed, Ann M., Recognizing the Heroin Addict; Training Bulletin for the Trumbull Police Department. 1/13.

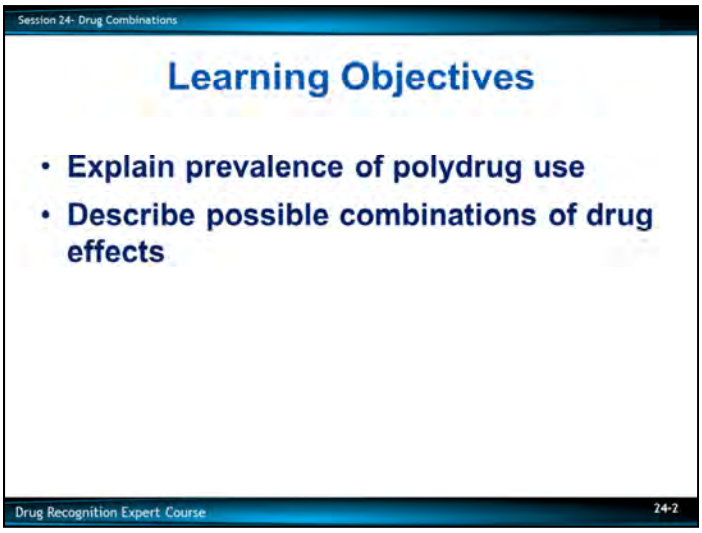
Court Qualification Record

11/16	Qualified as an expert witness for identification of Heroin impairment. (Judge Michael Adkins, 7th District)
3/16	Qualified as a Drug Recognition Expert in a case involving a combination of CNS Stimulant and Narcotic Analgesic. (Judge Roberta Mayer, 7th District)
9/12	Qualified as an expert witness for identification of "track" marks. (Judge Charles Peltier, 7th District)

Specialized Readings

Title	Author
Signs and Symptoms Handbook	Susan R. Williams and Barbara McVan.
Drugs From A to Z	Richard R. Lingeman
Guide to Psychoactive Drugs	Richard Seymour, MA and David E. Smith, M.D.
Heroin: Its History, Pharmacology, and Treatment	Humberto Fernandez and Therissa A, Libby, Pd. D.
Report on Synthetic China White: Fentanyl	Det. James Miller, LAPD

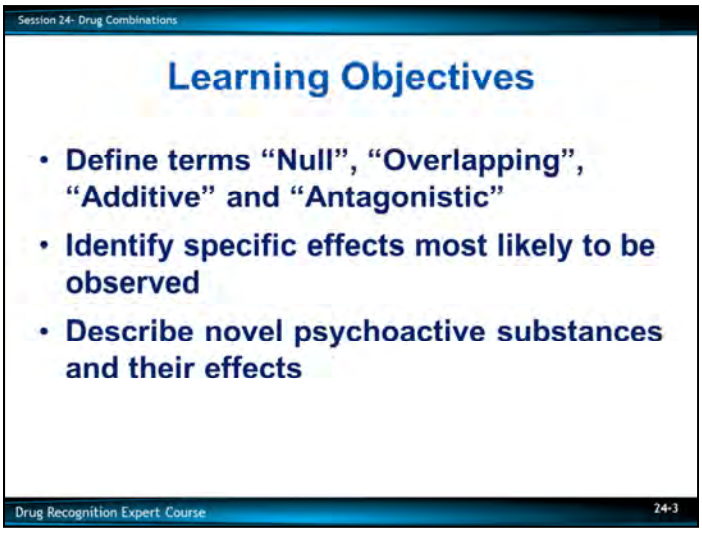

Session 24- Drug Combinations
1 Hour, 50 Minutes
Session 24
Drug Combinations
TSI
NHTSA
Drug Recognition Expert Course
24-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Explain the prevalence of polydrug use among drug-impaired subjects and identify common combinations of drugs abused by those subjects
- Describe the possible effects combinations of drugs can produce on the clinical indicators of drug impairment



- Define the terms "Null," "Overlapping," "Additive," and "Antagonistic" as they relate to polydrug effects
- Identify the specific effects most likely to be observed in persons under the influence of particular drug combinations
- Describe novel psychoactive substances and their effects

CONTENT SEGMENTS

A. The Prevalence of Polydrug and Polycategory Use
B. Possible Effects of Drug Combinations
C. Identifying Expected Indicators of Specific Combinations
D. Novel Psychoactive Substances

LEARNING ACTIVITIES

Instructor-Led Presentations
Interactive Discussions
Worksheet Exercise

A. <u>The Prevalence of Polydrug and Polycategory Use</u>

Polydrug use means ingesting two or more drugs.

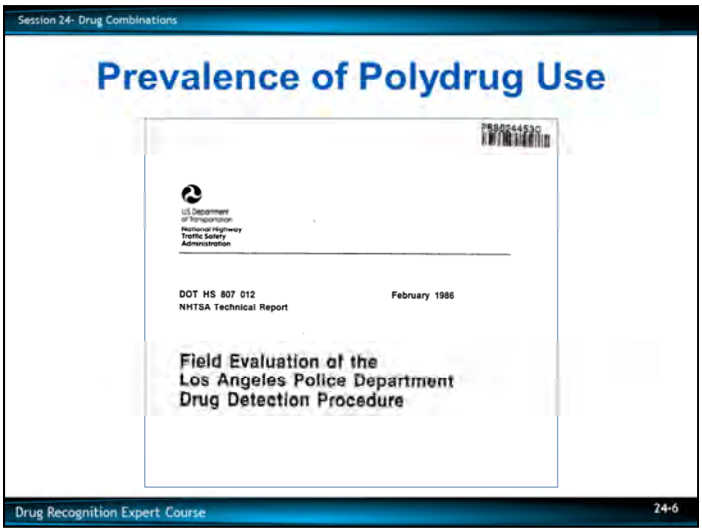
In many cases, one drug is used as a base or primary drug with additional drugs to leaven or compensate for the side effects of the primary drug and make the experience more enjoyable with drug synergy effects, or to supplement for primary drug when supply is low.

Polycategory Use
For our purposes, polycategory use is defined as: ingesting drugs from two or more drug categories.

Per the National Cannabis Prevention and Information Center (NCPIC), the most common type of polydrug mix is marijuana and alcohol. Alcohol may increase the rate of absorption of THC, the primary active component of cannabis, or marijuana.

Using alcohol with marijuana can strengthen the effect of the latter and cause a condition referred to as "greening out." This is a term used to describe when marijuana users experience a nauseous sensation that kicks in when they feel sick and overwhelmed after getting too high and may experience paleness, feeling dizzy accompanied with a spinning sensation.
If available, present local data to demonstrate the polydrug use in your area/State.
Source: Psychology Today, C. Scharff, Ph.D. May 6, 2014.

Alcohol was often found in combination with one or more drugs.



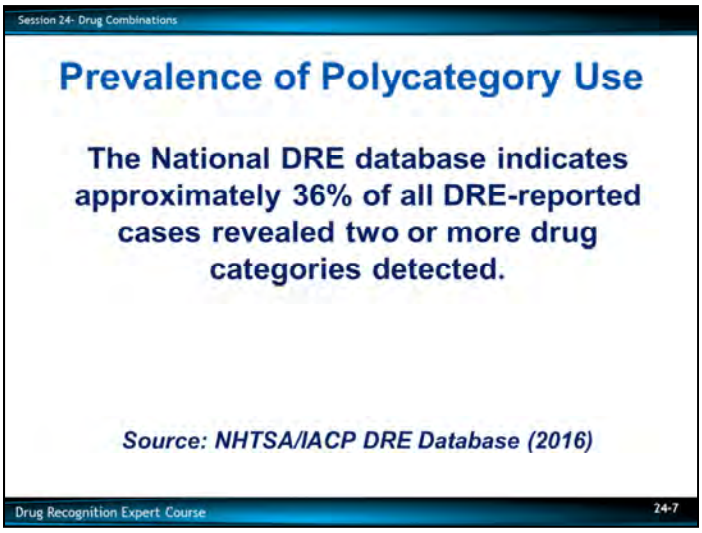
Prevalence of Polydrug Use

It is actually more common for a Drug Recognition Expert (DRE) to encounter polydrug users than single drug users.

- In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them

Point out 81 of the 173 suspects (47%) in the Los Angeles Field Study had alcohol in combination with one or more other drugs.

- If we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them



- The National DRE database indicates approximately 36% of all DRE-reported cases revealed two or more drug categories detected

Source: NHTSA/IACP DRE Database (2016)

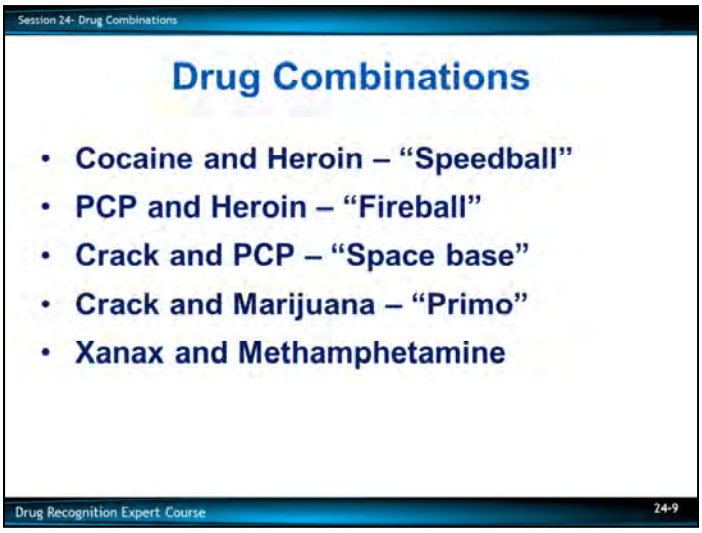
Emphasize: Not all States are represented in the database therefore, the 36% may be low. DREs nationwide are required to enter their evaluations in the national DRE database. Contact your State Coordinator.

Solicit participants' comments and questions about the prevalence of polydrug use.

Common Combinations

- Cocaine and Cannabis
- Cocaine and Heroin
- PCP and Cannabis
- Alcohol and practically anything else

Many of the subjects you examine will be exhibiting the effects of two or more drugs acting together.



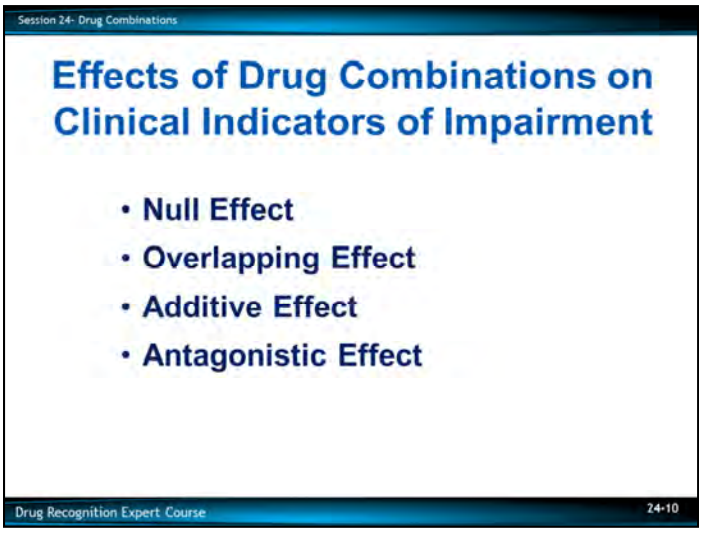
B. <u>Possible Effects of Drug Combinations</u>

Combinations

Let us examine the possible ways in which two or more drug categories might interact.
Some common combinations of drug categories and their street names include:

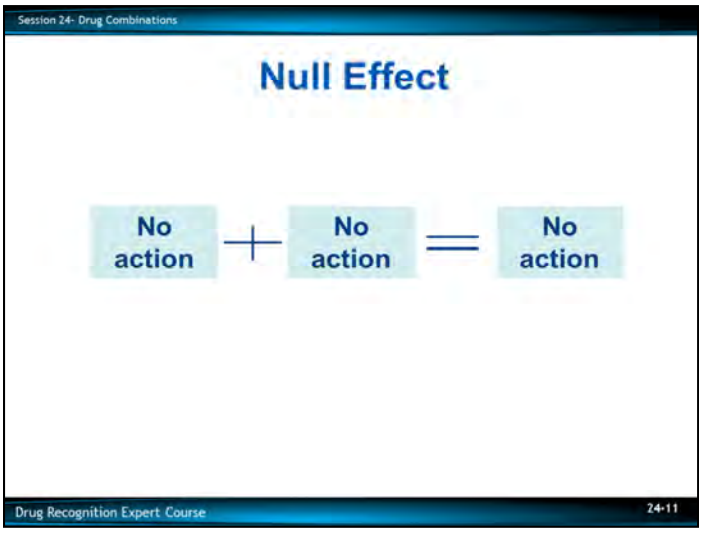
- Cocaine and Heroin – "Speedball"
- PCP and Heroin – "Fireball"
- Crack and PCP – "Space base"
- Crack and Marijuana – "Primo"
- Xanax and Methamphetamine

Point out there are hundreds of street names for drug combinations and the combinations vary and are always evolving.
Solicit drug combination street names from participants.



There are four effects of drug combinations on major indicators of impairment:

- Null Effect
- Overlapping Effect
- Additive Effect
- Antagonistic Effect



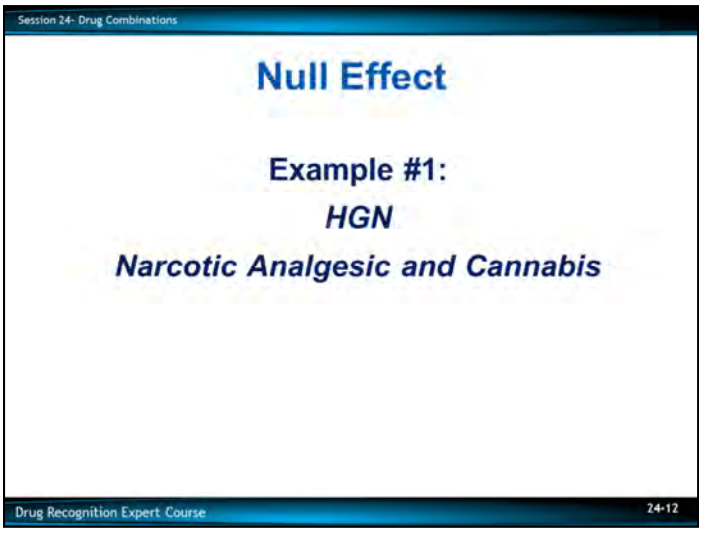
Four Effects

Null Effect

The first effect is called the "Null Effect." If neither drug affects a particular indicator of impairment, their combination also will not affect that indicator.

No action plus no action equals no action

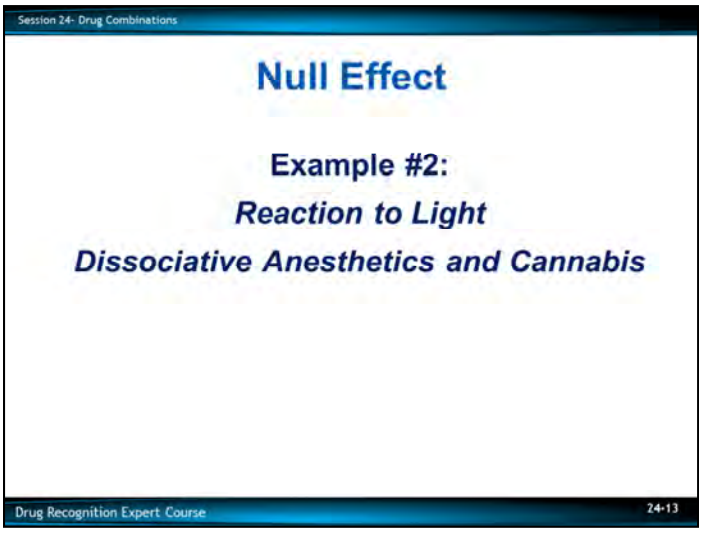
Clarify: "Null Effect" is the combination of no action plus no action equals no action.



Example #1: Horizontal Gaze Nystagmus (HGN) – Narcotic Analgesic and Cannabis
An example of the Null Effect:

- Neither drug affects HGN
  - The combination would not result in HGN being present

Point out a general principle: if neither drug affects a major indicator, the combination of those two drugs also will not affect that indicator.
Clarification of "Null Effect" – the combination of no action plus no action equals no action.

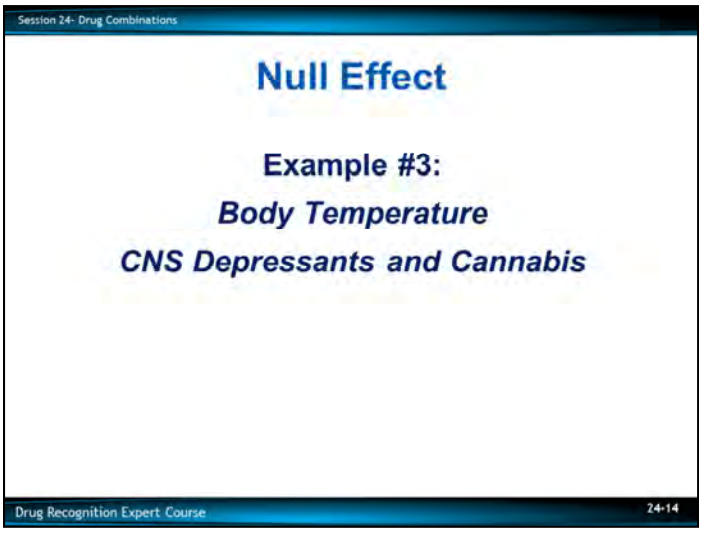


Example #2: Reaction to Light - Dissociative Anesthetics and Cannabis

Another example of the Null Effect:

- Neither drug affects reaction to light

Ask participants to suggest a specific combination of drugs that will exhibit the Null Effect on Pupil Size.



Example #3: Body Temperature – Central Nervous System (CNS) Depressants and Cannabis
Another example of the Null Effect:

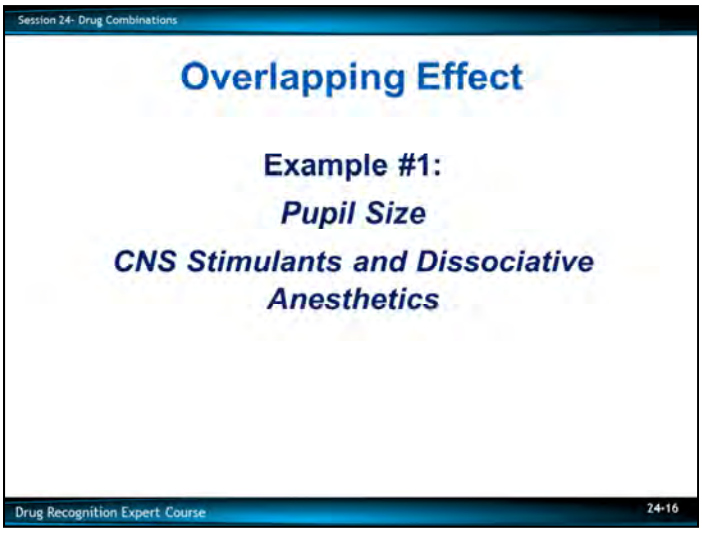
- Neither a CNS Depressant nor Cannabis usually affects body temperature; the combination of the two leaves body temperature in the DRE average range

Remind participants there is no Null Effect for Pulse and Blood Pressure.
Solicit participants' questions about the Null Effect.

Overlapping Effect

The second effect is called the "Overlapping Effect."

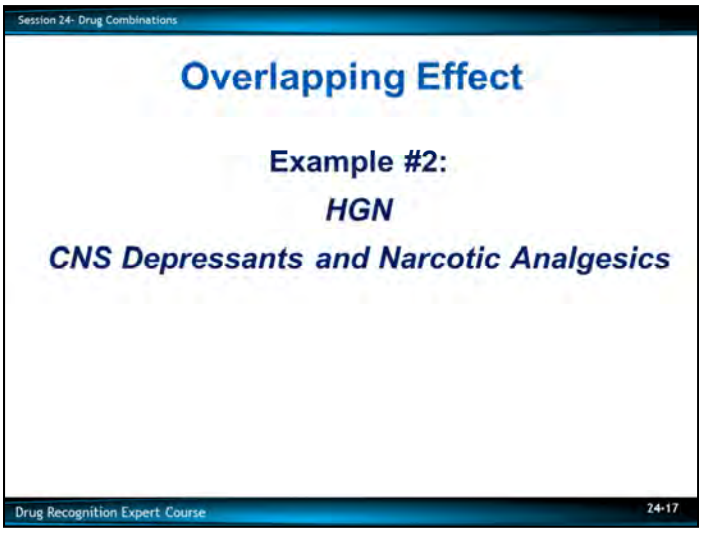
Clarify: "Overlapping Effect" - action plus no action equals action.



Example #1: Pupil Size - CNS Stimulants and Dissociative Anesthetics
One drug affects pupil size, but the other does not.

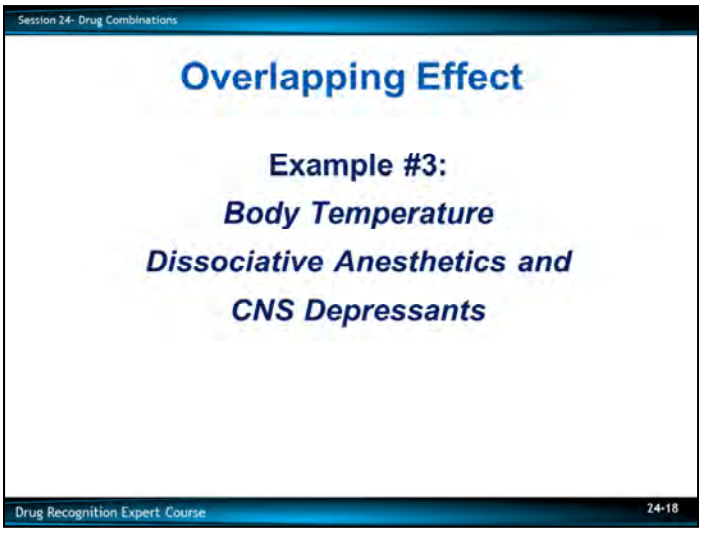
- CNS Stimulants dilate pupils, Dissociative Anesthetics do not affect pupil size
  - Therefore, pupils should be dilated

(Prior to showing next slide)
Ask a participant to give an example of a specific combination of drugs that will produce an "Overlapping Effect" on HGN.



Example #2: HGN - CNS Depressants and Narcotic Analgesics

- A CNS Depressant will cause HGN, but a Narcotic Analgesic will not cause HGN; a person under the combined influence of a CNS Depressant and a Narcotic Analgesic will usually have HGN



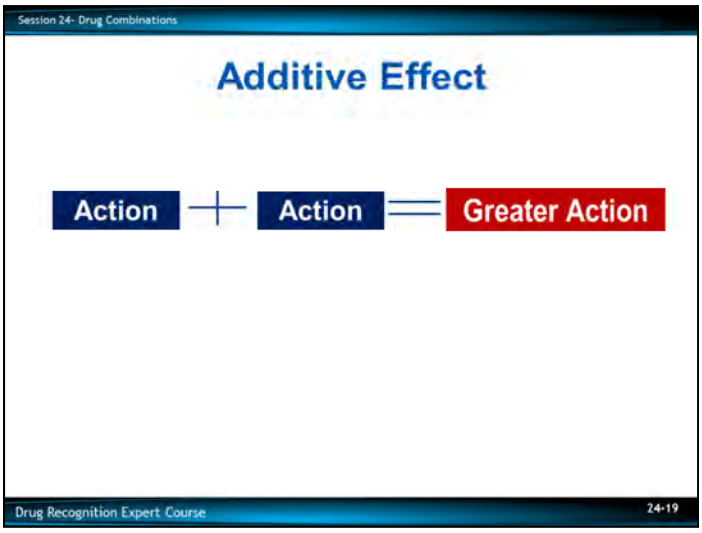
Example #3: Body Temperature - Dissociative Anesthetics and CNS Depressants

Another example of the "Overlapping Effect":

- Dissociative Anesthetics cause an elevated temperature. CNS Depressants typically do not effect temperature.
  - Under the influence, body temperature should be up or elevated

Ask a participant to give an example of another combination of drugs that will produce an "Overlapping Effect" on body temperature.

Remind participants there is no Overlapping Effect for Pulse and Blood Pressure.

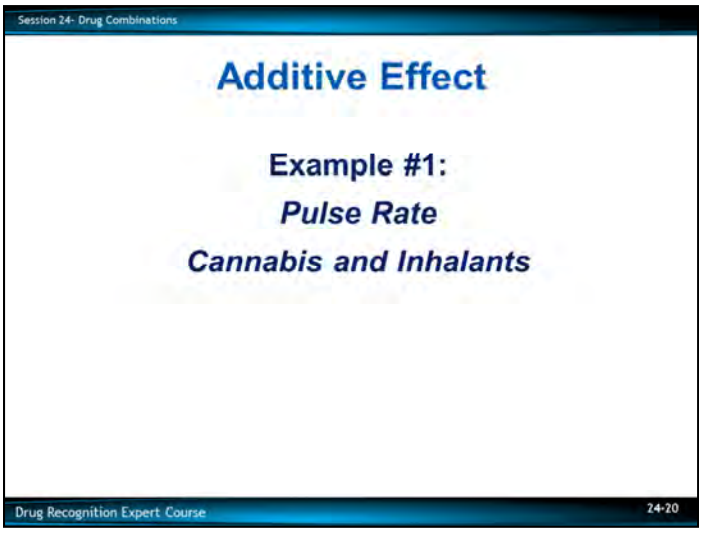


Additive Effect

The third effect is called the Additive Effect.

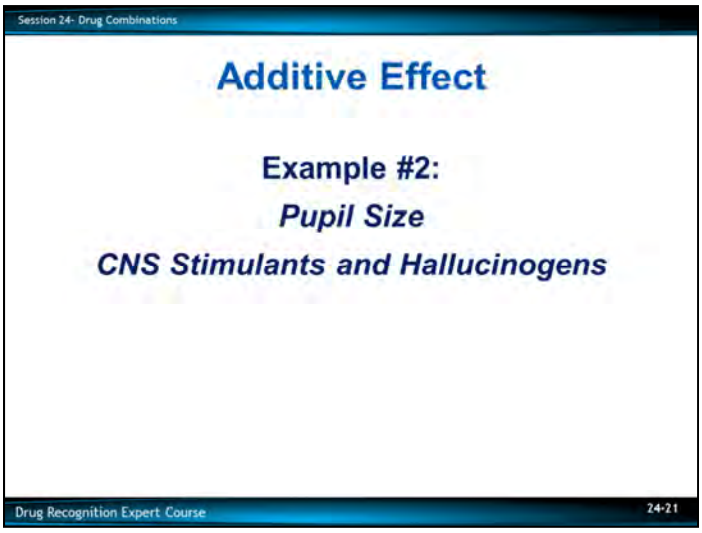
- If two drugs independently affect some indicator in the same way, their use in combination will also affect the indicator and the effect may be reinforced
- Action plus the same action produces reinforced action

Clarification of the "Additive Effect" – action plus the same action produces reinforced action.



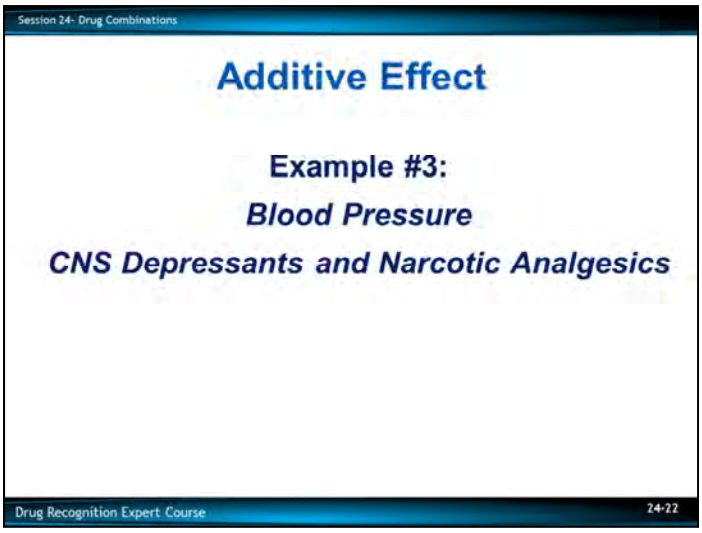
Example #1: Pulse Rate - Cannabis and Inhalants

- Cannabis and Inhalants both elevate pulse rate
  - Therefore, pulse rate should be elevated, or up



Example #2: Pupil Size - CNS Stimulants and Hallucinogens

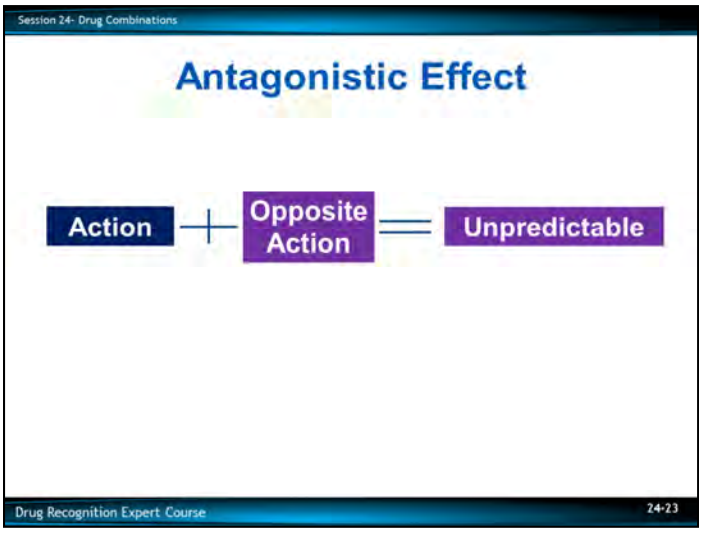
- CNS Stimulants and Hallucinogens both dilate the pupils
  - Therefore, pupils should be dilated



Example #3: Blood Pressure - CNS Depressants and Narcotic Analgesics

Ask a participant to give an example of a drug combination that will produce an additive effect on blood pressure.

- CNS Depressants and Narcotic Analgesics both depress blood pressure
  - Therefore, the blood pressure should be depressed or down



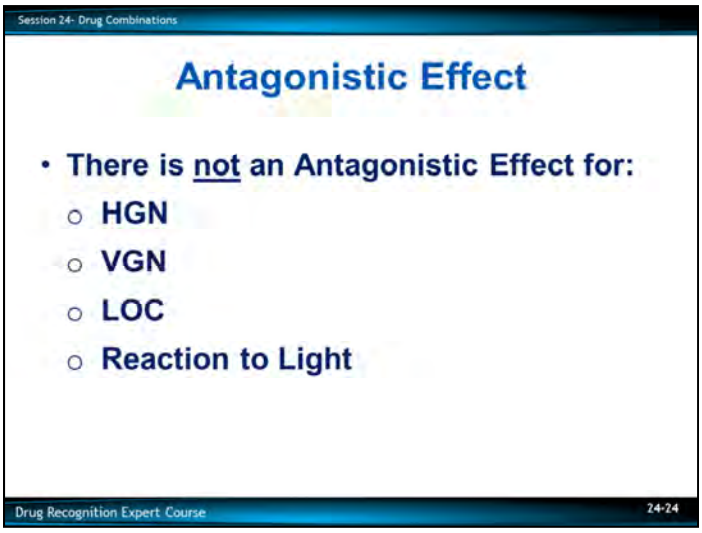
Antagonistic Effect

The fourth effect is called the Antagonistic Effect.

Clarification of "Antagonistic Effect" – action versus opposite action: an unpredictable outcome.

When two drugs produce an "Antagonistic Effect," they tend to try to override or compete with the effect of the other drug(s) until the drug with the longest duration of effects prevails. Normally, whichever drug is more psychoactive at the time determines what we'll see.

Point out a common example is when a person takes a "speedball" (Heroin plus Cocaine), the two drugs try to compete with their effects on the pupil size.

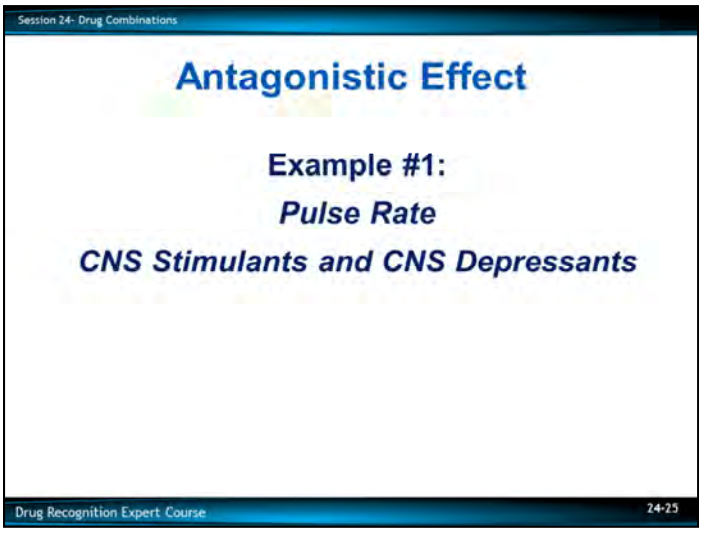


Whichever drug is more psychoactive at the time determines what will be observed. This is based upon the potency of the drug, the quantity ingested, the time of ingestion, and the duration of effects.

There is not an Antagonistic Effect for :

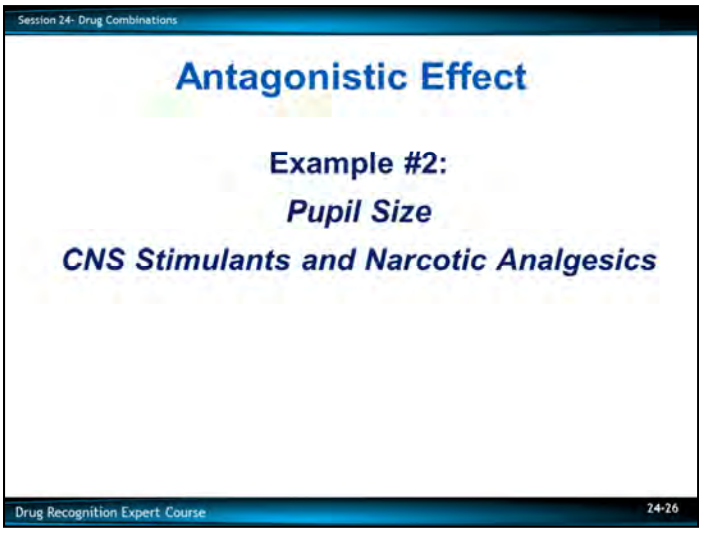
- HGN
- Vertical Gaze Nystagmus (VGN)
- LOC
- Reaction to Light

Question participants as to why this would be the case.



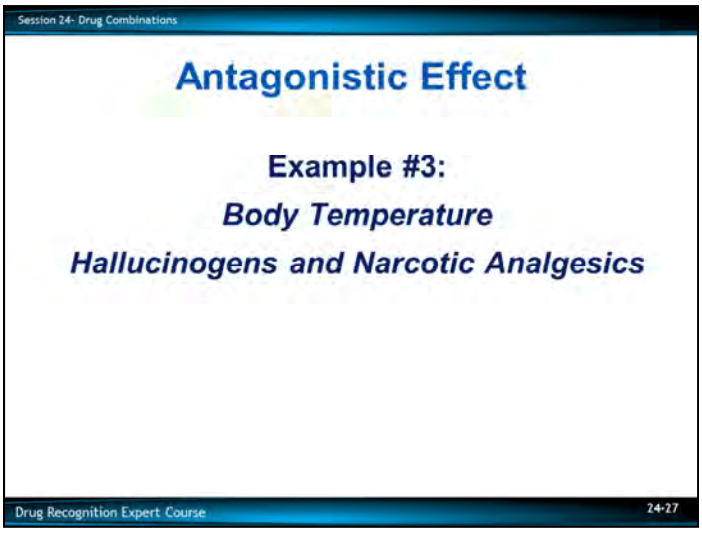
Example #1: Pulse Rate - CNS Stimulants and CNS Depressants

- CNS Stimulants elevate pulse rate, CNS Depressants depress pulse rate
  - Therefore, pulse rate will be up, down or within the DRE average ranges



Example #2: Pupil Size - CNS Stimulants and Narcotic Analgesics

- Pupil Size. CNS Stimulants dilate pupils, Narcotic Analgesics constrict pupils
  - Pupil size will be dilated, constricted or within the DRE average ranges



Example #3: Body Temperature - Hallucinogens and Narcotic Analgesics

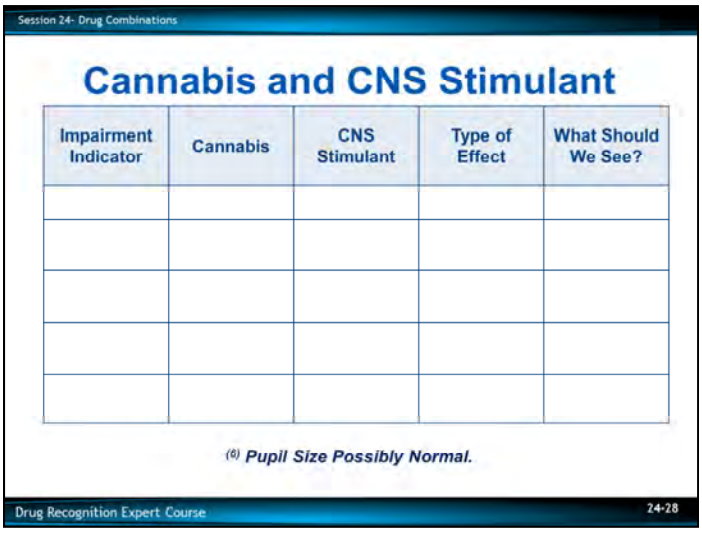
- Hallucinations elevate body temperature, Narcotic Analgesics depress body temperature
  - Body temperature will be up, down or within the DRE average ranges

With an "Antagonistic Effect," we just can't predict what we will see.

Summary

When drugs from two or more drug categories are taken together, they tend to produce a combination of Null Effects, Overlapping Effects, Additive Effects and Antagonistic Effects.

Solicit participants' questions about the Null, Overlapping, Additive and Antagonistic Effects. Proceed to the following slides of drug combinations involving the input from the participants.



HGN

A specific example: consider a person who is under the influence of a combination of Cannabis and a CNS Stimulant.

Ask participants: "will you see HGN with this particular combination?"

Neither Cannabis nor a CNS Stimulant causes HGN.

Point out the combination of Cannabis and CNS Stimulant produces a Null Effect on HGN.

This is a case of no action plus no action equals no action. We will not see HGN with this combination.

VGN

Ask participants: "Will we see VGN?"

Neither Cannabis nor a CNS Stimulant causes VGN. This is another Null Effect. We won't see VGN.

LOC

Ask participants "What will we see when we examine LOC?"

Cannabis causes LOC; a CNS Stimulant does not.

Point out the combination of Cannabis and CNS Stimulant produces an Overlapping Effect on LOC.

This is a case of action plus no action equals action. We will see LOC with this combination.

Pupil Size

Ask participants: "What will we see when we examine pupil size?"

CNS Stimulants dilate pupils; Cannabis either dilates pupils or has no effect on them.

Point out the combination of Cannabis and CNS Stimulant produces either an Additive Effect or an Overlapping Effect on pupil size.

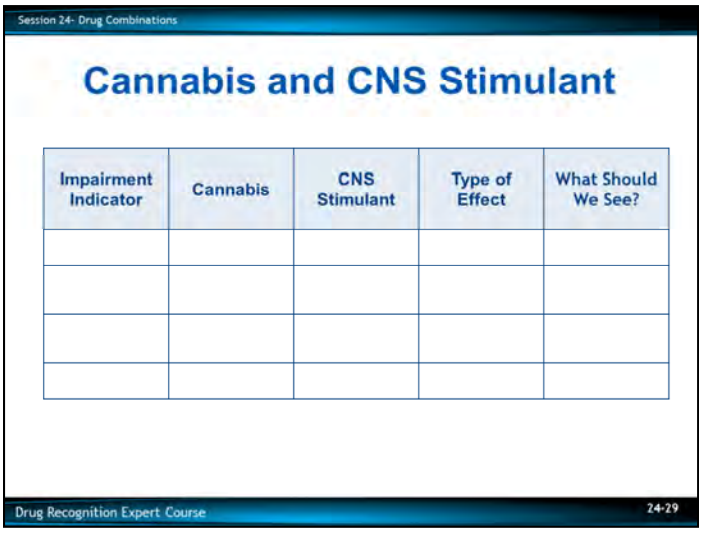
This may be a case of action plus no action equals action. Or it may be a case of action plus same action reinforces action. In either case, we should see dilated pupils with this combination.

Point out the term "normal" in Exception 6 refers to a pupil size within the DRE average ranges.

Reaction to Light

Ask participants: "What should we see when we examine the pupils' reaction to light?"

CNS Stimulants slow the pupils' Reaction to Light; Cannabis usually doesn't affect the pupils' reaction. Here we have another Overlapping Effect. We should observe a slowed reaction of the pupils.



Pulse Rate

Ask participants: "What should we see when we measure this person's pulse rate?"

Both Cannabis and CNS Stimulants usually elevate pulse rate. This is an Additive Effect. We should see a pulse rate that is up or elevated.

Blood Pressure

Ask participants: "What should we see when we measure this person's blood pressure?"

Cannabis usually causes blood pressure to be up or elevated; so does a CNS Stimulant. This is another Additive Effect. We should see a blood pressure that is up or elevated.

Body Temperature

Ask participants: "What can we expect to find when we check this person's temperature?"

Cannabis usually does not affect body temperature. But CNS Stimulants usually elevate temperature.

