Substance Abuse Trends in Maine

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SUBSTANCE ABUSE TRENDS IN MAINE

THIS REPORT IS PRODUCED FOR:
MAINE OFFICE OF SUBSTANCE ABUSE COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK

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Introduction and Background

This report takes into account the primary objectives of the Office of Substance Abuse (OSA): to identify substance abuse patterns in defined geographical areas, establish substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights all of the Strategic Prevention Framework State Incentive Grant (SPF SIG) prevention priorities identified in the SPF strategic plan: underage drinking, high-risk drinking among 18-25 year olds, misuse of prescription drugs among 18-25 year olds, marijuana use in 12-25 year olds, and slowing the spread of methamphetamine abuse; as well as showing the progress being made to address these priorities. Finally, this report shows how the use and abuse of substances in Maine compares to these same issues in the nation as a whole.

This report includes data available through June 2009 and, when possible, updates the April 2009 CESN report, which included data through December 2008. Older and unchanged data were included when more recent data were not available. Three major types of indicators are included: self-reported substance consumption, consequences of substance use, and factors contributing to substance use. In addition, interviews with key informants were conducted to examine different perspectives on current and emerging substance abuse trends across the state.

A detailed description of each source is provided in the Appendix, including retrieval and/or contact information. A brief history of the report is also included.

Organization of the Report

This report is used by a variety of people for many reasons. Some need a snapshot of the current status of a particular substance, while others are looking for longer-term trends. Still others may be seeking information on a particular population. Sometimes these points of view do not require new data, but rather special comparisons or presentations. To accommodate these diverse needs, the newest edition of this report has been reorganized as follows:

- At the front of the report, the reader can find six one-page Fact Sheets. These easy-access pages contain information organized into the following topic areas: Alcohol Use, Marijuana Use, Prescription Drug Misuse, Alcohol and Drug Use Among Youth, and Alcohol and Drug Use Among Young Adults, and Other Drug Use.
- The Executive Summary provides the reader with a brief overview of the larger report. It includes statistics and findings, but does not contain graphical illustrations, long-term trends or comparative findings.
- The Full Report presents the reader with more in-depth comparative and trend analyses and is broken into five major sections. The first outlines the problem of substance abuse in Maine overall and provides context for the findings that are presented in subsequent
sections. The second examines particular consumption trends and patterns among some of the most abused substances in order to provide the reader a deeper understanding of those substances. The third section examines the consequences related to substance use, such as traffic accidents and poisonings. The fourth section outlines some of the factors that contribute to substance use overall, such as norms and perceptions. The final section contains recent trends in substance abuse treatment and hospital admissions.
Quick Facts:
- Fifty-nine percent of adults over the age of 18 had at least one drink of alcohol within the past 30 days. Additionally, 7% of all adults drank heavily (more than one or two alcoholic drinks per day) and 16% binge drank within the past month (2008 BRFSS).
- At 12%, young adults ages 18-24 had the highest rate of heavy drinking compared to other age groups. This is higher than the national average of 7% (2008 BRFSS).
- Among students in grades 6 to 12, 25% used alcohol at least once within the past 30 days (2008 MYDAUS). This represents a 13% decrease since 2006.

Binge Drinking
Binge drinking means consuming five or more drinks during one sitting. Eleven percent of high school students engaged in binge drinking within the past two weeks (2008 MYDAUS). At 32%, young adults ages 18-24 have the highest reported rate of binge drinking compared to any other age group in Maine, and higher than the national average of 27% (2008 BRFSS).

Consequences Related to Alcohol Use
- Between 2007 and 2008, there was little change in the number of drug abuse violations among adults, a 10% decrease in OUI arrests, and a 10% increase in adult liquor violations (DPS).
- Juveniles are least likely to be arrested for OUI and more likely to be arrested for liquor law violations; juvenile arrests related to substance abuse continued to decline in 2008 (DPS).
- In 2006, 12% of pregnant women reported drinking some alcohol during the last three months of pregnancy (PRAMS).
- There were 46 fatalities from traffic accidents involving alcohol in 2008 (FARS).

Youth Perceptions about Alcohol
Almost 90% of Maine’s middle and high school students say that their parents feel it is “wrong” or “very wrong” to drink alcohol. Students also think that regular alcohol use is harmful (77% of middle schoolers and 69% of high schoolers). Twenty-three percent think kids would be caught for drinking alcohol, but more students think they’ll get caught by parents than by police.

1 In BRFSS, the definition of binge drinking differs for men (five drinks) and women (four drinks).
CURRENT MARIJUANA USE IN MAINE

Quick Facts:
- In 2007, 6% of adults over the age of 18 used marijuana within the past 30 days. Adult males were over four times more likely to use marijuana in the past 30 days than adult females (2007 BRFSS).
- At 13%, young adults ages 18-24 had the highest rate of using marijuana in the past 30 days compared to other age groups; this was closely followed by 25-34 year olds (12%); (2007 BRFSS).
- Among college students, 19% reported using marijuana within the past month and 30% within the past year (2008 HEAPP).
- Among students in grades 6 to 12, 13% used marijuana at least once within the past 30 days, down from 17% in 2002 (2008 MYDAUS).

Perceptions about Marijuana
Relatively few high school students (18%) believe trying marijuana a couple of times poses a great risk (18%), whereas almost half (45%) perceive regular use of marijuana as risky. Unfortunately, 41% believe marijuana is easy to obtain.

Among all youth, 70% did not think they would be caught by the police for smoking marijuana and 13% thought they would be seen as “cool” for smoking marijuana.

Among the adult population, 18-25 year olds are less likely to perceive great risk associated with smoking marijuana once per month (14%) compared to adults over age 26 (34%; 2006-07 NSDUH).

Comparisons to National Trends
Marijuana makes up the majority of illicit drug use in Maine. Comparisons to national statistics show that Mainers have higher reported rates of using marijuana than the national average.
- In 2007, the rate of past 30-day use of marijuana among high school students in Maine was 22% compared to 20% nationally (2007 YRBSS).
- Among 18-25 year olds, 26% reported that they used marijuana in the past month, the third highest rate in the nation among this age group (the national average was 16%; 2006-07 NSDUH).