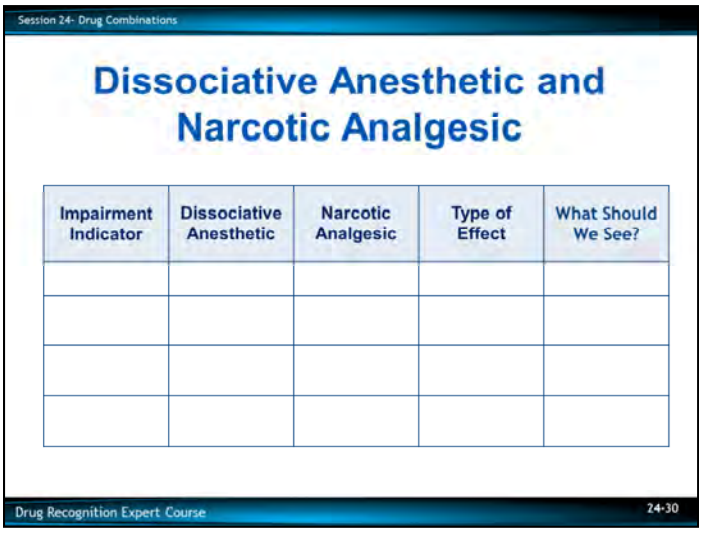
Point out Cannabis in combination with CNS Stimulant produces an Overlapping Effect on body temperature.

This is another case of action plus no action equals action. We can expect to see an elevated temperature with this combination.

Muscle Tone

Cannabis usually does not affect muscle tone. CNS Stimulants cause muscle tone to be rigid. This is another case of action plus no action equals action. We can expect to see rigid muscle tone with this combination.

Point out this particular combination produces no Antagonistic Effects.



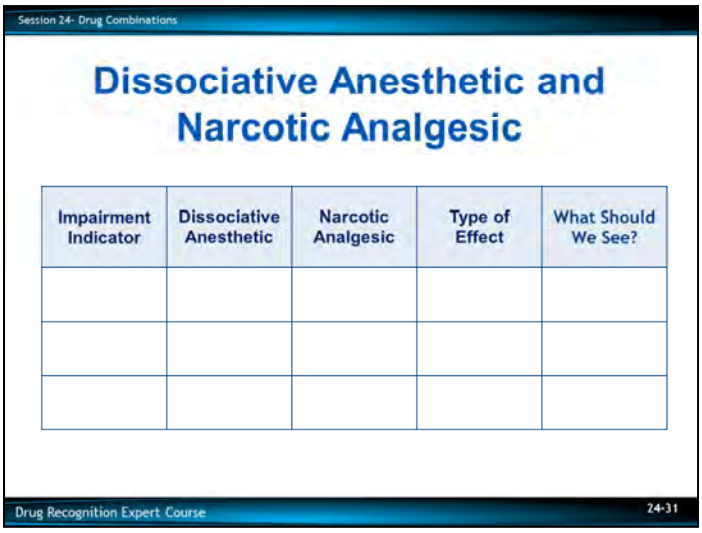
Dissociative Anesthetics and Narcotic Analgesics
Another specific example: consider a person under the influence of a combination of a Dissociative Anesthetic and a Narcotic Analgesic.

HGN
Ask participants: "What will we see when we examine this person for HGN?"
A Dissociative Anesthetic causes HGN, Narcotic Analgesics do not. This is an Overlapping Effect. We can expect to see HGN with this subject.

VGN
Ask participants: "What will we see when we examine this person for VGN?"
A Dissociative Anesthetic should cause VGN, especially at high doses. A Narcotic Analgesic will not cause VGN. This is another Overlapping Effect. We should see VGN in this subject.

LOC
Ask participants: "Can we expect to see a LOC?"
A Dissociative Anesthetic causes LOC; Narcotic Analgesics do not. Another Overlapping Effect. We can expect to see LOC.

Pupil Size
Ask participants: "What are we likely to see when we check the size of this subject's pupils?"
A Dissociative Anesthetic doesn't affect pupil size, but a Narcotic Analgesic constricts pupils. This is another Overlapping Effect. We can expect to see constricted pupils with this subject.
Remind participants the term "Normal" refers to the DRE average ranges or "expected ranges" for the pupil sizes.



Reaction to Light

Ask participants: "What are we likely to observe when we check the reaction of this subject's pupils to light?"

A Dissociative Anesthetic doesn't affect pupil's Reaction to Light; but a Narcotic Analgesic usually produces a "little or none visible" reaction.

Point out the combination of Dissociative Anesthetics and a Narcotic Analgesic produces Overlapping Effects on all major eye indicators of drug impairment.

This, too, is an Overlapping Effect. We can expect a "little or none visible" reaction in this subject's pupils.

Pulse Rate

Ask participants: "What can we expect to find when we check this subject's pulse rate?

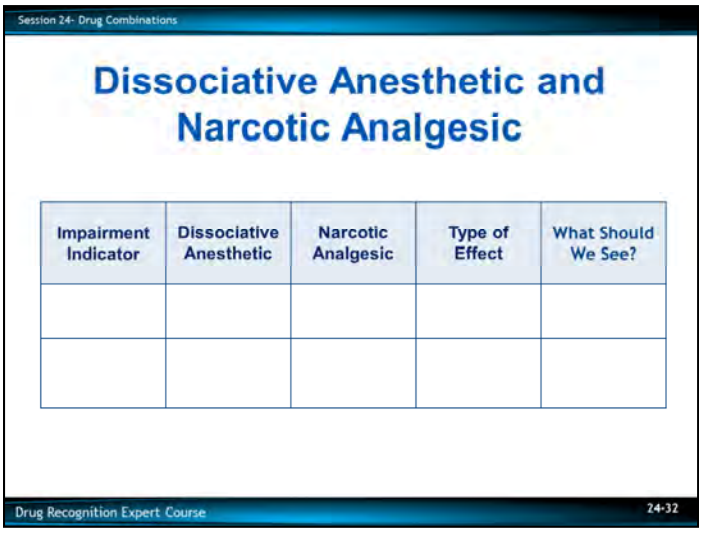
A Dissociative Anesthetic usually causes pulse rate to be elevated; a Narcotic Analgesic usually produces a depressed or lower pulse rate. This is our first Antagonistic Effect. We cannot predict what this subject's pulse rate will be. The pulse rate could be elevated, or depressed, or within the DRE average ranges. This subject's pulse rate will depend on many factors, including:

- How much of each drug was taken
- How and when each drug was taken
- How tolerant the subject is of each drug.

Blood Pressure

Ask participants: "What are we likely to find when we check this subject's blood pressure?"

A Dissociative Anesthetic usually elevates blood pressure; a Narcotic Analgesic usually lowers blood pressure. This is another Antagonistic Effect. We can't predict what the blood pressure will be. It could be above DRE average ranges, below DRE average ranges, or within the DRE average ranges.



Temperature

Ask participants: "What are we likely to find when we check this subject's temperature?"

A Dissociative Anesthetic usually elevates temperature; a Narcotic Analgesic usually lowers it. This, too, is an Antagonistic Effect. The temperature could be elevated (up), or depressed (down) or within the DRE average range.

Point out the combination of a Dissociative Anesthetic and Narcotic Analgesics produce Antagonistic Effects on all three vital signs.

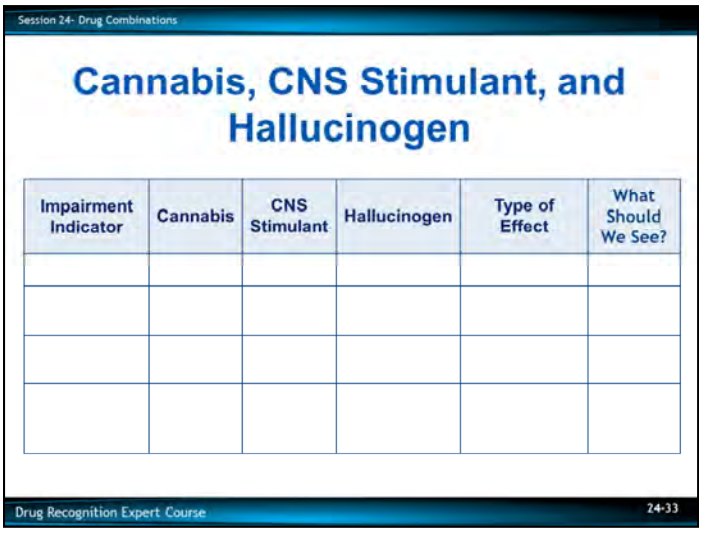
Point out the term "Normal" refers to the DRE average range for body temperature which is 98 degrees plus or minus 1 degree.

Muscle Tone

Ask the participants: What are we likely to find when we check this subject's muscle tone?

A Dissociative Anesthetic usually causes rigid muscle tone. A Narcotic Analgesic usually causes flaccid muscle tone. This could be an Antagonistic Effect. Muscle tone could be normal, rigid, or flaccid.

Solicit participants' comments and questions about the combination of a Dissociative Anesthetic and a Narcotic Analgesic.



Cannabis, CNS Stimulant, and Hallucinogens
Another specific example: consider a person under the influence of Cannabis, a CNS Stimulant, and a Hallucinogen.

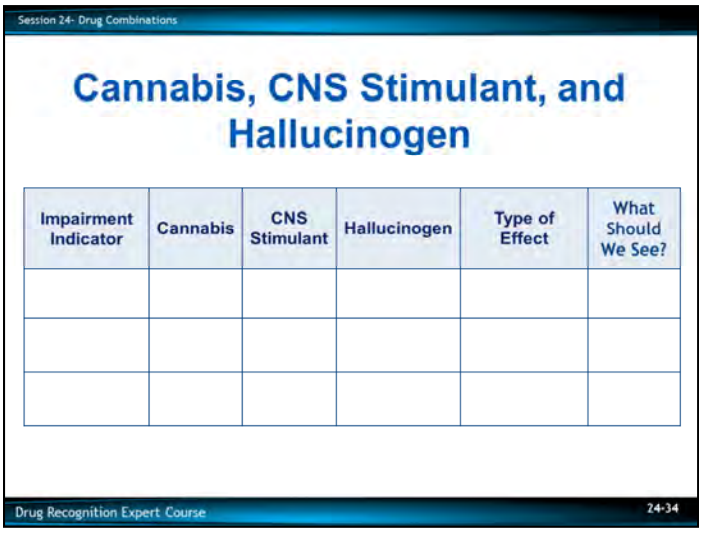
HGN
None of the three categories causes HGN. This is an example of the Null Effect.

VGN
None of the three drug categories cause VGN, another example of the Null Effect.

LOC
Cannabis causes a LOC while CNS Stimulants and Hallucinogens do not. This is an example of an Overlapping Effect and LOC should be present.

Pupil Size
Cannabis usually dilates pupils. CNS Stimulants and Hallucinogens also dilate the pupils. This is an example of an Additive or Overlapping Effect.
Ask participants: What effect will take place and the result.

The pupils should be dilated.
Remind participants the term "Normal" refers to pupil sizes within the DRE average ranges or "expected ranges" for a healthy, non-impaired person.



Reaction to Light
Cannabis does not effect the Reaction to Light. CNS Stimulants will slow down the reaction. Most Hallucinogens, with some exceptions, will cause a normal Reaction to Light. This is an example of either an Overlapping or Additive Effect.
Ask participants: What effect would take place and the result.

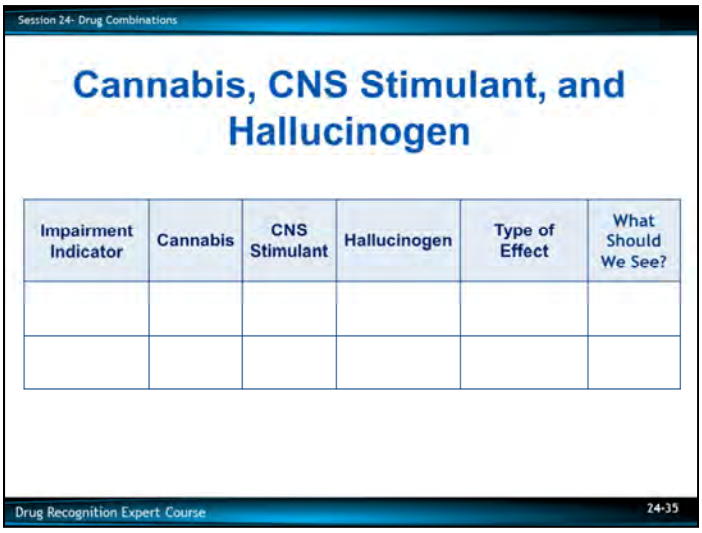
We could probably see a slow Reaction to Light.
Remind participants certain psychedelic amphetamines may cause a slowed reaction to light. (Exception #3)

Pulse Rate
Cannabis will normally elevate the pulse rate as will CNS Stimulants and Hallucinogens. This is an example of an Additive Effect.
Ask participants: What effect would take place and the result.

The result would be an elevated pulse rate.

Blood Pressure
All three drug categories will elevate blood pressure.
This is an example of an Additive Effect.
Ask participants: What effect would take place and the result.

Blood pressure should be elevated with this combination.

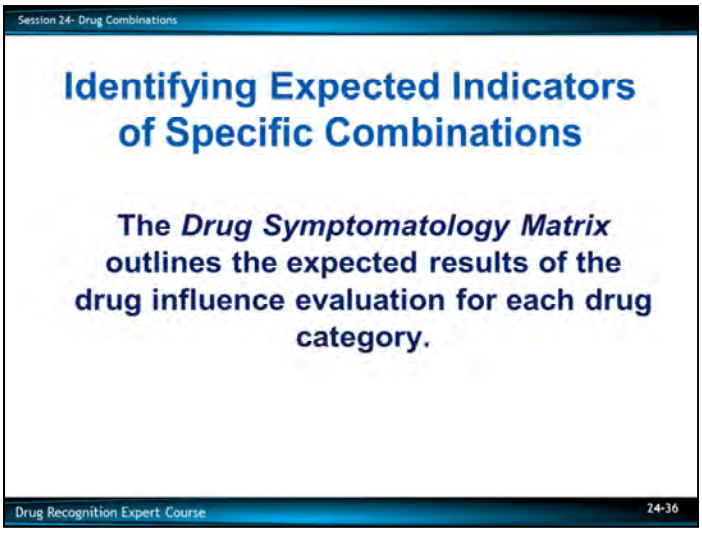


Body Temperature
Cannabis usually causes a body temperature in the average range. CNS Stimulants and Hallucinogens elevate body temperature. This would be an example of an Additive or Overlapping Effect.
Ask participants: What effect would take place and the result.

The body temperature should be elevated with this combination.

Muscle Tone
Cannabis causes a normal muscle tone, while CNS Stimulants and Hallucinogens will cause rigid muscle tone. This would be an example of an Additive or an Overlapping Effect.
Ask participants: What effect would take place and the effect.

The muscle tone should be rigid with this combination.



C. <u>Identifying Expected Indicators of Specific Combinations</u>

Direct the participants' attention to the Cumulative Drug Symptomatology Matrix found in their Participant Manual. A copy also appears for your reference in your Instructor Guide.

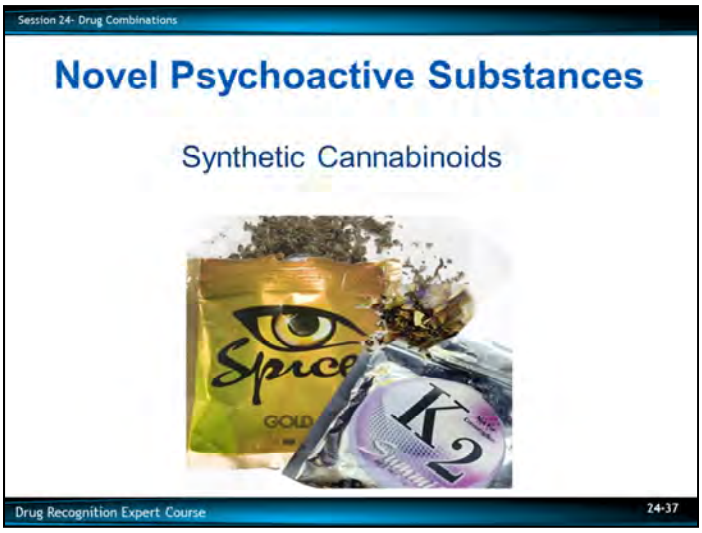
Drug Symptomatology Matrix

The Matrix outlines the expected results of the drug influence evaluation for each drug category.

We will refer to the Matrix to help us interpret what we are likely to see when we examine drug combinations.

Remind participants we "never say never" and we "always avoid saying always" when it comes to signs and symptoms of drugs. The Matrix summarizes what we usually see but doesn't guarantee we will always see exactly that, or every indicator.

Show the video of subjects under the influence of specific drug combinations. Point out the Null, Overlapping, Additive, and Antagonistic Effects exhibited by the subjects.



D. <u>Novel Psychoactive Substances</u>

The ever-increasing number of Novel Psychoactive Substances (NPS) emerging and the parallel changes in drug scenarios represent a challenge for DREs. NPS include Synthetic Cannabinoids, Cathinone Derivatives, Psychedelic Phenethylamines, novel Stimulants, Synthetic Opioids, Tryptamine Derivatives, and many more.

Users are typically attracted by these substances due to their intense psychoactive effects and likely lack of detection in routine drug screenings. These drugs act on a range of neurotransmitter receptors including Dopamine, Cannabinoid, and Opioid receptors.

Examples of Novel Psychoactive Substances:

- Synthetic Cannabinoids – Generally dried plant base sprayed with a mixture of synthetic Cannabimimetics compounds
  - Within any given package, there may be a range of different psychoactive compounds
  - Batches of the same brand may also possess highly variable concentrations
  - The popularity of these drugs in recent years has been driven by the lack of legal restrictions in many States
  - Hundreds of different Synthetic Cannabinoids have been synthesized with effects sometimes over 100 times greater than THC – leading to drastically varying effects
  - Examples of Synthetic Cannabinoids include JWH-018, JWH-133, and HU-210 and are sold under product names such as Spice, K-2, Kronic, and others

Note: A "Cannabimimetic compound" is a substance that has similar pharmacological effects to Cannabis.

Drugs such as JWH-018, JWH-133, and HU-210 are named based upon the researcher or the research facility. The "JWH" compounds were identified by John W. Huffman and "HU" compounds were researched at Hebrew University.

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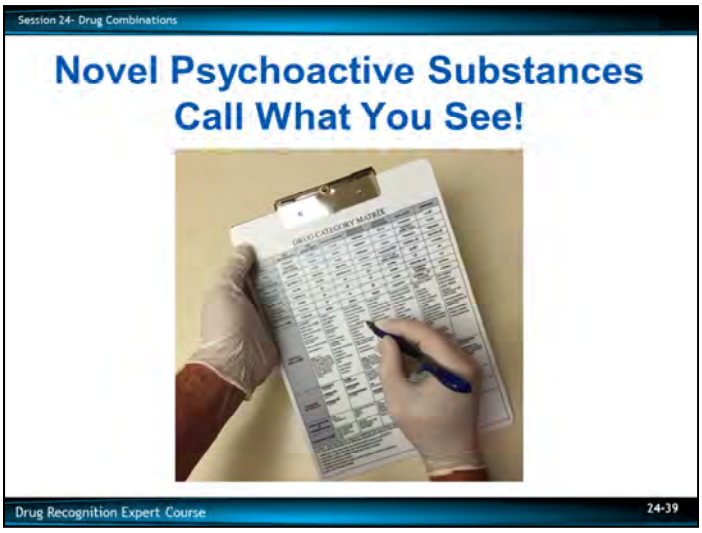
- Synthetic Cathinones – Structurally similar to amphetamines/catecholamines and chemically related to cathinone, with subtle variations that alter their chemical properties, potency, pharmacokinetics and pharmacodynamics
  - Their popularity was driven by the lack of legal restrictions and difficulties detecting the drug in routine drug screens
  - Each Synthetic Cathinone has variable effects and potency levels
  - Examples of Synthetic Cathinones include MDPV, Methcathinone, Mephedrone, and Methylone

- Novel Stimulants – Include substances similar to Amphetamine-type stimulants, Methamphetamine analogs, and Cocaine substitutes
  - Stimulants prevent the transport of dopamine or they can induce or enhance the release of Serotonin
  - Examples of Novel Stimulants include “Bath Salts,” “Flakka,” “Cloud Nine,” and others

- Synthetic Opioids – Share with Morphine most of their clinical pharmacological effects, including analgesia, sedation, euphoria and risk of respiratory depression
  - Examples of Synthetic Opioids include U-47700, AH-7921, AND THE Fentanyl analogues

- Novel Tryptamine Derivatives – Can cause visual hallucinations, alterations in sensory perception, distortion of body image, depersonalization, anxiety, and panic
  - Examples of tryptamine Derivatives are 4-HO-MET, 5-MeO-DET, AND NMT



Calling the Category or Categories

NPS may appear to a DRE similar to a polycategory case, though the effects in this case are actually only caused by the NPS drug. “Polycategory” refers to ingesting drugs from two or more drug categories simultaneously. DREs are reminded that their opinion should be based upon the evidence they collect during the evaluation, and there will be occasions when the symptomatology of NPS impairment could mimic multiple drug categories. If the DRE observes impairment that appears as multiple drug categories, he/she should include the relevant drug categories in their opinion.

For example, *Spice* is considered to be a synthetic cannabinoid. The unique drug effects of some synthetic cannabinoids may include symptomatology associated with more than one category of drugs. Likewise, Synthetic Cathinones are considered to be a CNS Stimulant, yet the variations in the chemicals may similarly cause a user to exhibit the signs of multiple drug categories. Although NPS drugs are presented within the category the drug was intended to mimic, it is possible the indicators observed by a DRE may not always fit within that category. A DRE should render an opinion based upon the unique evidence observed during the drug influence evaluation, and, if the observations are consistent with more than one drug category, should include them in the final opinion. A DRE should call the category(ies) based upon the indicators exhibited. For example, if a DRE opines Hallucinogens, and is clearly able to articulate the observed signs and symptoms of this category, then the DRE should call Hallucinogens. Toxicology may fail to confirm the presence of Hallucinogens; however, the DRE should be able to articulate the basis for opining Hallucinogens. Remember: toxicology <u>supports</u> the DRE's opinion, it does not <u>confirm</u> it.

Encourage participants to “call what you see” during the evaluation. NPS drugs can be considered correct opinions in more than one DRE drug category.

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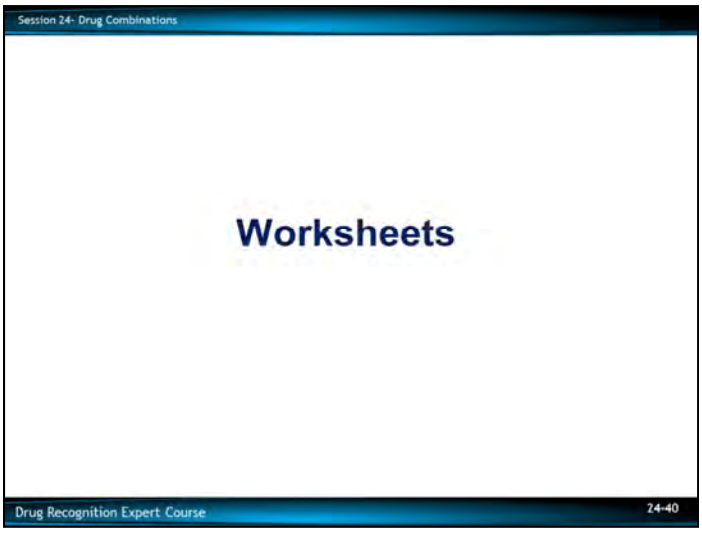


Worksheet Exercises

Assign participants to work in three-member teams. Direct participants' attention to the three worksheets located at the end of Session 24 in their Participant Manual.

Instruct the teams they have only 15 minutes to fill out all three worksheets (5 minutes per worksheet).

Worksheet #1: Dissociative Anesthetic and a Hallucinogen

Worksheet #2: Cannabis and CNS Depressant

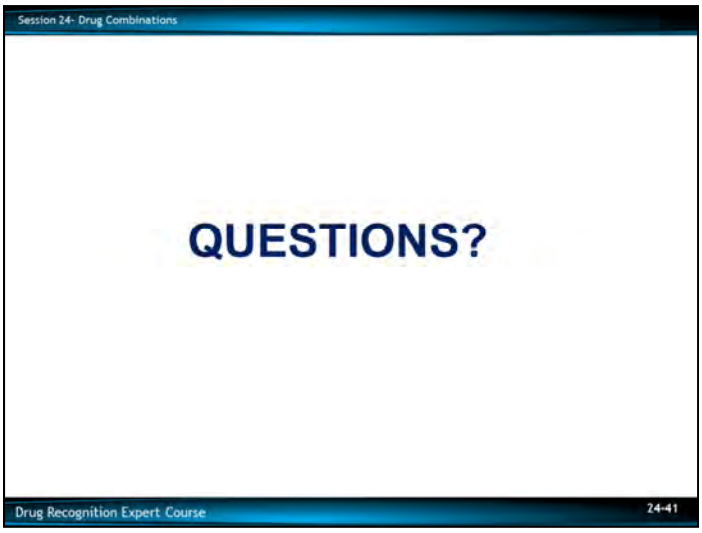
Worksheet #3: CNS Depressant and CNS Stimulant

Solicit participants' questions about this assignment.

Tell the teams to start working. Terminate their work after 15 minutes.

Discussion of Worksheets

For each worksheet, select a team member to lead the discussion. Critique and correct the participants' analyses of the drug combinations, as appropriate.



Solicit participants' comments and questions about Drug Combinations.

Specific Examples of Drug Combinations: An Exercise for the Student

On the final five pages of this session, you will find examples of specific drug combinations. The expected results for the first two of these combinations (Cannabis and Stimulants, and Dissociative Anesthetic and Narcotic Analgesic) have been worked out for you. Study those examples, then complete the work sheets for the three remaining combinations.

CANNABIS AND CNS STIMULANT
IN COMBINATION

Impairment Indicator	Effect Due to Cannabis	Effect Due to CNS Stimulant	Type of Combined Effect	What Will We See
Vertical Gaze Nystagmus	None	None	Null	None
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Dilated Or Normal	Dilated	Overlapping Or Additive	Dilated
Reaction to Light	Normal	Slow	Overlapping	Slow
Pulse Rate	Up	Up	Additive	Up
Blood Pressure	Up	Up	Additive	Up
Body Temperature	Normal	Up	Overlapping	Up
Muscle Tone	Normal	Rigid	Overlapping	Rigid

DISSOCIATIVE ANESTHETIC AND NARCOTIC ANALGESIC IN COMBINATION

Impairment Indicator	Effect Due to Phencyclidine	Effect Due to Heroin	Type of Combined Effect	What Will We See
Horizontal Gaze Nystagmus	Present	None	Overlapping	Present
Vertical Gaze Nystagmus	Present	None	Overlapping	Present
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Normal	Constricted	Overlapping	Constricted
Reaction to Light	Normal	Little Or None Visible	Overlapping	Little Or None Visible
Pulse Rate	Up	Down	Antagonistic	Down/Normal/Up
Blood Pressure	Up	Down	Antagonistic	Down/Normal/Up
Body Temperature	Up	Down	Antagonistic	Down/Normal/Up
Muscle Tone	Rigid	Flaccid	Antagonistic	Rigid/Flaccid/ Normal

WORKSHEET #1
INSTRUCTOR: KETAMINE AND LSD

Impairment Indicator	Effect Due to Dissociative Anesthetics	Effect Due to Hallucinogen (Hall)	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #2

INSTRUCTOR: CANNABIS AND CNS DEPRESSANT

Impairment Indicator	Effect Due to Cannabis	Effect Due to CNS Depressant	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #3

INSTRUCTOR: CNS STIMULANT AND CNS DEPRESSANT

Impairment Indicator	Effect Due to CNS Stimulant	Effect Due to CNS Depressant	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

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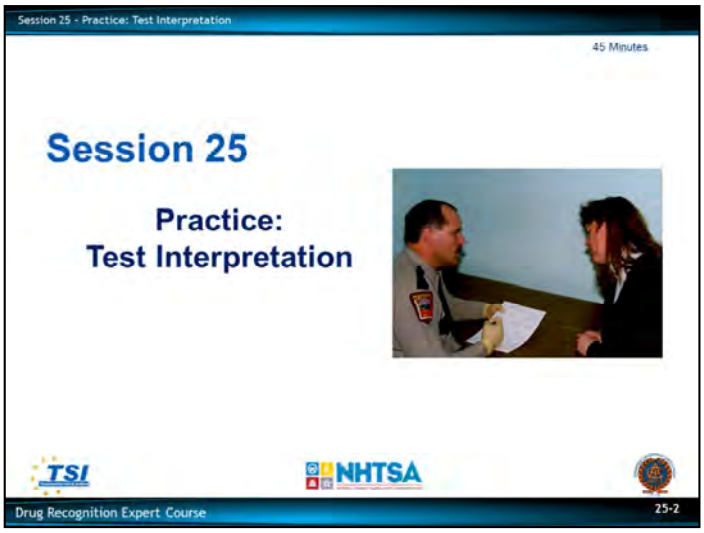
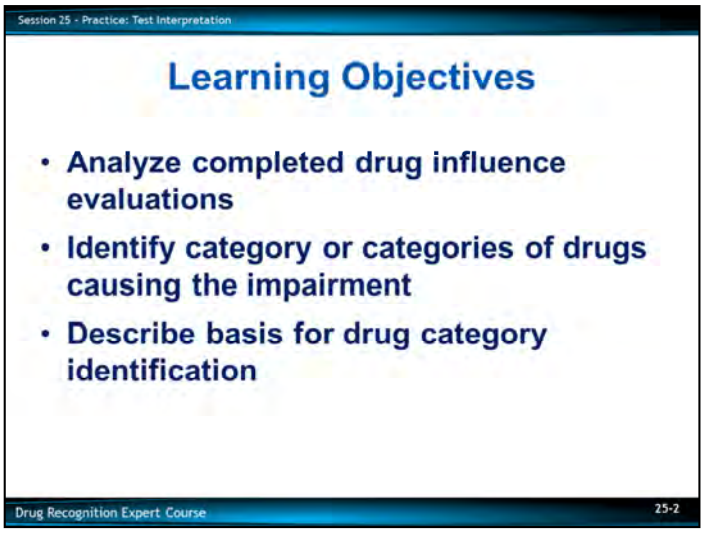

Session 25 - Practice: Test Interpretation
45 Minutes
Session 25
Practice:
Test Interpretation
TSI
NHTSA
Drug Recognition Expert Course
25-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the student will be able to:

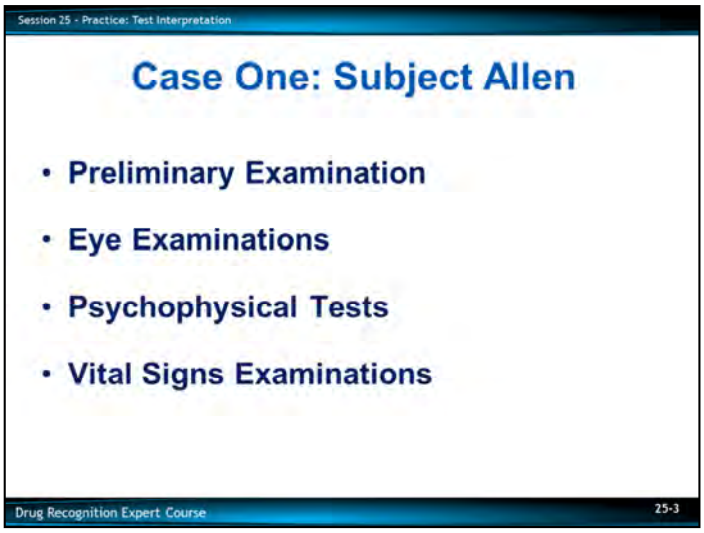
- Analyze completed drug influence evaluations
- Identify the category or categories of drugs causing the impairment
- Describe the basis for the drug category identification

CONTENT SEGMENTS

A. Interpretation Demonstrations
B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small Group Practice
Participant-Led Presentations



A. <u>Interpretation Demonstrations</u>

Case One: Subject Allen

Preliminary Examination

Review the results of the Preliminary Examination of Subject Allen.
Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis for participants' responses.

Eye Examinations

Review the results of the Eye Examinations of Subject Allen.
Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

Psychophysical Tests

Review the results of the Psychophysical Tests of Subject Allen.
Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

Vital Signs Examinations

Review the results of the Vital Signs Examinations of Subject Allen.
Ask participants to discuss the category or categories of drugs that would produce these results.

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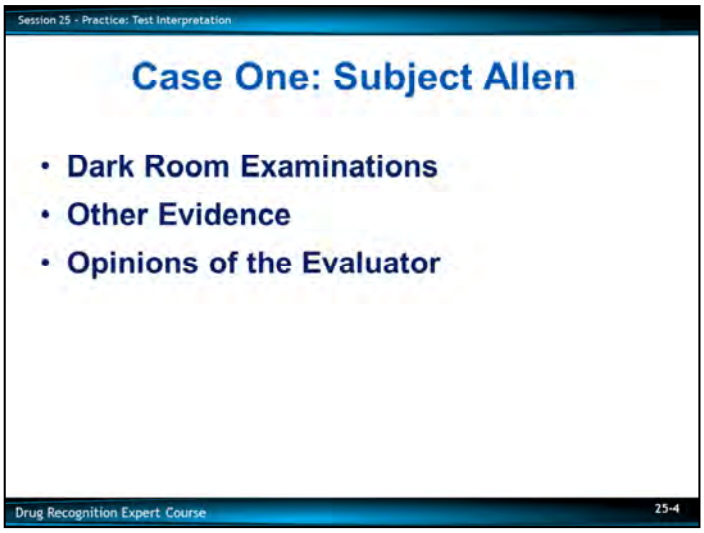


Dark Room Examinations

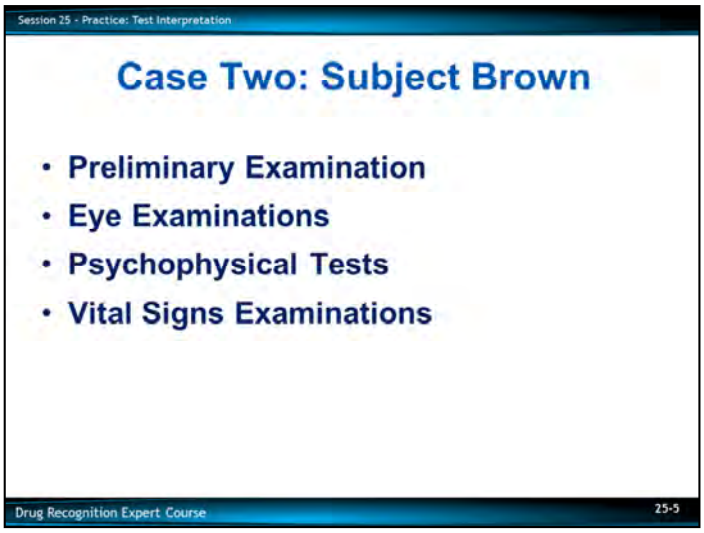
Review the results of the Dark Room Examinations of Subject Allen.
Ask participants to discuss the category or categories of drugs that would produce these results.

Other Evidence

Review the results of the examinations for injection sites and muscle tone and of the final interview of Subject Allen.
Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.

Opinions of Evaluator

Point out the evidence indicates Subject Allen is under the influence of Cannabis.
Solicit participants' questions concerning this demonstration.



Case Two: Subject Brown

Preliminary Examination

Review the results of the Preliminary Examination of Subject Brown.
Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis for participants' responses.

Eye Examinations

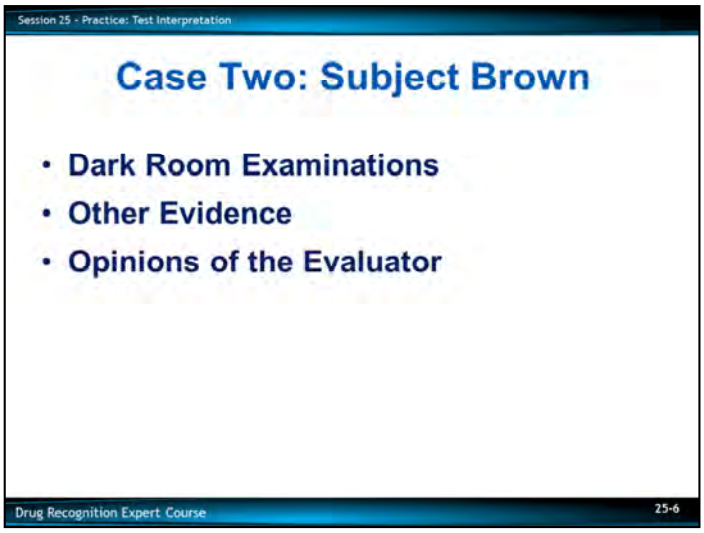
Review the results of the Eye Examinations of Subject Brown.
Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

Psychophysical Tests

Review the results of the Psychophysical Tests of Subject Brown.
Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

Vital Signs Examinations

Review the results of the Vital Signs Examinations of Subject Brown.
Ask participants to discuss the category or categories of drugs that would produce these results.



Dark Room Examinations

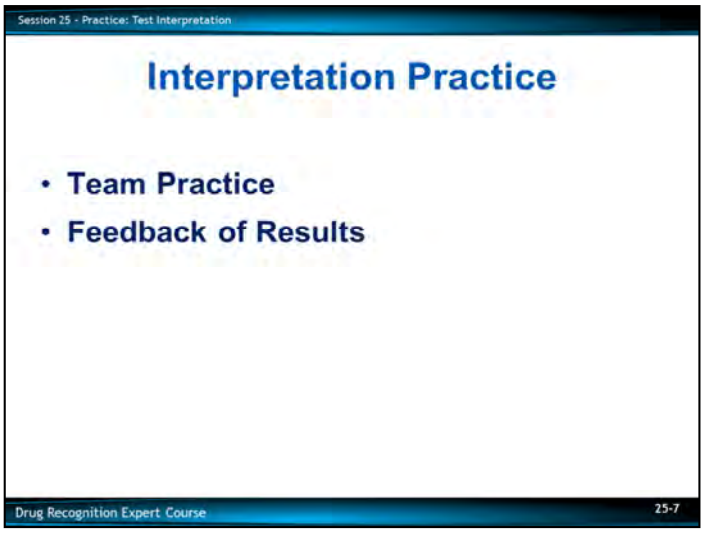
Review the results of the Dark Room Examinations of Subject Brown.
Ask participants to discuss the category or categories of drugs that would produce these results.

Other Evidence

Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Brown.
Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.

Opinions of Evaluator

Point out the evidence indicates Subject Brown is under the influence of Dissociative Anesthetic and Cannabis.
Solicit participants' questions concerning this demonstration.



B. <u>Interpretation Practice</u>

Team Practice

Assign participants to work in teams of 3 or 4 members.
Review and discussion of exemplars by teams.
Tell teams they are to review three exemplars (Subjects Cole, Davis, and Elliott). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, if any.
Teams will present their conclusions to the entire class.
Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.

Feedback of Results

Poll teams to determine their conclusions concerning the category or categories of drugs present in each subject.

- ***Subject Cole (Inhalant)***
- ***Subject Davis (Narcotic Analgesic)***
- ***Subject Elliott (Medical Impairment)***

Session Wrap-Up

Offer appropriate comments concerning the teams' performance.

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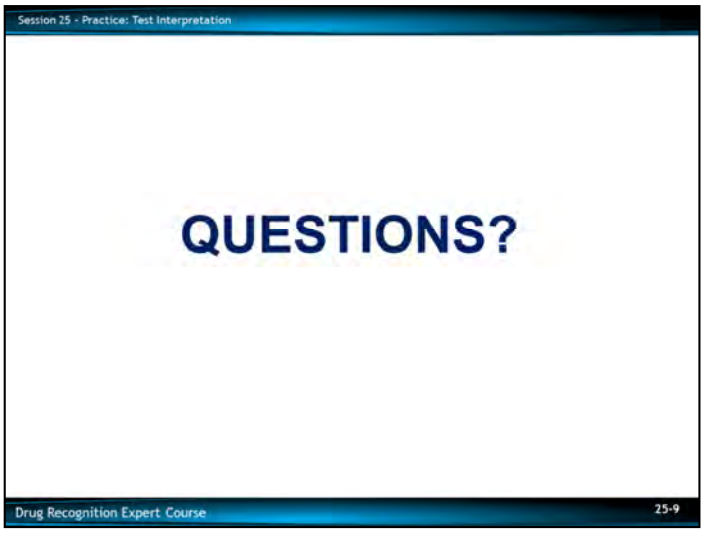


Solicit participants' comments and questions concerning this Practice Session.

DRUG INFLUENCE EVALUATION

Evaluator: Trooper Aaron Turcotte	DRE #: 12459	Rolling Log #: 17-03-077	Evaluator's Agency: Maine State Police	Case# 17-8890 Session XXV - #1 IG
Recorder/Witness: Tom Regan, Maine LEL	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Bangor Police Department	
Arrestee's Name (Last, First, Middle): Allen, Thomas G.	Date of Birth: 09/03/88	Sex: x	Race: W	Arresting Officer (Name, ID#): Officer Steve Pelletier #12459
Date Examined / Time /Location: 04/20/17 2140 Bangor PD	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 878400	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given Given by: Ofc. Pelletier	☒ Yes ☐ No	What have you eaten today? Cold cereal & chips	When? Around noon	What have you been drinking? Water	How much? N/A
Time of last drink? N/A					

Time now/ Actual "About 8 pm" 2145	When did you last sleep? This morning	How long? 5 hours	Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No			

Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☒ Yes ☐ No Sore right wrist	Are you under the care of a doctor or dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No (Long pause before answering)	Attitude: Cooperative	Coordination: Poor
Speech: Slow, Thick, Slurred at times	Breath odor: Normal	Face: Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☒ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal	
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus: ☐ Yes ☒ No	Vertical Nystagmus: ☐ Yes ☒ No	Able to follow stimulus: ☒ Yes ☐ No	Eyelids: ☐ Normal ☒ Droopy

Pulse/Time		HGN	Left Eye	Right Eye
1. 102	2148	Lack of Smooth	None	None
2. 100	2202	Maximum Deviation	None	None
3. 100	2220	Angle of Onset	None	None

Convergence

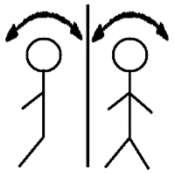
Right eye Left eye

26/30

One Leg Stand 24/30

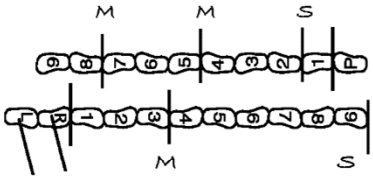
Modified Romberg Balance

Approx. 2" 2" Approx. 2" 2"



Circular Sway. Eyelid tremors

Walk and Turn Test



Leg tremors throughout the test.