Treatment for Marijuana
There continue to be more secondary treatment admissions for marijuana in the first half of 2009, and this may be increasing. Sixty-nine percent of persons admitted for marijuana as the primary substance were under the age of 29, and 56 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.
Quick Facts:
- Fourteen percent of young adults ages 18-25 used pain relievers for non-medical purposes within the past year, compared to only 3% of adults age 26 and older (2006-07 NSDUH). Six percent of college students reported using prescription drugs in the past year to get high (2008 HEAPP).
- Among students in grades 6 to 12, 11% used prescription drugs for a reason other than their intended purpose at least once in their lifetime; 5% misused prescription drugs in the past 30 days (2008 MYDAUS).
- Among older students (11th and 12th graders), nearly one in five misused prescription drugs at least once in their lifetime (2008 MYDAUS).
- Prescription narcotics comprised 26% of the total admissions to treatment in the first half of 2009, second only to alcohol (TDS).

Access to Prescription Drugs
Maine’s Prescription Monitoring Program (PMP) receives reports for Drug Classes C-II through C-IV. Between January and June 2009, 1,216,108 prescriptions were reported. Prescription narcotics consistently make up the bulk of prescriptions reported to the PMP, and accounted for more than 50% in the first half of 2009.

Poisonings and Prescription Drugs
The Northern New England Poison Center received just over 24,000 medication verification calls in the first half of 2009, more than were received during the same time period in 2008. The types of drugs most often requested for identification continue to be opioids and benzodiazepines.

In addition, the Poison Center receives reports of substance abuse-related exposures, cases in which a poisoning occurs. In the first half of 2009, opioids were mentioned most frequently in substance abuse-related exposures (62).

2 For NNEPC the opioid category is not exclusive to prescription drugs. This differs from other data sources cited.

Treatment for Prescription Drug Abuse
The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 64 percent (691 admissions) in Maine since the first half of 2005. Admissions for oxycodone (which includes OxyContin) specifically drives this trend.

According to treatment admissions data, users primarily inhale crushed pills, followed by injection and oral consumption. As a proportion of all admissions for oxycodone, inhalation as the route of administration appears to have decreased slightly (TDS).
**Quick Facts:**
Among Maine’s Youth (Grades 6 to 12):
- 25% used alcohol in the past 30 days (44% have used it at least once in their lifetime).
- 13% engaged in binge drinking within the past two weeks.
- 13% smoked marijuana in the past 30 days (23% have used it at least once in their lifetime).
- 11% used prescription drugs for a reason other than their intended purpose at least once in their lifetime (5% have used them in the past 30 days).
- 3.8% of students in grades 6 though 12 used cocaine in their lifetime, and 1.7% used it in the past 30 days.
- In 2008, 10.6% of students used inhalants at least once in their lifetime. Among 8th grade students, the rate of past 30-day use of inhalants was 5.5%. *(2008 MYDAUS)*

**Recent Declines in Alcohol Use**
Between 2006 and 2008, those who had used alcohol within the past 30 days declined from 29% in 2006 to 25% in 2008. Lifetime use of alcohol has also declined, from 48% in 2006 to 44% in 2008. Similarly, 13% of students reported that they engaged in binge drinking within the past two weeks, compared with 15% in 2006 *(2008 MYDAUS)*.

**Recent Declines in Drug Use**
In terms of drugs other than alcohol, the percent of students in grades 6 to 12 who reported using marijuana within the last 30 days has declined, from 17% in 2002 to 13% in 2008. The rate of lifetime cocaine use is down also, from 4.5% in 2006 to 3.8% in 2008; this represents the first downward movement since 2000. Lifetime use of inhalants also decreased, from to 12% in 2002 to 10.6% in 2008; past 30-day use among younger students, where use is more prevalent, also declined *(2008 MYDAUS)*.

**Youth Perceptions**
Almost 90% of Maine’s middle and high school students say that their parents feel it is “wrong” or “very wrong” to drink alcohol. Students also think that regular alcohol use is harmful (77% of middle schoolers and 69% of high schoolers). Among high school students, fewer think regular use of marijuana is harmful (45%). Moreover, 41% of high school students believe marijuana is easy to obtain. Among all youth, 23% think kids would be caught for drinking alcohol, but more students think they will get caught by parents than by police. In addition, 70% did not think they would be caught by the police for smoking marijuana.

**National Comparisons**
A nationally comparative data source shows that Maine high school students have lower rates of past 30-day alcohol use than the national average (29% in Maine, compared with 48% nationally). However, it appears that Maine high school students have higher rates of past 30-day use of marijuana; 22% in Maine compared to 20% nationally *(YRBSS 2007)*.
Quick Facts:
- Among young adults age 18-24, 12% heavily use alcohol (average daily alcohol use in women more than one per day, and in men more than two drinks per day) and 32% binge drank within the past month. These rates are higher than any other age group (2007 BRFSS).
- In 2007, 13% of 18-24 year olds used marijuana within the past month (BRFSS).
- In 2006-07, 14% of young adults ages 18-25 used pain relievers for non-medical purposes within the past year (NSDUH).
- Among 18-25 year olds, 8% used cocaine in the past year, higher than any other age group in Maine (2006-07 NSDUH).
- Among college students, 69% reporting drinking, 32% reporting consuming six or more beverages, and 19% reporting using marijuana within the past month (2008 HEAPP).

Substance Use Incidence and Trends
The rate of heavy drinking among young adults in Maine is 12%, and has been steadily increasing since 2005; this is higher than the national average of 7%. At 32%, young adults have the highest rate of binge drinking compared to other Mainers and binge drink at a higher rate than the national average of 25% (2008 BRFSS).

In 2007, 13% of 18-24 year olds used marijuana within the past month (2007 BRFSS). Other data from 2006-07 that can be compared to national trends show that young adults in Maine had the third highest rate of past-month marijuana use in the nation (26%, compared to the national average of 16%). The same data source shows that young adults had higher rates of prescription pain reliever use (14%) and cocaine use (8%) than other adults in Maine (2006-07 NSDUH).

Perceptions About Substance Use
Young adults ages 18-25 are less likely to perceive great risk associated with drinking five or more drinks once or twice per week (23%) than adults over age 26 (42%), although the percent has increased slightly since 2003. Similarly, this same age group is less likely to see smoking marijuana once per month as risky (14%) compared to older adults (34%) and this has declined since 2003 (2006-07 NSDUH).

Treatment for Young Adults
Consumers ages 18-24 sought treatment for a wider array of substances than older adults. More than one-third (35%) were in treatment for use of prescription narcotics and another third were in treatment for alcohol (34%); 11% sought treatment for marijuana and 12% for heroin/morphine. In terms of treatment for marijuana, 69% of persons admitted for marijuana as the primary substance were under the age of 29, and 56% of persons admitted for marijuana as the secondary substance were also under the age of 29.
Heroin
Admissions to treatment for heroin increased sharply in the last six months of 2008 and remained high in the first half of 2009 (593 cases).

Among those admissions, 62% are between the ages of 18 and 29; 76% report injecting the drug and 19% report inhaling it (TDS). Among Maine’s 6-12th grade students, the rate of lifetime heroin use remains low at 1.5% (2008 MYDAUS), and has remained fairly stable since 2002.

Key informants indicate that heroin use is an increasing problem, particularly in the southern part of the state. “Heroin [use] is surging in York County and up the coast, particularly among people working in the fishing industry.” It is unknown if this trend will continue, but it could reflect one of two things, or both: first, in a worsening economy, heroin is cheaper. Second, as more doctors participate in the PMP it is possible that access to prescription narcotics may be more difficult and people are switching to heroin.

Buprenorphine
Buprenorphine is used to manage opioid dependence but is often difficult to obtain. Drug court personnel indicate they have had strong reason to believe that some sharing of Suboxone occurs, and another treatment provider indicated that there has been a recent increase in the abuse of Suboxone including selling, crushing and dealing. In the first six months of 2009, the Northern New England Poison Control Center (NNEPCC) received 58 calls from the public and 86 calls from law enforcement regarding buprenorphine. When including suicide attempts, adverse effects and other types of poisonings, the Poison Center received 56 total calls for substance abuse-related poisonings involving buprenorphine, including 24 poisonings of children under the age of six.

Cocaine/Crack
According to the most recent data available, 3.8% of students in grades 6 through 12 used cocaine in their lifetime, down from 4.5% in 2006 (2008 MYDAUS). Among the 18-25 year old age group, cocaine use in the past year remains at 8%, higher than any other age group in Maine and higher than the national average of 7% (2006-07 NSDUH). Among college students, 3% indicate cocaine use within the past year, and 9% report lifetime use (2008 HEAPP).

Inhalants
Inhalant use among the youth population continues to be a concern, particularly among younger students. In 2008, 11% of students used inhalants at least once in their lifetime, a decline since 2002 (2008 MYDAUS). The incidence of previous 30-day use has also declined among the lower grades where recent use is more frequent. The highest rate of past 30-day use in 2008 was among 8th grade students, at 5.5% and down from just over 7% in 2006.

Methamphetamines and Other Drugs
In 2008, only 1.8% of college students reported any lifetime use of methamphetamine (2008 HEAPP). Similarly, only 1.3% of students in grades 6-12 had used stimulants at least once in their lifetime, and this has been decreasing since 2000 (2008 MYDAUS).
Executive Summary

This report takes into account the primary objectives of the Office of Substance Abuse (OSA): to identify substance abuse patterns in defined geographical areas, establish substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights SPF SIG prevention priorities of underage drinking, high-risk drinking among 18-25 year olds, and misuse of prescription drugs among 18-25 year olds. To address these areas, data were obtained from various sources. This report includes data available through June 2009 and updates a report produced by the CESN in April 2009.

Key findings of this report include:

Consumption

Alcohol

• Alcohol is the most often used substance in Maine. Fifty-nine percent of adults over the age of 18 have had at least one drink of alcohol within the past 30 days. Additionally, seven percent of adults drank heavily (one or two alcoholic drinks per day) and 16 percent reported binge drinking\(^3\) within the past month (2008 BRFSS).

• Overall, men in Maine binge drank more often than women in 2008, 21% compared with 11 percent (2008 BRFSS). Among college students, men were also much more likely to report consuming large quantities\(^4\) of alcohol in the past month (48% compared to 28%; 2008 HEAPP).

• Compared to other adults in Maine, in 2008, young adults ages 18-24 had the highest rate of heavy use of alcohol (one or two drinks per day) at 12 percent. In addition, 32 percent of young adults binge drank within the past month, the highest rate among any age group in Maine and higher than the national average of 25 percent (2008 BRFSS).

• The reported rate of binge drinking among the 45-54 year old population appears to be increasing (from 14% in 2007 to 17% in 2008) and is higher than the national average of 14 percent. Heavy alcohol use among 45-54 year olds appears to have increased in recent years as well, from five percent in 2006 to seven percent in 2008 (2008 BRFSS).

• Among college students, 69 percent reported drinking any alcohol in the past month and 36 percent reporting drinking six or more alcoholic beverages in one sitting at least once during the past month (2008 HEAPP).

• Among Maine’s youth, drinking rates have declined. In 2008, 25 percent used alcohol within the past 30 days compared with 29 percent in 2006. Over the same period, binge

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\(^3\) Binge drinking is defined as five or more alcoholic drinks at one sitting for males and four or more for females.

\(^4\) The HEAPP survey asks students about six or more drinks in one sitting.
drinking among Maine’s students declined from 15 percent in 2006 to 13 percent in 2008. However, binge drinking rates increase dramatically between 11th and 12th grades (from 20% to 26%; 2008 MYDAUS). Among 12th graders, this was higher than the national average of 24 percent.

- Maine’s young people are waiting longer to participate in drinking alcohol. The proportion of 11th and 12th grade students who drank alcohol before the age of 14 is steadily declining, from 28 percent in 2000 to 22 percent in 2008 (2008 MYDAUS).

**Prescription Drugs**

- Eleven percent of students in grades 6-12 used prescription drugs for purposes other than their intended use at some point within their lifetime, and nearly 20 percent of students in grades 11 and 12 have misused prescription drugs (2008 MYDAUS).

- In 2008, three percent of students reported having used a prescription drug in order to get high within the past month; six percent indicated they had done so within the past year, while 13 percent reported that they had used a prescription drug to get high at least once in their lifetime (2008 HEAPP).

- Fourteen percent of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year, compared to only three percent of adults age 26 and older (2005-06 NSDUH).

- Prescription drug abuse may be less pervasive among the college population in Maine. In 2008, three percent of students reported having used a prescription drug in order to get high within the past month; six percent indicated they had done so within the past year (2008 HEAPP).

- Prescription narcotics are frequently listed as the primary substance for which clients seek substance abuse treatment, accounting for 26 percent of all treatment admissions in the first half of 2009 (second only to alcohol) (TDS).

- According to Maine law enforcement officials and a staff at a local needle exchange program, the illicit distribution of buprenorphine (Suboxone®), a drug used to manage opioid dependence, appears to be on the rise. Calls to the Northern New England Poison Control Center (NNEPCC) from the public with questions about buprenorphine have also increased, from 101 mentions in 2007 to 147 in 2008, an increase of 46 percent. The trend continues into 2009, with 58 calls having come in to the Poison Center over the first six months.