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓	✓
Misses heel-toe	✓	✓✓
Steps off line		
Uses arms	✓✓	✓✓✓
Actual steps taken	9	9

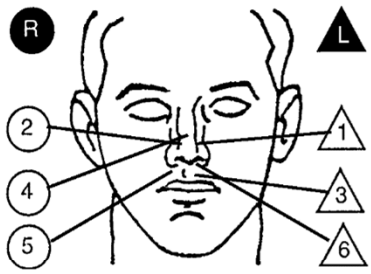
L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Leg tremors

Time Estimation 38 estimated as 30 seconds	Describe turn: Slow, walking turn	Cannot do test (explain): N/A	Type of footwear: Lace-up work boots

Finger to Nose

(Draw lines to spots touched)



Slow movements. Eyelid tremors.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	9.0	6.0 – 8.0
Right Eye	6.0	9.0	6.0 – 8.0

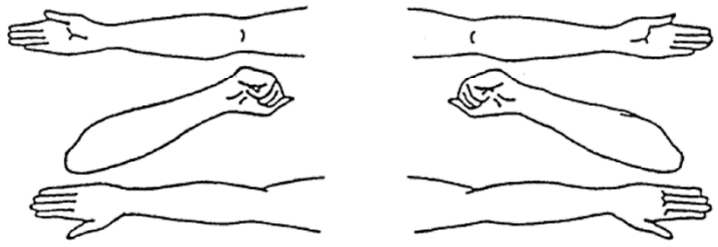
Nasal area: Clear

Oral cavity: Brownish-green coating

Rebound Dilation: ☒ Yes ☐ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure: 160 / 90	Temperature: 98.4 °F
Muscle Tone: ☒ Near Normal ☐ Flaccid ☐ Rigid	Comments:

What drugs or medications have you been using? "Just some vitamins."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: 04/20/17 2050	Time DRE was notified: 2122	Evaluation start time: 2140	Evaluation completion time: 2235	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

DRE/Officer's Signature: Aaron Turcotte	Reviewed/approved by / date:	DRE# 12459

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant	
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☒ Cannabis	

Revised 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Allen, Thomas G.

1. **Location:** The evaluation was conducted in the Interview Room at the Bangor Police Department. The room had adequate lighting with a tile floor with no obstructions. The darkroom examination was conducted in an adjacent interview room.

2. **Witnesses:** Tom Reagan, a Maine LEL and former DRE instructor witnessed the entire evaluation.

3. **Breath Alcohol Test:** Arresting officer, Steve Pelletier of the Bangor Police Department administered a breath test to the suspect at 2112 hours resulting in a 0.00% BAC.

4. **Notification and Interview of the Arresting Officer:** At approximately 2122 hours I was contacted by dispatch requesting a drug influence evaluation at the Bangor Police Department. I met Officer Pelletier at the PD where I was advised that he had arrested the suspect for DUI after observing his vehicle being operated without headlights and drifting over the center divider line on State Street. Upon contacting the driver, Officer Pelletier observed that he was disoriented and had slow, lethargic movements. When he exited his vehicle, he had poor balance and coordination, and appeared to be disoriented. Officer Pelletier administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests to the suspect. No clues of HGN were observed, but four clues were observed on the W&T test, and two clues were observed on the OLS test. No odor of an alcoholic beverage was detected on the suspect's breath. However, Officer Pelletier did notice that the suspect had bloodshot and watery eyes, and that his pupils were dilated. After obtaining a .00 BAC, Officer Pelletier requested the assistance of a DRE.

5. **Initial Observations of the Suspect:** I first observed the suspect in the Interview Room at the Bangor PD. He seemed disinterested and unconcerned about his arrest. When he stood, he was unstable on his feet and appeared disoriented. His speech was slow and thick. His eyes were bloodshot and watery, and his pupils appeared to be dilated. Numerous times he asked Officer Pelletier why he had been arrested, and what he was being charged with. I contacted the suspect and introduced myself and asked if he would complete a drug influence evaluation, which he agreed to do. I noted that he was wearing long green pants, a long sleeve blue sweatshirt, and brown laced-up boots.

6. **Medical Problems and Treatment:** The suspect advised that he had a sore wrist from some yard work he had done about 2 or 3 weeks ago. When questioned about the injury, he advised that he did not require medical assistance and that it would not affect his ability to do the drug evaluation. No other medical conditions were mentioned by the suspect and none were observed.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: During this test, the suspect exhibited an approximate two-inch circular sway. He also had slowed time estimation, estimating the passage of 30 seconds in 38 seconds. When asked how he had estimated the 30 seconds, the suspect stated, "I was counting, but I forgot what number I was on." Eyelid tremors were present throughout the test.

   Walk and Turn: During this test, the suspect lost his balance twice during the instructions stage, missed touching heel to toe once on the first nine steps and twice on the second nine steps. He also raised his arms for balance twice on first nine steps and three times on the second nine steps. He made an improper turn by walking around slowly, instead of the turn he was instructed to do. Leg tremors were present.

One Leg Stand: Per DRE protocol, this test was conducted twice, once standing on the left foot and once standing on the right foot. When standing on his left foot and raising his right foot, the suspect swayed while balancing, used his arms to balance, and put his foot down once at 1,009. While standing on his right foot and raising his left foot, he again swayed while balancing, used his arms to balance and put his foot down at 1,008 and 1,017. Leg tremors were observed throughout the test. The suspect's counting was slow on each of the tests.

Finger to Nose: During this test, the suspect's arm and hand movements towards his nose were slow and deliberate. He did not touch the tip of his nose with the tip of his index finger as instructed on all six attempts. Eyelid tremors were present throughout the test.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The eye examinations were conducted in one of the BPD interview rooms which could be darkened for the examinations. No clues of HGN were present. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 6.0 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. In Direct Light, rebound dilation was present with his pupils ranging from 6.0 mm to 8.0 mm in both eyes. A lack of convergence was also present in both eyes. The suspect's eyes were watery and bloodshot.

   Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were 102, 100 and 100 beats per minute (bpm). All three results were above the DRE average range. The suspect's blood pressure was checked at 160/90, which is also above the DRE average range. His body temperature was 98.4 degrees, which was within the DRE average range. The suspect was asked about his elevated pulse rates and blood pressure. He indicated he was not aware why they would be elevated. He also indicated that he did not have a history of high blood pressure.

9. **Signs of Ingestion:** The suspect's nasal area was clear. However, he did have a brownish-green coating on the back of his tongue, which can be an indicator of someone who has recently smoked marijuana. When questioned about the coating on his tongue, the suspect had no explanation. No indicators of injection sites were located on the suspect's arms and hands.

10. **Suspect's Statements:** The suspect denied using any drugs. When asked about possible drug use, the suspect stated, "Just some vitamins." A no time during the evaluation did the suspect indicate he had used drugs. Additional questions about drug use were ignored by the suspect.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of ***Cannabis*** and is unable to operate a vehicle safely.

12. **Toxicological Sample:** After completing the drug influence evaluation, the suspect was transported to the Saint Joseph Hospital where a blood sample was collected from the suspect at 2150 hours.

13. **Miscellaneous:** Refer to Officer Pelletier's arrest report for additional details.

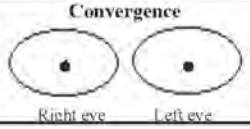
DRUG INFLUENCE EVALUATION

Evaluator: Sgt. Matt Shapiro — New Hampshire SP	DRE #: 5754	Rolling Log #: 17-08-045	Evaluator's Agency: New Hampshire SP	Case# 233453 Session XXV - #2 IG
Recorder/Witness: Trooper Marc Beaudoin — NH SP	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Bedford PD	
Arrestee's Name (Last, First, Middle): Brown, Jerome A.	Date of Birth: 04/06/87	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Jessica Humphrey #16387
Date Examined / Time /Location: 08/08/17 2218 Bedford PD	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 8901	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Officer Humphrey	☒ Yes ☐ No	What have you eaten today? When? No response	What have you been drinking? How much? No response	Time of last drink? N/A
Time now/ Actual: "It's dark" 2215	When did you last sleep? How long? "Not sure"	Are you sick or injured? ☐ Yes ☐ No No response	Are you diabetic or epileptic? ☐ Yes ☒ No	
Do you take insulin? ☐ Yes ☐ No "I'm not sick"	Do you have any physical defects? ☐ Yes ☐ No No response	Are you under the care of a doctor or dentist? ☐ Yes ☐ No No response		
Are you taking any medication or drugs? ☐ Yes ☒ No Answered "No" very slowly	Attitude: Passive, Cooperative	Coordination: Poor, Staggering		
Speech: Non-responsive at times, Slow	Breath odor: Rancid	Face: Blank stare, Sweaty		
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal	
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

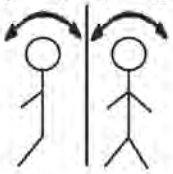
Pulse/Time		HGN	Left Eye	Right Eye
1.	110 / 2226	Lack of Smooth Pursuit	Present	Present
2.	112 / 2238	Maximum Deviation	Present	Present
3.	112 / 2250	Angle of Onset	30	30

Convergence



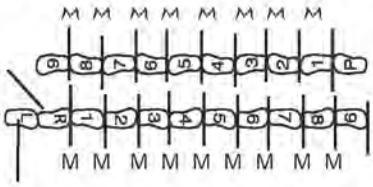
Modified Romberg Balance

Approx 0" 0" 2" 2"



Rigid. Eyelid tremors

Walk and Turn Test



Slow, rigid movements throughout

		1st Nine	2nd Nine
Cannot keep balance	✓✓		
Starts too soon			
Stops walking			
Misses heel-toe		(All)	(All)
Steps off line			
Uses arms		(All)	(All)
Actual steps taken		9	9

/30 **One Leg Stand** /30

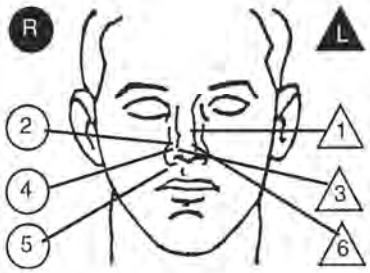
L	R	
✓	✓	Sways while balancing
✓	✓	Uses arms to balance
		Hopping
✓	✓✓	Puts foot down

Test stopped for safety reasons

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
55 estimated as 30 seconds	Slow movements	N/A	Lace-up running shoes

Finger to Nose

(Draw lines to spots touched)



Slow, rigid movements. Eyelid tremors.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	7.5	6.0 – 7.5
Right Eye	5.0	7.5	6.0 – 7.5

Nasal area: Clear

Oral cavity: Green coating on tongue

Rebound Dilation: ☒ Yes ☐ No

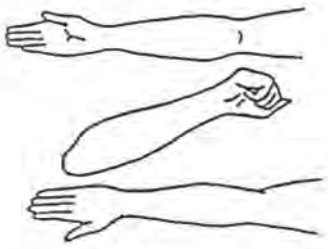
Reaction to Light: Normal

Blood Pressure	Temperature
168 /110	99.8 °F

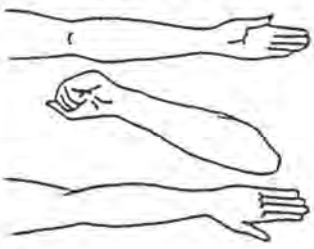
Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

RIGHT ARM



LEFT ARM



Nothing observed

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
No response	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	
08/08/17 2100	2152	2215	2310	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

DRE/Officer's Signature: Matt Shapiro — Reviewed/approved by / date: — DRE# 5754

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☒ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☒ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Brown, Jerome A.

1. **Location:** The evaluation was conducted in Bedford Police Department Interview Room. The room is well illuminated and has a short pile carpeting with no obstructions. The darkroom examinations were conducted in a separate interview room adjacent to the main interview room.

2. **Witnesses:** Trooper Beaudoin of the New Hampshire State Police witnessed and recorded the evaluation.

3. **Breath Alcohol Test:** The arresting officer, Officer Humphrey of Bedford Police Department administered a breath test to the suspect at 2137 hours obtaining a 0.00% BAC result.

4. **Notification and Interview of the Arresting Officer:** On 08/08/17 at approximately 2152 hours I was contacted by Officer Humphrey requesting a drug influence evaluation at the Bedford Police Department. Upon my arrival, I met Trooper Beaudoin and Officer Humphrey where it was determined that the suspect had nearly hit a Bedford PD officer while on a traffic stop on 6th Street. The suspect was later observed parked in the Burger Shack parking lot. When contacted by Officer Humphrey, the suspect appeared dazed and confused. He was also non-responsive, had a blank stare, and was sweating profusely. It was determined that he had driven to his location. When asked for his operator's license, vehicle registration and proof of insurance, he handed Officer Humphrey a traffic ticket he had received several weeks prior for disobeying a stop sign. Officer Humphrey suspected the driver was under the influence and requested that he perform SFSTs. According to Officer Humphrey, the suspect had difficulty understanding the instructions and completing the tests as instructed. However, six clues of Horizontal Gaze Nystagmus (HGN) and Vertical Gaze Nystagmus (VGN) were observed. The suspect's balance and coordination were so poor, the Walk and Turn (W&T) and One Leg Stand (OLS) tests had to be stopped for safety purposes. The suspect was subsequently arrested for DUI and transported to the PD for processing. After obtaining a .00 BAC, a DRE was requested to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the main Interview Room at BPD. He was looking straight ahead with a blank stare. When asked questions, he responded slowly, and at times did not respond at all. His speech was slow and thick, and several times he repeated his responses. He was unstable on his feet and when he stood, he would stagger, and several times nearly fell. The suspect was perspiring heavily. I also noted that his eyes were bloodshot. I introduced myself to the suspect and asked if he would participate in a drug evaluation. The suspect was slow to respond and then stated, "Okay." I noted that he was wearing jeans with holes in both knees, a dirty white tee-shirt and lace-up athletic running shoes.

6. **Medical Problems and Treatment:** When asked about any medical conditions he may be suffering from, the suspect was once again slow to respond and I had to repeat the question several times. He then stated, "I'm not sick." I asked if there was anything that would prevent him from participating in the drug influence evaluation, the suspect stated, "No, I'm not sick." The suspect did not report any medical conditions during the evaluation and none were observed.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: The suspect had an approximate two-inch side to side sway and had a slow time estimation, estimating the passage of 30 seconds in 55 seconds. He was also rigid throughout the test, and eyelid tremors were present.

Walk & Turn: The suspect lost his balance twice during the instructions stage. Once he began the walking stage, he walked slowly with rigid movements. He also missed touching heel to toe on every step on both the first nine steps and the second nine steps. He also raised his arms for balance during the entire test. His turn was slow and deliberate, but was made as instructed.

One Leg Stand: The suspect lost his balance while attempting this test. He nearly fell when trying to stand on his left foot, putting his foot down at 1,002. While attempting to stand on his right foot, he immediately put his foot down at 1,001 and 1,002, and the test was stopped for safety reasons.

Finger to Nose: On this test, the suspect missed the tip of his nose with the tip of his index finger as directed on all six attempts. He also kept his finger in contact with his face on each attempt and had to be reminded to put his arm back at this side. His arm movements were slow and rigid. Eyelid tremors were observed throughout the test.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The eye examinations were conducted in the BPD interview room which can be adequately darkened for the examination process. Six clues of HGN were present, with a 30-degree angle of onset. VGN was also present. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 5.0 mm in both eyes in Room Light and 8.0 mm in both eyes in Near Total Darkness. Rebound dilation was present in Direct Light with his pupils ranging from 6.0 mm to 7.5 mm in both eyes. The suspect was unable to convergence his eyes and looked straight ahead during the test.

   Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were at 110, 112 and 112 beats per minute. All three results were above the DRE average range. The suspect's blood pressure was checked at 168/110, which is also above the DRE average range. His body temperature was 99.8 degrees, which is also above the DRE average range. The suspect was questioned about his elevated pulse rates and blood pressure and he indicated he was not aware of why they would be elevated. The suspect's muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal area was clear and his breath was rancid smelling. He had a greenish coating on the back of his tongue, which can be an indicator of someone who has recently smoked marijuana. When questioned about the green coating, he had no explanation. No indicators of injection sites were located on the suspect's arms and hands.

10. **Suspect's Statements:** The suspect did not respond when asked about drug use.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert the suspect is under the influence of a **Dissociative Anesthetic and Cannabis** and is unable to operate a vehicle safely.

12. **Toxicological Sample:** After completing the evaluation, the suspect was requested to provide a urine sample. The sample was collected at 2303 hours and was placed into evidence pending delivery to the state laboratory for analysis.

13. **Miscellaneous:** The suspect was also booked on an arrest warrant for Possession of a Dangerous Drug.

DRUG INFLUENCE EVALUATION

Evaluator: Officer Cullen Kau — Honolulu PD	DRE #: 5992	Rolling Log #: 17-05-61	Evaluator's Agency: Honolulu PD	Case# 17-70785 Session XXV - #3
Recorder/Witness: Lt. Ben Moszkowicz — Honolulu PD	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Honolulu PD	
Arrestee's Name (Last, First, Middle): Cole, Ricky Lee	Date of Birth: 06/04/94	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Michelle Yoshiki #13052
Date Examined / Time /Location: 05/07/17 0200 HPD Intake	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 98902	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	

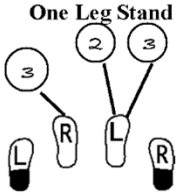
Miranda Warning Given: Given by: Officer Yoshiki — ☒ Yes ☐ No	What have you eaten today? Rice bowl	When? 7:00 pm	What have you been drinking? How much? Red Bull — One can	Time of last drink? N/A
Time now/ Actual: "3 am" / 0208	When did you last sleep? Last night	How long? 4 or 5 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Passive, Cooperative		Coordination: Poor, Staggering at times	
Speech: Slow, Slurred, Thick	Breath odor: Rancid		Face: Flushed	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☒ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus: ☐ Yes ☒ No	Vertical Nystagmus: ☒ Yes ☐ No	Able to follow stimulus: ☒ Yes ☐ No	Eyelids: ☒ Normal ☐ Droopy

Pulse/Time		HGN	Left Eye	Right Eye
1.	106 / 0214	Lack of Smooth Pursuit	Present	Present
2.	102 / 0222	Maximum Deviation	Present	Present
3.	96 / 0240	Angle of Onset	35	35

Convergence

Right eye Left eye

/30 **One Leg Stand** /30

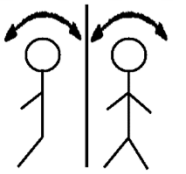


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
1	1	Hopping
1	2	Puts foot down

Nearly fell. Tests stopped.

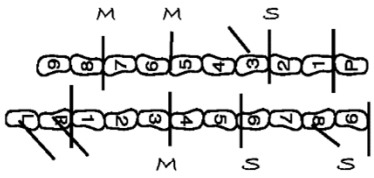
Modified Romberg Balance

Approx. 2" Approx. 2" 2" 2"



Circular sway

Walk and Turn Test

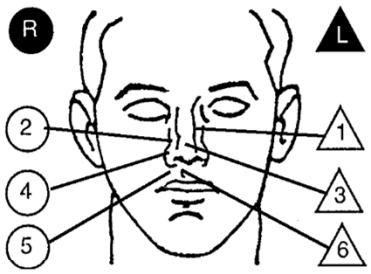


Walked slowly.

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓✓	✓
Misses heel-toe	✓	✓✓
Steps off line	✓	✓
Uses arms	✓	✓
Actual steps taken	9	9

Time Estimation: 45 estimated as 30 seconds	Describe turn: Slow, deliberate steps	Cannot do test (explain): N/A	Type of footwear: Flip-flops

Finger to Nose
(Draw lines to spots touched)



Swaying. Opened eyes on each attempt.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	4.0
Right Eye	4.5	6.5	4.0

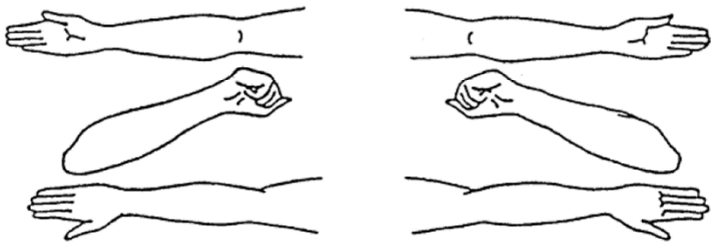
Nasal area: Redness

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Chemical-like odor on hands and fingers

Blood Pressure: 146/98	Temperature: 98.8 °F		
Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid	Comments:		
What drugs or medications have you been using? "None. I'm not using drugs."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: 05/07/17 0115	Time DRE was notified: 0140	Evaluation start time: 0200	Evaluation completion time: 0255	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
DRE/Officer's Signature: Cullen Kau	Reviewed/approved by / date:			DRE# 5992

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☒ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Cole, Ricky L.

1. **Location:** The evaluation was conducted in the Interview Room at the Honolulu Police Department. The room is well illuminated and has short pile carpeting with no obstructions. The darkroom examination was conducted in the staff restroom.

2. **Witnesses:** Lt. Ben Moszkowicz of the HPD witnessed and recorded the drug evaluation.

3. **Breath Alcohol Test:** Officer Michelle Yoshiki, who was arresting officer, administered a breath test to the suspect at the HPD at 0130 hours obtaining a 0.00% BAC result.

4. **Notification and Interview of the Arresting Officer:** At approximately 1040 hours on 5/07/17, I was contacted by Dispatch requesting that I conduct a drug evaluation for Officer Yoshiki at HPD. Upon my arrival and contacting Officer Yoshiki, it was determined that she had detained the suspect after observing his vehicle fail to stop at a red traffic light at King Street and University Ave. The suspect's speech was slow, slurred and thick. The suspect also had difficulty concentrating and appeared confused. Officer Yoshiki conducted SFSTs and observed six clues of Horizontal Gaze Nystagmus (HGN). In addition, Vertical Gaze Nystagmus (VGN) was also observed. However, no odor of an alcoholic beverage was detected on the suspect's breath. The suspect had difficulty performing the SFSTs and several times nearly fell while attempting them at roadside. Officer Yoshiki detected a strong chemical-like odor on the suspect's hands and clothing. The suspect was arrested for DWI and transported to the HPD for processing. After obtaining a .00 BAC result, she requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at HPD. He appeared passive and confused, but was cooperative. His speech was slow and thick, and at times slurred. He had poor balance and coordination, and several times steadied himself using the desk and the wall. He also had difficulty walking and bumped into the interview table several times. His face was flushed and his eyes appeared to be bloodshot and watery. When I introduced myself, and asked if he would complete a drug influence evaluation, he was slow to respond and appeared to be having problems concentrating. I noted that he was wearing white multi-colored shorts, a Hilo Hattie's tee shirt, and flip-flops. I noted that he had a chemical-like odor on his clothing.

6. **Medical Problems and Treatment:** I questioned the suspect about medical problems and other conditions which may prohibit him from doing the evaluation. He reported that he was "a little dizzy" but was okay. I asked if he needed medical assistance and said he did not. The suspect did not report any other medical issues and none were observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect acknowledged that he understood the instructions. The following tests were administered to the suspect:

   Modified Romberg Balance: During this test, the suspect swayed approximately 2" in a circular motion. His time estimation was slow, estimating the passage of 30 seconds in 45 seconds.

   Walk and Turn: The suspect lost his balance twice during the instructions stage. On the walking stage, he missed touching heel to toe once, stopped while walking once, and stepped off the line once on the first nine steps. Once he got to the end of the first nine steps, he stopped and appeared confused on what to do next. He was reminded to turn around and proceed back down the line. His turn was slow and made with deliberate steps, but completed it as directed. On the second nine steps, he stopped while walking once, stepped off the line once, and missed touching heel-to-toe twice. He also used his arms for balance one time on the first nine steps and twice on the second nine steps.

One Leg Stand: The suspect had difficulty with this test. He swayed while balancing, used his arms to balance, began hopping, and put his foot down to keep from falling when attempting to stand on his left and right foot. Due to his poor balance and coordination difficulties, the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect swayed noticeably and opened his eyes on each attempt. He was unable to touch the tip of his nose on any of the six attempts. His hand and arm movements were slow and rigid.

8. **Clinical Indicators of Impairment:**

   Eye Signs: The eye examinations were conducted in the HPD restroom which could be darkened for the examinations. Six clues of HGN were present with an angle of onset detected at approximately 35 degrees in each eye. VGN and a Lack of Convergence were also present. The suspect's eyes were bloodshot and watery. His pupils were all within the DRE average ranges in all three lighting conditions.

   Vital Signs: The suspect's pulse rates were elevated at 106, 102 and 96 beats per minute, and were all above the DRE average ranges. His blood pressure was 146/98, which was also above the DRE average range. The suspect was asked about his high pulse rates and blood pressure. He appeared to be confused with the question and had no explanation for them being high.

9. **Signs of Ingestion:** The suspect had a severe redness to his nasal area. He also had a strong chemical-like odor on his clothing and hands. When asked about the odor on his hands and clothing, he indicated that earlier in the day he was helping a friend clean his car engine and they were using a lot of engine cleaner and he must have gotten the cleaner on his hands and clothes.

10. **Suspect's Statements:** The suspect denied using any medications or drugs. He admitted smoking marijuana occasionally, but claimed he had not smoked marijuana in over a month.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a ***Inhalant*** and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the suspect at 0255 hours and entered into evidence and will be forwarded to the Crime Laboratory for analysis.

13. **Miscellaneous:** An arrest warrant for Failure to Appear for Possession of Marijuana was served on the suspect. Refer to Officer Yoshiki's DUI arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator: Trooper Andrew Martinek	DRE #: 22701	Rolling Log #: 17-02-088	Evaluator's Agency: Minnesota State Patrol	Case# 17-45902 Session XXV - #4 IG
Recorder/Witness: Deputy Chad Myers, Winona County SO	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: New Brighton Police Department	
Arrestee's Name (Last, First, Middle): Davis, Paul J.	Date of Birth: 01/21/85	Se: x	Race: W	Arresting Officer (Name, ID#): Officer Matt Farmer #25448
Date Examined / Time /Location: 6/02/17 1525 Ramsey Co. Detention Center	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 45665	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	

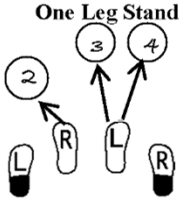
Miranda Warning Given: Given by: Officer Farmer	☒ Yes ☐ No	What have you eaten today? Pancakes	When? 9 am	What have you been drinking? How much? Coffee, Water N/A	Time of last drink? N/A
Time now/ Actual: "About 5pm" /	When did you last sleep? "Took a nap today"	How long? 2 hours	Are you sick or injured? ☐ Yes ☒ No "I'm cold"		Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No Sore left shoulder		Are you under the care of a doctor or dentist? ☐ Yes ☒ No		
Are you taking any medication or drugs? ☐ Yes ☒ No "Sometimes I take some pain medication."	Attitude: Cooperative, Slow		Coordination: Poor, Unstable at times		
Speech: Slow, Low, Raspy	Breath odor: Normal	Face: Pale			
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal		
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy	

Pulse/Time	HGN	Left Eye	Right Eye
1. 56 / 154	Lack of Smooth Pursuit	None	None
2. 58 / 155	Maximum Deviation	None	None
3. 56 / 1618	Angle of Onset	None	None

Convergence

Right eye Left eye

One Leg Stand

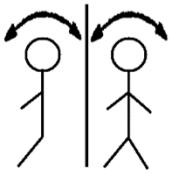


L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
1	2	Puts foot down

Nearly fell. Tests stopped.

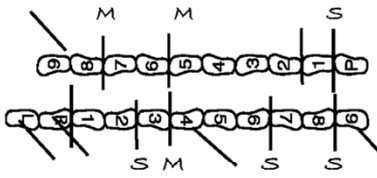
Modified Romberg Balance

Approx. 4" 4" Approx. 4" 4"



Head nodded forward

Walk and Turn Test



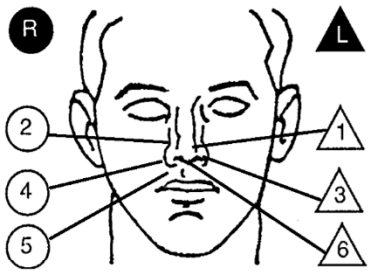
Slow, deliberate steps

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓✓✓	✓
Misses heel-toe	✓	✓✓
Steps off line	✓✓	✓
Uses arms	✓	✓✓✓
Actual steps taken	9	9

Time Estimation: 68 estimated as 30 seconds	Describe turn: As instructed, but slow	Cannot do test (explain): N/A	Type of footwear: Lace-up work boots

Finger to Nose

(Draw lines to spots touched)



Slow, deliberate movements. Used pads of fingers on attempts 1, 3 and 5.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	4.5	1.5
Right Eye	2.0	4.5	1.5

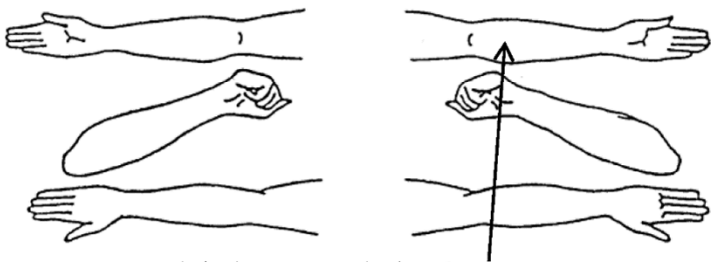
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to None

RIGHT ARM **LEFT ARM**



Fresh injection mark on inside of arm.

Blood Pressure: 112/64	Temperature: 97.5 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I'm not using anymore."	N/A	N/A	N/A

Date / Time of arrest: 06/02/17 1420	Time DRE was notified: 1505	Evaluation start time: 1525	Evaluation completion time: 1630	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
DRE/Officer's Signature: Andrew Martinek	Reviewed/approved by / date:			DRE# 22701

Opinion of Evaluator: ☐ Not Impaired ☐ Medical ☐ Alcohol ☐ CNS Depressant ☐ CNS Stimulant ☐ Hallucinogen ☐ Dissociative Anesthetic ☒ Narcotic Analgesic ☐ Inhalant ☐ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Davis, Paul J.

1. **Location:** The evaluation was conducted in Booking Room at the Ramsey County Detention Center. The Booking Room is well illuminated and has a concreate floor with no obstructions and provides an adequate location for conducting a drug influence evaluation. The staff restroom was used for the dark room examinations.

2. **Witnesses:** Deputy Chad Myers from the Winona County S.O. was present and recorded the drug influence evaluation.

3. **Breath Alcohol Test:** At 1450 hours, the arresting officer, Officer Matt Farmer, conducted a breath test on the suspect at the Ramsey County Detention Center. Officer Farmer obtained a 0.00% BAC result, which, according to Officer Ramsey, was not consistent with the degree of impairment he had observed during his roadside contact with the suspect.

4. **Notification and Interview of the Arresting Officer:** At approximately 1505 hours on 06/02/17, I was on duty and requested to respond to the Ramsey County Detention Center for a drug influence evaluation. Upon my arrival, I contacted Officer Farmer of the New Brighton PD. Officer Farmer advised me that he located the suspect slumped over the steering wheel of his vehicle parked along the shoulder of Long Lake Road. The vehicle was in gear and the engine was running. The vehicle was resting up against a roadside cement barrier and was not moving when he contacted the suspect. The suspect was coherent, but appeared dazed and confused. He also noted that the suspect's speech was slow, low and raspy. His movements were slow and deliberate and at times, he was licking his lips. When Officer Farmer had the suspect exit his vehicle, his movements were slow and he was unstable on his feet. After determining that the suspect was not experiencing a medical emergency, Officer Farmer attempted to administer SFSTs at roadside. However, the suspect had difficulty completing the SFST's and was arrested for DUI. Officer Farmer noted that the suspect's pupils were constricted. He also observed what appeared to be a bloody spot on his forearm area on the inside of his left sleeve. When placed into Officer Farmer's patrol vehicle, the suspect appeared to be "on the nod." After obtaining a .00 BAC, Officer Farmer requested the assistance of a DRE.

5. **Initial Observation of the Suspect:** I first observed the suspect in the Booking Room at the County Detention Center. The suspect was having difficulties keeping his eyes open. His head was continually nodding forward, and he had droopy eyelids. When he spoke, his voice was slow, low and raspy. He was continually scratching his face and arms, and he complained of being cold. I introduced myself to the suspect and explained that I had been requested to conduct a drug influence evaluation by the arresting officer. After several minutes of explaining the process to the suspect, he agreed to participate. During my initial contact with the suspect, he continued to appear to be "on the nod" and numerous times I had to repeat my questions and wait for his delayed responses. When asked if was taking any medications or drugs, the suspect did indicate that sometimes takes pain medication. The suspect stated several times that felt cold and at times nauseous. The room temperate in the Booking Room as set at approximately 70 degrees, which is the normal setting for the time of year. I noted that the suspect was wearing jeans, a long sleeve plaid shirt and black lace-up boots.

6. **Medical Problems and Treatment:** The suspect was asked about any medical conditions he may be experiencing and he was slow to respond. He finally indicated that he was tired, and sometimes takes pain medication to help him with some pain issues from a sore shoulder. He explained that he had hurt his shoulder about two or three years ago while moving pallets at work, but was not under a doctor's care for it. When asked if he needed medical assistance for his shoulder or any other medical problem he may be experiencing, he stated, "No, I'm okay." During the evaluation, no medical situations were detected and none were mentioned by the suspect.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:

   Modified Romberg Balance: During this test, the suspect swayed approximately four inches front to back and side to side. His head also nodded forward and it appeared he was on the nod. His time estimation was slow, estimating 30 seconds in 68 seconds. During the test, the suspect also scratched his arms and face numerous times.

   Walk and Turn: During this test, the suspect lost his balance twice during the instructions stage. Once he began the walking stage, on the first nine steps he stopped while walking three times, missed touching heel to toe once, and used his arms for balance once. As he made his turn, the suspect took very slow and deliberate steps, but completed the turn as instructed. On the second nine steps, the suspect stopped while walking once, missed touching heel to toe twice and stepped off the line once. He also raised his arms for balance three times.

   One Leg Stand: On this test, the suspect had difficulty maintaining his balance while standing on both the left and right foot. While attempting to stand on his left foot and raise his right foot, he began swaying, used his arms to balance, put his foot down immediately, and lost his balance nearly falling. The test was stopped at that point for safety reasons. When attempting to stand on his right foot and raise his left foot, he again swayed, used his arms to balance, put his foot down on counts 1,0003 and 1,004, and again nearly fell. The test was then stopped for safety reasons.

   Finger to Nose: On this test, the suspect made slow and very deliberate arm movements. He was not able to touch the tip of his nose with the tip of his index finger as directed on five of the six attempts. The only attempt where he touched the tip of his nose was on attempt #6. He used the pads of his fingers for attempts #1, #3, and #5. At times during this test, the suspect appeared to be on the nod.

8. **Clinical Indicators of Impairment:**

   Eye Signs: No clues of HGN were observed. Vertical Gaze Nystagmus and Rebound Dilation were also not observed. The suspect was able to converge his eyes as directed. The suspect's pupils were constricted in all three lighting levels. They were estimated at 2.0 mm in both eyes in Room Light, 4.5 mm in both eyes in Near Total Darkness, and 1.5 mm in both eyes in Direct Light. The suspect's pupil reaction to light was little to none visible.

   Vital Signs: The suspect's pulse rates of 56 beats per minute (bpm), 58 bpm and 56 bpm were below the DRE average ranges, as was his blood pressure of 112/64 mm Hg. His body temperature was measured at 97.5 degrees, which was also below the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** A fresh injection mark was located on the inside of the suspect's left arm. When questioned about the mark, the suspect indicated he had scratched himself when loading pallets at work.

10. **Suspect's Statements:** After completed the evaluation I asked the suspect about drug use. The suspect admitted that he used to use pain meds, but state "I'm not using anymore."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Evaluator that the suspect is under the influence of a **Narcotic Analgesic** and is unable to operate a vehicle safely.

12. **Toxicological Specimen:** A urine sample was collected from the suspect by Officer Farmer and was submitted as evidence pending analysis by the State Crime Lab.

13. <u>Miscellaneous:</u> Refer to Officer Farmer's arrest report for additional information.

DRUG INFLUENCE EVALUATION

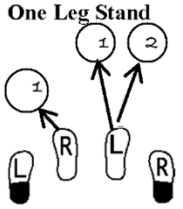
Evaluator: Lt. Dale Lewis	DRE #: 12258	Rolling Log #: 17-04-034	Evaluator's Agency: Oklahoma University Police	Case# 17-30238 Session XXV - #5 IG
Recorder/Witness: Officer Kyle Canaan, Norman Police Dept.	Crash: ☐ None ☐ Fatal ☐ Injury ☒ Property		Arresting Officer's Agency: Oklahoma Highway Patrol	
Arrestee's Name (Last, First, Middle): Elliott, John B.	Date of Birth: 06/01/80	Se: x	Race: W	Arresting Officer (Name, ID#): Trooper Christopher Sherman #20270
Date Examined / Time /Location: 04/05/17 1810 Oklahoma County Jail	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 42331	Chemical Test: Urine ☒ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given: ☒ Yes ☐ No Given by: Tpr. Sherman	What have you eaten today? Tuna sandwich	When? 1 pm	What have you been drinking? How much? Water and coffee N/A	Time of last drink? N/A
Time now/ Actual: "I don't know" /1816	When did you last sleep? Last night	How long? "Maybe 5 hours"	Are you sick or injured? ☐ Yes ☒ No "I'm okay"	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No "I used to see a doctor"	
Are you taking any medication or drugs? ☐ Yes ☒ No "I probably should."	Attitude: Emotional changes (Laughing / Crying)		Coordination: Poor, Unsteady	
Speech: Slurred, Rambling, Incoherent at times	Breath odor: Normal		Face: Flushed	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☒ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☐ Equal ☒ Unequal Right pupil larger than left	Resting Nystagmus: ☐ Yes ☒ No	Vertical Nystagmus: ☐ Yes ☒ No	Able to follow stimulus: ☒ Yes ☐ No	Eyelids: ☒ Normal ☐ Droopy

Pulse/Time	HGN	Left Eye	Right Eye
1. 68 / 182	Lack of Smooth Pursuit	None	None
2. 66 / 1840	Maximum Deviation	None	None
3. 66 / 185	Angle of Onset	None	None

Convergence

Right eye Left eye

One Leg Stand

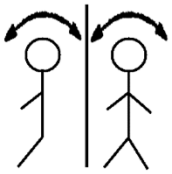


L	R	
1	1	Sways while balancing
		Uses arms to balance
		Hopping
1	2	Puts foot down

Nearly fell. Test stopped

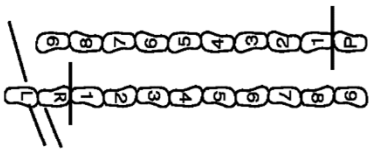
Modified Romberg Balance

Approx. 2" Approx. 2" 2" 2"



Eyelid tremors

Walk and Turn Test



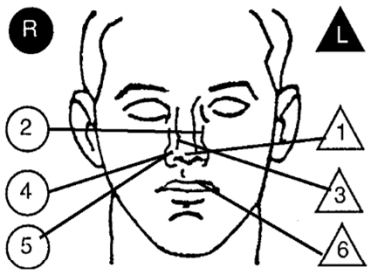
Fell against wall. Test stopped for safety reasons.

	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking	N/A	N/A
Misses heel-toe	N/A	N/A
Steps off line	N/A	N/A
Uses arms	N/A	N/A
Actual steps taken	N/A	N/A

Time Estimation: 32 estimated as 30 seconds	Describe turn: N/A	Cannot do test (explain): Lost balance – Nearly fell	Type of footwear: Lace-up dress shoes

Finger to Nose

(Draw lines to spots touched)



Using pads of fingers on all attempts.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	6.5	4.0
Right Eye	6.5	7.5	5.5

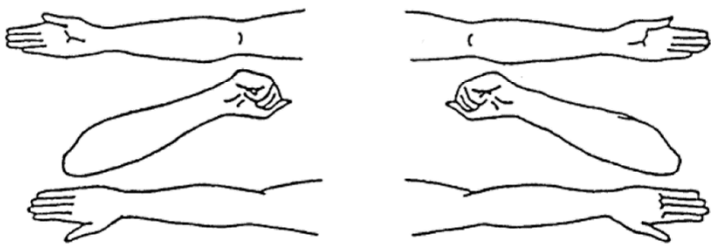
Nasal area: Clear

Oral cavity: Clear

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure: 178/118	Temperature: 99.0 °F
Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid	Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I don't use drugs, but probably should."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
04/05/17 1722	1750	1810	1920	

DRE/Officer's Signature: Dale Lewis | Reviewed/approved by / date: | DRE# 12258

Opinion of Evaluator: ☐ Not Impaired ☒ Medical ☐ Alcohol ☐ CNS Depressant ☐ CNS Stimulant ☐ Hallucinogen ☐ Dissociative Anesthetic ☐ Narcotic Analgesic ☐ Inhalant ☐ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Elliott, John B.

1. **Location:** The evaluation was conducted in the booking area at the Oklahoma County Jail in Oklahoma City. The room is well illuminated and has a smooth concrete flooring with no obstructions. The darkroom examinations were conducted in the staff restroom.

2. **Witnesses:** The evaluation was observed and recorded by DRE instructor Officer Kyle Canaan from the Norman Police Department who was at the jail lodging a subject.

3. **Breath Alcohol Test:** Trooper Sherman had administered a breath test to Elliott prior to my arrival and obtained a 0.00% result.