**Marijuana**

- According to recent data, 13 percent of 18-24 year olds had used marijuana in the past 30 days; this was closely followed by the proportion of 25-34 year olds using marijuana in the same time period (12%). Adult males were over four times more likely use marijuana in the past 30-days than adult females (2007 BRFSS).
• Data from 2006-07 indicate that 26 percent of 18-25 year olds had used marijuana in the past month, the third highest rate in the nation among this age group (the national average was 16%). Almost 40 percent of Maine's young adults used marijuana in the past year (2005-06 NSDUH).

• Among the college student population in 2008, 19 percent reported using marijuana within the past month; 30 percent indicated they had used marijuana in the past year. Men were more likely than women to use marijuana in the past month (22% compared with 17% among women), as were students under the age of 21 (21% compared with 16% among students over 21) (2008 HEAPP).

• The percent of students in grades 6 to 12 who used marijuana within the last 30 days has declined in the past six years, from 17 percent in 2002 to 13 percent in 2008. Moreover, the prevalence of using marijuana before the age of 14 has decreased since 2002, from 17 percent to 12 percent (2008 MYDAUS).

• A nationally comparative data source shows that Maine high school students have higher rates of past 30-day use of marijuana than the national average, 22 percent in Maine compared to 20 percent nationally (YRBSS 2007).

Other Drugs

• Consumption of illicit drugs in Maine increased slightly from 2003 through 2005 and remained stable in 2006-07; the rate of use continues to be highest among 18-25 year olds. Only three percent of Mainers age 12 and older used illicit drugs other than marijuana in the past month; nine percent of those ages 18-25 used illicit drugs other than marijuana (2005-06 NSDUH).

• At eight percent, cocaine use in the past year among the 18-25 year old age group is higher than any other age group in Maine and higher than the national average of seven percent (2006-05 NSDUH). Among college students, three percent indicate cocaine use within the past year, and nine percent report lifetime use of cocaine (2008 HEAPP).

• Among youth, 3.8 percent of students in grades 6 though 12 used cocaine in their lifetime; 1.7 percent had used cocaine in the past 30 days. The rate of lifetime use is down from 4.5 percent in 2006 and represents the first downward movement since 2000 (2008 MYDAUS).

• In 2008, 10.6 percent of students used inhalants at least once in their lifetime, down from 12 percent in 2002. The highest rate of past 30-day use in 2008 was among 8th grade students, at 5.5 percent and down from just over seven percent in 2006 (MYDAUS 2008).

• Admissions to treatment for heroin increased sharply in the last six months of 2008 and remained high in the first half of 2009. Key informants indicate that heroin use is an increasing problem, particularly in the southern part of the state.
Consequences

- Adult arrests for drug abuse violations, OUI, and liquor violations have increased slightly between 2000 and 2007. Between 2007-2008 there was little change in drug abuse violations, there was a ten percent decrease in OUI arrests, and a 10 percent increase in adult liquor violations. Juveniles are least likely to be arrested for OUI and more likely to be arrested for liquor law violations; juvenile arrests related to substance abuse continued to decline in 2008 (DPS).

- In 2006, 12 percent of women who were pregnant drank some alcohol during the last three months of pregnancy, compared with only five percent in 2002. In 2006, this was higher among older women (35+) and women with higher incomes ($50,000+) (21% and 16% respectively) (PRAMS).

- In 2008, there were 46 alcohol related traffic fatalities in the State of Maine, representing 30 percent of all crash fatalities and showing a one-year decrease in an otherwise upward trend since 2002. One-third of alcohol related crashes involved a driver between the ages of 18 and 25; 13 percent of all alcohol-related crash fatalities occurred among this age group (MDOT/FARS).

- Between 2006 and 2008, there were 1,035 Maine Driver Drug Tests conducted, 900 (87%) of which had identifiable outcomes and some of which had multiple findings. Over that time period, marijuana was the most frequently detected substance (268), followed by methadone (164), oxycodone (118) and cocaine (110) (MDOT/FARS).

- The general public made just over 24,000 medication verification calls to The Northern New England Poison Center in the first half of 2009 that were categorized as substance abuse. The types of drugs most often requested for identification were opioids and benzodiazepines, both of which increased since the previous reporting period. In terms of substance-abuse related exposures (cases in which a poisoning occurs), opioids continue to account for the most exposures (62), followed by alcohol or alcohol containing substances (44), stimulants/street drugs (39), antidepressants (28) and benzodiazepines (25) (NNEPC).

- Deaths associated with cocaine and opioids other than heroin and methadone continued to increase in 2006, while deaths from methadone experienced a sharp decline. However, drug-related deaths in 2006 were still most often attributed to methadone (49 deaths in 2006), followed by other opioids (42) and cocaine (22), although these data are preliminary (ODRV).

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5 Note that for NNEPC the opioid category is not exclusive to prescription drugs; that is, street drugs such as heroin are also included. This differs from other data sources cited in this report.
Contributing Factors

- **Youth Access:** Overall, fewer students believed that alcohol, marijuana and other drugs were easy to get in 2008 compared with 2000. However, 41 percent of high school students continued to believe it was easy to obtain marijuana, while 31 percent thought it was easy to obtain alcohol; by 12th grade 52 percent believed it was very easy to obtain marijuana, and 39 percent believed it was very easy to obtain alcohol (2008 MYDAUS). Among college students, 85 percent of students under 21 thought alcohol was somewhat or very easy to obtain, and 11 percent of students over 21 were willing to provide alcohol to a minor (2008 HEAPP).

- **Availability of Prescription Drugs:** Between January and June 2009, 1,216,108 prescriptions were reported to Maine’s Prescription Monitoring Program (PMP), which receives reports for Drug Classes C-II through C-IV. Prescriptions for narcotics consistently account for the bulk of prescriptions reported to the PMP (50%), followed by tranquilizers and then stimulants.

- **Youth Perception of Risk/Harm:** Forty-eight percent of students in grades 6 through 8 believe that a few alcoholic drinks posed great risk of harm, compared with 36 percent of high school students (up from 33% in 2004). In terms of marijuana, among high school students, 18 percent believe trying marijuana a couple of times poses a great risk, and 45 percent think regular use of marijuana as risky (MYDAUS 2008).

- **Young Adult Perceptions of Harm:** Twenty-three percent of young adults thought there was great risk from drinking five or more alcohol drinks in one sitting in 2006-07, the lowest of any age group. Similarly, perceptions of risk associated with smoking marijuana once per month declined from 17 percent in 2003 to 14 percent in 2006 (NSDUH 2006-07).