4. **Notification and Interview of the Arresting Officer:** On 04/05/17, at approximately 1750 hours, I was on duty and requested to contact Trooper Sherman for a drug evaluation at the Oklahoma County Jail. According to Trooper Sherman, Elliott had been involved in a minor crash in a construction zone on I-40. Construction workers at the scene reported that Elliott was very confused and appeared intoxicated. Trooper Sherman arrived at the scene and observed Elliott wandering in traffic and very emotional acting. According to Trooper Sherman, Elliott's speech was slurred, rambling and at times incoherent. Elliott had difficulties maintaining his balance and several times nearly fell when walking. Trooper Sherman determined that Elliott was not injured and suspected that he may be impaired. After determining that Elliott could perform SFSTs, Trooper Sherman attempted to administer the Horizontal Gaze Nystagmus (HGN) test, the Walk and Turn (W&T) test and One Leg Stand (OLS) test. No clues of HGN were observed. However, Elliott did have difficulty completing the other SFSTs as directed. Both tests had to stopped for safety reasons. Elliott was found to be operating with a suspended operator's license and had an outstanding misdemeanor warrant for his arrest for Failure to Appear. Elliott was taken into custody and transported to the Oklahoma County Jail for processing. After obtaining a .00 BAC, a DRE was requested to assist with the investigation.

5. **Initial Observation of the Suspect:** I first observed Elliott in the interview room at the County Jail. He was having problems with his balance and was unsteady on his feet. At times he was laughing, and then he would get emotional and cried several times. He was talking to himself and his speech was rambling, and at times incoherent. I introduced myself to Elliott and requested to conduct the drug evaluation, which he agreed to do by stating, "Alright, but I'm not drunk!" I noted that his face was flushed and his moods were changing, going from cooperative to agitated. He was wearing dress pants, a brown long sleeve shirt and lace-up dress shoes.

6. **Medical Problems and Treatment:** Elliott stated that he had been seeing a doctor for some "issues" but stopped going to his appointments about a year ago. When I attempted to discuss the "issues" he had mentioned, Elliott got very evasive and would not comment or answer my questions. He indicated that he was not taking any medication or drugs, but commented, "I probably should." I asked Elliott if he needed medical assistance and he responded angrily, "For what! I'm okay! Just do what you've got to do!"

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Elliott prior to him attempting them. After each demonstration, he confirmed that he understood the instructions. The following psychophysical tests were administered per DRE protocol:

   Modified Romberg Balance: During this test, Elliott swayed approximately two inches front to back and side to side. He estimated 30 seconds in 32 seconds. Eyelid tremors were present during the test.

   Walk and Turn: Elliott could not maintain his balance in the instructions stage, losing his balance three times. On the third time he lost his balance, he stated, "I can't do this!" and the test was stopped for safety reasons. After trying to complete the test, Elliott began rubbing his head.

One Leg Stand: For this test, Elliott was not able stand on one foot and nearly fell several times. The tests were stopped for safety reasons.

Finger to Nose: On this test, Elliott could not touch the tip of his nose with the tip of his index finger as directed. He used the pads of his fingers on all six attempts. He also swayed noticeably while attempting to touch his nose.

8. **Clinical Indicators of Impairment:**

   Eye Signs: No clues of HGN were present and Vertical Gaze Nystagmus was not observed. He was able to converge his eyes as instructed. Rebound dilation was not observed. Elliott's pupils were found to be unequal in size. In Room Light, his left pupil was estimated at 5.0 mm and his right pupil was estimated at 6.5 mm. In Near Total Darkness, his left pupil was estimated at 6.5 mm and his right pupil was estimated at 7.5 mm. In Direct Light, his left pupil was estimated at 4.0 mm and his right pupil was estimated at 5.5 mm. All the estimations were within the DRE average ranges for each of the lighting conditions. When asked about his unequal pupil sizes, Elliott was unable to explain the differences.

   Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were 68, 66 and 66 beats per minute. All three results were within the DRE average range for pulse rates. His blood pressure was checked at 178/118, which was above the DRE average range for blood pressure. His body temperature was 99.0 degrees, which was within the DRE average range. The suspect was asked about his elevated blood pressure and he indicated he was not aware of why it would be elevated. He also indicated that he did not have a history of high blood pressure. After obtaining the high blood pressure and observing Elliott's unequal pupil sizes, the jail nurse was advised of the situation.

9. **Signs of Ingestion:** Elliott's nasal and oral cavities were clear. There were no indicators of injection marks on his hands or arms.

10. **Suspect's Statements:** Elliott denied using drugs or medications. He stated that his doctor wanted to prescribe him some medications, but he refused because he felt there was nothing wrong with him. When asked if he had ever consumed drugs, he did indicate that several years ago he was prescribed medication for anxiety and stress. He further indicated that the drugs became too expensive and he quit taking them.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Elliott is under the influence of a **Medical Impairment** and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A urine sample was collected from the subject and will be forwarded to State Crime Laboratory for analysis.

13. **Miscellaneous:** After completing the evaluation, the jail nurse checked Elliott's vital signs and recommended that he be transported to the emergency room for a medical assessment. At approximately 1920 hours, Elliott was transported to the OU Medical Center.

Drug Categories for Interpretation Practice

SUBJECT	CATEGORY (IES)
Allen	Cannabis
Brown	Dissociative Anesthetics (PCP) and Cannabis
Cole	Inhalants
Davis	Narcotic Analgesic
Elliott	Medical Impairment

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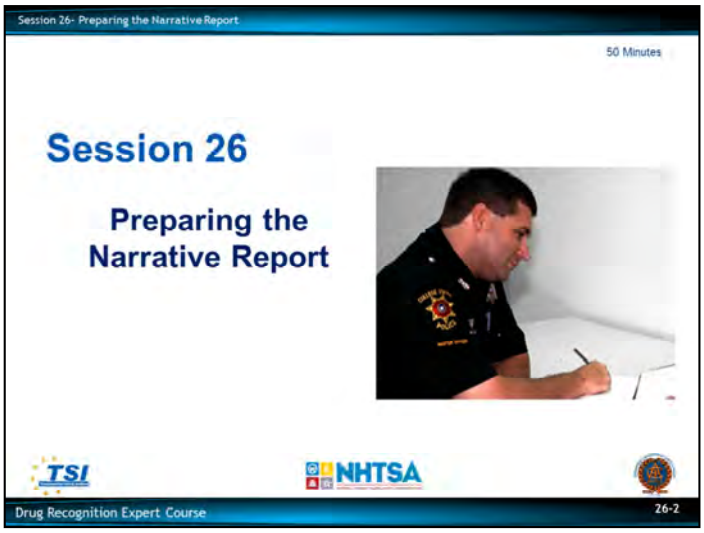
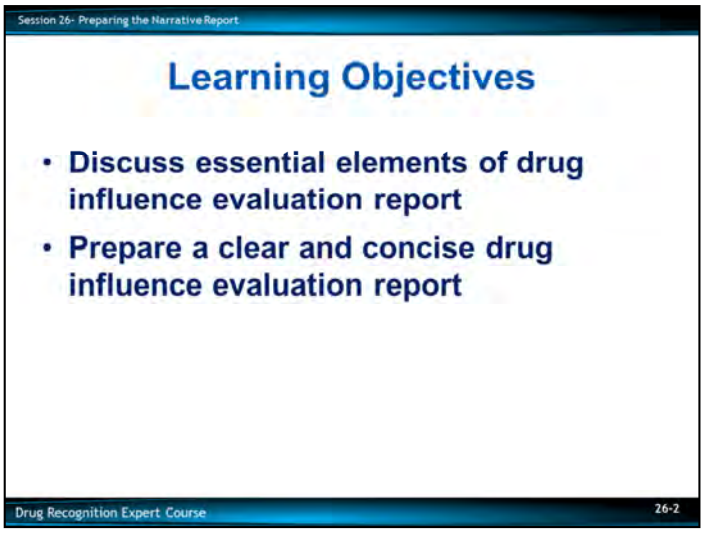

Session 26- Preparing the Narrative Report
50 Minutes
Session 26
Preparing the Narrative Report
TSI
NHTSA
Drug Recognition Expert Course
26-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

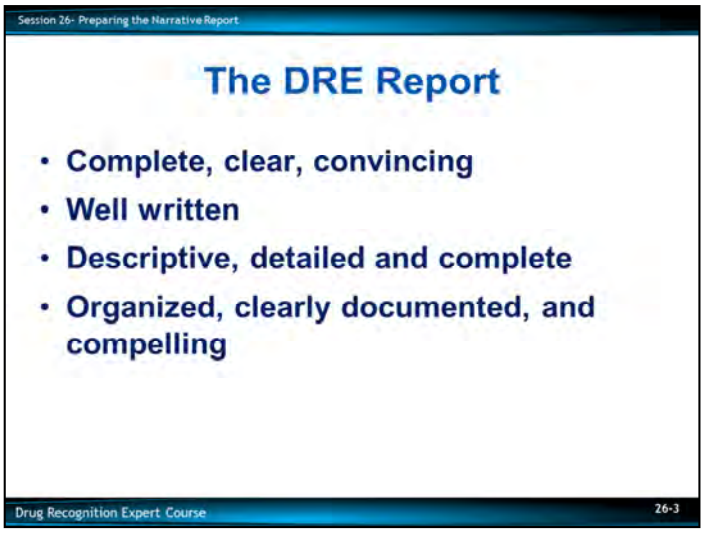
- Discuss the essential elements of the drug influence evaluation report
- Prepare a clear and concise drug influence evaluation report

CONTENT SEGMENTS

A. Components of the Process
B. Components of the Drug Evaluation Report
C. Drug Evaluation Narrative Report Format
D. Sample Report

LEARNING ACTIVITIES

Instructor-Led Presentations
Interactive Discussion



A. <u>Components of the Process</u>

The Drug Recognition Expert (DRE) Report
Successful prosecution depends on how clearly, completely, and convincingly the DRE presents their observations, measurements, and conclusions.

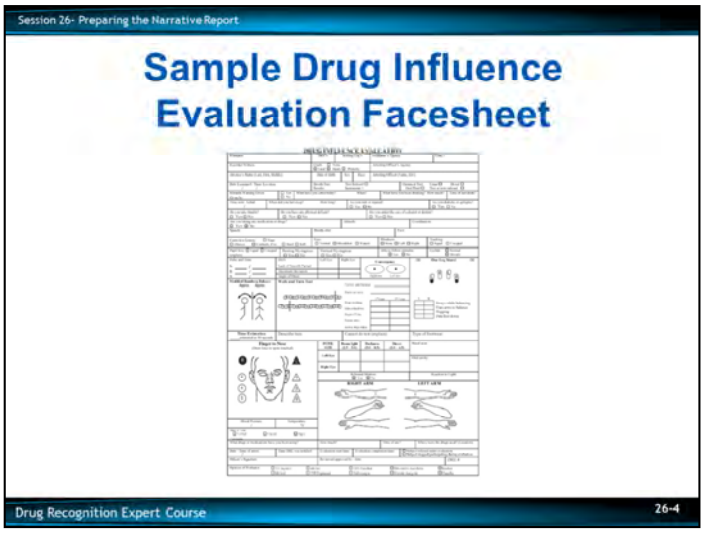
A well-written, clear, and convincing drug evaluation report increases the likelihood that the case will be properly adjudicated.

- A prosecutor is more likely to file the charge if the evidence is organized, clearly documented, and compelling

Point out prosecutor's decision is generally based on the offense/arrest report and, consequently, if they cannot find the information they need, they are more likely to plea bargain or dismiss the charge.

- The defense is less likely to contest the charge when the report is descriptive, detailed, and complete

Point out evidence gathered during the drug influence evaluation is rarely challenged when it is well documented on the evaluation form and backed up by a detailed narrative report.



B. <u>Components of the Drug Influence Evaluation Report</u>

The Facesheet
The Drug Influence Evaluation Facesheet is part of your drug influence evaluation report; but it is not the entire report.

The Facesheet contains some very important information.
Examples:
- Subject's pulse rate was elevated on all three measurements
- Subject's eyes failed to converge
- Subject's pupils were constricted

Point out some of the key information on the sample Facesheet.

However, it is important to remember the DRE Facesheet does not contain all of the important information available concerning this subject.

Most importantly, the Drug Influence Evaluation Facesheet is a technical document.

- Trained DREs know how to complete and interpret the Facesheet

Boxes on the Facesheet should not be left blank. It is recommended "N/A" or "None Observed" be used.

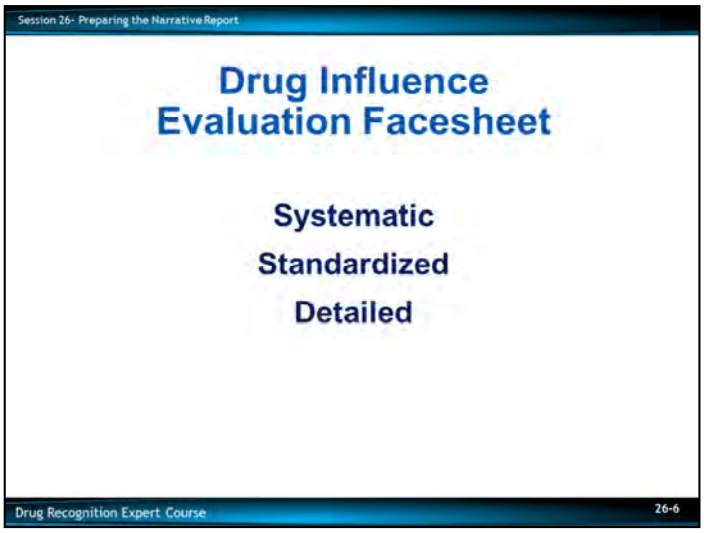
Ask participants to suggest some important information that might be available that wouldn't appear on the Facesheet.

Examples:

- Information obtained during the interview of the arresting officer
- Elaborate or lengthy statements made by the subject
- Paraphernalia found in the subject's possession

Many prosecutors, judges, and jurors won't know how to interpret the Facesheet.

- It is up to you to take all of the information you work so hard to obtain and put it into a clear, plain English, written report so the prosecutor, the judge, and the jury will understand what you observed and what it means



To ensure the information contained on the Facesheet is systematic and standardized, the results of the tests should be recorded as follows:

Lack of Convergence (LOC)

- A dot should be made where the pupil is and draw an arrow to indicate the movement and where the pupil stops

Modified Romberg Balance (MRB)

- The first figure indicates the sway from front to back and should be estimated in inches from center

Show the participants an example.
Remind them in their participant manuals are a complete description of the correct way to mark their evaluations.

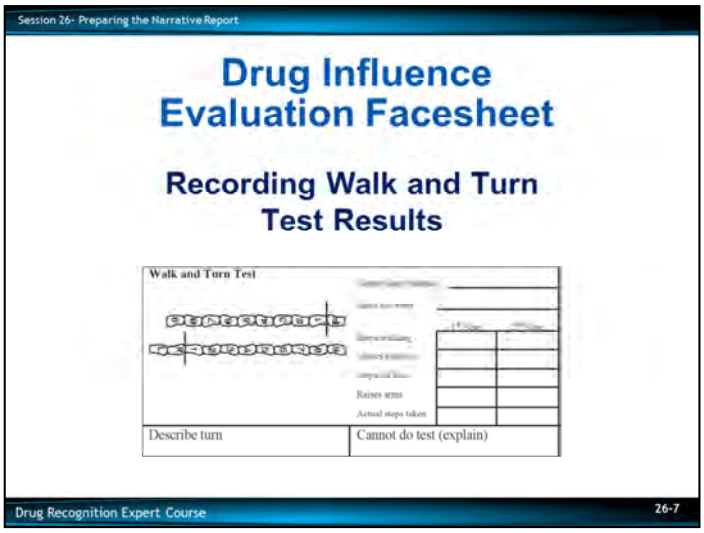
- The second figure indicates the sway from side to side and is estimated in inches from center

Show the participants an example.

- Put the approximate number of inches from center the subject's sways on either end of the arrows

- Record actual elapsed time of the time estimation

Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.



Walk and Turn (WAT)

- The first two – cannot keep balance and starts too soon – are observed during the instruction stage
- Indicate by a check mark the number of times the subject stops, misses heel-to-toe, steps off line, or uses arms
- Record the actual number of steps taken
- If the subject stops walking, indicate where with a vertical slash mark and an "S" under that mark
- If the subject steps off the line, indicate with half of a slash mark at an angle in the direction the step was off the line
- If the subject misses heel-to-toe, indicate with a vertical slash mark and an "M" under that mark
- Describe the turn.

Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.

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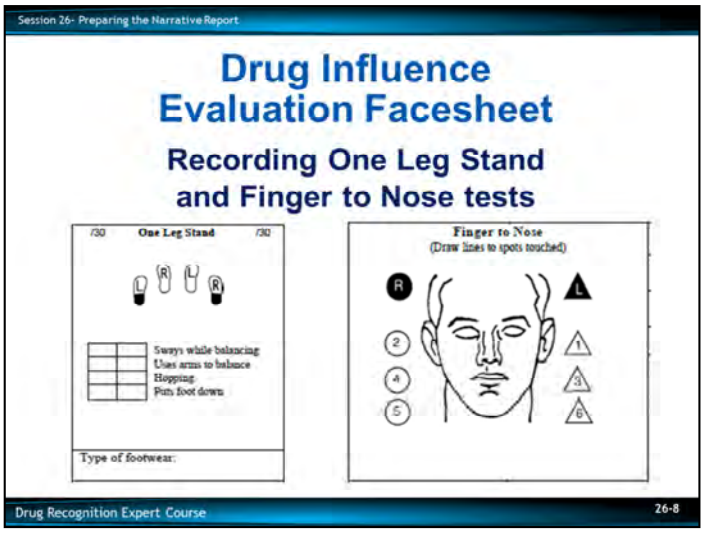


One Leg Stand (OLS)

Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.

- Indicate in the OLS box the number the subject counted to when the foot touched the floor (if applicable)

- Check marks should be made to indicate the number of times the subject swayed, used arms, hopped, or put foot down

- Indicate how far the subject counted in 30 seconds in the top area of the box above the foot raised

- Add any other indicators observed such as tremors, falling, etc.

Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.

Finger to Nose (FTN)

- A line should be drawn to the appropriate triangle or circle to indicate where the subject touched their nose

- Suggestion – If the DRE draws the line from the place where the subject touched to the triangle, it enables them to draw a straighter line

Solicit participants' comments and questions about the Narrative Report.

_____

_____

_____

_____

_____

C. <u>Drug Influence Evaluation Narrative Report Components</u>

The Narrative Report
The typical Drug Influence Evaluation Narrative Report format contains 13 components.

First component: Location (i.e., where the evaluation was conducted).

Second component: Witnesses
- List the person who served as the evaluator and the recorder and their agency
- List officers who helped to conduct the evaluation
- List who observed the evaluation
- Include any instructors who witnessed the evaluation

Third component: the Breath Alcohol Test
- Indicate Breath Alcohol Concentration (BAC) result
- List who administered the breath alcohol test
- List the time the test was administered

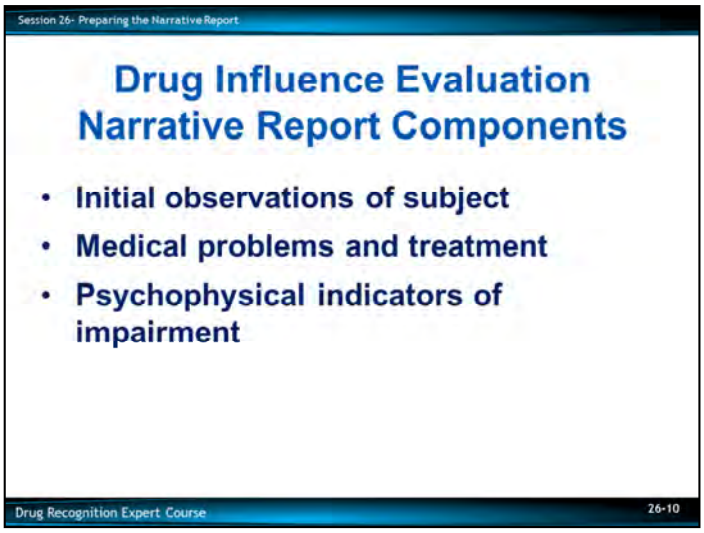
Fourth component: Notification and Interview of the Arresting Officer
- List when you were first notified of the request for the drug influence evaluation
- Summarize the information you were given at that time
- Summarize the information provided by the arresting officer
- Document the details of your interview with the arresting officer and other witnesses

_____

_____

_____

_____



Fifth component: Initial Observation of the Subject

- Describe where you first saw the subject
- Describe noteworthy aspects of your initial observations
- List the findings of the Preliminary Examination of the subject

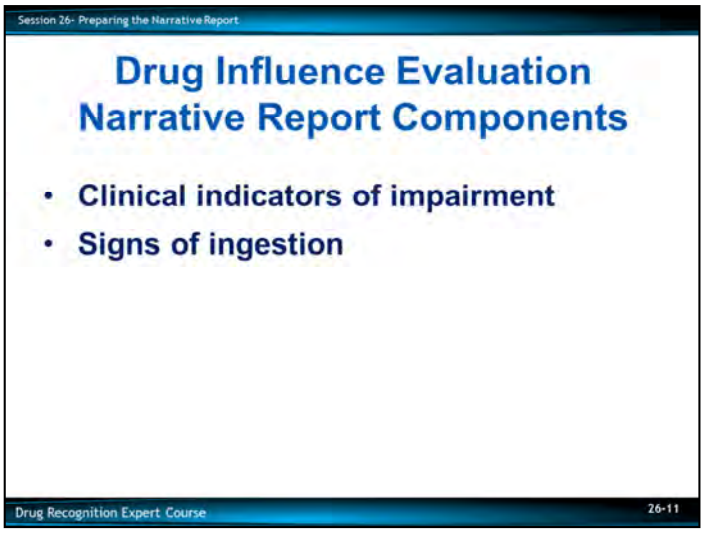
Sixth component: Medical Problems and Treatment

- Describe your observations or indications of any apparent injury or illness affecting the subject
- Describe any statements of injury or illness
- Summarize any medical treatment offered to the subject

Point out DREs should document as much information as possible about any reported medical issues claimed by the subject and if medical treatment is warranted, it should be arranged, or at least offered.

Seventh component: Psychophysical Indicators of Impairment

- Summarize performance of the MRB, WAT, OLS, and FTN tests
- Describe any relevant behaviors on the tests not included on the Facesheet
- Document any other pertinent observations, such as eyelid tremors, leg tremors, miscounting, etc.



Eighth component: Clinical Indicators of Impairment

Point out in this section of the DRE's report the word "average" or words "average ranges" refers to the results of the specific test within the DRE average range(s).

Eye Signs

- Briefly summarize your observations of Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), LOC, Pupil Size, Reaction to Light, and appearance of the suspect's eyes

Vital Signs

- Briefly summarize the suspect's pulse rate, blood pressure, and temperature

Ninth component: Signs of Ingestion

- Record the results of examinations of oral and nasal cavities
- Document the results of examinations for injection marks
- Document any odors detected on suspect's breath, hands, clothing, etc.
- Document physical debris of drugs or drug paraphernalia found on suspect's person

Tenth component: Subject's Statements and other Observations.

- "Miranda" waiver and responses

Remind participants to contact their local prosecutor's office for information on when to give Miranda during the evaluation.

- Document any volunteered or spontaneous statements
- Record any statements made as a result of your interview
- Include any admissions or denial of drug use, time, location drugs were used, and any statements made relating to the suspect's perception of their impairment, if applicable

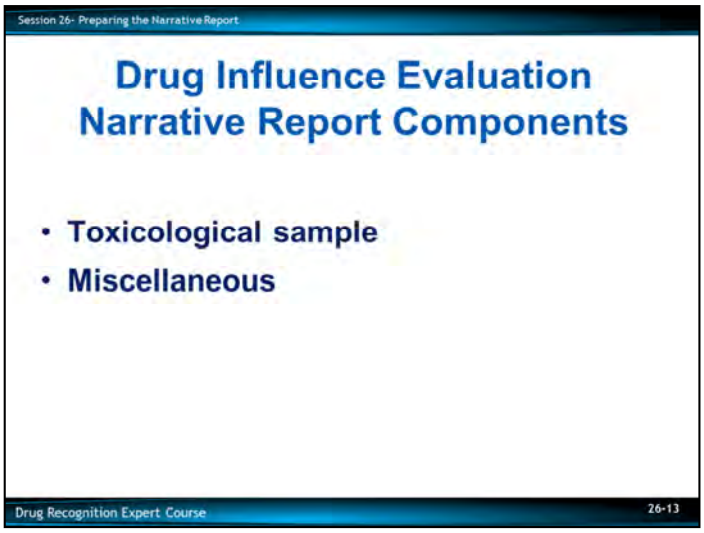
Eleventh component: DRE's Opinion.

Remind participants anytime they have a positive BAC reading, they must list alcohol (ETOH) as part of the opinion.

- State the category or categories of drugs you believe is/are affecting the suspect
- State your opinion concerning the suspect's ability to operate a vehicle safely, if applicable to this case

Write on a easel/easel pad or dry erase board the proper wording of the DRE's opinion:

"It is my opinion as a certified Drug Recognition Expert that (name) is under the influence of (drug category) and unable to operate a vehicle safely."



Twelfth component: Toxicological Sample

If available, show participants a copy of a toxicology request form they will be using.
Remind participants if they have a tracking number on the toxicology request form, they should also include that number in the report.
State the type of sample (urine, blood, etc.) obtained from the subject.

The narrative report should include:

- What sample was obtained
- The time the sample was collected (if known)
- Information on who collected the sample or observed the collection of the sample
- Where the sample was taken and to whom it was given
- If the subject refused to provide a sample, state that fact

Thirteenth component: Miscellaneous

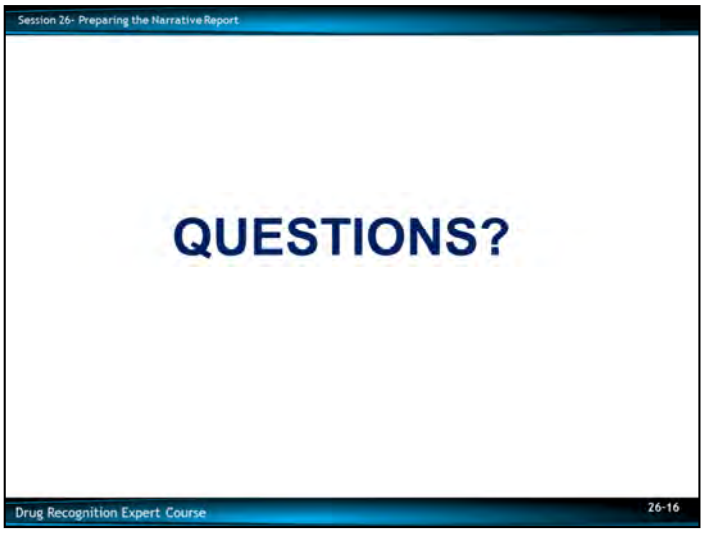
Include any other pertinent information such as drugs or drug paraphernalia found in the subject's possession, additional charges, etc.

D. <u>Sample Report</u>

Direct the participants' attention to the Sample Drug Evaluation Report (Roach) in their Participant Manual.

A copy of this report is found at the end of this session, for your reference. This report is a suggested guide for preparing clear, concise, detailed reports. Even if your State or prosecutor requires a different narrative report format, you should still include all 13 reporting components in a detailed manner.

Briefly review all thirteen components of the report with the participants, including the proper terminology for the DRE's opinion.



Solicit their comments and questions about the Narrative Report.

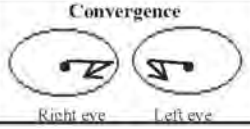
DRUG INFLUENCE EVALUATION

Evaluator: Officer Kemp Layden	DRE #: 7022	Rolling Log #: 17-10-155	Evaluator's Agency: Phoenix Police Department	Case# 17-22354 (Session XXVI)
Recorder/Witness: Deputy Ryan Castro, Maricopa Co. S.O.	Crash: ☒ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency: Arizona Department of Public Safety	
Arrestee's Name (Last, First, Middle): Roach, Robert A.	Date of Birth: 04/02/90	Sex: M	Race: W	Arresting Officer (Name, ID#): Officer Trevor Graff #15681
Date Examined / Time /Location: 10/21/17 / 2130 / 4th Ave Jail Jail	Breath Test: Results: 0.00	Test Refused ☐ Instrument #: 68100	Chemical Test: Urine ☐ Blood ☒ Oral Fluid ☐ Test or tests refused ☐	

Miranda Warning Given: Given by: Ofc. Graff	☒ Yes ☐ No	What have you eaten today? Doritos & Cookies	When? "All day"	What have you been drinking? How much? Arizona Ice Tea "2 or 3 cans" / Time of last drink? N/A
Time now/ Actual: 9 pm/ 2135	When did you last sleep? Last night	How long? 7 or 8 hours "Maybe"	Are you sick or injured? ☒ Yes ☐ No Sore back	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☒ Yes ☐ No "I smoke a little pot for my back"	Attitude: Cooperative, Carefree		Coordination: Slow, Unsteady	
Speech: Slow, Thick, Low	Breath odor: Marijuana		Face: Normal	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☒ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☒ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse/Time		HGN	Left Eye	Right Eye
1.	98 / 2142	Lack of Smooth Pursuit	None	None
2.	96 / 2154	Maximum Deviation	None	None
3.	98 / 2212	Angle of Onset	None	None

Convergence



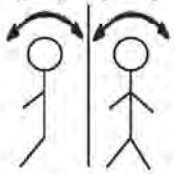
24/30 **One Leg Stand** 22/30

L	R	
1	1	Sways while balancing
1	1	Uses arms to balance
		Hopping
1	2	Puts foot down

Leg tremors. Counted incorrectly (R)

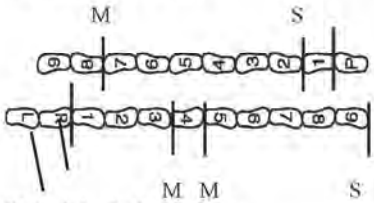
Modified Romberg Balance

Approx 3" 3" Approx 3" 3"



Circular sway / Eyelid tremors

Walk and Turn Test



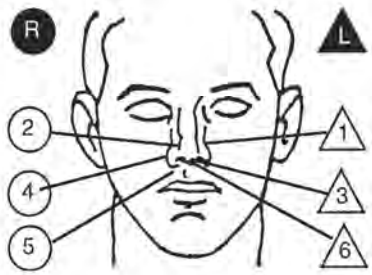
Walked slowly. Leg tremors.

	1st Nine	2nd Nine
Cannot keep balance	✓✓	
Starts too soon		
Stops walking	✓	✓
Misses heel-toe	✓	✓
Steps off line		
Uses arms	✓	✓✓✓
Actual steps taken	9	9

Time Estimation: 42 estimated as 30 seconds	Describe turn: Stopped, walked in a circle	Cannot do test (explain): N/A	Type of footwear: Unlaced brown athletic shoes

Finger to Nose

(Draw lines to spots touched)



Slow movements. Eyelid tremors. Laughing

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.0	9.0	5.0 – 6.5
Right Eye	6.0	9.0	5.0 – 6.5

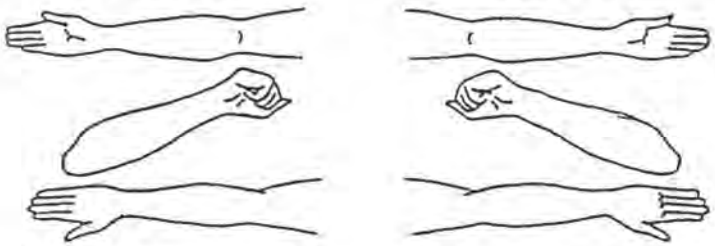
Nasal area: Clear

Oral cavity: Green coating on tongue

Rebound Dilation: ☒ Yes ☐ No

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed

Blood Pressure: 162 / 98	Temperature: 98.2 °F
Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid	Comments:

What drugs or medications have you been using? "I smoke pot for my back pain."	How much? "A couple bowls"	Time of use? 10 am and 8 pm	Where were the drugs used? (Location) "At home and in my car."

Date / Time of arrest: 10/21/17 2025	Time DRE was notified: 2115	Evaluation start time: 2130	Evaluation completion time: 2225	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
DRE/Officer's Signature:	Reviewed/approved by / date:			DRE#

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☒ Cannabis

Rev 10/17

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Roach, Robert A.

1. **Location:** The drug influence evaluation was conducted in the holding cell and hallway at the Maricopa County 4th Avenue Jail. Both areas have adequate lighting for conducting a drug evaluation and have a concrete floor with no obstructions. The darkroom examinations were conducted in the staff restroom.

2. **Witnesses:** Deputy Ryan Castro of the Maricopa County S.O. witnessed and recorded the drug influence evaluation.

3. **Breath Alcohol Test:** Officer Graff administered a breath test to the suspect at 2055 hours and obtained a 0.00 BAC result using an Intoxilyzer 8000, serial number 68100.

4. **Notification and Interview of the Arresting Officer:** On 10/21/17, I was on duty and at approximately 2115 hours was requested to contact Officer Graff at the 4th Avenue Jail for a drug evaluation. At the jail, I was advised by Officer Graff that he had arrested the suspect during a West Valley DUI Task Force enforcement operation. According to Officer Graff, the suspect was driving 15 miles over the posted speed limit on Grand Avenue and failed to stop at a red traffic light at West Greenway Road. When Officer Graff activated his overhead emergency lights to the stop the suspect's vehicle, the suspect continued for approximately a half mile before stopping. When the suspect pulled his vehicle over, he stopped in a position partially blocking an intersection. When asked for his operator's license, vehicle registration and proof of insurance, the suspect appeared confused and several times asked Officer Graff why he had been stopped. Officer Graff noted that the suspect's movements were slow and deliberate. After existing his vehicle, the suspect had to steady himself against his vehicle several times. During the contact, Officer Graff did not detect the odor of an alcoholic beverage on the suspect's breath. When asked about consuming alcohol, the suspect denied consuming any. Officer Graff had the suspect perform SFSTs at roadside which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and One Leg Stand (OLS) tests. According to Officer Graff, no HGN clues were observed. The suspect had difficultly performing the W&T and OLS tests. Officer Graff indicated he detected an odor of marijuana on the suspect's clothing and coming from his vehicle. Officer Graff arrested the suspect for DUI and transported him to the DPS Office where a breath test was conducted and a blood sample obtained. After obtaining a .00 BAC result, Officer Graff requested a DRE to assist with the investigation. Once I arrived to assist with the investigation, Officer Graff returned to the DUI Task Force operation.

5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area of the 4th Avenue Jail. He appeared to be cooperative and appeared to be confused. He was slow to respond to questions and several times appeared confused when trying to relate information. His speech was slow, slurred, and at times difficult to hear. When he stood up from the booking bench, he used the wall to steady himself. His pupils appeared to be dilated, and his eyes were bloodshot and watery. I noted that the suspect was wearing tan colored shorts, a multi-colored tee shirt, and unlaced brown athletic shoes.

6. **Medical Problems and Treatment:** When asked about any medical conditions, the suspect indicated he had a "sore back" and was smoking marijuana to try and relieve the pain. When asked if he had a medical marijuana card, he indicated he did not, but was planning to get one. When asked if his sore back would prevent him from participating in the drug influence evaluation, the suspect stated, "I should be okay, dude." When asked if he required any medical assistance for his back pain, he indicated he did not. The suspect did not report any other medical conditions and none were observed during the evaluation.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect per DRE protocol:

Modified Romberg Balance: During this test, the suspect exhibited a circular sway of approximately three inches. His time estimation was slow, estimating 30 seconds in 42 seconds. When asked how he had estimated the 30 seconds, the suspect stated, "I was trying to count, but I kind of forgot." Eyelid tremors were present throughout the test.

Walk and Turn: Prior to starting the test, the suspect was asked if his shoes would create any difficulties in properly completing the test. He replied he did not think so, and agreed to do the test with them on. For the test, a painted white line on the concrete floor was used. During the instruction stage of the test, the suspect lost his balance to the right twice. After regaining his balance and starting the walking stage, his steps were slow and deliberate. He failed to touch heel to toe on his 3rd and 4th steps, raised his arms for balance once, and stopped on the 9th step and appeared to be confused on how to continue. He then asked, "What now?" He was advised to make his turn as directed and continue with the remainder of the test following the instructions. He then made an improper turn by taking multiple steps with both feet, turning around in a circle. On the second nine steps, the suspect stopped walking on his first step and again appeared to be confused. He raised his arms for balance three times on the second nine steps and failed to touch heel to toe on his 7th and 8th steps. Leg tremors were present throughout the test. Several times the suspect laughed out loud and appeared to be amused as he attempted the test.

One Leg Stand: Per DRE protocol, this test was conducted twice, once standing on the left foot and once standing on the right foot. While standing on his left foot and raising his right foot, he counted out loud slowly, counting to 1,024, when the test was stopped after 30 seconds. He swayed while balancing and twice used his arms for balance while standing on his left foot. He lost his balance once and put his foot down at count 1,015. While standing on his right foot and raising his left foot, the suspect again counted slowly reaching 1,022 when 30 seconds had elapsed. He swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 1,017 and 1,019. Leg tremors were present throughout the test. He also counted incorrectly while standing on his right foot, skipping 1,012 and 1,020. After skipping the numbers in the count, he began laughing.

Finger to Nose: During this test, the suspect's arm movements towards his nose were slow and deliberate. He did not touch the tip of his nose with the tip of his index finger as instructed on attempts 1, 2, 4 and 5. Eyelid tremors were present throughout the test. Several times the suspect began laughing as he attempted to touch his nose.

8. **Clinical Indicators of Impairment:**

Eye Signs: The eye examinations were conducted in the jail staff restroom which is equipped with a glow stick on the wall. The room can be adequately darkened for the examination process. No clues of HGN were present. VGN was also not observed. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 6.0 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. Rebound dilation was present with his pupils ranging from 5.0 mm to 6.5 mm in in both eyes in Direct Light. All three estimations were above the DRE average ranges for each of the lighting conditions. A lack of convergence was also present in both eyes.

Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were 98, 96 and 98 beats per minute. All three results were above the DRE average range for pulse rates. The suspect's blood pressure was checked at 162/98, which was also above the DRE average range for blood pressure. His body temperature was 98.2 degrees, which is within the DRE average range. The suspect was asked about his elevated pulse rates and blood pressure and he indicated he was not aware of why they would be elevated. He also indicated that he did not have a history of high blood pressure.

9. **Signs of Ingestion:** The suspect's nasal area was clear. However, he did have a greenish coating on the back of his tongue, which can be an indicator of someone who has recently smoked marijuana. When questioned about the green coating, he had no explanation. No indicators of injection sites were located on the suspect's arms and hands.

10. **Suspect's Statements:** The suspect admitted smoking a bowl of marijuana about 30 minutes prior to being stopped. He stated he had been at a friend's house and his back was hurting, so he smoked some marijuana and was driving home when he was pulled over. He also admitted smoking marijuana earlier in the day at about 10 am just before he left his house for work. He also indicated that he now uses marijuana more than he used to, and has been smoking marijuana several times a week since he was about 20 years old. When asked if the marijuana he had smoked prior to being stopped had affected him, he stated, "Maybe just a little. It was some pretty good weed." He further indicated that he enjoys smoking marijuana because it relaxes him. He also stated that when he smokes marijuana he usually drives slower and considers himself a safer driver.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Robert Roach is under the influence of Cannabis and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A blood sample was collected from the suspect at 2100 hours in accordance with state statutory requirements and was submitted into evidence for laboratory testing.

13. **Miscellaneous:** The suspect was also cited for DWS and Driving Uninsured. Refer to Officer Graff's arrest report for additional details.

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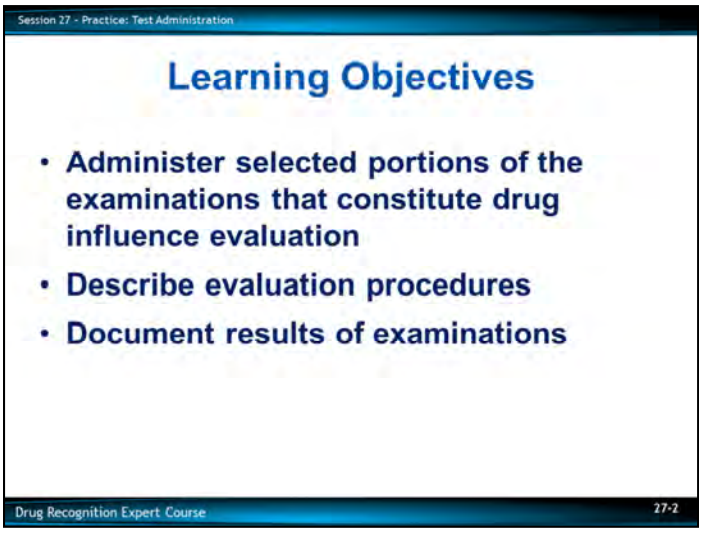
Session 27 - Practice: Test Administration
1 Hour, 30 Minutes
Session 27
Practice: Test Administration
TSI
NHTSA
Drug Recognition Expert Course
27-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the student will be able to:

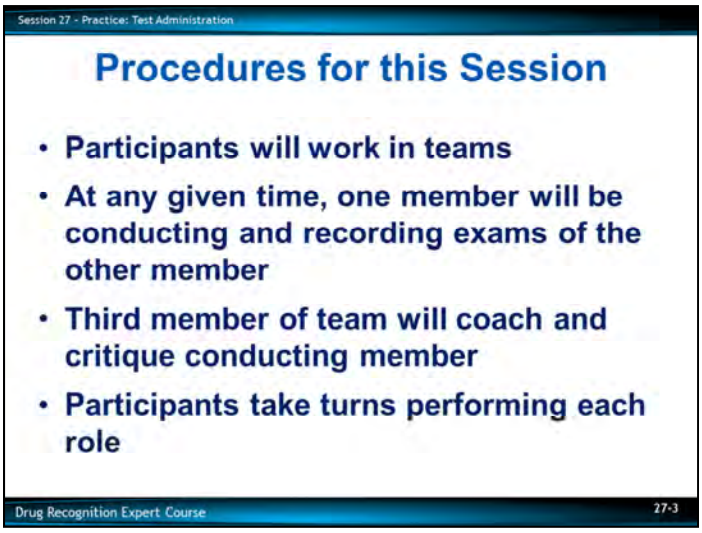
- Administer selected portions of the examinations that constitute the drug influence evaluation
- Describe the evaluation procedures
- Document the results of the examinations

CONTENT SEGMENTS

A. Procedures for this Session
B. Hands-On Practice
C. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Coaching
Participant-Led Coaching



A. <u>Procedures for this Session</u>

Team Assignments

- Participants will work in two or three member teams

Three member teams are preferable. However, no four-member teams should be constructed. Thus, for example, if the class has 25 participants, assign 7 three-member teams and 2 two-member teams.