- **Youth Perceptions of Enforcement:** In 2008, 24 percent thought kids would be caught for drinking alcohol and 30 percent thought they would be caught for smoking marijuana. Among high school students, only 12 percent thought a kid in their neighborhood would be caught by the police for drinking alcohol, while 41 percent thought they would be caught by their parents. Among college students, 34 percent of students over 21 thought it was unlikely they would face legal consequences for furnishing alcohol to minors.

- **Youth Perceptions of Community/Cultural Norms:** Among middle and high school students, 89 percent reported that their parents feel it is “wrong” or “very wrong” to drink alcohol. This was slightly higher for marijuana (94%). About three out of four students report that adults in their community think that drinking alcohol is “wrong” or “very wrong,” and four out of five report the same community attitude towards marijuana. Nonetheless, almost two in three (59%) reported to have known at least one adult who got drunk or high in the past year.
Substance Abuse Treatment

- Nearly half (47%) of all admissions to treatment during the first half of 2009 were for treatment of alcohol as a primary presenting problem, followed by prescription drugs (26%), marijuana (9%) and heroin (9%) (TDS). However, the raw number of primary alcohol admissions continues to decrease.

- Among persons entering treatment during the first half of 2009, nearly three-quarters (73%) of adults over age 40 received treatment services for alcohol as a primary presenting problem. This differs from younger consumers (ages 18-24) where more than one-third (35%) were in treatment for use of prescription narcotics, one-third in treatment for alcohol (34%), 12 percent for heroin/morphine and 11 percent for marijuana (TDS).

- The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 64 percent since the first half of 2005. Sixty percent of these admissions were among individuals between the ages of 18 and 29; 24 percent were among adults between the ages of 30 and 39.

- Treatment admissions for heroin/morphine as the primary substance increased sharply in the second half of 2008; although there was a slight decrease in the first half of 2009 (from 637 to 593 cases), admissions remain higher than they have been since 2005. As with prescription narcotics, 62 percent of these admissions involve individuals between the ages of 18 and 29.

- There continued to be more secondary treatment admissions for marijuana in the first half of 2009. Sixty-nine percent of persons admitted for marijuana as the primary substance were under the age of 29, and 56 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.

- Admissions with a primary diagnosis related to substance abuse accounted for approximately one percent of both inpatient and outpatient visits to hospitals across the state. Prescription drugs were the most often-associated substance for inpatient substance-abuse related hospital admissions. In terms of outpatient visits for substance abuse, alcohol and opioids (excluding heroin, opium and methadone) dominated the landscape (2006 MHDO).
Overview: The Problem of Substance Abuse in Maine

Twenty-five percent of Maine students have used alcohol within the past 30 days, 12 percent engaged in binge drinking within the past two weeks and 12 percent used marijuana within the past 30 days. Eleven percent used prescription drugs for purposes other than their intended use at some point within their lifetime (2008 MYDAUS). While all these indicators have shown modest to significant declines since 2006, a large proportion of underage youth continue to abuse alcohol, marijuana and prescription drugs. Moreover, many youth perceive that alcohol and marijuana are easy to obtain, and that they will not be caught for using them.

Among the adult population, however, alcohol use continues to increase. In Maine, 59 percent of adults over the age of 18 had at least one drink of alcohol within the past 30 days, higher than the national average of 55 percent. While one drink within the past 30 days is not considered abuse, heavy alcohol use (more than one drink per day for women or two drinks per day for men) is considered a public health concern by the Centers for Disease Control. Compared to other age groups, young adults aged 18-24 had the highest rate of heavy alcohol use (12%), and this has been steadily increasing since 2005. Thirty-two percent of 18-24 year olds also binge drank within the past month. Moreover, in 2008 drinking among the 45-54 year old population appears to be increasing both in terms of binge drinking (17%) and heavy alcohol use (7%; 2008 BRFSS). Moreover, alcohol has consistently been the primary substance for which most adults in Maine seek treatment (47% of all admissions in the first half of 2009) and nearly three-quarters of adults over age 40 who are in treatment receive treatment services for alcohol.

For other drugs, data for Mainers over the age of 12 also show that in the past year, 13 percent have used marijuana, followed by prescription pain relievers (5%) and cocaine (2%) (2006-07 NSDUH). Rates of use are particularly high among the 18-25 year old population, and higher than national averages. Mainers continue to seek out treatment for abuse involving a wide array of substances besides alcohol; of note, admissions for prescription narcotics have been increasing and recent data indicate that heroin use may also be on the rise. Marijuana as a secondary substance identified at treatment admission may also be increasing. The number of Mainers seeking treatment has not changed significantly since 2005.

Both individuals and communities suffer the consequences of substance abuse in terms of increased health care needs and criminal justice resources. In 2007, 32 percent of law enforcement agencies in Maine reported that drugs contributed to property crime and 27 percent reported they contributed to violent crime. Drug and alcohol violations are increasing statewide and, in 2008, 30 percent of drivers involved in fatal crashes in Maine had consumed alcohol. The proportion of pregnant women who reported drinking any alcohol during the last

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three months of pregnancy appears to be increasing. Moreover, the number of substance-abuse related poisonings and drug-related deaths are showing upwards trends as well.
A Closer Look: Consumption

Across all data sources, Mainers indicate that alcohol is the most often used substance in Maine, and the most commonly used illegal drug is marijuana. Prescription drugs also stand out compared to other illegal drugs, although both tend to impact treatment and enforcement. In order to gain a greater understanding of the patterns and trends, each substance or group of substances is addressed in more depth in the following sections. Population comparisons illustrate more specifically who is using each substance, trending data illustrate how use has changed over time, and specific behaviors associated with the substance (e.g., binge drinking) are described.

Alcohol

Adult Population

According to the most recent data available, 59 percent of adults over the age of 18 have had at least one drink of alcohol within the past 30 days (2008 BRFSS). This has increased since 2007 (from 57%) and is higher than the national average of 55 percent. Data from the 2006-07 NSDUH corroborate this finding; 53 percent of Maine residents over the age of 12 consumed alcohol in the past month compared to 51 percent nationally. Additionally, seven percent of adults drank heavily (one or two alcoholic drinks per day) and 16 percent binge drank within the past month (2007 BRFSS), although both are fairly close to the national averages (5% and 16%, respectively).