Make team assignments.

- At any given time, one member of the team will be engaged in conducting and recording examinations of another member

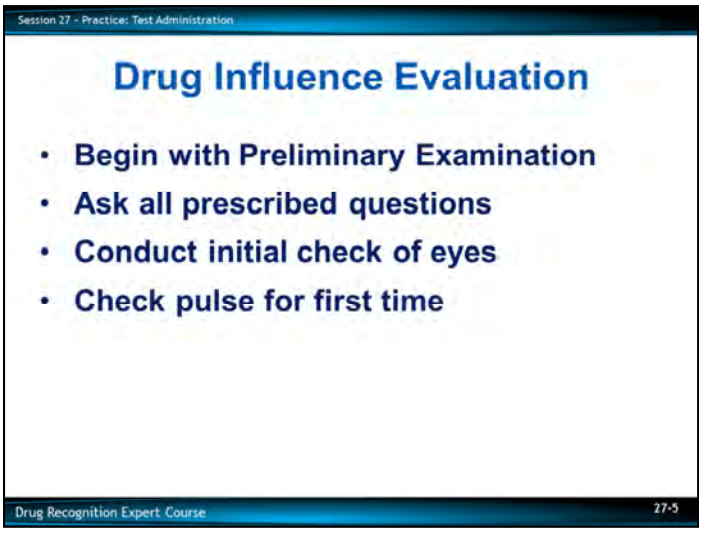
- The third member of the team will help coach and critique the participant who is conducting the examinations

- Participants will take turns serving as test administrator, test subject, and coach

Emphasize participants can help each other learn by pointing out errors of omission or commission.

B. <u>Hands-On Practice</u>

Instruct participants to begin their practice.
Monitor the teams and offer encouragement and constructive criticism, as appropriate.
Make sure each participant serves as the test administrator for at least one complete drug influence evaluation.



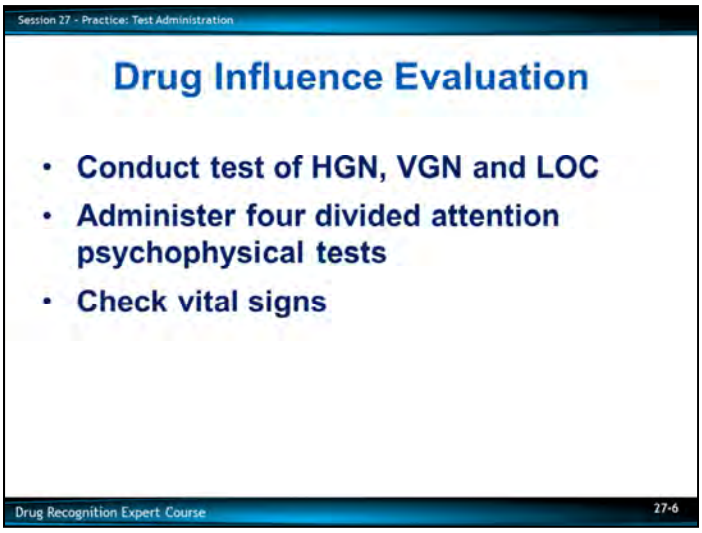
Drug Influence Evaluation
For this practice session, each participant will conduct a complete drug influence evaluation.
Instruct participants to review the standardized drug influence evaluation form in their manual.

Begin with the Preliminary Examination.
For practical purposes, not all 12-steps will be completed in this Session. Provide information to participants regarding steps one and two.

Ask all of the prescribed questions.

Conduct the initial check of the eyes.

Check the pulse for the first time.
Point out the participant who is "coaching" should simultaneously take the subject's pulse along with the test administrator*.*

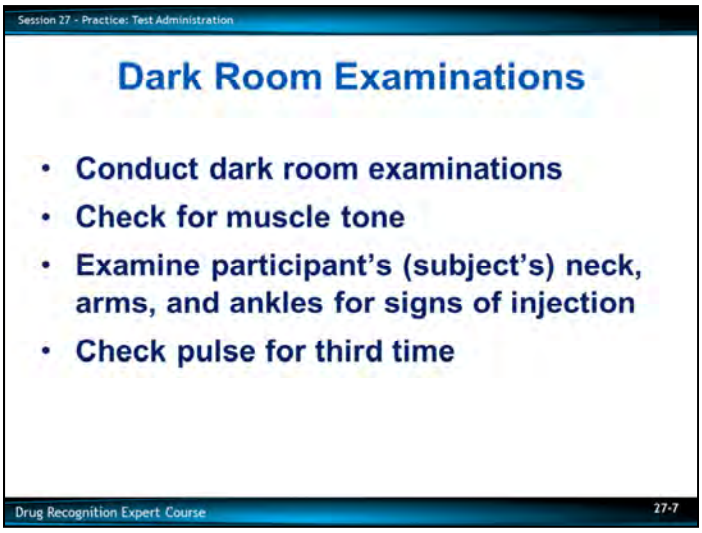


Conduct the test of Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), and Lack of Convergence (LOC).
Point out when conducting the HGN test, the "coach" should check the participant administrator's ability to estimate angles of 30, 40, and 45 degrees. If available, a template should be used for this check.

Administer the four divided attention psychophysical tests.
- Modified Romberg Balance (MRB) test
- Walk and Turn (WAT) test
- One Leg Stand (OLS) test
- Finger to Nose (FTN) test

Point out it will not be necessary for the participant (<u>subject</u>) actually to perform these tests (except for FTN). It will suffice for the participant (<u>administrator</u>) simply to give the test instructions accurately and completely.

Check the vital signs.
- Blood pressure
- Temperature
- Check the pulse for the second time



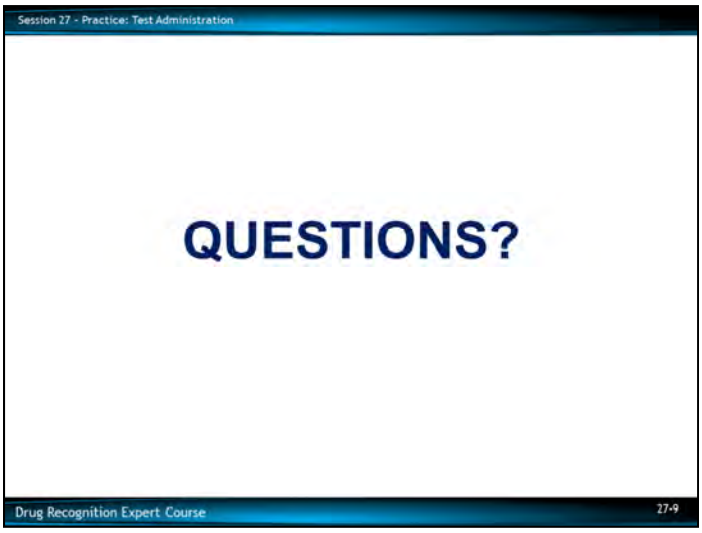
Dark Room Examinations

- Conduct the dark room examinations

Point out for this practice session these examinations will not actually be given in the dark

- Check for muscle tone
- Examine the participant's (subject's) neck, arms, and ankles for signs of injection
- Check the pulse for the third time

Solicit participants' questions concerning procedures for this practice session.



C. <u>Session Wrap-Up</u>

Solicit participants' comments and questions concerning Test Administration.

DRUG INFLUENCE EVALUATION

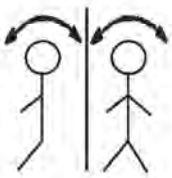
Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle)	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time /Location / /	Breath Test: Test Refused ☐ Results: Instrument #:		Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐	
Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today? When?		What have you been drinking? How much?	Time of last drink?
Time now/ Actual /	When did you last sleep? How long?		Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No		Are you under the care of a doctor or dentist? ☐ Yes ☐ No	
Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:		Coordination:	
Speech:	Breath odor:		Face:	
Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery		Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal
Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

Pulse and Time 1. ____ / ____ 2. ____ / ____ 3. ____ /	HGN	Left Eye	Right Eye	**Convergence** Right eye Left eye
	Lack of Smooth Pursuit			
	Maximum Deviation			
	Angle of Onset			

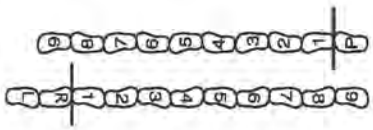
/30 **One Leg Stand** /30

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance
Approx. Approx.



Walk and Turn Test

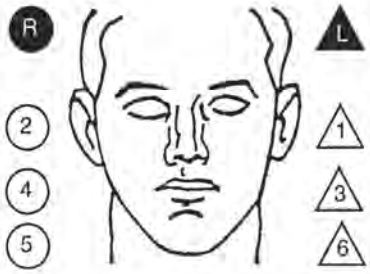


Cannot keep balance ____
Starts too soon ____

	1st Nine	2nd Nine
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation ____estimated as 30 seconds	Describe turn	Cannot do test (explain)	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

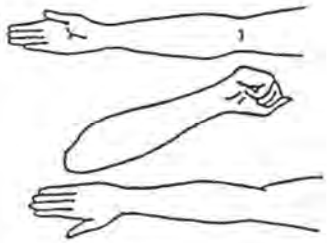
Nasal area:

Oral cavity:

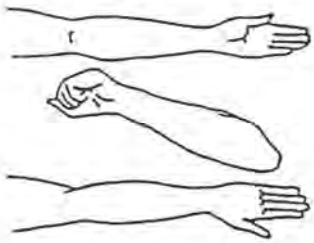
Rebound Dilation: ☐ Yes ☐ No

Reaction to Light:

RIGHT ARM



LEFT ARM



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid
Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:

☐ Subject refused entire evaluation
☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☐ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☐ Cannabis

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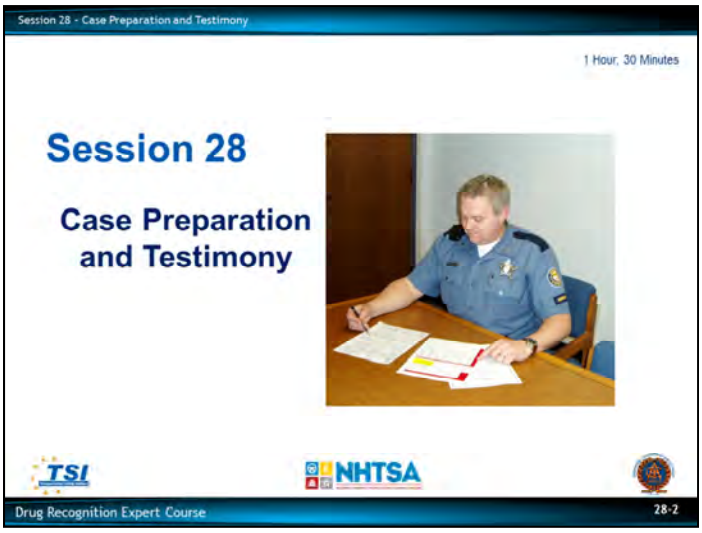
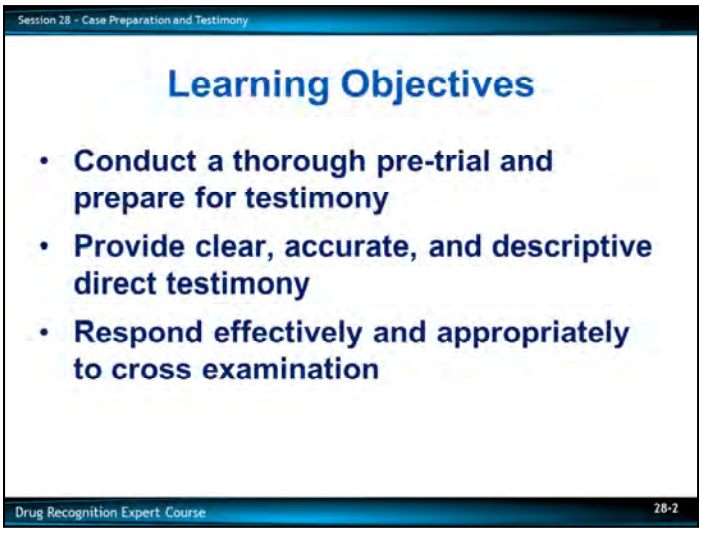

Session 28 - Case Preparation and Testimony
1 Hour, 30 Minutes
Session 28
Case Preparation and Testimony
TSI
NHTSA
Drug Recognition Expert Course
28-2



Briefly review the objectives, content, and activities of this section.

Upon successfully completing this session, participants will be able to:

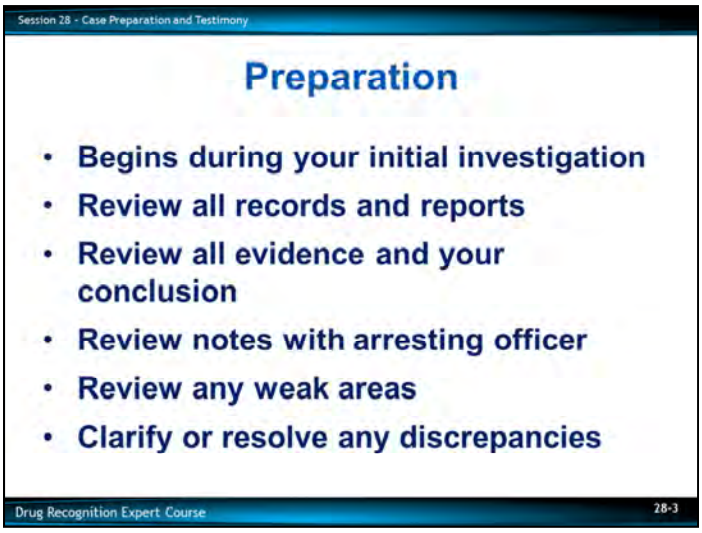
- Conduct a thorough pre-trial review of all evidence and prepare for testimony
- Provide clear, accurate, and descriptive direct testimony concerning drug influence evaluations
- Respond effectively and appropriately to cross examine in DRE cases

CONTENT SEGMENTS

A. Guidelines for Case Preparation
B. Guidelines for Direct Testimony
C. Typical Defense Tactics

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Reading Assignments

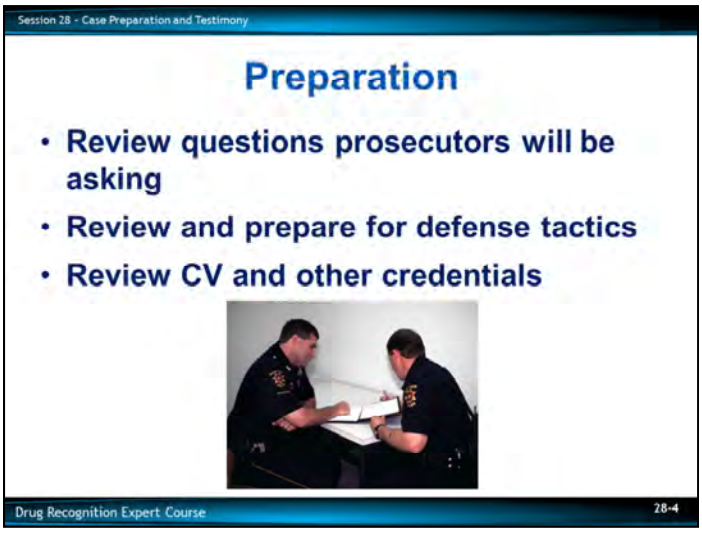


A. <u>Guidelines for Case Preparation</u>

Preparation
Preparation to present your case in court begins during your initial investigation.

The quality of your investigation and documentation will ultimately determine your ability to accurately present information during trial.
Point out it is especially important to take complete and accurate notes of your investigation and observations. Complete documentation of this information is essential.

When you receive the trial notice, you should schedule a pre-trial conference with the prosecutor.
- Review all records and reports associated with the case
- Review all evidence and your conclusion
- Review notes with arresting officer
- Review any weak areas
- Clarify or resolve any discrepancies

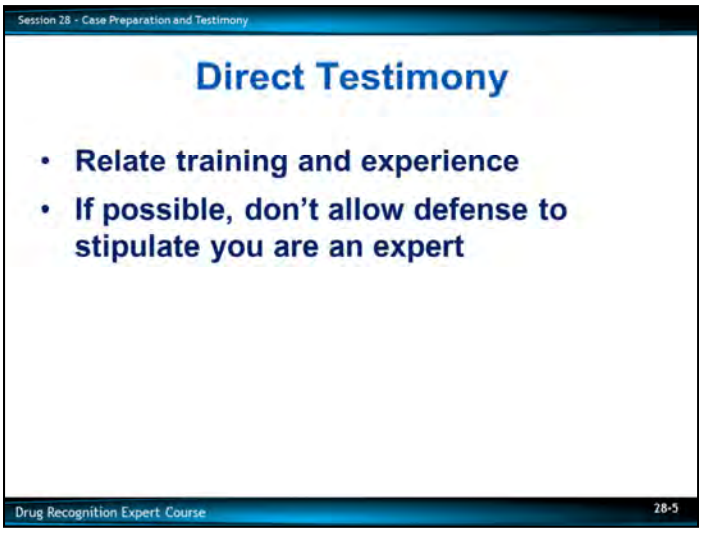


- Review questions the prosecutors will be asking
- Review typical tactics the prosecutors expect the defense to use
- Review your Curriculum Vitae (CV) and credentials

If a pre-trial conference is not possible, identify the main points of the case and discuss them with the prosecutor during the few minutes before the trial.

- It is very important to meet with prosecutors that have never been exposed to the Drug Evaluation and Classification (DEC) Program before trial to explain it can not be treated like a typical DUI trial
    - You must explain there are different protocols for DUI vs. DRE cases

- Excellent resources for prosecutors can be obtained through the National Traffic Law Center (NTLC)
    - Another excellent resource is your state's Traffic Safety Resource Prosecutor (TSRP)



B. <u>Guidelines for Direct Testimony</u>

Direct Testimony
Although knowledge only greater than what the public has is required to qualify as an "expert." Your testimony will carry much more weight if you have good credentials.

Qualifications will be established during Voir Dire:
- Voir Dire is a French expression literally meaning "to see, to say"
- Loosely, this would be rendered in English as "to seek the truth" or "to call it as you see it"
- In a law or court context, one application of Voir Dire is to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court

When testifying, relate training and experience to the type of arrest being tried (e.g., DWI, Methamphetamine, Cocaine, etc.).

Being qualified as an expert in the past does not automatically qualify you as an expert in a particular court case.
- Highlight the fact you were <u>selected</u> to attend specialized DRE training, not just assigned randomly

Point out officers should document all previous cases where they were qualified as an expert.
- If possible, do not allow the defense to stipulate you are an expert

_____

_____

_____

_____

_____

- Document and record all evaluations conducted
  - Establish ratio of evaluations that resulted in a finding the subject was not under the influence

- Highlight the number of times you have seen a person under the influence of the drug(s) in question and have observed the symptomatology, etc.

- Ability to answer specific questions with confidence, skill, and exactness will bolster a professional image in the eyes of the judge and/or jury

New Scientific Principle

Point out they aren't really new, just not within the common realm of knowledge of the average person.

- The scientific principles are unfamiliar to the jury or judge

Your task is to establish your hard work through training will be acceptable in the court.

- American courts employ either the Frye or the Daubert standards for determining the admissibility of scientific evidence

Discuss the appropriate rule of evidence for your jurisdiction.

The landmark case "Frye vs. U.S." 293F 1013 (D.C. Cir. 1923).

Frye requires the scientific principle or theory used to support "evidence" be in conformity with a generally accepted explanatory theory, if the "evidence" is to be admissible.

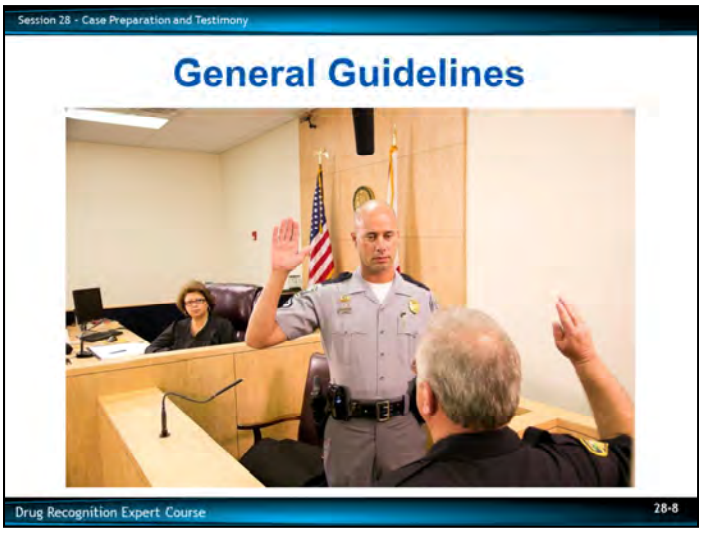
Point out it is not enough qualified experts testify a particular scientific technique is valid. The technique must be generally accepted by the relevant scientific community.

In Daubert, courts serve as a gatekeeper for all scientific evidence.

Source: Daubert vs. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)

Courts assess evidence by considering four factors:

- Opinions are testable
- Methods/principles have been subject to peer review
- Known error rate can be identified
- Opinions rest on methodology generally accepted within the relevant scientific/technical community



General Guidelines

- Basic job is to present the findings of your investigation the suspect was under the influence of a drug or some combination of drugs
  - Keep this in mind at all times

- Don't be afraid to say "I don't know"

Point out the officer is not expected to be an expert on all aspects of all drugs.

- Testify to only what you know

- Remember, an expert witness can rely on hearsay to develop his or her expertise

Avoid contact with the defense attorney if possible.

Don't be upset if prosecutor and defense attorney appear friendly to each other.
Remind participants both sides have a specific role to play in the case at hand, but that does not preclude a personal or professional relationship.

- Remember, some jurors focus on an officer's demeanor more than content of testimony

Point out the DRE should be polite and courteous during testimony. Do not become agitated as a result of defense questions. Do not take personal issue with defense statements, stick to the facts.

_____

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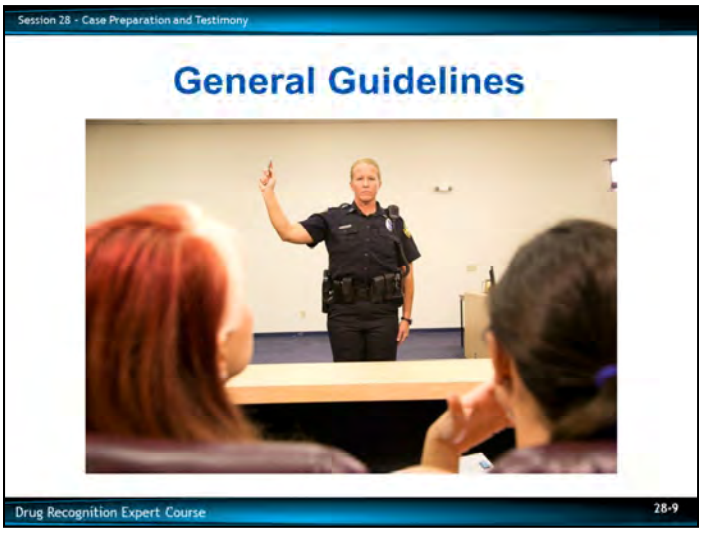

Do not bring manuals or articles into court for reference.

- Review materials before court to become familiar with contents

- Explain technical terms in layman's language
  - For example, Horizontal Gaze Nystagmus (HGN) means an involuntary jerking of the eyes occurring as the eyes gaze to the side

- Pay attention to what evidence or testimony can be and is excluded

Point out if the officer testifies on subject matter that was excluded, it could result in a mistrial.

When describing subject's performance on Standardized Field Sobriety Tests (SFSTs), explicitly describe exactly what the subject did or neglected to do.

Point out the terms "pass" or "fail" should not be used. Describe actual performance. The defense will try to trip you up on this point…there are no passing and failing marks.

Point out if terms "normal" or "within normal" are used in the DRE report, be prepared to describe what those terms mean and how they relate to the DRE average ranges (i.e., pupil size, pulse, blood pressure, etc.).

- Results of subject's performance are describable evidence
- Be sure to emphasize all evidence is taken into account before forming an opinion
- If defense attorney asks a "why" question, take the opportunity to explain in great detail if appropriate

Point out this suggestion does not mean the officer should embellish his or her testimony…be careful not to open any doors for the defense.

_____

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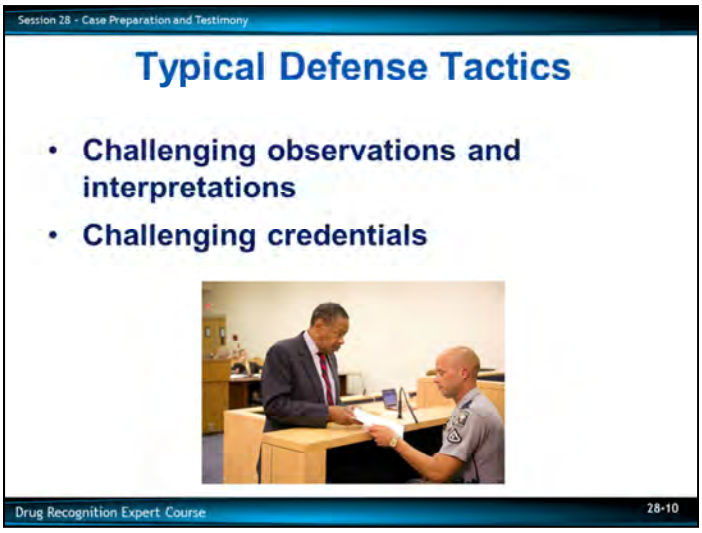


C. <u>Typical Defense Tactics</u>

Point out the defense attorney's job is to try and create a "reasonable doubt." Don't take it personally.

The defense relies on several factors to "impeach" or discredit your testimony.

The defense will challenge your observations and interpretations. They will attempt to show the signs, symptoms, and behaviors observed have other explanations.

Defense will challenge your credentials. A bona fide expert has both formal training resulting in a high degree of knowledge and experience in applying knowledge, resulting in a skill.

Point out if the defense can discredit your training and/or experience, your testimony will have little "weight" with the jury.

By demonstrating the officer lacks depth of knowledge in the drug field by contrasting his or her knowledge with the defense expert's knowledge.

- The trial tactic is to show the officer does not have the expertise to accurately determine the cause of intoxication/impairment because of inadequate formal training which lessens the value of his/her field experience and increases likelihood he/she is mistaken in his/her conclusion

_____

_____

_____

_____

_____

_____

Some examples of challenging your credibility are:
Inconsistencies:

- Arresting officer's and examining officer's testimony must be complimentary
  - Any differences must be explained

- Get your facts straight and stick to them

Comparison with past testimony:

- Try to get copies of transcripts of previous trials to review your strong/weak points
  - If possible, review your testimony with the prosecutor

Testimony at odds with other established experts:

- Do your homework…review the literature
  - Explain any differences, if possible

Lack of recall:

- Try to be prepared, but don't be afraid to say "I don't know"
  - Be honest

By demonstrating the officer incorrectly performed part of the evaluation, resulting in an erroneous conclusion.
Point out the evaluation should be performed "by the book" each and every time it is conducted.

Role of Defense Expert

To impeach credibility of the arresting officer and/or the prosecution expert.

- My expert vs. your expert
  - Usually they are 180 degrees apart in their opinions

To present alternative conditions and states could have produced the same or similar symptoms.

Typical Defense Questions

Pupillary examinations:

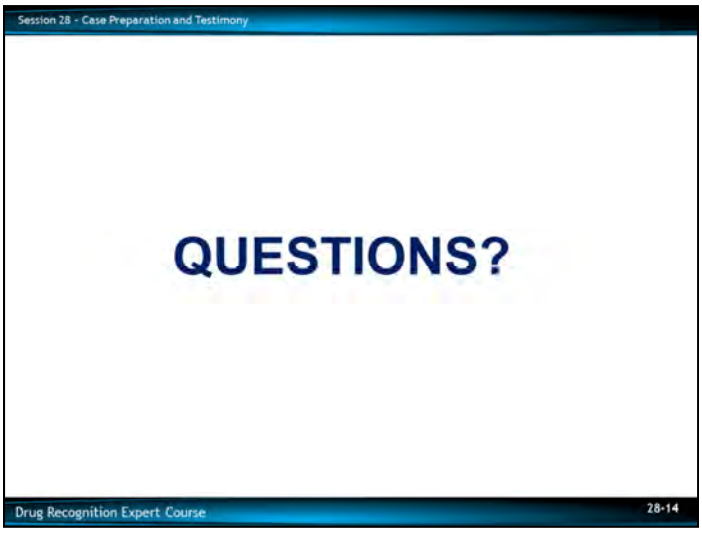
- Where the examination took place
- How dark was the examining room
- The size or power of the penlight
- Where the defendant was placed in relationship to the examiner
- Where the penlight was directed during the examination
- Where the defendant was looking during the examination
- How many times each pupil was checked
- Are there any physical illnesses or conditions that manifest the same signs as the drug(s) in question

Point out the list of possible answers is almost interminable.

Suggested role play to discuss the following questions:

To prepare for possible DRE-related testimony, a DRE should be familiar with the following:

- What is a DRE?
- What is involved in the DEC training program?
- How do DREs properly identify the drug category or categories?
- How do DREs explain their opinion?
- What are the components of a drug influence evaluation?



Solicit participants' comments and questions concerning Case Preparation and Testimony.

DRE DEFENSE CROSS EXAMINATION QUESTIONS

The following are representative of questions the defense may use to challenge the DRE's in court. (The defendant is identified as Miss Alicia Ann Ace.)

Missing Symptoms/Normals

This line of questions attempts to elicit the fact that the defendant did not have all of the expected signs or symptoms of the drug (s) in question.

Officer, you were taught that bruxism or grinding of the teeth is a sign of CNS Stimulant influence, isn't it? Miss Ace didn't have that sign, did she?

The defense may also focus on those signs or symptoms that were normal, and were therefore, not consistent with the drug in question.

Officer, you learned the normal range of temperature in DRE training, didn't you? And that range is 98.6 plus or minus one degree, isn't it? What was Miss Ace's temperature? (98) 98 is within normal ranges, isn't it? Miss Ace's temperature was normal, wasn't it? CNS Stimulants cause elevated temperature, don't they? Miss Ace's was not elevated, was it?

Alternative Explanations

The defense elicits alternative explanations for the signs and symptoms of the drug (s) in question. These alternative explanations usually deal with medical conditions, stress, a traffic crash, etc.

Officer, an elevated pulse rate can be caused by things other than drugs, can't it? Excitement may cause it? Stress may cause it? Being involved in a traffic crash is stressful, isn't it? And being involved in a traffic crash may cause elevated pulse, right? Being interviewed in the early morning by three police officers is stressful? And that may also cause the pulse to be elevated, can't it?

Defendant's Normals

The defense attempts to emphasize the fact that not everyone is so-called normal, that normal is subjective.

Officer, you were taught the normal range for pulse in DRE training, weren't you? And you agree that not all people fall in that normal range, don't you? That there are people with pulse rates above normal that aren't on drugs, right? A person's pulse changes over time, doesn't it? You don't know what Miss Ace's normal pulse is, do you? It could be in the normal range, right? But it could be above or below the normal range – normally for her, isn't that so?

Doctor Cop

The line of questioning challenges the credibility of the officer's teachers – that they are police officers, rather than medical professionals.

Officer, the teachers in this DRE school weren't doctors, were they? They weren't nurses either? Toxicologists? Pharmacologists? Paramedics? They were police officer, right?

Just a Cop

This line of questioning challenges the DRE's credentials – that they are "just a cop." This infers that the DRE evaluation is actually a medical evaluation that should be undertaken only by a medical professional.

Officer, you're not a doctor, are you? A toxicologist? A pharmacologist? A nurse? A physiologist? You don't have a degree in chemistry, do you? You're a police officer, right?

The Unknown

By causing the officer to state that they don't know how a sign or symptom is caused, the defense attacks the officer's credibility. This line of questioning challenges the officer's expertise, by implying that a real expert would know these things.

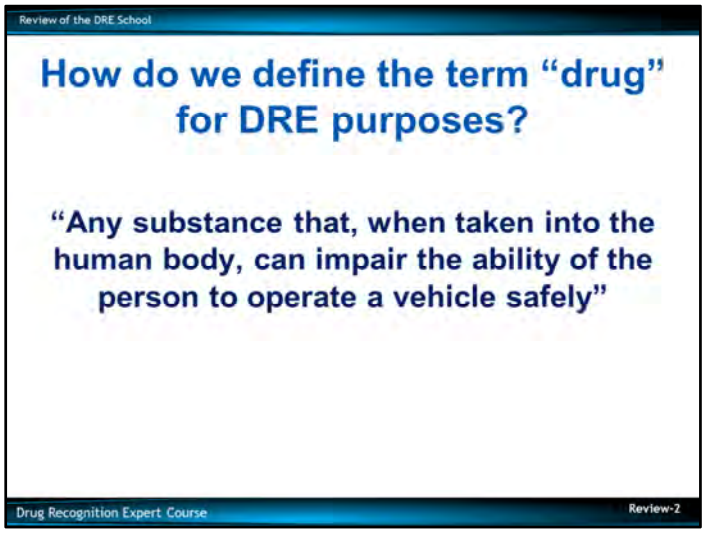
Officer, you don't know how CNS Stimulants dilate the pupil, do you? You don't know how alcohol supposedly causes nystagmus, do you? You don't know how CNS Stimulants supposedly elevate the heart rate, do you?

Guessing Game

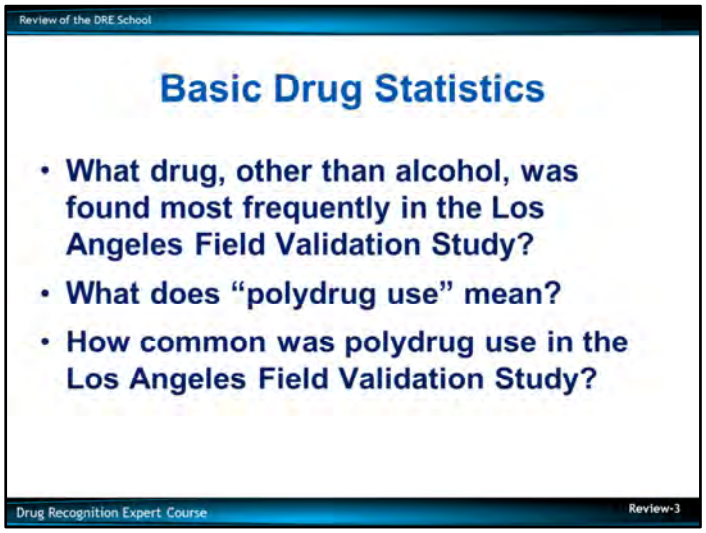
This tactic attacks the DRE's opinion as a subjective guess, a belief, rather than objective. Guesses can be wrong.

Officer, your opinion in a DRE case is subjective, isn't it? It's a belief on your part? You've made these beliefs in DRE cases in the past, haven't you? A sometimes toxicology didn't find the drug you predicted, isn't that so? And, in fact, sometimes, toxicology didn't find any drug, isn't that so? And so, sometimes your opinion is not correct, right? Sometimes, you guess wrong?

Review of the DRE School
2 Hours, 30 Minutes
Review of the DRE School
TSI
NHTSA
Drug Recognition Expert Course
Review-2



How do we define the term "drug" for Drug Recognition Expert (DRE) purposes?
"Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely."



Basic Drug Statistics

- What drug, other than alcohol, was found most frequently in the Los Angeles Field Validation Study?

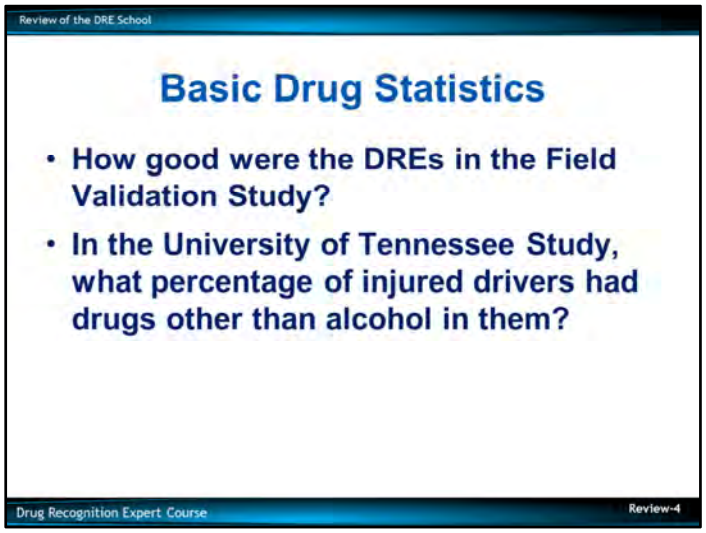
PCP

- What does "polydrug use" mean?

Ingesting two or more drugs

- How common was polydrug use in the Los Angeles Field Validation Study?

More than 70% of the subjects had two or more drug categories in them

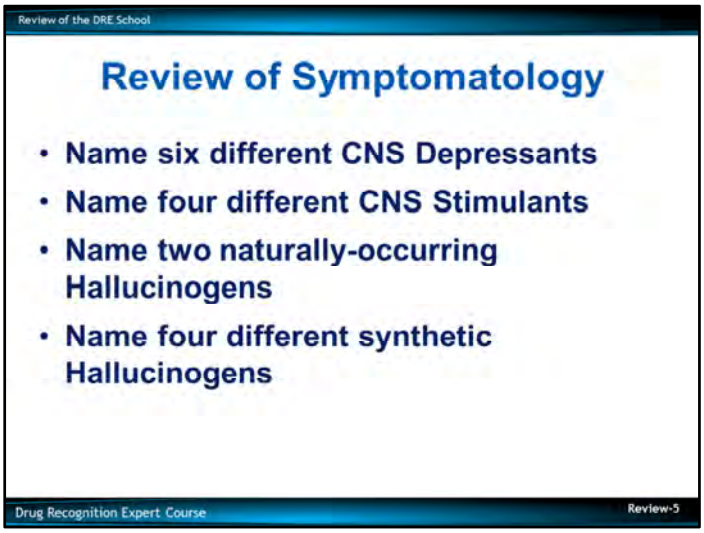


- How good were the DREs in the Field Validation Study?

Nearly 80% of the time when the DREs said a particular category of drugs was present, that category was found in the subject's blood.
In 92.5% of the subjects, the DREs correctly identified at least one of the categories that were present

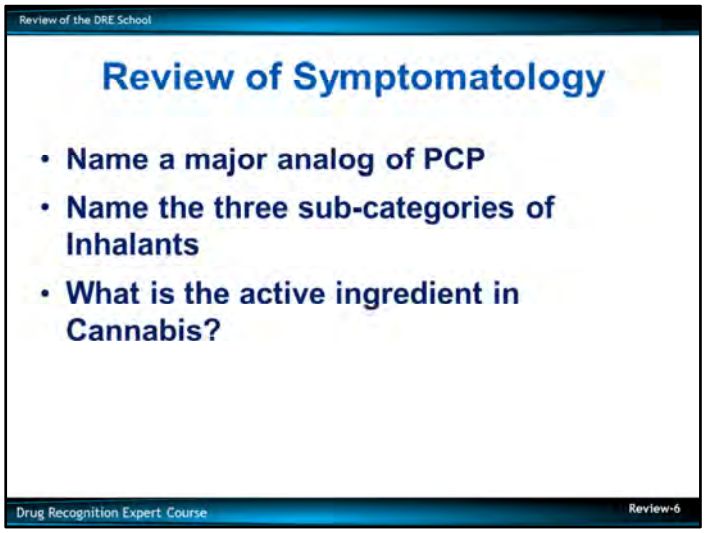
- In the University of Tennessee Study, what percentage of injured drivers had drugs other than alcohol in them?

40% of those drivers had evidence of other drugs in their urine



Review of Symptomatology

- Name six different Central Nervous System (CNS) Depressants
- Name four different CNS Stimulants
- Name two naturally-occurring Hallucinogens
- Name four different synthetic Hallucinogens



- Name a major analog of PCP

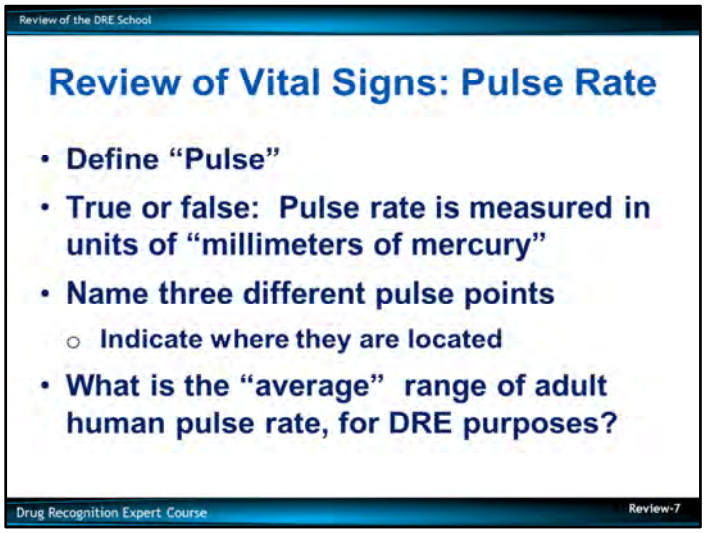
Ketamine

- Name the three sub-categories of Inhalants

Volatile Solvents, Aerosols, Anesthetic Gases

- What is the active ingredient in Cannabis?

THC



Review of Vital Signs

- Define "Pulse"

The rhythmic dilation and relaxation of an artery that results from the beating of the heart.

- True or False: Pulse rate is measured in units of "millimeters of mercury"

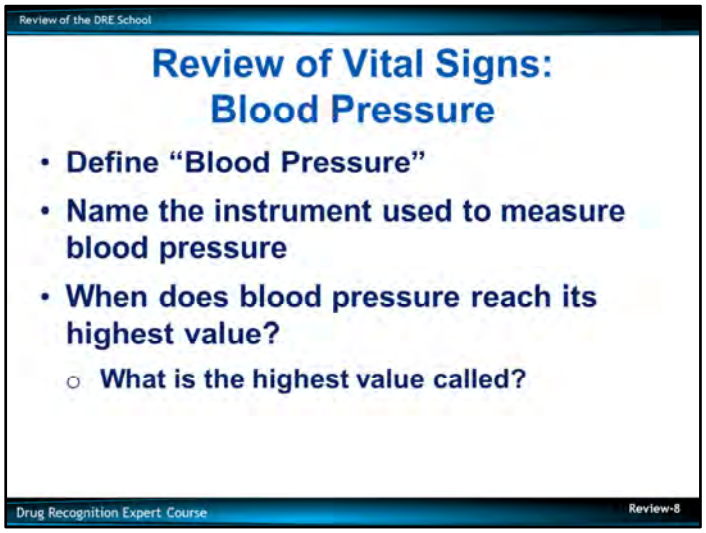
FALSE: pulse rate is measured in "beats per minute"

- Name three different pulse points, and indicate where they are located.

Radial, Brachial and Carotid pulse points

- What is the "average" range of adult human pulse rate, for DRE purposes?

60-90 beats per minute



Review of Vital Signs: Blood Pressure

- Define "Blood Pressure".

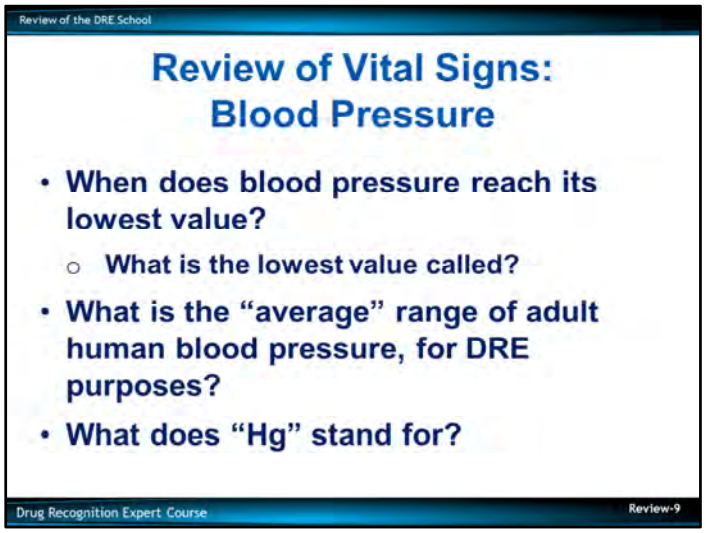
The force that the circulating blood exerts on the walls of the arteries

- Name the instrument used to measure blood pressure.

Sphygmomanometer

- When does blood pressure reach its highest value? What is the highest value called?

The systolic pressure is reached when the heart contracts and pushes blood into the arteries



- When does blood pressure reach its lowest value? What is the lowest value called?

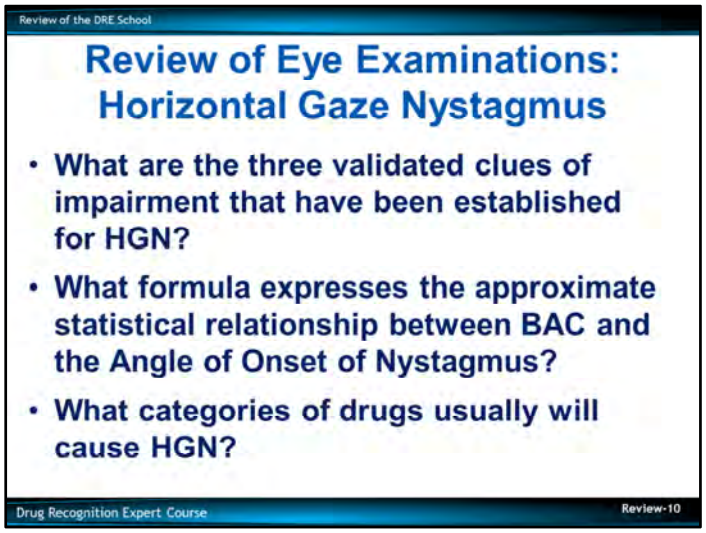
The diastolic pressure is reached when the heart is fully expanded

- What is the "average" range of adult human blood pressure, for DRE purposes?

Systolic: 120-140mmHg
Diastolic: 70-90mmHg

- What does "Hg" stand for?

Chemical symbol for mercury ("Hydrargyrum", Latin word for "Mercury"). Blood pressure is measured in millimeters of mercury



Review of the Eye Examinations: Horizontal Gaze Nystagmus (HGN)

- What are the three validated clues of impairment that have been established for HGN?

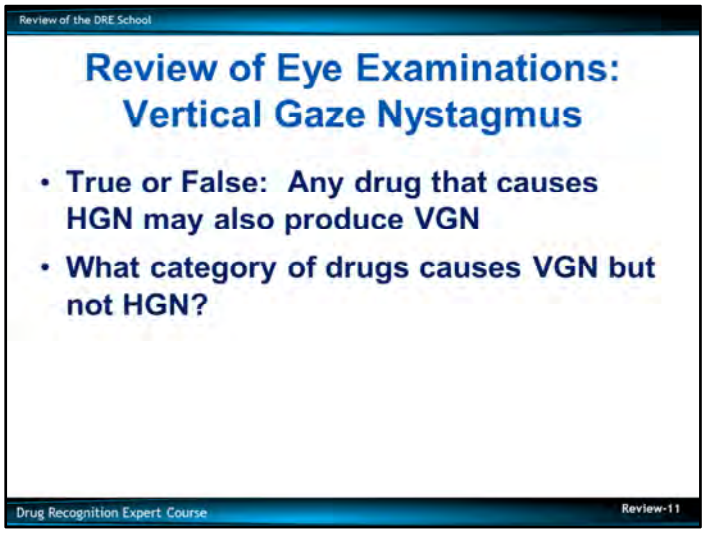
Lack of Smooth Pursuit
Distinct and Sustained Nystagmus at Maximum Deviation
Angle of Onset of Nystagmus

- What formula expresses the approximate statistical relationship between BAC and the Angle of Onset of Nystagmus?

BAC = 50 – Angle of Onset

- What categories of drugs usually will cause HGN?

CNS Depressants
Dissociative Anesthetics
Inhalants



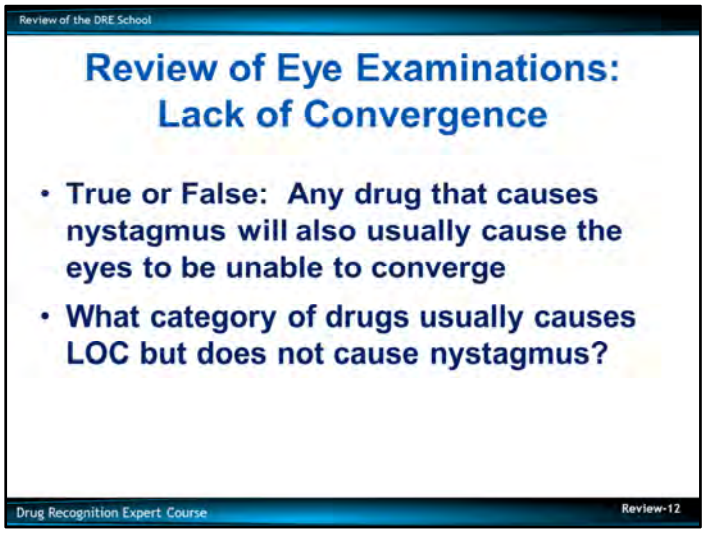
Review of the Eye Examinations: Vertical Gaze Nystagmus (VGN)

- True or False: Any drug that causes HGN may also produce VGN.

TRUE: All drugs that cause HGN will cause VGN, if the dose is large enough

- What category of drugs causes VGN but not HGN?

No drug causes VGN but not HGN



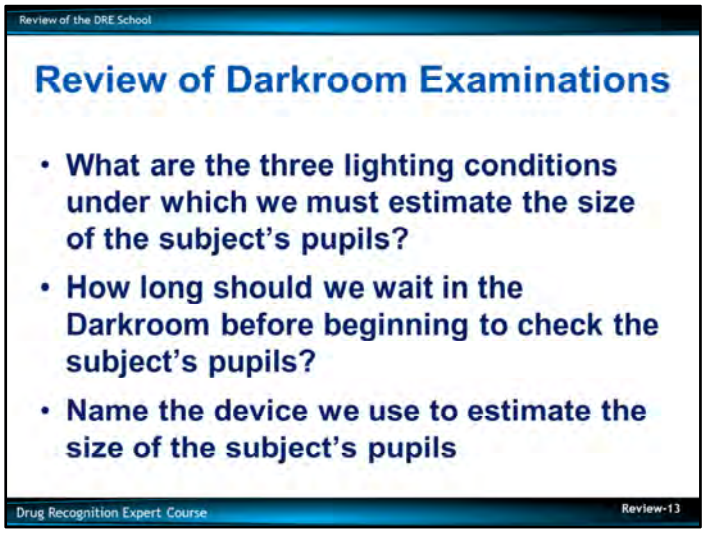
Review of the Eye Examinations: Lack of Convergence (LOC)

- True or False: Any drug that causes nystagmus will also usually cause the eyes to be unable to converge.

TRUE: CNS Depressants, Dissociative Anesthetics and Inhalants usually cause the eyes to be unable to converge

- What category of drugs usually causes LOC but does not cause nystagmus?

CANNABIS usually causes LOC, but doesn't cause nystagmus



Review of the Darkroom Examinations

- What are the three lighting conditions under which we must estimate the size of the subject's pupils?

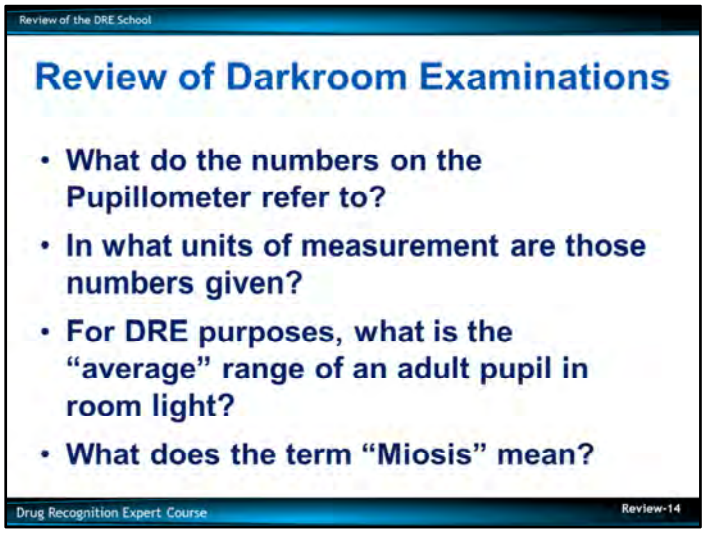
Room Light
Near Total Darkness
Direct Light

- How long should we wait in the Darkroom before beginning to check the subject's pupils?

At least 90 seconds

- Name the device we use to estimate the size of the subject's pupils.

Pupillometer



- What do the numbers on the Pupillometer refer to?

The diameters of the dark circles/semi-circles

- In what units of measurement are those numbers given?

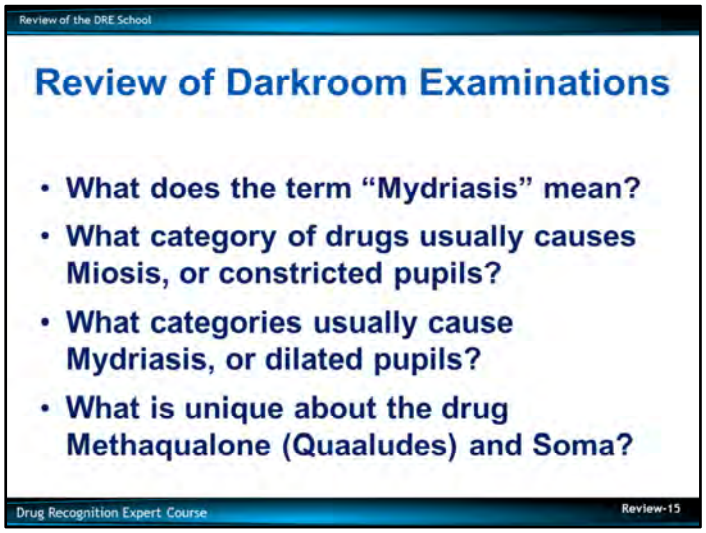
In millimeters

- For DRE purposes, what is the "average" range of an adult pupil in room light?

The diameter of the pupil normally ranges from 2.5 to 5.0 mm

- What does the term "Miosis" mean?

"Miosis" means an abnormally small or constricted pupil



- What does the term "Mydriasis" mean?

"Mydriasis" means an abnormally large or dilated pupil

- What category of drugs usually causes Miosis, or constricted pupils?

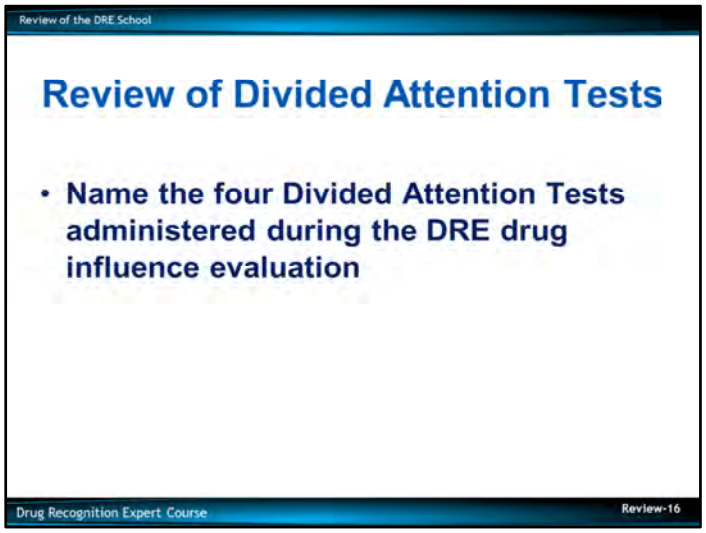
Narcotic Analgesics usually cause pupils to constrict below the DRE average range.

- What categories usually cause Mydriasis, or dilated pupils?

CNS Stimulants and Hallucinogens usually cause pupils to dilate above the DRE average range. Cannabis also may cause dilation. Certain CNS Depressants and some inhalants may also cause pupil dilation.

- What is unique about the drug Methaqualone (Quaaludes) and Soma?

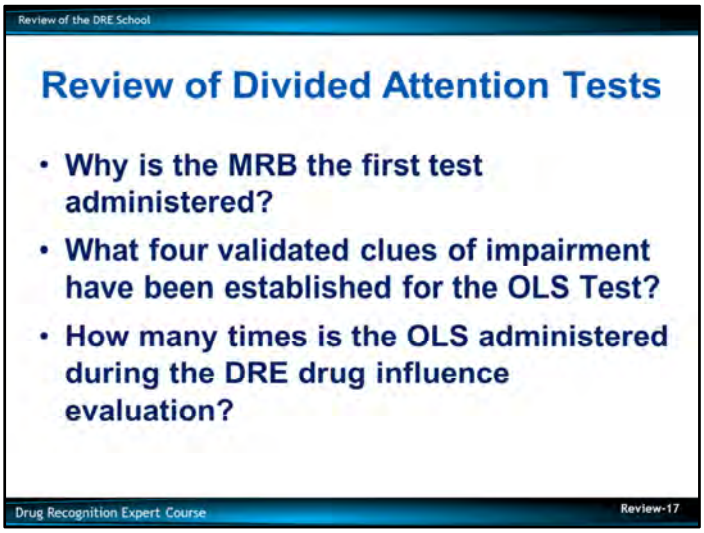
Both are CNS Depressants that cause pupil dilation.



Review of the Divided Attention Tests

- Name the four Divided Attention Tests administered during the DRE drug influence evaluation.

Modified Romberg Balance
Walk and Turn
One Leg Stand
Finger to Nose



- Why is the Modified Romberg Balance (MRB) the first test administered?

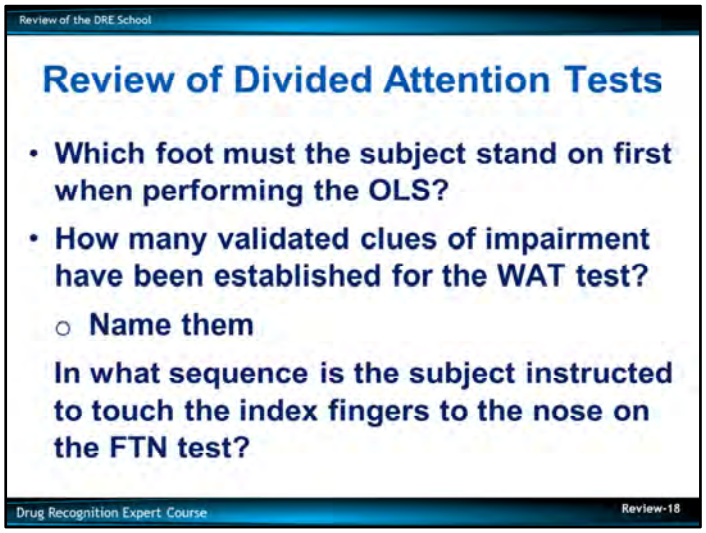
For standardization

- What four validated clues of impairment have been established for the One Leg Stand (OLS) Test?

Sways while balancing
Uses arms for balance
Hopping
Puts the foot down

- How many times is the OLS administered during the DRE drug influence evaluation?

Twice



- Which foot must the subject stand on first when performing the OLS?

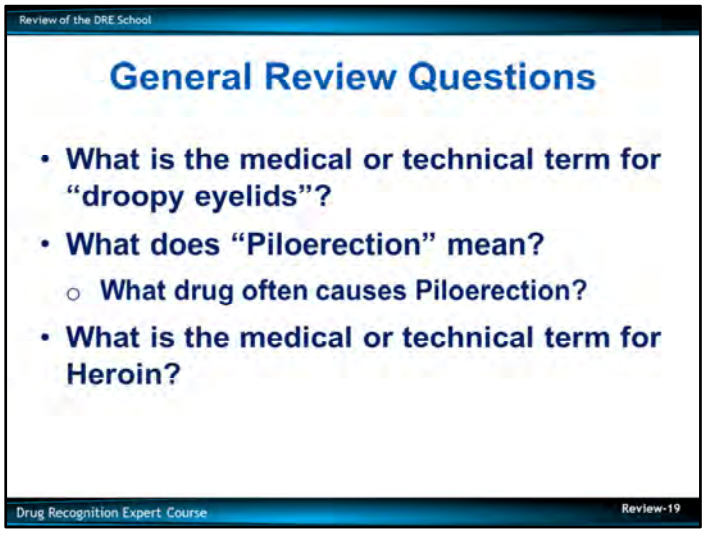
Left

- How many validated clues of impairment have been established for the Walk and Turn (WAT) test? Name them.

Eight validated clues
Cannot keep balance during the instructions
Starts too soon
Stops while walking
Does not touch heel-to-toe
Steps off the line
Uses arms for balance
Improper turn
Incorrect number of steps

- In what sequence is the subject instructed to touch the index fingers to the nose on the Finger to Nose (FTN) test?

Left, Right, Left, Right, Right, Left



General Review Questions

- What is the medical or technical term for "droopy eyelids"?

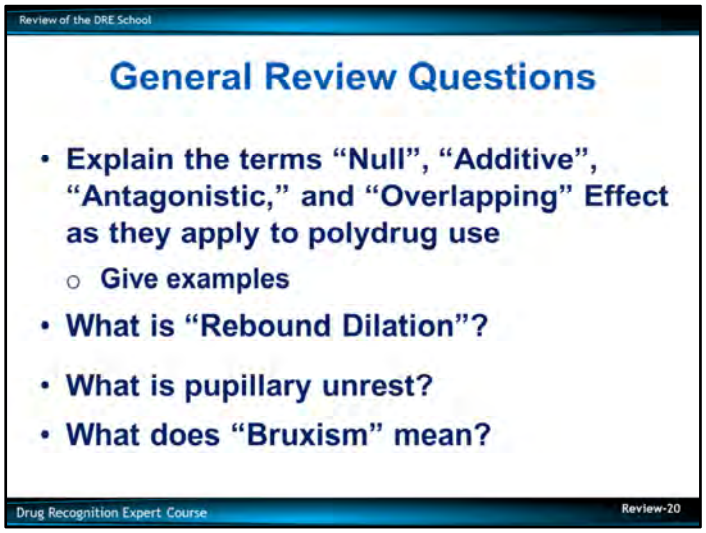
Ptosis

- What does "Piloerection" mean? What drug often causes Piloerection?

"Piloerection" means "Hair Standing Up", or "Goose Bumps". It is often caused by LSD

- What is the medical or technical term for Heroin?

Diacetyl Morphine



- Explain the terms "Null", "Additive", "Antagonistic," and "Overlapping" Effect as they apply to polydrug use. Give examples

"Null": neither drug affects some specific indicator
"Additive": the two drugs produce some identical effects
"Antagonistic": the two drugs produce some directly opposite effects
"Overlapping": one drug affects some symptom the other doesn't affect, and vice versa

- What is "Rebound Dilation"?

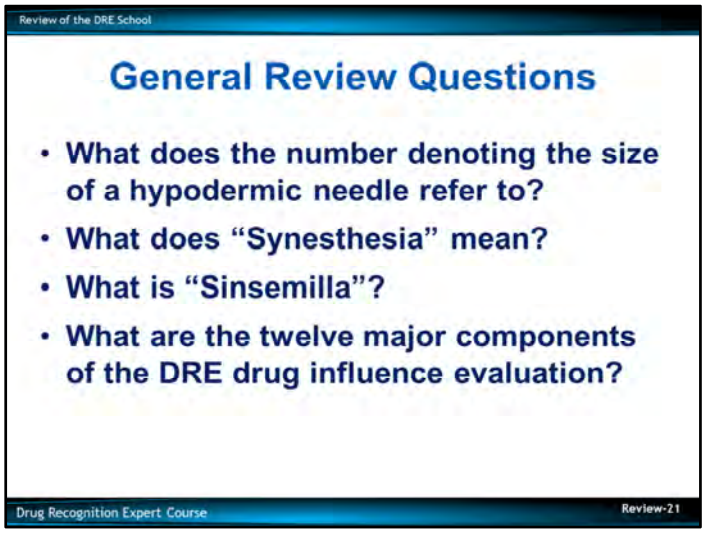
"Rebound Dilation" is a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original size.

- What is pupillary unrest?

The continuous change in the size of the pupils that may be observed under room or steady light conditions.

- What does "Bruxism" mean?

Grinding the teeth



- What does the number denoting the size of a hypodermic needle refer to?

The inside diameter of the needle

- What does "Synesthesia" mean?

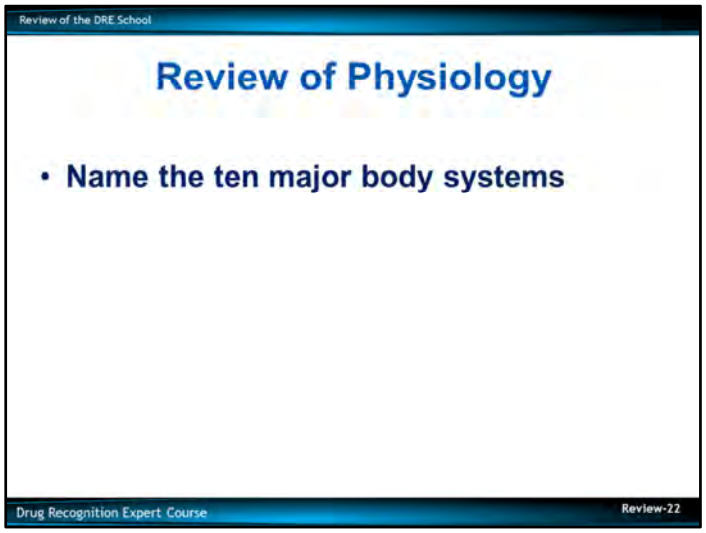
A mixing of senses, i.e. hearing colors or seeing sounds

- What is "Sinsemilla"?

A variety of marijuana with a high concentration of THC

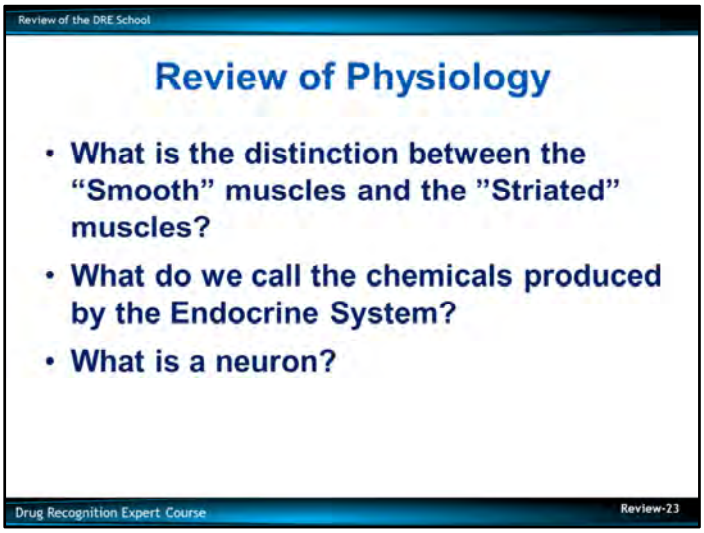
- What are the twelve major components of the DRE drug influence evaluation?

Breath Alcohol Test
Interview of Arresting Officer
Preliminary Examination
Examinations of the Eyes
Divided Attention Tests
Vital Signs Examinations
Dark Room Examinations
Examination for Muscle Tone
Examination for Injection Sites
Subject's Statements
Opinion of the Evaluator
Toxicological Examination



Review of Physiology

M is for Muscular System
U is for Urinary System
R is for Respiratory System
D is for Digestive System
E is for Endocrine System
R is for Reproductive System
S is for Skeletal System
I is for Integumentary System
N is for Nervous System
C is for Circulatory System



- What is the distinction between the "Smooth" muscles and the "Striated" muscles?

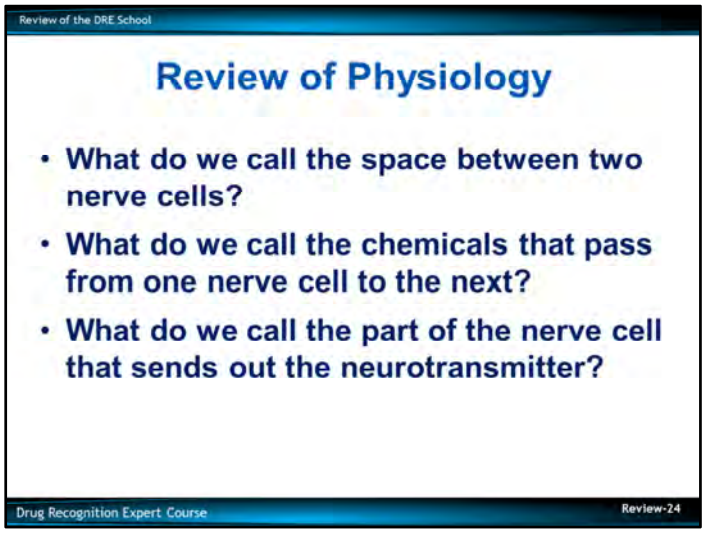
We consciously control the Striated; we don't consciously control the Smooth

- What do we call the chemicals produced by the Endocrine System?

Hormones

- What is a neuron?

A nerve cell



- What do we call the space between two nerve cells?

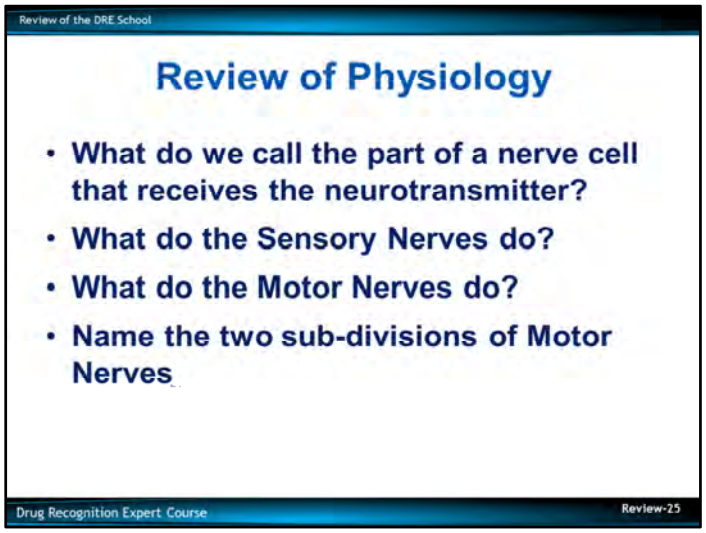
Synapse, or synaptic gap

- What do we call the chemicals that pass from one nerve cell to the next?

Neurotransmitters

- What do we call the part of the nerve cell that sends out the neurotransmitter?

Axon



- What do we call the part of a nerve cell that receives the neurotransmitter?

Dendrite

- What do the Sensory Nerves do?

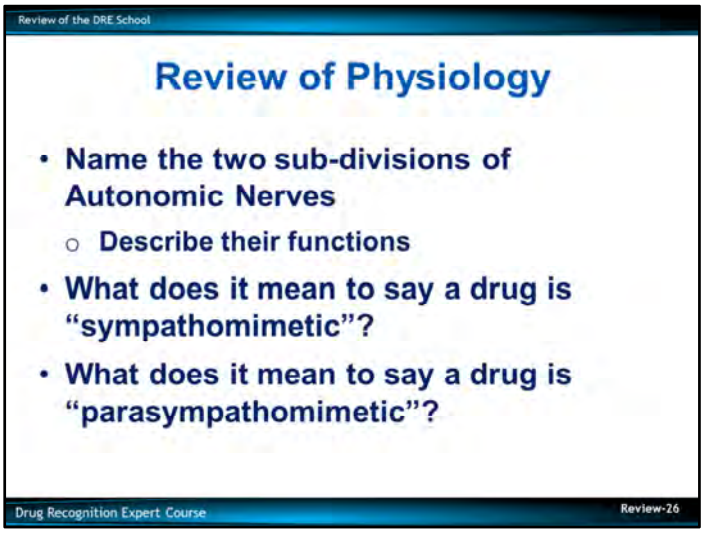
Carry messages to the brain, from the sense organs, pain sensors, etc.

- What do the Motor Nerves do?

Carry messages from the brain, to the muscles, etc.

- Name the two sub-divisions of Motor Nerves.

Voluntary (control striated muscles) and Autonomic (control smooth muscles)



- Name the two sub-divisions of Autonomic Nerves and describe their functions.

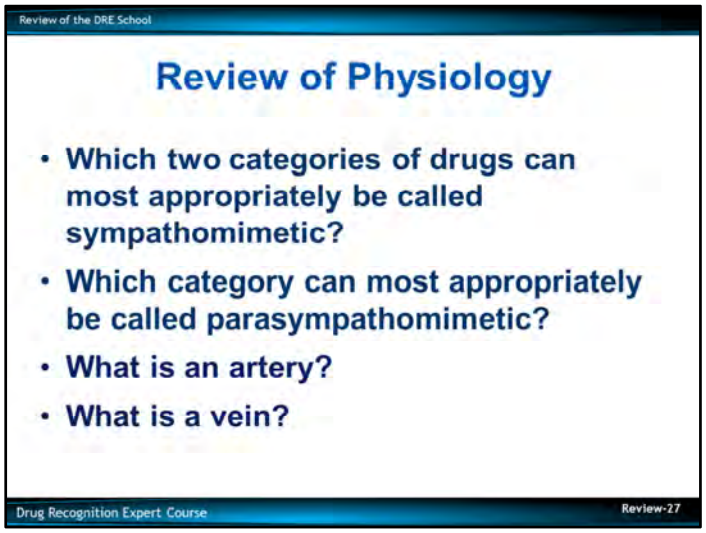
Sympathetic (command the body's response to fear, excitement, etc.), and Parasympathetic (promote the body's tranquil activities)

- What does it mean to say a drug is "sympathomimetic"?

It means the drug's effects mimic those caused by messages transmitted along sympathetic nerves (excitement, agitation, arousal, etc.)

- What does it mean to say a drug is "parasympathomimetic"?

The drug's effects mimic those caused by messages transmitted along parasympathetic nerves (relaxation, calm, sleep, etc.)



- Which two categories of drugs can most appropriately be called sympathomimetic?

CNS Stimulants and Hallucinogens

- Which category can most appropriately be called parasympathomimetic?

Narcotic Analgesics

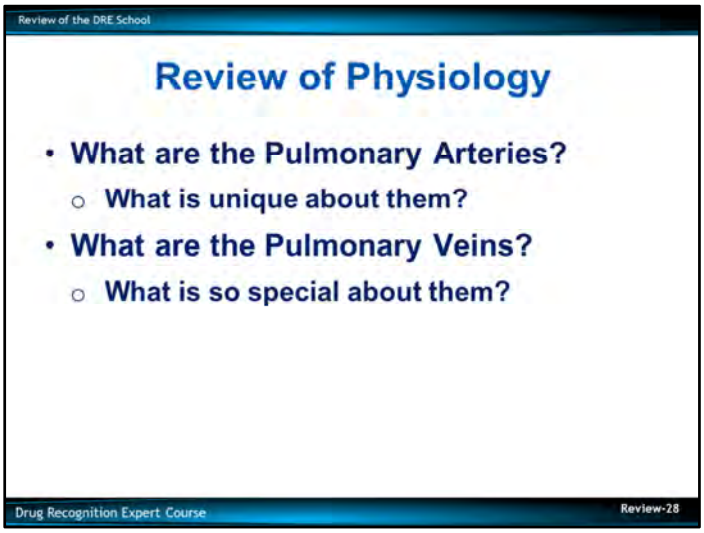
Clarification: Cannabis, Dissociative Anesthetics, and Inhalants have some sympathomimetic characteristics, but not as many as do the CNS Stimulants and Hallucinogens. CNS Depressants have parasympathomimetic characteristics, but not as many as the Narcotic Analgesics.

- What is an artery?

Strong, elastic blood vessel that carries blood from the heart to the body's tissues and organs

- What is a vein?

Blood vessel that carries blood back to the heart from tissues and organs

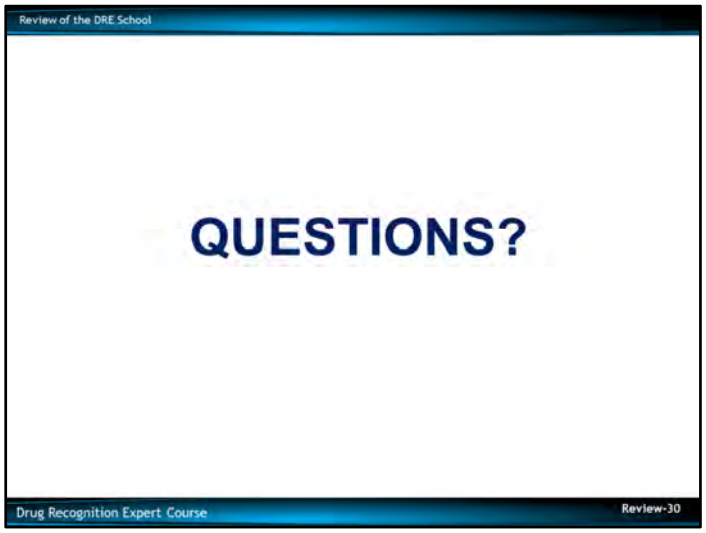


- What are the Pulmonary Arteries, and what are unique about them?

They are the arteries that carry blood from the heart to the lungs. They are the only arteries that carry blood depleted of oxygen.

- What are the Pulmonary Veins and what is so special about them?

They are the veins that carry blood back to the heart from the lungs. They are the only veins that carry blood rich in oxygen.



Solicit participants' comments and questions concerning the Review of the DRE School.

A SELF-TEST FOR REVIEW AND STUDY

Circle the letters corresponding to the correct answers. Note that some questions have **more than one** correct answer.

1. Suppose you examine a suspect that you know is under the combined influence of Demerol and Thorazine. Which of the following would you **not** expect to find in that suspect? (Circle all that you wouldn't expect to see.)

   A. Tachycardia is present
   B. Horizontal Gaze Nystagmus is present
   C. Hypotension is present
   D. Mydriasis is present
   E. Lack of Convergence is present

2. The Autonomic Nervous System has **sympathetic** nerves and _____ nerves.

   A. parasympathetic
   B. metasympathetic
   C. postsympathetic
   D. mesosympathetic
   E. pilosympathetic

3. Suppose you examine a suspect that you know is under the combined influence of Ketamine and Methamphetamine, and you observe that he or she exhibits Horizontal Gaze Nystagmus. This is an example of ....

   A. a Synergistic Effect
   B. an Antagonistic Effect
   C. the Null Effect
   D. an Overlapping Effect
   E. an Additive Effect

4. The technical term meaning "constricted pupils" is ....

   A. Mydriasis
   B. Occulosis
   C. Miosis
   D. Bruxism
   E. Ptosis

5. **Chloral Hydrate** is an example of ....

   A. a Non-Barbiturate
   B. an Antipsychotic Tranquilizer
   C. an Antidepressant
   D. a Barbiturate
   E. an Anti-Anxiety Tranquilizer

6. **Numorphan** is an example of ....

   A. a Synthetic Opiate
   B. an Analog of Phencyclidine
   C. a Natural Alkaloid of Opium
   D. an Opium Derivative
   E. a non-Amphetamine-based Stimulant

7. Which of the following ordinarily will cause Horizontal Gaze Nystagmus? (Circle all that usually cause nystagmus.)

   A. Methamphetamine
   B. Valium
   C. The combination of Cocaine and Xanax
   D. The combination of Cannabis and LSD
   E. The combination of Heroin and Dilaudid

8. **Ritalin** is an example of ....

   A. a CNS Stimulant
   B. a Narcotic Analgesic
   C. a Hallucinogen
   D. a CNS Depressant
   E. an Analog of Phencyclidine

9. Suppose you examine a suspect that you know is under the combined influence of Heroin and PCP and you observe that he or she exhibits **miosis**. This is most likely due to ....

   A. the “Downside” of Heroin
   B. an Overlapping Effect between the two drugs
   C. an Antagonistic Effect between the two drugs
   D. an Additive Effect between the two drugs
   E. the “Downside” of PCP

10. Which of the following usually will be true in a subject who is under the influence of a Hallucinogen? (Circle all that usually will be true.)

    A. Pupils will be constricted
    B. Body temperature will be elevated
    C. Eyes will be unable to converge
    D. Blood pressure will be elevated
    E. Horizontal Gaze Nystagmus will be present

11. Which of the following is not classified as a Hallucinogen? (Circle all that **are not** Hallucinogens.)

    A. ETOH
    B. DOM
    C. MDMA
    D. 2CB
    E. THC

12. Which of the following ordinarily will leave body temperature within the DRE average range? (Circle all that usually don't affect body temperature.)

    A. CNS Stimulants
    B. Dissociative Anesthetics
    C. Cannabis
    D. CNS Depressants
    E. All of the above **usually do** affect body temperature

13. Suppose you examine a suspect that you know is under the combined influence of Percodan and Cannabis, and you find that the suspect's pulse rate is 74 bpm. This is most likely due to ....

    A. an Additive Effect between the two drugs
    B. the "Downside" of Cannabis
    C. an Overlapping Effect between the two drugs
    D. an Antagonistic Effect between the two drugs
    E. the "Downside" of Percodan

14. How many distinct, validated clues have been established for the Modified Romberg Balance test?

    A. Eight
    B. Six
    C. Four
    D. Three
    E. There are **no validated** clues for that test.

15. A person under the combined influence of Ritalin and LSD usually will have above normal blood pressure. This is an example of ....

A. an Overlapping Effect
B. a Synergistic Effect
C. the Null Effect
D. an Additive Effect
E. an Antagonistic Effect

16. The gap between two nerve cells is called the ....

A. Vesicle
B. Neuron
C. Synapse
D. Dendrite
E. Axon

17. **"Ptosis"** most nearly means ....

A. Dilated pupils
B. Grinding the teeth
C. Constricted pupils
D. Droopy eyelids
E. Goose bumps

18. How many distinct, validated clues have been established for the Walk and Turn test?

A. Eight
B. Six
C. Four
D. Three
E. There are **no validated** clues for that test.

19. Which of the following are not subcategories of Inhalants? (Circle all that are not proper names for Inhalant Subcategories.)

A. Fluorocarbons
B. Anesthetic Gases
C. Aerosols
D. Volatile Solvents
E. Propellants

20. **Phencyclidine** is best described as ....

A. parasympathomimetic
B. an antidepressant
C. a cellular stimulant
D. psychotophobic
E. a dissociative anesthetic

21. Which of the following usually **will not cause** the pupils to dilate? (Circle all that usually do not cause dilation.)

A. MDMA
B. Methaqualone
C. Desoxyn
D. Peyote
E. Ketamine

22. Which subcategory or subcategories of Inhalants usually cause blood pressure to **be depressed**? (Circle all that usually cause a depressed pressure.)

A. Anesthetic Gases
B. Propellants
C. Volatile Solvents
D. Aerosols
E. Fluorocarbons

23. Which of the following are **Natural Alkaloids** of opium? (Circle all that are Natural Alkaloids.)

A. Lortab
B. Dilaudid
C. Codeine
D. Thebaine
E. Hycodan

24. **"Crank"** is a street name for ....

A. Heroin
B. Cocaine
C. PCP
D. Methamphetamine
E. LSD

25. Which of the following are **not validated clues** for the One Leg Stand test? (Circle all that aren't validated clues.)

A. Hopping
B. Uses arms for balance
C. Putting the foot down
D. Failing to count out loud
E. Sways while balancing

26. Which of the following would be considered **sympathomimetic** drugs? (Circle all that are sympathomimetic.)

A. MDMA
B. Dexedrine
C. Xanax
D. Oxycontin
E. Desoxyn

27. Suppose you examine a suspect, and you observe **all** of the following: Horizontal Gaze Nystagmus is present, with an onset of approximately 30 degrees; BAC is 0.00; eyes are unable to converge; pupil size is 5.5 mm in near-total darkness and 3.5 mm in direct light; pupil reaction to light is within normal; pulse rate is 100 bpm; blood pressure is 148/96; body temperature is 99.8 degrees. In your opinion, this suspect is under the influence of ....