However, 12 percent of young adults ages 18-24 used alcohol heavily, the highest of any age group (2008 BRFSS). This has been steadily increasing since 2005 (see Figure 1) and is significantly higher than the national average of seven percent. Heavy alcohol use among 45-54 year olds appears to have increased in recent years as well, from five percent in 2006 to seven percent in 2008.

Young adults also appear to consume larger quantities of alcohol when they drink compared with other age groups. In 2008, 32 percent of 18-
24 year olds binge drank\(^7\) within the past month, compared with 23 percent of 25-34 year olds, 20 percent of 35-44 year olds and 17 percent of adults ages 45 to 54 (2008 BRFSS; see Figure 2). These rates have changed since 2006, the first year with comparable data available: while the rates of binge drinking among 18-24 year olds and 25-34 year olds appear to be declining, the reported rate among the 45-54 year old population appears to be increasing and is higher than the national average (17% compared to 14% nationally), (2008 BRFSS).

The prevalence of binge drinking among 18-24 year olds in Maine is also much higher than the national average for this age group (27%), as are binge drinking rates among 25-34 year olds and 35-44 year olds (23% and 19%, respectively). Older data from 2006-07 also indicate that binge drinking rates are high among the young adult population in Maine, with 46 percent reporting they had engaged in binge drinking in the past month compared with a national average of 42 percent (2006-07 NSDUH). Overall, men in Maine binge drank more often than women in 2008, (21% compared with 11%).

**College Student Population**

A recent survey of college students in Maine supports the findings for the young adult population. According to those data, 69 percent of students reported drinking any alcohol in the past month and 36 percent reporting drinking six or more alcoholic beverages in one sitting at least once during the past month (see Figure 3) (2008 HEAPP). Men were somewhat more likely to drink than women (71% compared to 68%), and they were much more likely to report consuming large quantities of alcohol in the past month (48% compared to 28%). While students who were over 21 years old were more likely to drink at all in the past month compared to their under 21 counterparts (76% compared to 62%),

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\(^7\) Binge drinking in this survey differs according to gender; it is defined as five or more alcoholic drinks in one sitting for men, and four or more alcoholic drinks in one sitting for women.
both groups were equally likely to report binge drinking in the past month (35%).

**Underage Population**

According to the most recent data available, 25 percent of Maine students in grades 6 through 12 used alcohol within the past 30 days (2008 MYDAUS). This represents a four percentage point decrease, or a 13 percent decline, since 2006 (Figure 4). Lifetime rates of use are also declining. Other data corroborate this finding, showing a downward progression from 2000 to 2006 in 30-day alcohol use among high school students, from 43 percent in 2005 to 40 percent in 2007 (2007 YRBSS)8.

Moreover, while the data show that 38 percent of 11th graders and 45 percent of 12th graders consumed alcohol in the past month, this represents the first major decrease in the rates of past month use reported by these grades since 2002 (2008 MYDAUS).

In terms of binge drinking, 13 percent of students had engaged in binge drinking within the past two weeks, compared with 15 percent in 2006 (2008 MYDAUS); previously, binge drinking rates had been stable at 16 percent since 2000. Among high school students, this decrease ranged from three percentage points among 12th graders (26% to 23%) to almost five percentage points among 11th graders (25% to 20%) (see Figure 5). However, the proportion of 12th graders who binge drank in the past two weeks was higher than the national average (26% compared with 24%) (2008 MYDAUS Technical Report).

Previously available data from 2007 had suggested that the gender gap for binge drinking rates was closing. While the 2008 MYDAUS does show that the difference between male and female rates of binge drinking has been shrinking, males were still more likely to report engaging in binge drinking than females (13% compared with 11%; see Figure 6).

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8 Note that the rates of use differ between the two data sources because MYDAUS includes middle school students, whereas YRBSS does not.
Finally, it appears that young Mainers are waiting longer to participate in drinking alcohol. The number of 11th and 12th grade students who drank alcohol before the age of 14 is steadily declining, from 28 percent in 2000 to 22 percent in 2008, while those never using is increasing (see Figure 7).

**Prescription Drugs**

Current consumption patterns regarding prescription drug use are difficult to pinpoint because of a wide range of definitions among various data sources. However, recent data indicate that 11 percent of students in grades 6-12 have used prescription drugs for a reason other than their intended purpose at least once in their lifetime, and five percent had misused prescription drugs in the past 30 days (2008 MYDAUS). For both indicators, data show that use has continued to decrease gradually since 2004 (Figure 8). Among older students (11th and 12th graders), nearly one in five students has misused prescription drugs at least once in their lifetime, and there is little difference between male and female students (2008 MYDAUS).

Adolescents are not the only population misusing prescription drugs. NSDUH data from 2006-07 show that 14 percent of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year, compared to only three percent of adults age 26 and older. Figure 9 shows that these rates of non-medical use of pain relievers among the adult population...
have remained fairly stable since 2003. However, data suggest that prescription drug abuse may be less pervasive among the college population in Maine, or it may be due to the difference in how the question was worded in the college survey. In 2008, three percent of students reported having used a prescription drug in order to get high within the past month; six percent indicated they had done so within the past year, while 13 percent reported that they had used a prescription drug to get high at least once in their lifetime (2008 HEAPP).

According to the 2008 Drug Threat Assessment, prescription narcotics continue to pose a great threat throughout the New England region, including Maine, with the most abused prescription drugs being oxycodone and hydrocodone (2008 NDIC). Moreover, the Treatment Data System shows that oxycodone, which includes the trademarked OxyContin®, is the most frequently listed primary drug (not including alcohol) for which treatment is sought. According to treatment admissions data⁹, users primarily inhale crushed pills, followed by injection and oral consumption. As a proportion of all admissions for oxycodone, the route of administration remained fairly stable in the first half of 2009, with inhalation decreasing slightly (see Figure 10). According to one key informant: “There is a psychological divide among addicts who use needles and those who don’t. If you use needles you’re a junkie, but if you snort, smoke or ingest a drug, you’re just ‘partying.’”

The illicit distribution of buprenorphine (Suboxone®) continues to be a concern. Interviews with Maine law enforcement officials and staff of a Portland-based needle exchange program previously cited buprenorphine as a drug that is increasingly common. More recent interviews with drug court personnel indicated that while they have had strong reason to believe that some sharing of Suboxone occurs, this cannot be substantiated. Another treatment provider indicated that there has been a recent increase in the abuse of Suboxone including selling, crushing and dealing. Buprenorphine is often used to manage opioid dependence and many

⁹ These data do not include shelter/detox admissions.
persons with substance use disorders state that they take the drug to not feel sick, rather than to get high. In fact, many treatment providers substituted buprenorphine products when it became apparent that those in treatment for opiate abuse were starting to abuse methadone. However, buprenorphine is difficult to obtain most of the time, with addicts having a hard time locating a provider.