A. a combination of a CNS Depressant and a CNS Stimulant
B. a CNS Depressant alone
C. a Dissociative Anesthetic alone
D. a combination of a Dissociative Anesthetic and a CNS Stimulant
E. a combination of a CNS Depressant and Cannabis

28. The only artery that carries **de-oxygenated** blood is the _____ artery.

A. Carotid
B. Brachial
C. Pulmonary
D. Radial
E. Coronal

29. Suppose a subject is under the influence of **Hycodan** and nothing else. Indicate whether each of the following will be true or false:

A. T F Horizontal Gaze Nystagmus will not be present
B. T F Pupils will be constricted
C. T F Bradycardia will be present
D. T F Eyes will be able to converge
E. T F Hypotension will be present

30. **"Bruxism"** most nearly means ....

A. Dilated pupils
B. Grinding the teeth
C. Constricted pupils
D. Droopy eyelids
E. Goose bumps

31. Suppose a suspect is under the influence of a combination of Marijuana and Cocaine, but nothing else. Indicate whether each of the following will be true or false:

A. T F Pulse rate will be elevated
B. T F Pupils will be dilated
C. T F Horizontal Gaze Nystagmus will be present
D. T F Eyes will be able to converge
E. T F Blood pressure will be elevated

32. How many distinct, validated clues have been established for the Finger to Nose test?

A. Eight
B. Six
C. Four
D. Three
E. There are **no validated** clues for this test.

33. The drug _____ is an example of an Anti-Anxiety Tranquilizer. (Circle all that are Anti-Anxiety Tranquilizers.)

A. Librium
B. Valium
C. Amobarbital
D. Chloral Hydrate
E. Xanax

ANSWER KEY FOR THE SELF-TEST

1. Correct answers are A and D.
   Demerol (Meperidine) is a Narcotic Analgesic, Thorazine is a CNS Depressant. The combination should **not produce** elevated heart rate (Tachycardia) nor dilated pupils (Mydriasis). But HGN and LOC should be present, due to the Depressant, Thorazine. And, lowered blood pressure (Hypotension) should be present as an Additive Effect of both drugs.

2. Correct answer is A, **parasympathetic**.

3. Correct answer is D, **Overlapping**.
   Ketamine is an analog of PCP, a drug that usually does cause HGN. Methamphetamine is a CNS Stimulant, a type of drug that doesn't affect nystagmus (Dissociative Anesthetic). This is a case of **action plus no action equals action**, i.e., an Overlapping Effect.

4. Correct answer is C, **Miosis**.

5. Correct answer is A, **Non-Barbiturate**.

6. Correct answer is D, **Opiate Derivative**.

7. Correct answers are B and C.
   Valium is a CNS Depressant, which of course causes nystagmus. The combination of Cocaine and Xanax gives us a Stimulant and a Depressant (Xanax), which causes nystagmus via an Overlapping Effect. None of the other drugs mentioned cause nystagmus: Methamphetamine is a Stimulant; LSD is a Hallucinogen; Heroin and Dilaudid are Narcotics; Cannabis, of course, is its own category.

8. Correct answer is A, **CNS Stimulant**.

9. Correct answer is B, **Overlapping**.
   Heroin, a Narcotic, causes constriction of the pupils (Miosis); PCP does not affect pupil size. This is another case of **action plus no action equals action**.

10. Correct answers are B and D.
    Hallucinogens are **sympathomimetic** drugs, and therefore usually elevate the vital signs. But they have no effect on either nystagmus or LOC. And, instead of constricting the pupils, Hallucinogens usually cause pupils to dilate.

11. Correct answers are A and E.
    ETOH is the chemical name for Ethyl Alcohol, the common beverage form of alcohol that remains the most commonly-abused drug. **THC** is the primary active ingredient in Cannabis. But "MDMA" (also known as "Ecstasy") and "DOM" (also known as "STP") and 2CB **are** Hallucinogens.

12. Correct answers are C and D, **Cannabis and Depressants**.

13. Correct answer is D, **Antagonistic**.
A pulse rate of 74 bpm is within the DRE average range. Percodan, a Narcotic Analgesic, usually lowers the pulse, while Cannabis usually elevates the pulse. The Antagonistic Effect of the two drugs has put this subject's pulse into a precarious, and probably temporary, state of balance.

14. Correct answer is E, **no validated clues**.
It is important to understand that, when we say there are no validated clues for MRB Test, that does **not mean** that the test is invalid. It simply means that we do not have the research data to attest that specific clues on that test are statistically reliable indicators of impairment. Those kinds of research data, at the present time, are available only for HGN, WAT, and OLS.

15. Correct answer is D, **Additive**.
Ritalin (a Stimulant) and LSD (a Hallucinogen) both usually elevate blood pressure.

16. Correct answer is C, **Synapse**.

17. Correct answer is D, **Droopy Eyelids**.

18. Correct answer is A, **Eight**.
Of the eight **validated** clues for WAT, two may be observed during the Instruction Stage of the test. They are can't keep balance (which means the suspect breaks away from the heel-to-toe stance) and starts too soon. The other six clues pertain to the Walking Stage of the test. They include:

misses heel-to-toe
uses arms to balance
steps off line
stops walking
turns improperly
takes the wrong number of steps

Although these eight are the only validated clues for WAT, they aren't the only things that might be observed that could serve as evidence of impairment. All of your observations of the suspect are important.

19. Correct answers are A and E, **Fluorocarbons and Propellants**.
The only proper names for subcategories of Inhalants are Volatile Solvents, Aerosols and Anesthetic Gases.

20. Correct answer is E, **Dissociative Anesthetic**.

21. Correct answer is E, **Ketamine**.
Ketamine is an analog of PCP, a drug that doesn't affect pupil size. MDMA and Peyote are Hallucinogens, and Desoxyn is a CNS Stimulant; all of those dilate pupils. Methaqualone is a very special CNS Depressant; unlike almost all other Depressants, Methaqualone does affect pupil size (by dilating the pupils).

22. Correct answer is A, **Anesthetic Gases**.
Volatile Solvents and Aerosols usually produce an elevated blood pressure. "Fluorocarbons" and "Propellants" are, of course, not proper names for subcategories of Inhalants.

23. Correct answers are C and D, **Codeine and Thebaine**.
Lortab, Dilaudid and Hycodan are all **opium derivatives**. Dilaudid derives from Morphine, and Hycodan and Lortab from Codeine.

24. Correct answer is D, **Methamphetamine**.

25. Correct answer is D, **Failing to Count Out Loud**.
Hopping, Uses Arms for Balance, Putting the Foot Down and Sways While Balancing are the four (and only four) **validated** clues of impairment for OLS.

26. Correct answers are A, B and E: **MDMA, Dexedrine and Desoxyn**.
Dexedrine and Desoxyn are members of the Amphetamine family of CNS Stimulants. MDMA is a "Psychedelic Amphetamine" belonging to the Hallucinogens. CNS Stimulants and Hallucinogens are the two categories that make up the **sympathomimetic** drugs. That means they simulate the responses that the body makes to messages conveyed along the **sympathetic** nerves, i.e., elevated vital signs, dilated pupils, etc. Three other categories, namely the Inhalants, Phencyclidine and Cannabis have **some** sympathomimetic characteristics, but they are not considered to be fully sympathomimetic, and not to the degree of the CNS Stimulants and Hallucinogens. Xanax and Oxycontin aren't even close to being sympathomimetic. Xanax (a Depressant) and Oxycontin (a Narcotic) are better described as wholly or partially **parasympathomimetic**.

27. Correct answer is C, **a Dissociative Anesthetic**.
Dissociative Anesthetics, by themselves, can account for all of the observations listed. Dissociative Anesthetics cause nystagmus and LOC; they do not affect pupil size, so the pupils remain within the normal range; they do not affect the reaction of the pupils to light; they usually elevate all three vital signs.

A Depressant, by itself, could not account for the elevated vitals, and usually would slow the pupils' reaction to light.

If we had a combination of a Depressant and a Stimulant, we'd expect to see the pupils dilated beyond the normal range (due to an Overlapping Effect), and we'd expect to see the reaction of the pupils slowed (due to an Additive Effect). Also, although it is possible that the vital signs could all be elevated with a combination of Depressant and Stimulant, we'd probably expect to see some "moderation" of the vitals due to an Antagonistic Effect.

If we had a combination of a Dissociative Anesthetic and a Stimulant, we could expect to see pupil dilation and some slowing of the reaction to light, due to Overlapping Effects.

If we had a combination of a Dissociative Anesthetic and a Stimulant, we could expect to see an elevated body temperature, since both of those drugs elevate temperature.

28. Correct answer is C, **Pulmonary**.

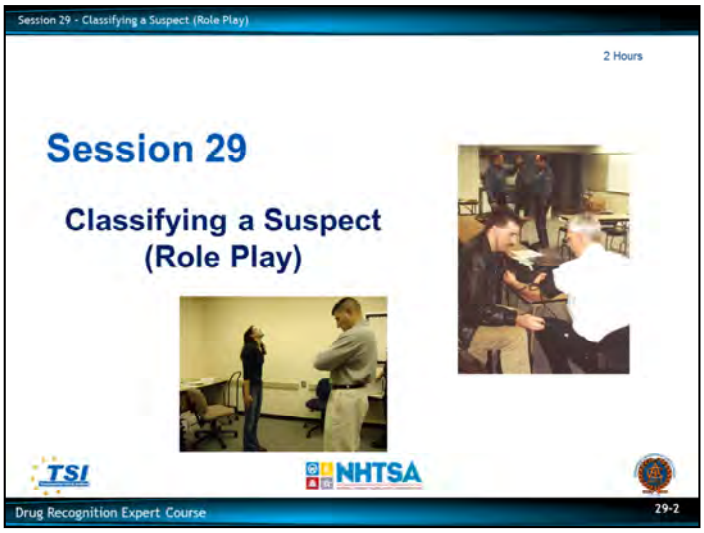
29. Correct answers are:
    (A) True: **no nystagmus** will be present
    (B) True: we will see miosis, or **constricted pupils**
    (C) True: we will find a slow pulse, or **Bradycardia**
    (D) True: we won't see a Lack of Convergence, so the eyes **will be able to converge**
    (E) True: we will find a lowered blood pressure, or **Hypotension**
    Hycodan is a Narcotic Analgesic, and these observations will be consistent with impairment by Narcotics.

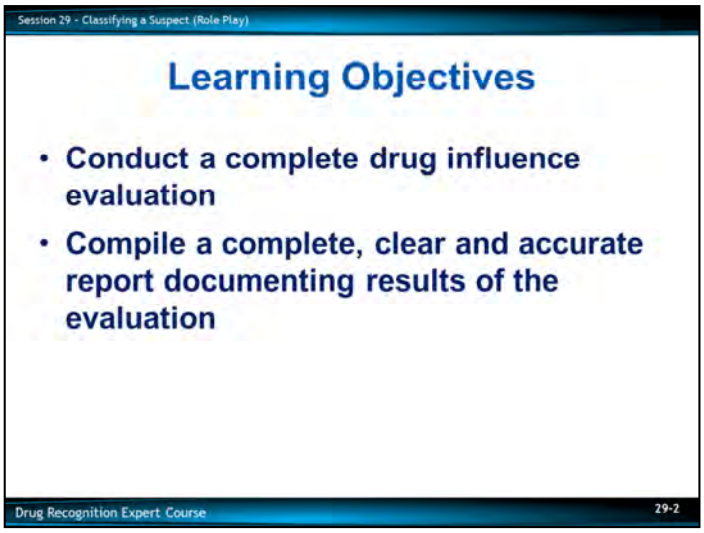
30. Correct answer is B, **Grinding the Teeth**

31. Correct answers are:
    (A) True: An Additive Effect will **elevate the pulse** for this combo
    (B) True: **pupils will dilate** due to an Overlapping or Additive Effect
    (C) False: neither drug causes nystagmus, so the Null Effect will also **cause no nystagmus**
    (D) False: Marijuana causes LOC, so the Overlapping Effect means the **eyes won't converge**
    (E) True: An Additive Effect will **elevate the blood pressure**

32. Correct answer is E, **no validated clues**

33. Correct answers are A, B and E: **Librium, Valium** and **Xanax**


Session 29 - Classifying a Suspect (Role Play)
2 Hours
Session 29
Classifying a Suspect
(Role Play)
TSI
NHTSA
Drug Recognition Expert Course
29-2



Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the student will be able to:

- Conduct a complete drug influence evaluation using the systematic and standardized 12-step process
- Compile a complete, clear, and accurate report documenting the results of the drug influence evaluation

CONTENT SEGMENTS

A. Scenarios: Simulated Examinations
B. Report Preparation Practice
C. Report Review and Critique

LEARNING ACTIVITIES

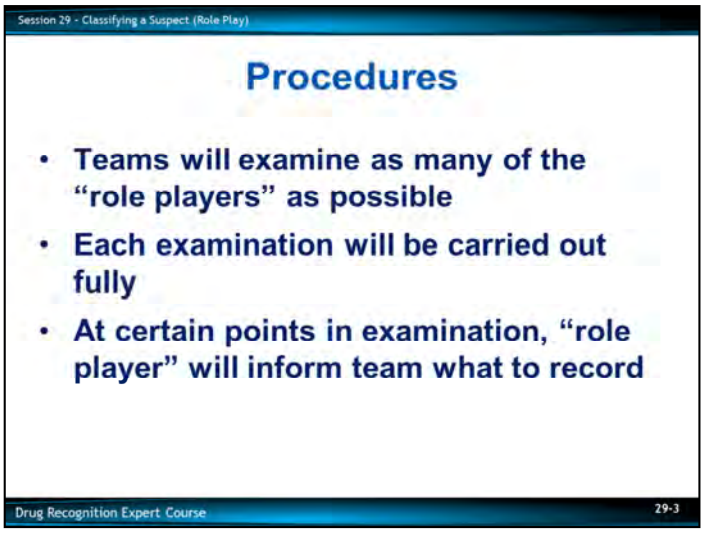
Interview Practice
Note-Taking Practice
Small Group Work Session
Instructor-Led Presentations
Participant-Led Presentations
Participant-Led Critiques

A. Scenarios: Simulated Examinations

Team Assignments

Assign the students to teams of 3-4 members.

The total number of student teams should not be more than the number of "role players" participating in this session. Otherwise, one or more teams would be unoccupied during major portions of this segment.



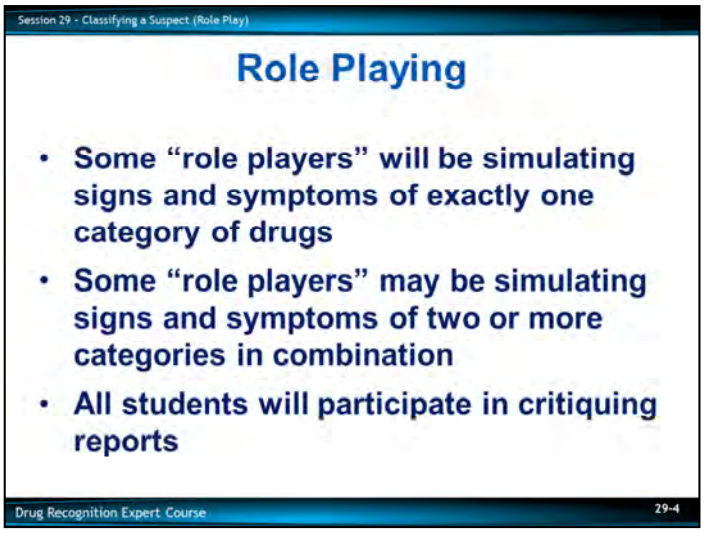
Procedures

Explain procedures to the students.

Each team will examine as many as possible of the "role players" until the time scheduled for this segment elapses.

Each examination will be carried out fully; nothing will be omitted except for the breath alcohol test. At certain points in the examination, the "role player" will inform the team what to record.

- Example: the "role players" will instruct the teams concerning the evidence to be recorded from the Horizontal Gaze Nystagmus (HGN) test



All data will be recorded on the standard Drug Influence Evaluation Form.

Some "role players" will be simulating the signs and symptoms of exactly one category of drugs
- Clarification: "Role player Alpha" might be simulating a person who is under the influence of a CNS Stimulant only
- "Role player Delta" might be simulating a person under the influence of an Inhalant only

Some "role players" may be simulating the signs and symptoms of two or more categories in combination.
- "Role player Bravo" might be simulating someone who is under the influence of both PCP and Marijuana

It is possible one or more "role players" may be simulating persons who are not under the influence of any drugs.

At the completion of each examination, the team will discuss the evidence obtained and reach a consensus concerning the category or categories of drugs present.

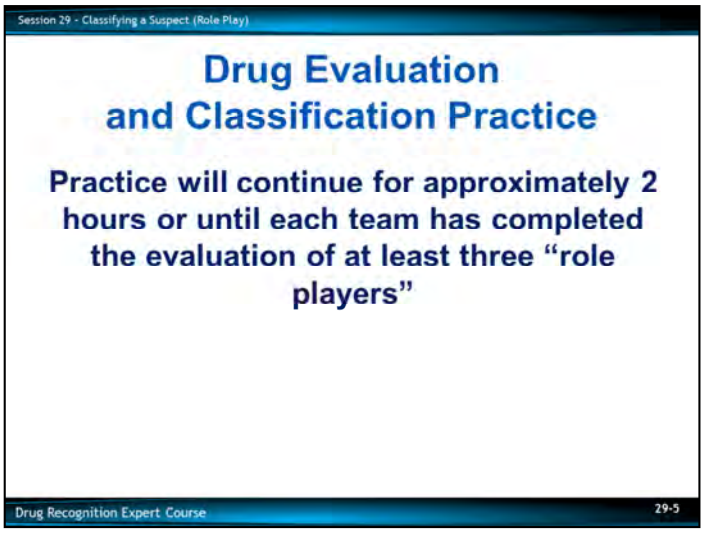
Subsequently, each team will be assigned the responsibility of preparing and presenting a complete narrative report on one "role player."

All students will participate in critiquing the reports.
Verify all teams understand the procedures.
Solicit students' questions concerning the procedures.

_____

_____

_____



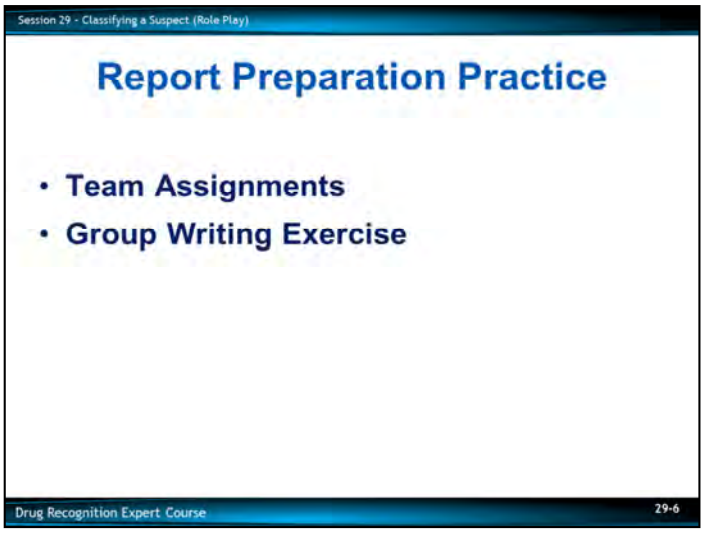
Drug Evaluation and Classification Practice

Assign a "role player" to each team. Example: "Alpha" to team #1, "Bravo" to team #2, "Charlie" to team #3, etc.

As each team completes the entire evaluation, the team will hand over its "role player" to the next team. That is, team #1 hand off to team #2, team #2 to team #3, etc.

Make sure each team member fully participates and conducts some portion of the evaluation of each "role player."

Allow the practice to continue for approximately 2 hours or until each team has completed the evaluation of at least three "role players" (whichever occurs later).



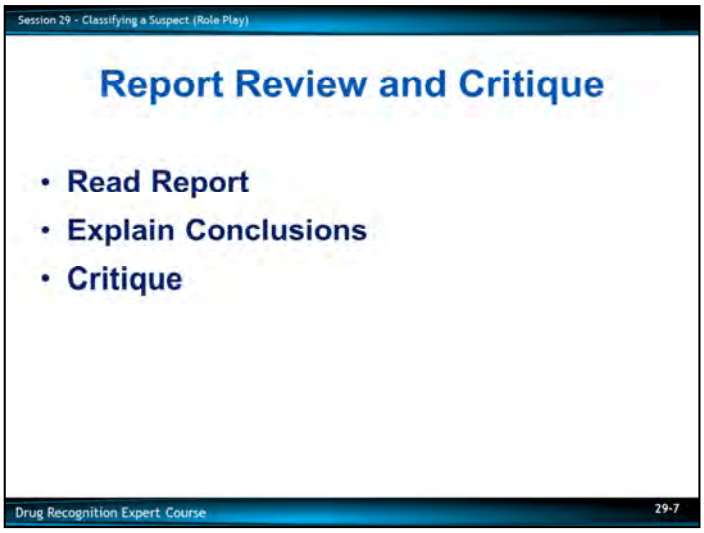
B. <u>Report Preparation Practice</u>

Team Assignments

Instruct each team to prepare a report based on the third "role player" evaluated by the team. Verify each team understands who is to be the subject of the report.

Group Writing Exercise

Team members may divide the report writing work among themselves in any way they see fit.



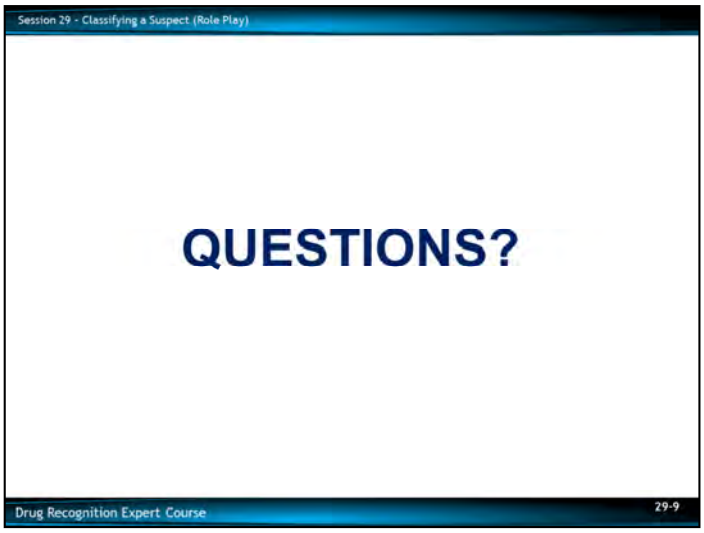
C. <u>Report Review and Critique</u>

Report Presentation

- Each team should appoint a spokesperson to read their report and explain exactly what led the team to its conclusion concerning the category or categories of drugs

Report Critique

Inquire whether other teams that evaluated this same "role player" reached a different conclusion about the drug category or categories.
In turn, present and critique the other teams' reports.
If necessary, this segment can be conducted simultaneously in two separate classrooms, with half of the teams present in each classroom, to allow all reports to be presented and critiqued within the allotted time.



Solicit participants' comments and questions concerning Classifying a Suspect.

DRUG INFLUENCE EVALUATION

Evaluator	DRE # / Rolling Log #		Evaluator's Agency	Case #
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle)	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time / Location / /	Breath Test: Results:	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐	Test or tests refused ☐
Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today?	When?	What have you been drinking? How much?	Time of last drink?
Time now / Actual /	When did you last sleep?	How long?	Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No		Are you under the care of a doctor or dentist? ☐ Yes ☐ No	
Are you taking any medication or drugs? ☐ Yes ☐ No	Attitude:		Coordination:	
Speech:	Breath odor:		Face:	
Corrective Lenses: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery		Blindness: ☐ None ☐ Left ☐ Right	Tracking: ☐ Equal ☐ Unequal
Pupil Size: ☐ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☐ No	Able to follow stimulus ☐ Yes ☐ No	Eyelids ☐ Normal ☐ Droopy

Pulse and Time	HGN	Left Eye	Right Eye	Convergence
1. ____ / ____	Lack of Smooth Pursuit			Right eye Left eye
2. ____ / ____	Maximum Deviation			
3. ____ / ____	Angle of Onset			

/30 **One Leg Stand** /30

L R L R

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Modified Romberg Balance
Approx. Approx.

Walk and Turn Test

Cannot keep balance: _____

Starts too soon: _____

	1st Nine	2nd Nine
Steps walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
____ estimated as 30 seconds			

Finger to Nose
(Draw lines to spots touched)

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye			
Right Eye			

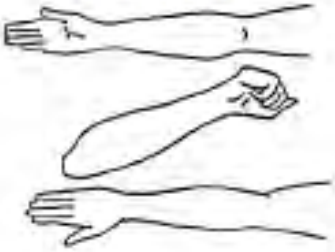
Rebound Dilation: ☐ Yes ☐ No

Nasal area:

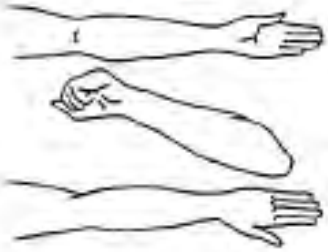
Oral cavity:

Reaction to Light:

RIGHT ARM



LEFT ARM



Blood Pressure /	Temperature °F

Muscle Tone: ☐ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-1

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
ALPHA				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? "Cereal"	When? "This morning"	What have you been drinking? How much? "Just coffee"	Time of last drink? N/A

Time now/ Actual	When did you last sleep? "Two days ago"	How long? "5 hours"	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
/				

Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No	Are you under the care of a doctor or dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative, passive	Coordination: Slow

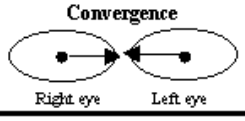
Speech: Normal	Breath odor: Normal	Face: Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

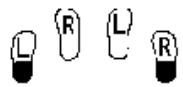
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 80 /	Lack of Smooth Pursuit	None	None
2. 76 /	Maximum Deviation	None	None
3. 76 /	Angle of Onset	None	None

Convergence

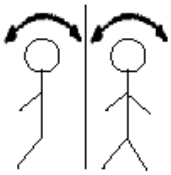


30/30 **One Leg Stand** 32/30

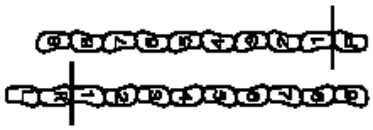


Modified Romberg Balance

Approx. 1" 1" Approx. 0" 0"



Walk and Turn Test

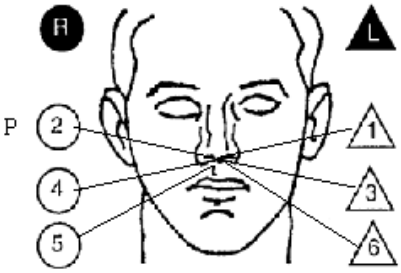


	1st Nine	2nd Nine
Cannot keep balance		
Starts too soon		
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken	9	9

L	R	
	X	Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Time Estimation 32 estimated as 30 seconds	Describe turn: Slow but correct	Cannot do test (explain): N/A	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



Used pad of finger on attempt #2

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	3.5
Right Eye	4.5	6.5	3.5

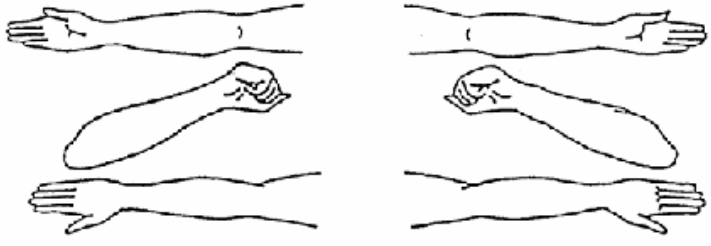
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Clear

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
128 / 84	98.6 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using? "Nothing. I'm just need some sleep."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☒ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE # / Rolling Log #		Evaluator's Agency	Case # Session 29-2
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle) BRAVO	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time /Location / /	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐	Test or tests refused ☐

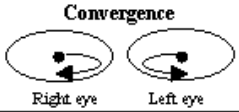
Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today? "Bag of chips"	When? "Noon"	What have you been drinking? How much? "Juice" 3 or 4 bottles	Time of last drink? N/A
Time now/ Actual /	When did you last sleep? "Last night"	How long? 8 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Carefree, cooperative		Coordination: Fair, unsteady at times	
Speech: Slow	Breath odor: Normal		Face: Normal	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time

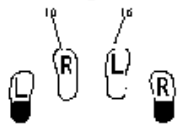
1. 120 /
2. 116 /
3. 118 /

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



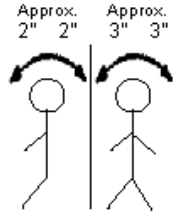
26/30 **One Leg Stand** 24/30



L	R	
	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X	X	Puts foot down

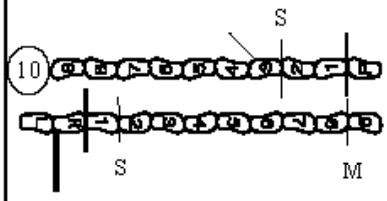
Leg tremors

Modified Romberg Balance



Eyelid tremors

Walk and Turn Test



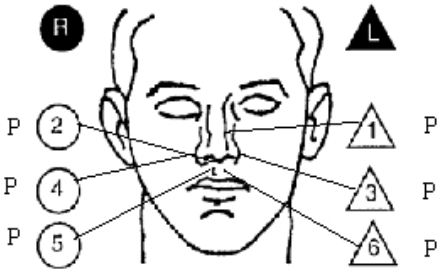
Walked slowly. Leg tremors

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking	✓	✓
Misses heel-toe	✓	
Steps off line		✓
Raises arms	✓✓	✓✓✓
Actual steps taken	9	10

Time Estimation 22 estimated as 30 seconds	Describe turn Slow	Cannot do test (explain) N/A

Type of footwear:

Finger to Nose
(Draw lines to spots touched)



Used pads of fingers on all attempts. Eyelid tremors

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	8.5	5.5
Right Eye	6.5	8.5	5.5

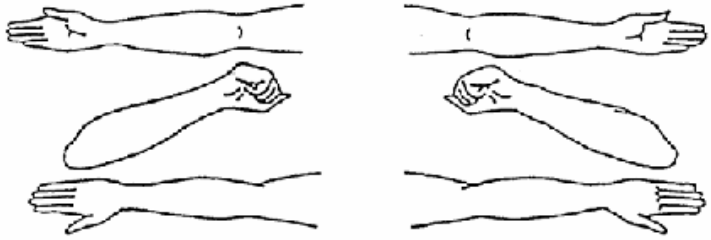
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Green coating

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
168 / 100	98.2 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using? "Nothing man. It's all good."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:

☐ Subject refused entire evaluation
☐ Subject stopped participating during evaluation

Officer's Signature:

Reviewed/approved by / date:

DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☒ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-3

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
CHARLIE				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? "Today?" (Long pause) "No"	When?	What have you been drinking? "Drink?"	How much? "No"	Time of last drink?
						N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	"This morning"	4 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Dazed, confused	Slow, rigid movements

Speech:	Breath odor:	Face:
Slow to respond, confused	Chemical-like odor	Sweaty

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1. 112 /
2. 116 /
3. 114 /

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	Present	Present
Angle of Onset	Immed	Immed

Convergence

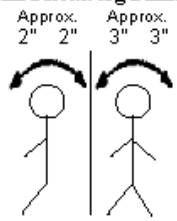
Looked straight ahead

38/30 **One Leg Stand** 24/30

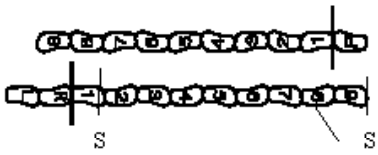
L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
		Puts foot down

Rigid. Reminded to count out loud.

Modified Romberg Balance



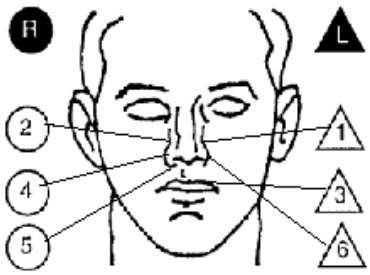
Walk and Turn Test



	1st Nine	2nd Nine
Cannot keep balance		
Starts too soon	✓	
Stops walking	✓✓	
Misses heel-toe		
Steps off line	✓	
Raises arms	✓✓✓	
Actual steps taken	9	

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
52 estimated as 30 seconds	Did not attempt the turn	N/A	

Finger to Nose
(Draw lines to spots touched)



PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.5	3.5
Right Eye	4.5	6.5	3.5

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Normal

Nasal area: Clear

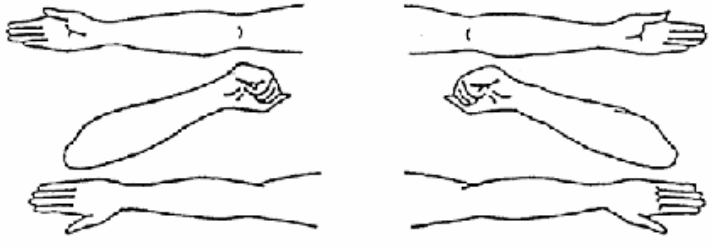
Oral cavity: Clear

Blood Pressure	Temperature
172 / 102	100 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

RIGHT ARM **LEFT ARM**



Nothing observed.

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Drugs? … Nothing man"	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☒ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
DELTA				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?
		"I didn't eat today"	"Just some water today."	N/A

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	"I don't remember."	☐ Yes ☒ No	☐ Yes ☐ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Passive, cooperative	Slow, sluggish, unstable

Speech:	Breath odor:	Face:
Slow to respond, low	Normal	Normal (continually rubbing face)

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

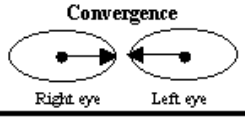
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time

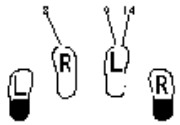
1. 52 /
2. 50 /
3. 50 /

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



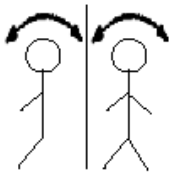
22/30 **One Leg Stand** 24/30



L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X	X	Puts foot down

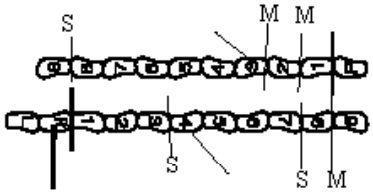
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Scratching arms.

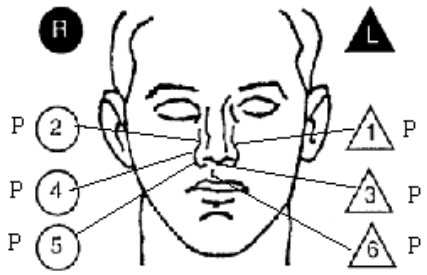
Walk and Turn Test



	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops walking	✓✓	✓
Misses heel-toe	✓	✓✓
Steps off line	✓	✓
Raises arms	✓✓✓	✓
Actual steps taken	9	9

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
90 estimated as 30 seconds	Slow, deliberate turn	N/A	

Finger to Nose
(Draw lines to spots touched)



Slow movements. Used pads of fingers.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.0	3.5	2.0
Right Eye	2.0	3.5	2.0

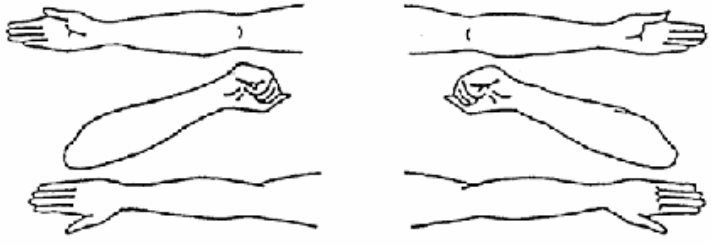
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: White coating, dry

Reaction to Light: Little to none

RIGHT ARM **LEFT ARM**



Two fresh injection marks on left forearm.

Blood Pressure	Temperature
102 / 52	97.2 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Honest man, I'm clean."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-5

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
ECHO				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?
		"Nothing today"	"Water & Juice" "Couple of bottles"	N/A

Time now/ Actual	When did you last sleep? How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	Last night About 3 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "Not anymore."	Cooperative	Poor, staggering

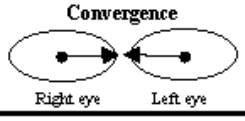
Speech:	Breath odor:	Face:
Slurred, mumbling at times	Normal	Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

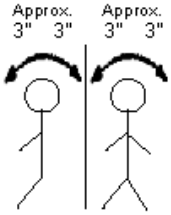
Pulse and Time	HGN	Left Eye	Right Eye
1. 48 /	Lack of Smooth Pursuit	Present	Present
2. 46 /	Maximum Deviation	Present	Present
3. 46 /	Angle of Onset	40	40

Convergence

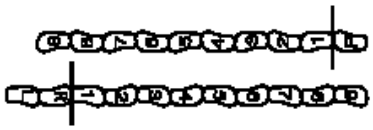


/30 **One Leg Stand** /30

Modified Romberg Balance



Walk and Turn Test



Test stopped when subject nearly fell three times in the instruction stage.

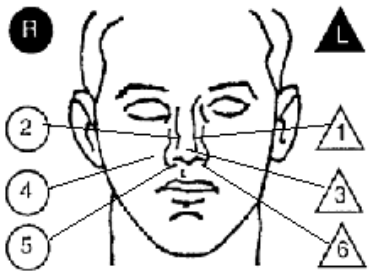
	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
X	X	Hopping
		Puts foot down

Both tests stopped for safety reasons

Time Estimation 65 estimated as 30 seconds	Describe turn N/A	Cannot do test (explain) Nearly fell	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



Head nodded forward. Slow, deliberate movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	2.5	3.5	2.0
Right Eye	2.5	3.5	2.0

Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Little to None

Nasal area: Clear

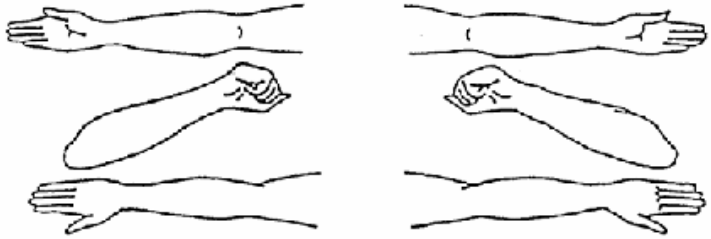
Oral cavity: Clear

Blood Pressure	Temperature
104 / 60	97.4 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

RIGHT ARM **LEFT ARM**



Fresh injection mark on inside of left forearm.

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I stopped using about 2 years ago."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☒ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-6

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
FOXTROT				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		"Brownies"	"2 hours ago"	"Arizona Ice Tea"	1 can	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	Last night	About 8 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "No medicine"	Cooperative, carefree, relaxed	Poor, unsteady

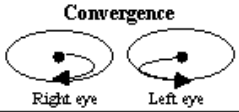
Speech:	Breath odor:	Face:
Slurred, talkative	Normal	Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

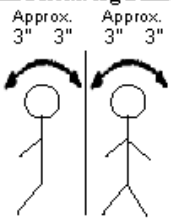
Pulse and Time	HGN	Left Eye	Right Eye
1. 112 /	Lack of Smooth Pursuit	None	None
2. 116 /	Maximum Deviation	None	None
3. 116 /	Angle of Onset	None	None

Convergence



25/30 **One Leg Stand** 23/30

Modified Romberg Balance



Eyelid tremors

Walk and Turn Test

Cannot keep balance ✓

Starts too soon

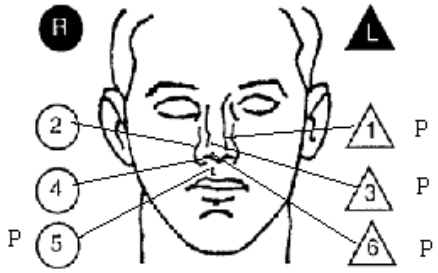
	1st Nine	2nd Nine
Stops walking	✓	✓✓
Misses heel-toe	✓	
Steps off line		✓
Raises arms	✓✓	✓✓✓
Actual steps taken	9	9

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
X		Hopping
X		Puts foot down

Leg tremors

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
22 estimated as 30 seconds	Slow. Laughed when turning	N/A	

Finger to Nose
(Draw lines to spots touched)



Eyelid tremors. Used pads of fingers on 1, 3, 5, & 6

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.5	8.0	5.0
Right Eye	5.5	8.0	5.0

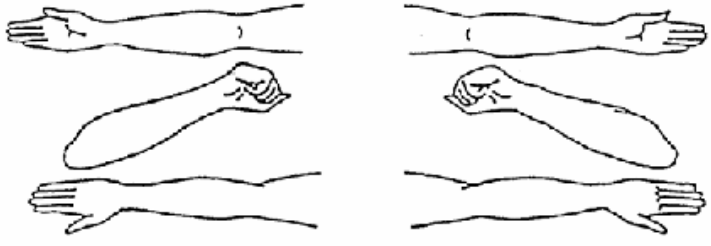
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Raised Taste Buds

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
164 / 98	98.0 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I'm not taking drugs." (Laughed)	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☒ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE # / Rolling Log #		Evaluator's Agency	Case # Session 29-7
Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle) GOLF	Date of Birth	Sex / Race	Arresting Officer (Name, ID#)	
Date Examined / Time /Location / /	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐	Test or tests refused ☐

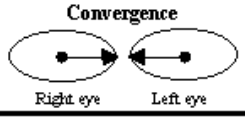
Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? Beef jerky & pepperoni	When? 4 pm	What have you been drinking? How much? Red Bull 1 can	Time of last drink? N/A
Time now/ Actual /	When did you last sleep? 2 days ago	How long? About 3 hours	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No	
Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No		Are you under the care of a doctor or dentist? ☐ Yes ☒ No	
Are you taking any medication or drugs? ☐ Yes ☒ No "Am I under arrest?"			Attitude: Excited, animated	Coordination: Jittery, quick, unsteady
Speech: Talkative, rapid	Breath odor: Rancid		Face: Sweaty	
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery		Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

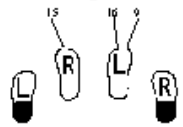
1. 112 / ____
2. 106 / ____
3. 110 / ____

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	None	None
Maximum Deviation	None	None
Angle of Onset	None	None

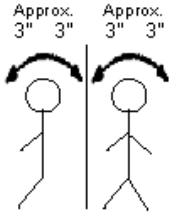
Convergence



38/30 **One Leg Stand** 42/30

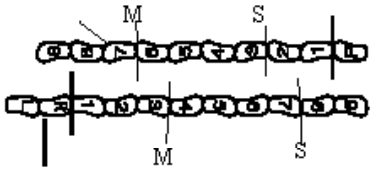


Modified Romberg Balance



Eyelid tremors

Walk and Turn Test



Took quick steps. Slammed heel to toes.