Calls to the Northern New England Poison Control Center (NNEPCC) involving buprenorphine have also increased recently. In 2008, the Poison Center received 147 calls from the public that mentioned buprenorphine compared to 101 in 2007, an increase of 46 percent. Moreover, law enforcement personnel asked over 230 questions about buprenorphine in 2007 and 2008. Poisonings involving buprenorphine also appeared to be rising steadily, both in terms of substance abuse-related poisonings (21 in 2008, up from 10 in 2007) and in terms of poisonings of children under the age of six (23 in 2008, up from 15 in 2007). These trends continued into 2009, with 58 calls from the public coming in to the Poison Center over the first six months, and 86 calls coming in from law enforcement. Moreover, the Center received 16 calls of substance abuse-related poisonings involving buprenorphine during the first half of the year, and 20 poisonings of children under the age of six, close to the total number for 2008. When including suicide attempts, adverse effects and other types of poisonings, the total number of calls received regarding substance abuse-related poisonings involving buprenorphine is even higher (47).

Other Illegal Drugs

Consumption of illicit drugs in Maine increased slightly from 2003 through 2005 and remained stable in 2006-07; the rate of use continues to be highest among 18-25 year olds (see Figure 11) (NSDUH). In 2006-07, 28 percent of 18-25 year olds used illicit drugs (including marijuana) in the past month, making Maine the state with the fourth highest rate of illicit drug use among 18-25 year olds in the nation.

Among that same population, past year abuse or dependence on illicit drugs has remained fairly stable since 2002-03; however, Maine is consistently about three percentage points higher than the national average (10% in 2006-07 compared to 8% nationally).

Overall, illicit drug use in Maine is greatly influenced by the prevalence of marijuana. When marijuana is excluded from the analysis of illicit drug use, the picture changes dramatically (see Figure 12). Only
three percent of Mainers age 12 and older used illicit drugs (other than marijuana) in the past month; those with the highest rate, nine percent, are aged 18-25 (2006-07 NSDUH). In fact, the use of illicit drugs other than marijuana has decreased in recent years.

**Marijuana.** As stated above, marijuana makes up the majority of illicit drug use and has a high rate of use in Maine. In Maine, the percent of students in grades 6 to 12 who used marijuana within the last 30 days has declined in the past six years, from 17 percent in 2002 to 13 percent in 2008, see Figure 13 (2008 MYDAUS) lifetime use has also declined steadily. The 2007 YRBSS, which is asked of high school students, shows similar downward trends. Moreover, the prevalence of young people using marijuana before the age of 14 has decreased since 2002, from 17 percent to 12 percent (2008 MYDAUS).

However, comparisons to national statistics continue to show that Maine youth have higher marijuana use than the national average. One 2007 source shows that Maine high school students have higher rates of past 30-day use of marijuana than the national average; 22% in Maine compared to 20% nationally (YRBSS 2007). Another data source shows the rate of past 30-day use of marijuana among 12-17 year olds in Maine was the second highest in the nation (9% compared to 7% nationally) (2006-07 NSDUH).

Among the adult population, recent data indicate that 13 percent of 18-24 year olds had used marijuana in the past 30 days; this was closely followed by 25-34 year olds (12%), as shown in Figure 14. Adult males were over four times more likely to report having used marijuana in the past 30-days than adult females (2007 BRFSS).
Data from 2006-07\textsuperscript{10} show that 26 percent of 18-25 year olds used marijuana in the past month (Figure 15), the second highest rate in the nation among this age group (the national average was 16%). Similarly, almost 40 percent of young adults in Maine used marijuana in the past year. Conversely, only six percent of adults over the age of 25 used marijuana in the past month, and eight percent in the past year (2006-07 NSDUH). However, both past month and past year marijuana use may be declining slightly among all Mainers age 12 and older and, as Figure 15 illustrates for past month use, this trend is driven down by decreases in the 12-17 and 18-25 year old populations (the same pattern is seen for past year use of marijuana).

Among the college student population in 2008, 19 percent reported using marijuana within the past month; 30 percent indicated they had used marijuana in the past year. Men were more likely than women to use marijuana in the past month (22% compared with 17% among women), as were students under the age of 21 (21% compared with 16% among students over 21) (2008 HEAPP).

\textbf{Cocaine/Crack.} According to the most recent data available, 3.8 percent of students in grades 6 though 12 used cocaine in their lifetime, and 1.7 percent used it in the past 30 days (2008 MYDAUS), see Figure 16. The rate of lifetime use is down from 4.5 percent in 2006 and represents the first downward movement since 2000. This was particularly true among older students, as demonstrated in Figure 17.

\textsuperscript{10}Questions related to marijuana use in Maine were asked by special request in the 2007 BRFSS; for trending and national comparisons, the data from 2006-07 NSDUH represent the most recent data available.
Among the 18-25 year old age group, cocaine use in the past year remains at eight percent, higher than any other age group in Maine (Figure 18) and higher than the national average of seven percent (2006-07 NSDUH). Among college students, three percent indicate cocaine use within the past year, and nine percent report lifetime use of cocaine; as seen with other drugs, men were more likely than women to report using crack/cocaine in the past year (4% compared with 3% of women) (2008 HEAPP).

While cocaine abuse—particularly crack—is cited as a large problem in New England, it is centered in southern New England (i.e., Connecticut, Rhode Island, and Massachusetts) rather than in Maine (NDIC, 2008); as a primary drug for which individuals seek treatment, there is approximately one admission for crack for every three admissions for cocaine in Maine. Treatment admissions data indicate that crack is almost exclusively smoked (91%), whereas cocaine is administered through various routes. For cocaine only, injection as the primary route of administration may be declining (down to 22% from 29% in the second half of 2008) while inhalation increased to 43 percent in the first half of 2009 from 36 percent (Figure 19) (TDS).

**Heroin.** The 2009 Drug Threat Assessment (NDIC, 2008) indicates that 25 percent of law enforcement officials in the northeast report that heroin poses the greatest drug threat (compared with four percent elsewhere), and that a higher percentage of state and local law enforcement agencies in northeastern states identify heroin as the drug that most contributes to violent and property crime. As discussed earlier, New England’s heroin problem is likely fed by abusers of prescription narcotics switching to less expensive heroin. Among Maine’s students, the rate of lifetime heroin use remains low at 1.5% (2008 MYDAUS), and has remained fairly stable since 2002.