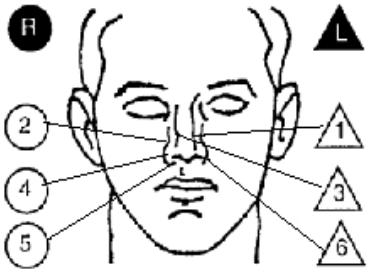
	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking	✓	✓
Misses heel-toe	✓	✓
Steps off line		✓
Raises arms	✓✓	✓✓✓
Actual steps taken	9	9

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
X		Hopping
X	X	Puts foot down

Counted quickly. Slurred numbers

Time Estimation 22 estimated as 30 seconds	Describe turn Slow. Laughed when turning.	Cannot do test (explain) N/A	Type of footwear:

Finger to Nose
(Draw lines to spots touched)



Quick and jerky arm movements.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	6.5	8.5	5.5
Right Eye	6.5	8.5	5.5

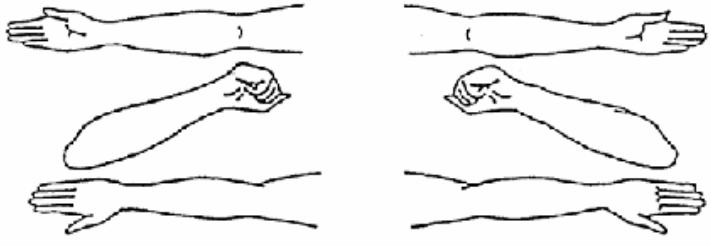
Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

Nasal area: Redness

Oral cavity: Clear

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure 174 / 102	Temperature 99.8 °F
Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid Comments:	

What drugs or medications have you been using? "I'm not answering that."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time: ☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
Officer's Signature:	Reviewed/approved by / date:		DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-8

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
HOTEL				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today? "I don't remember"	When?	What have you been drinking? How much? "Uh…some juice I think."	Time of last drink? N/A

Time now/ Actual	When did you last sleep? No response	How long?	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
/				

Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No	Are you under the care of a doctor or dentist? ☐ Yes ☐ No No response

Are you taking any medication or drugs? ☐ Yes ☐ No No response	Attitude: Indifferent	Coordination: Poor, staggering

Speech: Slow, deliberate, incomplete responses	Breath odor: Chemical-like	Face: Flushed

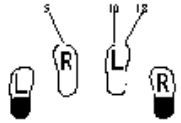
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☒ Yes ☐ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 112 /	Lack of Smooth Pursuit	Present	Present
2. 114 /	Maximum Deviation	Present	Present
3. 120 /	Angle of Onset	Immed	Immed

Convergence

22/30 **One Leg Stand** 26/30

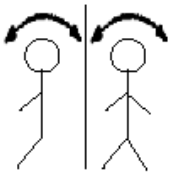


L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X	X	Puts foot down

Leg tremors. Reminded to count.

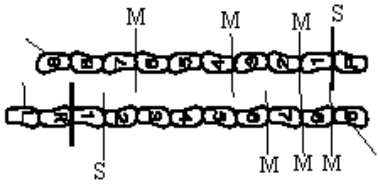
Modified Romberg Balance

Approx. 3" 3" Approx. 3" 3"



Circular sway. Eyelid tremors.

Walk and Turn Test

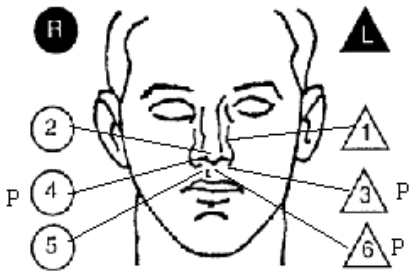


Rigid movements. Did not count steps.

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking	✓	✓
Misses heel-toe	✓✓✓	✓✓✓
Steps off line	✓	✓
Raises arms	✓✓✓	✓✓✓
Actual steps taken	9	11

Time Estimation 52 estimated as 30 seconds	Describe turn Staggered to the right	Cannot do test (explain) N/A	Type of footwear: Boots

Finger to Nose
(Draw lines to spots touched)



Had to be reminded to remove his finger each time.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.0	9.0	6.5-7.5
Right Eye	7.0	9.0	6.5-7.5

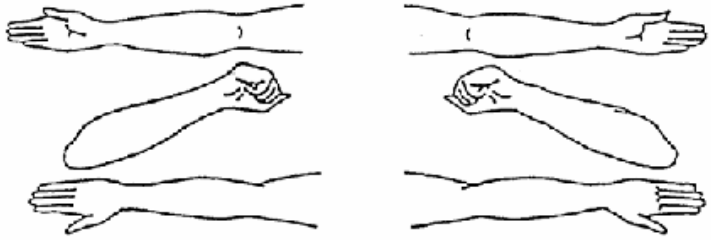
Rebound Dilation: ☒ Yes ☐ No

Nasal area: Clear

Oral cavity: Green coating. Raised taste buds.

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
184 / 112	100 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using? No response	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator:

☐ Not Impaired	☐ Alcohol	☐ CNS Stimulant	☒ Dissociative Anesthetic	☐ Inhalant
☐ Medical	☐ CNS Depressant	☐ Hallucinogen	☐ Narcotic Analgesic	☒ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-9

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
INDIA				

Date Examined / Time /Location	Breath Test: Results: 0.00	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		"Cheese sandwich"	Noon	"Mountain Dew"	"A couple"	N/A

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	"This morning"	"2 hours"	☐ Yes ☒ No "I'm okay"	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No "I've got a headache"	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No "I smoke weed sometimes"	Cooperative, confused	Poor, staggering

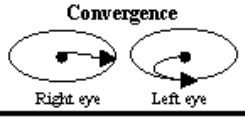
Speech:	Breath odor:	Face:
Low, slow, mumbling	Solvent-like odor	Flushed

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

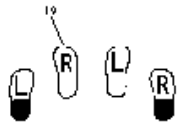
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 96 /	Lack of Smooth Pursuit	Present	Present
2. 92 /	Maximum Deviation	Present	Present
3. 88 /	Angle of Onset	30	30

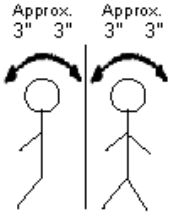
Convergence



22/30 **One Leg Stand** 26/30

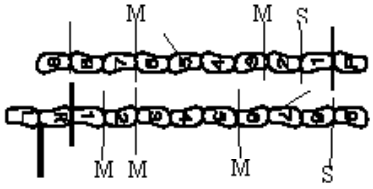


Modified Romberg Balance



Circular sway. Eyelid tremors.

Walk and Turn Test



Rigid movements. Did not count steps.

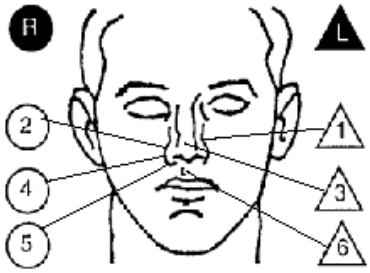
	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking	✓	✓
Misses heel-toe	✓✓✓	✓✓✓
Steps off line	✓	✓
Raises arms	✓✓✓	✓✓✓
Actual steps taken	9	9

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X		Puts foot down

Nearly fell

Time Estimation 40 estimated as 30 seconds	Describe turn Staggered. Lost balance.	Cannot do test (explain) N/A	Type of footwear: Boots

Finger to Nose
(Draw lines to spots touched)



Had to be reminded to actually touch his nose.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	5.0	7.0	4.0
Right Eye	5.0	7.0	4.0

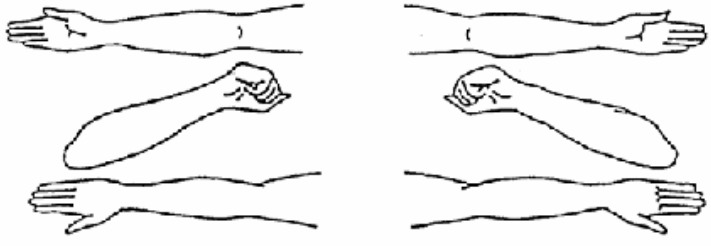
Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

Nasal area: Redness. Running nose

Oral cavity: Red

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
148 / 98	98.8 °F

Muscle Tone: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing tonight"	N/A	N/A	N/A

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☐ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☒ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-10

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
JULIET				

Date Examined / Time /Location	Breath Test: Results: 0.06	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given ☐ Yes ☐ No Given by:	What have you eaten today? "Cereal"	When? "About 7 am"	What have you been drinking? "Beer"	How much? "A couple"	Time of last drink? "Hour ago"

Time now/ Actual	When did you last sleep? "Last night"	How long? "8 hours"	Are you sick or injured? ☐ Yes ☒ No	Are you diabetic or epileptic? ☐ Yes ☒ No
/				

Do you take insulin? ☐ Yes ☒ No	Do you have any physical defects? ☐ Yes ☒ No	Are you under the care of a doctor or dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No	Attitude: Cooperative, withdrawn	Coordination: Unsteady

Speech: Low, mumbling	Breath odor: Alcoholic beverage	Face: Flushed

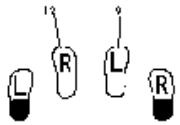
Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☒ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

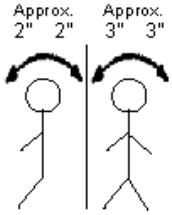
Pulse and Time		HGN	Left Eye	Right Eye
1.	82 /	Lack of Smooth Pursuit	Present	Present
2.	80 /	Maximum Deviation	Present	Present
3.	80 /	Angle of Onset	45	45

Convergence

32/30 **One Leg Stand** 28/30

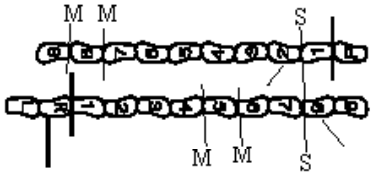


Modified Romberg Balance



Circular sway.

Walk and Turn Test



Cannot keep balance ✓

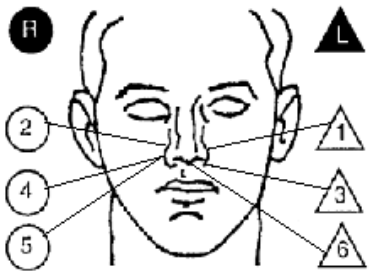
Starts too soon

	1st Nine	2nd Nine
Stops walking	✓	✓
Misses heel-toe	✓✓	✓✓
Steps off line	✓	✓
Raises arms	✓	✓✓
Actual steps taken	9	9

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
	X	Hopping
X	X	Puts foot down

Time Estimation 36 estimated as 30 seconds	Describe turn Slow turn	Cannot do test (explain) N/A	Type of footwear: Lace-up shoes

Finger to Nose
(Draw lines to spots touched)



Slow movements

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	4.5	6.0	3.5
Right Eye	4.5	6.0	3.5

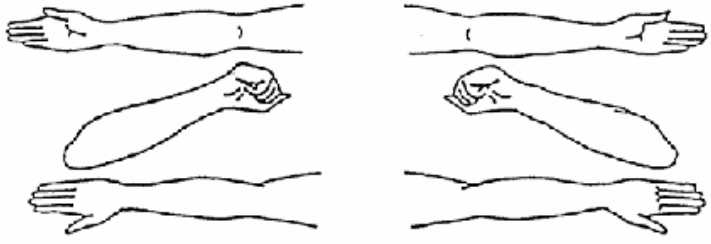
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Clear

Reaction to Light: Normal

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
128 / 84	98.7 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using? "I just had a couple beers."	How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A

Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☒ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-11

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
KILO				

Date Examined / Time /Location	Breath Test: Results: 0.05	Test Refused ☐ Instrument #:	Chemical Test: Urine ☐ Blood ☐ Oral Fluid ☐ Test or tests refused ☐
/ /			

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		Chicken dinner	6 pm	Wine	Two glasses	2 hours ago

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	Last night	6 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Cooperative, drowsy acting	Unsteady, slow

Speech:	Breath odor:	Face:
Slow, low, mumbling	Alcoholic beverage	Flushed, dry mouth, licking lips

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☐ Normal ☒ Droopy

Pulse and Time	HGN	Left Eye	Right Eye
1. 60 /	Lack of Smooth Pursuit	Present	Present
2. 58 /	Maximum Deviation	None	None
3. 58 /	Angle of Onset	None	None

Convergence

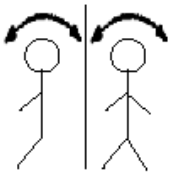
/30 **One Leg Stand** /30

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X	X	Puts foot down

Nearly fell. Stopped for safety reasons.

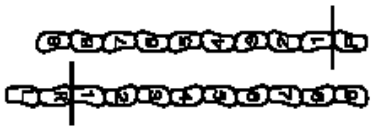
Modified Romberg Balance

Approx. 2" 2" Approx. 3" 3"



Head nodded forward.

Walk and Turn Test

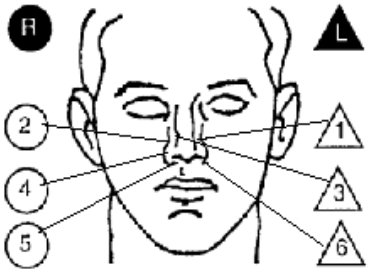


Lost balance three times. Test stopped.

	1st Nine	2nd Nine
Cannot keep balance	✓✓✓	
Starts too soon		
Stops walking		
Misses heel-toe		
Steps off line		
Raises arms		
Actual steps taken		

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
40 estimated as 30 seconds	Slow turn	N/A	Slip-on shoes

Finger to Nose
(Draw lines to spots touched)



Slow movements.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	1.5	2.0	1.5
Right Eye	1.5	2.0	1.5

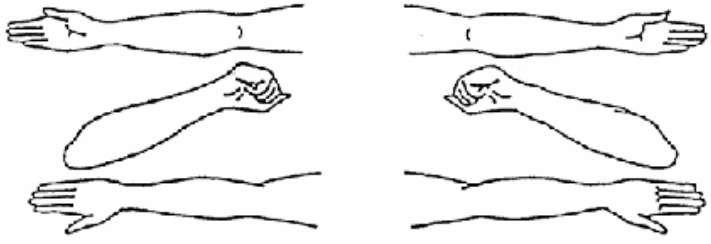
Rebound Dilation: ☐ Yes ☒ No

Nasal area: Clear

Oral cavity: Clear

Reaction to Light: Little to None

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
108 / 64	97.2 °F

Muscle Tone: ☐ Normal ☒ Flaccid ☐ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"I just drank some wine but I'm not drunk."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☒ Alcohol ☐ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☒ Narcotic Analgesic ☐ Cannabis

DRUG INFLUENCE EVALUATION

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
				Session 29-12

Recorder/Witness	Crash: ☐ None ☐ Fatal ☐ Injury ☐ Property	Arresting Officer's Agency

Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Race	Arresting Officer (Name, ID#)
LIMA				

Date Examined / Time /Location	Breath Test: Results: 0.03	Test Refused ☐ Instrument #:	Chemical Test: Oral Fluid ☐	Urine ☐ Blood ☐ Test or tests refused ☐
/ /				

Miranda Warning Given Given by:	☐ Yes ☐ No	What have you eaten today?	When?	What have you been drinking?	How much?	Time of last drink?
		Pizza	7 pm	Beer	Two	3 hours ago

Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
/	Yesterday	3 hours	☐ Yes ☒ No	☐ Yes ☒ No

Do you take insulin?	Do you have any physical defects?	Are you under the care of a doctor or dentist?
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

Are you taking any medication or drugs?	Attitude:	Coordination:
☐ Yes ☒ No	Anxious, restless	Jittery, unsteady

Speech:	Breath odor:	Face:
Loud, rapid, slurred	Alcoholic beverage	Normal

Corrective Lenses: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☒ Normal ☐ Bloodshot ☐ Watery	Blindness: ☒ None ☐ Left ☐ Right	Tracking: ☒ Equal ☐ Unequal

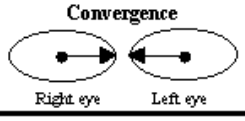
Pupil Size: ☒ Equal ☐ Unequal (explain)	Resting Nystagmus ☐ Yes ☐ No	Vertical Nystagmus ☐ Yes ☒ No	Able to follow stimulus ☒ Yes ☐ No	Eyelids ☒ Normal ☐ Droopy

Pulse and Time

1. 102 /
2. 100 /
3. 102 /

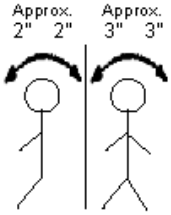
HGN	Left Eye	Right Eye
Lack of Smooth Pursuit	Present	Present
Maximum Deviation	None	None
Angle of Onset	None	None

Convergence



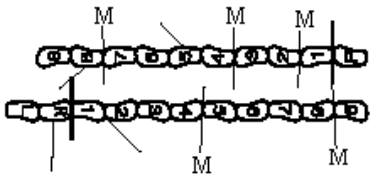
22/30 **One Leg Stand** 24/30

Modified Romberg Balance



Bruxism. Eyelid tremors.

Walk and Turn Test



Walked quickly.

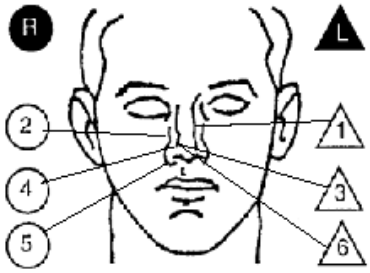
	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops walking		
Misses heel-toe	✓✓	✓✓✓
Steps off line	✓	✓✓
Raises arms	✓✓✓	✓✓✓
Actual steps taken	9	9

L	R	
X	X	Sways while balancing
X	X	Uses arms to balance
		Hopping
X	X	Puts foot down

Counted quickly.

Time Estimation	Describe turn	Cannot do test (explain)	Type of footwear:
22 estimated as 30 seconds	Quick spin	N/A	Slip-on boots

Finger to Nose
(Draw lines to spots touched)



Quick, jerky movements. Jammed fingers to nose.

PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
Left Eye	7.5	9.0	6.0
Right Eye	7.5	9.0	6.0

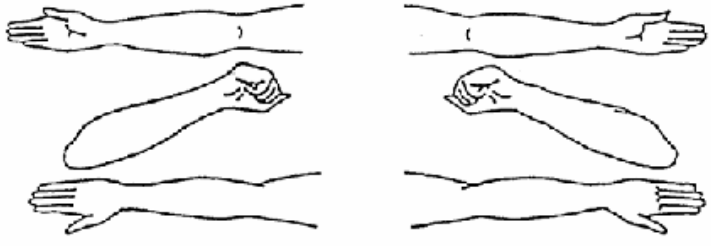
Rebound Dilation: ☐ Yes ☒ No

Reaction to Light: Slow

Nasal area: Redness. No nasal hair.

Oral cavity: Clear

RIGHT ARM **LEFT ARM**



Nothing observed.

Blood Pressure	Temperature
170 / 100	99.8 °F

Muscle Tone: ☐ Normal ☐ Flaccid ☒ Rigid

Comments:

What drugs or medications have you been using?	How much?	Time of use?	Where were the drugs used? (Location)
"Nothing. Just a couple of beers man."	N/A	N/A	N/A

Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	☐ Subject refused entire evaluation ☐ Subject stopped participating during evaluation
/				

Officer's Signature:	Reviewed/approved by / date:	DRE #

Opinion of Evaluator: ☐ Not Impaired ☒ Alcohol ☒ CNS Stimulant ☐ Dissociative Anesthetic ☐ Inhalant ☐ Medical ☐ CNS Depressant ☐ Hallucinogen ☐ Narcotic Analgesic ☐ Cannabis

ROLE PLAY SCENARIOS

SUBJECT	DRUG CATEGORY
Alpha	Not impaired
Bravo	Cannabis
Charlie	Dissociative Anesthetic (PCP)
Delta	Narcotic Analgesic
Echo	Narcotic Analgesic and CNS Depressant
Foxtrot	Cannabis
Golf	CNS Stimulant
Hotel	Dissociative Anesthetic and Cannabis
India	Inhalant
Juliet	Alcohol (ETOH) only (BAC = 0.06)
Kilo	Narcotic Analgesic and ETOH (BAC = 0.05
Lima	CNS Stimulant and ETOH (BAC = 0.03)

Session 30 - Transition to the Certification Phase of Training
2 Hours, 30 Minutes
Session 30
Transition to the Certification Phase of Training
TSI
NHTSA
Drug Recognition Expert Course
30-2

Briefly review the objectives, content, and activities of this session.

Upon successfully completing this session, the participant will be able to:

- Demonstrate the knowledge and skills the course was intended to help develop
- Summarize the key topics covered
- Offer comments and suggestions for course improvement
- Prepare for Field Certification Training
- Understand the steps involved in the Drug Recognition Expert (DRE) certification process

CONTENT SEGMENTS

A. Summary
B. Post Test
C. Session Wrap-Up
D. Certification Process, Training Assignments and Schedule
E. Closing Remarks

LEARNING ACTIVITIES

Participant-Led Presentations
Participants' Anonymous Critique of Course
Knowledge Examination
Instructor-Led Presentation

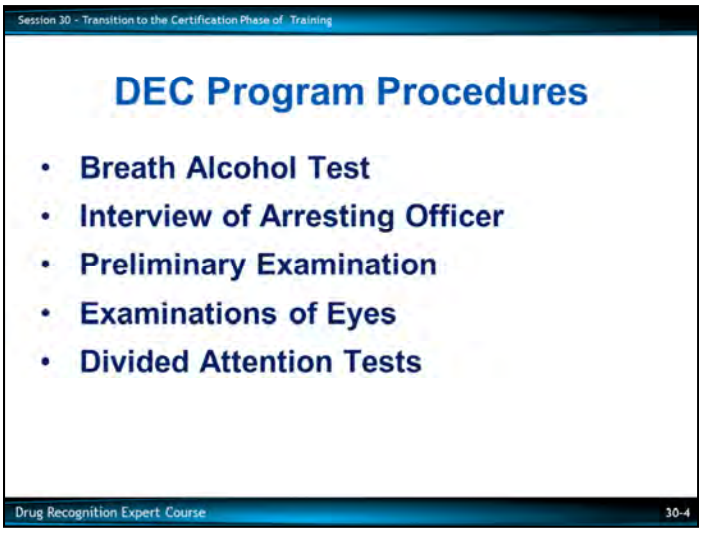
A. <u>Summary</u>

The Seven Categories of Drugs

Ask participants to name the seven categories.

Make sure all categories are named, then reveal the bottom of the slide with the list.

- Central Nervous System (CNS) Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

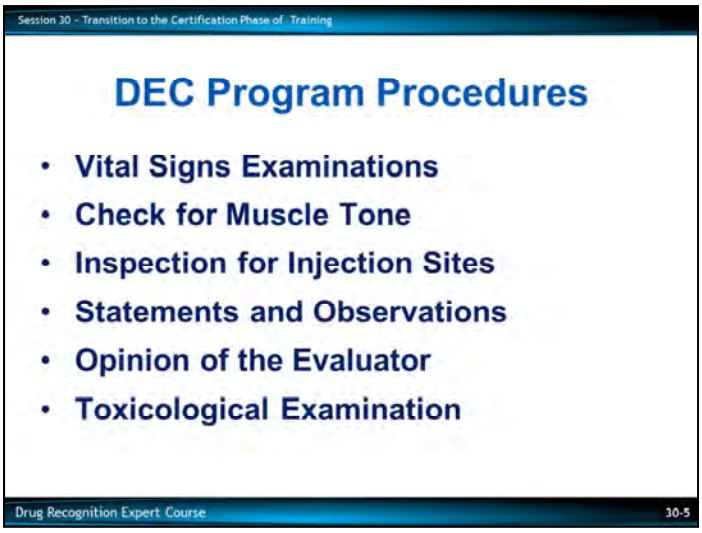


The Drug Evaluation and Classification (DEC) Program Procedures

Ask participants to name the components of the procedure. Make sure all components are named then reveal the bottom portion of the slide with the components listed.

- Breath Alcohol Test
- Interview of Arresting Officer
- Preliminary Examination
- Examinations of Eyes
- Divided Attention Tests

Ask participants to discuss the kinds of evidence/information gleaned from each component.



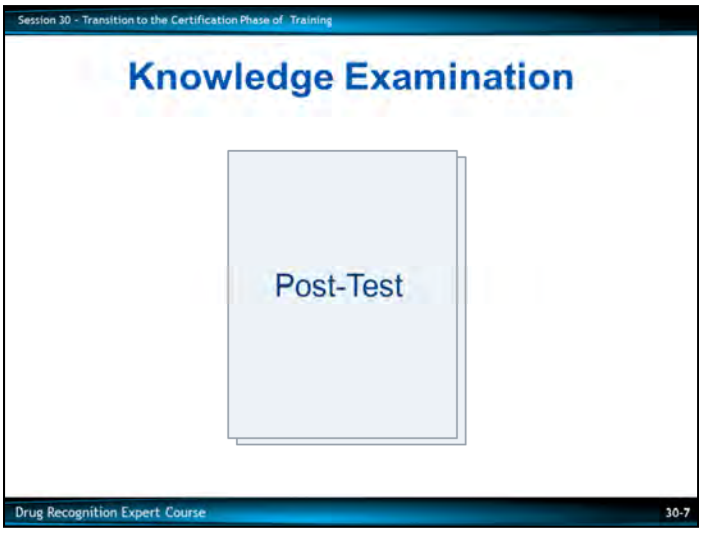
Ask participants to name the components of the procedure. Make sure all components are named then reveal the bottom portion of the slide with the components listed.

- Vital Signs Examinations
- Check for Muscle Tone
- Inspection for Injection Sites
- Statements and Observations
- Opinion of the Evaluator
- Toxicological Examination

Ask participants to discuss the kinds of evidence/information gleaned from each component.

Symptomatology Matrix Review

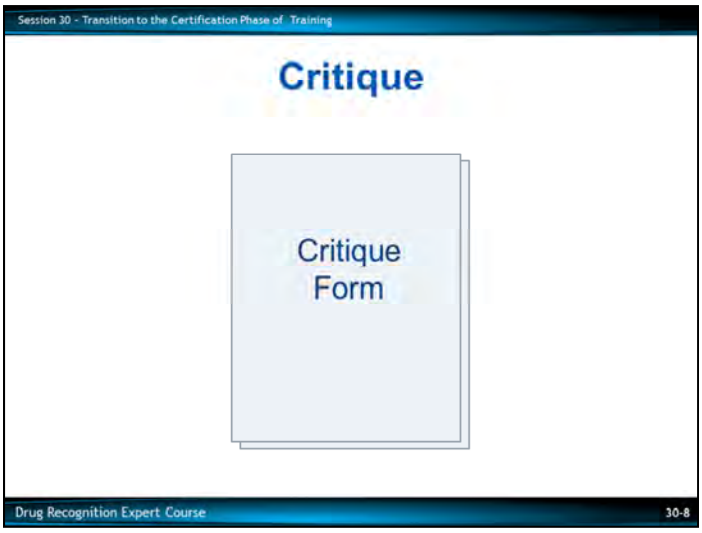
Instruct participants to turn to the symptomatology chart in their manuals.
Briefly summarize and review the major signs and symptoms associated with each drug category.
Reveal each category one at a time and conduct the review.
Solicit participants' questions concerning the major content topics of the course.
Inform the participants the final exam in a "closed book" test. Instruct them to put all books and notes away.



B. <u>Post-Test</u>

Knowledge Examination

- ***Distribute post-test knowledge examination***
- ***Allow students approximately 80 minutes to complete the knowledge examination***
- ***Collect the completed knowledge examination***
- ***Grade the knowledge examinations***



C. <u>Session Wrap-Up</u>

Critique

Hand-out critique forms to the participants for completion.

D. <u>Certification Training Assignments and Schedule</u>

Remind participants of the three phases of training needed to complete their certification process:

1. **Phase I – Pre-School**
2. **Phase II – 7-Day School**
3. **Phase III – Field Certifications**

Review with participants the International Association of Chiefs of Police (IACP) International Standards for DRE certification.

- IACP Standard 1.10 requires the candidate DRE satisfactorily complete a minimum of twelve (12) evaluations, identifying subjects under the influence of at least three of the drug categories
  - All three must be supported by toxicology

- The candidate DRE must also act as the evaluator for at least six evaluations

- All evaluations, either administered or observed, must be documented on the candidate's Rolling Log

- Candidate DREs need to have toxicology samples from at least nine (9) subjects evaluated during the certification process

- The candidate DRE cannot be certified unless the opinion concerning the drug category(s) is supported by toxicology 75 percent of the time or in at least seven (7) of the nine samples submitted for certification

- Field certification evaluations must be observed and supervised by a DRE instructor to count towards minimum certification requirements
  - The evaluation must be observed in its entirety and the instructor who observed the entire evaluation must review the Facesheet and narrative report.
  - Once this report is approved, only this instructor should sign-off on the observed evaluation

Field Certifications

Remind participants of what will be needed for the field certifications.

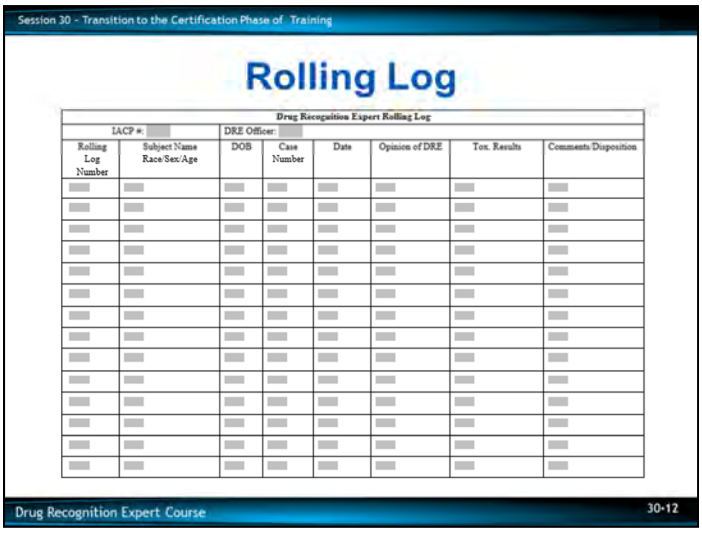
Should include the following:

- DRE kits
- Certification Progress Log
- DRE Participant Manual
- Rolling Log
- A "prepared mind"

Emphasize the importance of attending DRE Field Certification Training with a positive attitude, patience, and a commitment for success. Expect long work days.

Remind participants DRE field certifications must be completed as soon as possible following completion of the classroom training.

Remind participants by the time they have completed field certification(s), they shall have prepared a Curriculum Vitae (CV).



Rolling Log

Every DRE should maintain a list of all evaluations conducted during their career. These should include, at a minimum, training evaluations, enforcement evaluations, and any evaluation in which they participate. This Log illustrates the DRE's experience relative to drug impairment recognition. The Rolling Log number is a format consisting of three sets of numbers separated by a hyphen. The first two digits are the two-digit year when the evaluation was conducted (i.e. 17-, or 18-, etc.). The second set of digits is a three digit number for the total number of drug influence evaluations conducted within the current year. For example, the first evaluation conducted in the year will "001," followed by "002," etc. This number will reset at the beginning of the next calendar year.

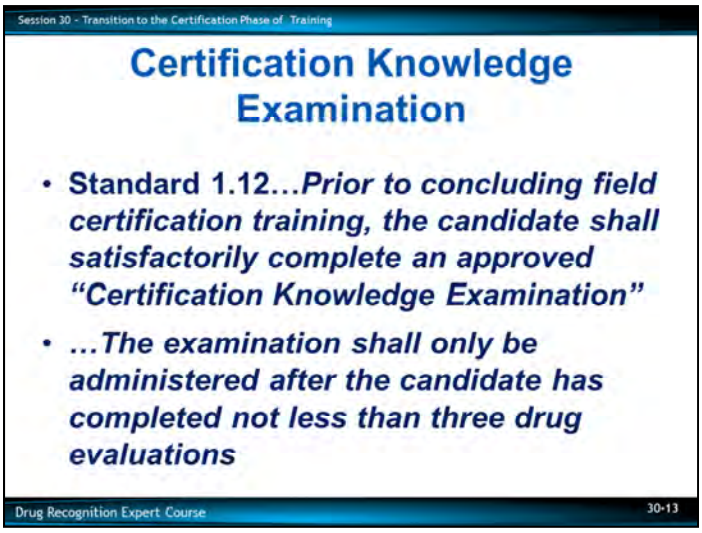
The final set of numbers is a four-digit number that represents the total number of evaluations conducted in the DRE's career. This number continues to accrue and does NOT reset each year. An example of a Rolling Log number would be:
17-001-0001 (the first evaluation ever conducted by a DRE, which occurred in calendar year 2017)
18-001-0049 (the first drug influence evaluation this DRE conducted in 2018, but it is the 49th evaluation of his/her career).

Each drug influence evaluation will receive a DRE Rolling log number that is specifically generated based upon the number of evaluations conducted by that DRE.
Provide additional examples of Rolling Log numbers to assist participants in understanding the determination of Rolling Log numbers.

DREs should record the basic information about each evaluation in their Rolling Log, including the opinion as to which drug category or categories were involved. When the toxicology results are received, the DRE should enter all of the specific drugs in the appropriate column, including drugs that were not in the original opinion.

_____

_____



- Standard 1.12…Prior to concluding field certification training, the candidate shall satisfactorily complete an approved "Certification Knowledge Examination"
- …The examination shall only be administered after the candidate has completed not less than six drug evaluations

Final Certification Knowledge Examination

- Prior to concluding the certification process, the candidate DRE must satisfactorily complete an IACP-approved Certification Knowledge Examination

- The Certification Knowledge Examination is a multi-part comprehensive examination where the participant cannot make significant errors or omissions

- Examination consists of five parts which tests the candidate DRE's knowledge of the drug symptomatology matrix, drug effects, drug combinations, and report writing skills

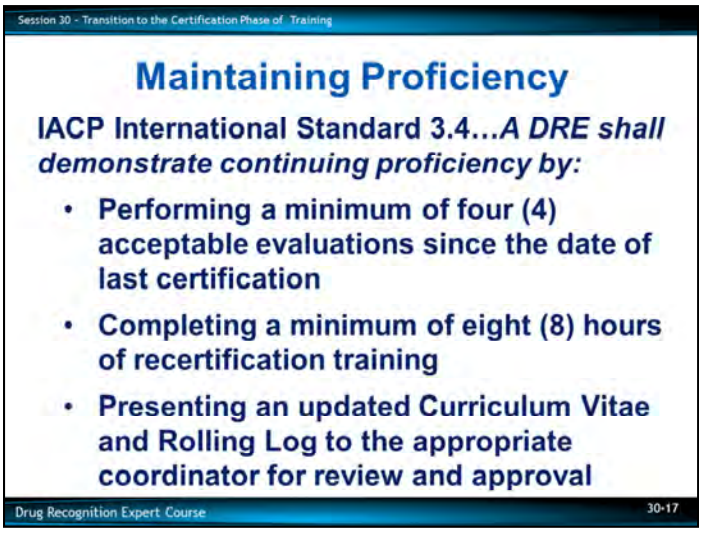
- After each component required for certification is completed, a DRE Instructor must sign off on the DRE candidate's log

Remind students only the instructor who observed the evaluation can sign-off on the evaluation.

- The candidate DRE must be recommended for certification by two DRE instructors

DRE Certification
DRE certification is for a period of two years.

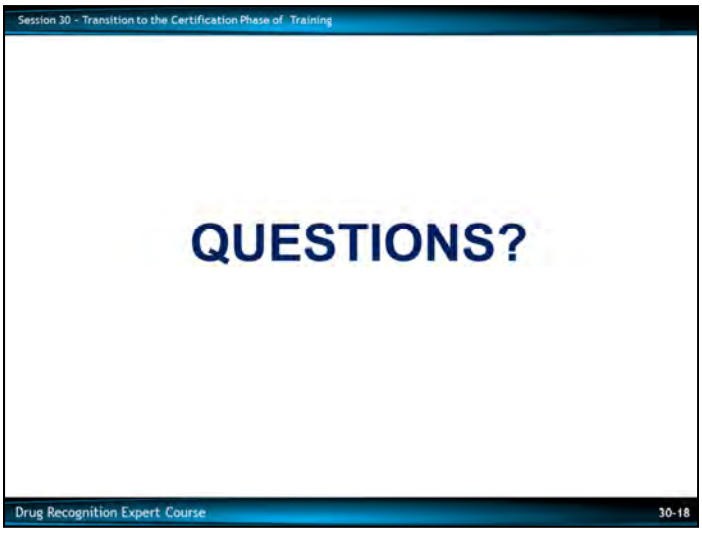
DREs shall be required to renew their certificate of continuing proficiency every two years.



Once certified, DREs shall be required to renew their certificates of continuing proficiency every two years.

Continuing proficiency requires:

- Performing a minimum of four (4) acceptable drug evaluations since the last date of certification
- Completing a minimum of eight (8) hours of approved re-certification training
- Presenting an updated Curriculum Vitae (CV) and Rolling Log to the appropriate coordinator for review



Solicit questions from participants regarding the Transition to the Certification Phase of Training.

E. <u>Closing Remarks</u>

Closing remarks will be offered by appropriate representatives of the department of faculty.

Drug Recognition Expert Rolling Log							
IACP #:		DRE Officer:					
Rolling Log Number	Subject Name Race/Sex/Age	DOB	Case Number	Date	Opinion of DRE	Tox. Results	Comments/Disposition

INSTRUCTOR'S GUIDELINES FOR THE FINAL EXAMINATION

ADMINISTERING THE FINAL EXAMINATION

The NHTSA/IACP approved Final Examination (Form A) is administered at the completion of this training. Each participant must receive one copy of the examination and an answer sheet. To guard against loss of a copy of the examination, do not simply hand over a large supply of examinations to the first row of students and ask them to "pass them back". Instead, instructors must physically hand a single copy to each individual participant. EMPHASIZE THAT PARTICIPANTS MUST WRITE NOTHING ON THE EXAMINATION ITSELF. When a participant completes the test, make sure you collect their copy of the examination along with the answer sheet. Carefully inspect the copy of the examination to make sure nothing has been written on it. Destroy completely any copies that have been marked in any way.

GRADING THE EXAMINATION

The Final Examination contains 100 multiple choice questions. A participant must correctly answer at least 80 questions to pass the examination and progress to Certification Training. A participant who is totally correct on at least 80 questions passes. A participant who answers 21 or more questions incorrectly fails.

WHAT DO WE DO WHEN A PARTICIPANT FAILS?

The International Standards established for this program by IACP, and endorsed by NHTSA, grant every participant who fails the Final Examination one additional attempt to pass. BUT PLEASE NOTE THAT SOME OF THE STATES AND LAW ENFORCEMENT AGENCIES PARTICIPATING IN THE DRUG EVALUATION AND CLASSIFICATION PROGRAM HAVE ADOPTED A MORE EXACTING STANDARD. For example, some agencies will not allow a "failed" participant a second attempt unless he or she scored at least 70 on the first attempt.

All participating agencies have the right to set standards that are more stringent than those promulgated by IACP. Therefore, when a participant fails the Final Examination, your first duty is to determine whether the participant qualifies for a second attempt.
Assuming a "failed" participant qualifies, the second attempt cannot occur sooner than two weeks following the completion of the school, and must occur not later than four weeks after the School end. In other words, there is an enforced waiting period of two weeks, to provide time for remedial study; then, there is a two week "window of opportunity". NO EXCEPTION CAN BE MADE TO THIS.

During the two week waiting period, the participant is expected to study the manual and their class notes. Tutoring by certified DRE instructors is permissible and encouraged. However, if you tutor a "failed" participant, be sure that you do not simply "teach the test". DO NOT GO OVER THE FINAL EXAMINATION WITH THE PARTICIPANT. DO NOT LET HIM OR HER KNOW WHICH QUESTIONS WERE ANSWERED INCORRECTLY. Do use the available quizzes and other study guides to help tutor the participant. These include the "Challenge Quiz" found at the end of the PRE-School Participant's Manual; the Pre-test for this School; the five quizzes that are used in this School; and, the "Self-Test for Review and Study" that is found at the end of Session 28 of the DRE School Participant's Manual.

One thing that the “failed” participant cannot do during the two-week waiting period is formally enroll in Certification Training. It is permissible for him or her to attend Certification Training events as an observer. But the “failed” participant cannot administer any subject evaluations, nor can they serve as the recorder for any evaluations. And, of course, the “failed” participant will receive absolutely no credit for any evaluations they observe.

The second attempt at the Final Examination must employ Form B Final Written Examination. If the participant correctly answers at least 80 questions on the second attempt, they pass. If the score is 79 or lower, or if the two to four week “window” elapses and the participant has not been re-tested, they irrevocably fail, and are no longer a participant in the Drug Evaluation and Classification Program. The only way that the participant can be re-admitted to the Program would be to enroll in another DRE School, complete it in its entirety, and pass the Final Examination.

DRUG EVALUATION AND CLASSIFICATION PROGRAM
FIELD CERTIFICATION INSTRUCTOR OBSERVATION

Date: _____ Time: _____ DRE Student: _____

Evaluation #: _____ Test Subject: _____

Scribe: _____ Observer: _____

	Errors of Omission	Errors of Commission
Preliminary Examination:	[ ] None Observed	[ ] None Observed
Comments/Observations:		
Eye Examination:	[ ] None Observed	[ ] None Observed
Comments/Observations:		
Psychophysical Tests:	[ ] None Observed	[ ] None Observed
Comments/Observations:		
Vital Signs:	[ ] None Observed	[ ] None Observed
Comments/Observations:		
Dark Room Examination:	[ ] None Observed	[ ] None Observed
Comments/Observations:		

Opinion of Student: _____ Agree [ ] Disagree [ ]

Toxicology Sample: [ ] Urine [ ] Blood [ ] Other Result: _____

Comments: _____

DRE Instructor: _____ DRE#: _____

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