However, as the section on treatment trends will show in more detail, admissions to treatment for heroin remained high in the first half of 2009, and key informants indicate that heroin continues to be a problem, particularly in the southern part of the state, where it is entering the
state from Massachusetts. Moreover, treatment data show that the highest admission rates for heroin are among 18-29 year olds. The treatment data show that the primary route of administration for heroin remains injection, followed by inhalation. However, as a proportion of all primary admissions for heroin, injection users have remained fairly steady at 75 to 77 percent since the first half of 2005.

**Inhalants.** Inhalant use among the youth population continues to be a concern, particularly among younger students. In 2008, 10.6 percent of students used inhalants at least once in their lifetime (2008 MYDAUS). However, this represents the first decrease since 2002, when lifetime rates were around 12 percent. The incidence of previous 30-day use has also declined, particularly among the lower grades (see Figure 20) where recent use is more frequent. The highest rate of past 30-day use in 2008 was among 8th grade students, at 5.5 percent and down from just over seven percent in 2006.

**Methamphetamine and Other Illicit Drugs.** Little data exist regarding consumption rates of methamphetamine. According to national reports, methamphetamine is posing a large threat in the nation as a whole, but poses a relatively low threat in the New England Region (NDIC, 2008).

In 2008, only 1.8 percent of college students reported any lifetime use of methamphetamine (2008 HEAPP). Similarly, only 1.3 percent of students had used stimulants at least once in their lifetime, and this has been decreasing since 2000 (MYDAUS). However, two key informants reported the use of meth tablets, as opposed to the crystalline form. This was reported among male long-haul truck drivers coming in from Canada to the northern part of the state, as well as within the gay “club” community in the southern part of the state. While the rate of methamphetamine use has been stable over the past few years, the quantity of meth tablets found in individual seizures has increased recently, which may indicate increased demand.

Other drugs with noteworthy levels of use and abuse in Maine and the New England region include MDMA (Ecstasy), abuse of which has been increasing in recent years; khat, an African plant with stimulant effects which has been increasingly smuggled into Maine for use by the Somali population; and hallucinogens such as LSD, PCP, and mushrooms, the use of which has remained stable at low levels in recent years (NDIC, 2008). Among college students, 1.9 percent reported using Ecstasy in the past year, and 3.4 percent reported using hallucinogens (2008 HEAPP).
Over the Counter Medicines. A growing number of young people report using over the counter (OTC) medications (such as cold and cough medication or allergy medication) in order to get high, but there is little data available. In 2008, 2.3 percent of college students reported misusing OTC products to get high in the past month, 3.9 percent reported misusing them in the past year, and close to eight percent report misusing them at least once in their lifetime (2008 HEAPP).
A Closer Look: Consequences

While a great deal of information regarding substance use can be obtained from the survey data described in the previous section, information on the effects of that use on individuals and communities can be derived from what has come to be called “consequence” data. Consequences of substance use and abuse include, but are not limited to: criminal justice involvement; drinking during pregnancy; drinking and driving; as well as substance-related poisonings and deaths.

Criminal Justice Involvement

The meaning of criminal justice statistics is sometimes difficult to decipher as rises and declines can have as much to do with police enforcement of the laws as the actual occurrences of events. Enforcement is often viewed as a contributing factor to substance use, because enforcement impacts both the ability to obtain substances and perceptions that one will be caught. For this reason, perceptions of enforcement are discussed as a contributing factor to substance use. This section deals with criminal justice involvement as a consequence of substance abuse for both the individual and the criminal justice system.

Overall, Department of Public Safety (DPS) data show that arrests for drug abuse violations, OUI, and liquor violations have been increasing slightly since 2000. Figure 21 shows that 2008 saw little change in drug abuse violations from 2007 and a ten percent decrease in OUI arrests from the previous year. There was also an 10 percent increase in adult liquor violations since 2007, bringing violations back up to the 2006 levels; it may be that enforcement activities have been focusing more on adult violations.

Juvenile arrests show a somewhat different pattern. Juveniles are least likely to be arrested for OUI and more likely to be arrested for liquor law violations. As Figure 22 illustrates, however, juvenile arrests related to substance abuse continued to decline in 2008. In particular, arrests for liquor law violations continued to decrease in 2008 after a steady upward trend. Given that many initiatives across the state have focused on increasing enforcement of liquor law violations among

![Figure 21. Number of Adult Substance-Related Arrests: 2000 to 2008](image)

![Figure 22. Number of Juvenile Substance-related Arrests: 2000 to 2008](image)
youth (with programs such as Shoulder Taps and Party Patrols), it may be that youth increasingly believe that they will be caught and are therefore changing their behaviors.

In addition, Maine has the most law enforcement agencies reporting that drugs, particularly prescription drugs, contributed to property crime (32%), and violent crime (27%) compared to the rest of the nation (2007 National Drug Threat Survey, as reported in Benak et al., 2007). Moreover, a key informant at an agency that provides pretrial services to adult Mainers indicates that the majority of their cases are substance-abuse related, and that the service population most commonly abuses opiates (pills, heroin and methadone). While marijuana use is also very common, consuming it does not seem to lead to criminal behavior in the same way that addiction to opiates or cocaine does.

Substance Use and Pregnancy

Another consequence of substance use is the impact of that use on the fetuses of pregnant women. The State of Maine collects some data on alcohol use while pregnant. Results from the 2006 Maine Pregnancy Risk Assessment Monitoring System (PRAMS) indicate that 12 percent of pregnant women drank any alcohol during the last three months of pregnancy, compared with only five percent in 2002. In 2006, this was higher among older women (35+) and women with higher incomes ($50,000+) (21% and 16% respectively, see Figures 23 and 24). However, neither of these groups binge drank within the last three months of pregnancy.

In addition, according to substance abuse treatment admissions data, 4.6 percent of all women (124 cases) admitted for substance abuse treatment in the first half of 2009 were pregnant. As a proportion of all female admissions, this has remained fairly stable since the first half of 2005. Just over half of pregnant treatment admissions in the first half of 2009 were among women between the ages of 18 and 24 (51%); 44 percent were admitted for prescription narcotic use, followed by heroin (19%) and alcohol (11%) (TDS).
Driving Under the Influence of Alcohol and Drugs

As a proportion of all crash fatalities, fatalities from alcohol-related crashes have been increasing recently in Maine after declining for decades (Figure 25). In 2008, 46 fatalities from traffic accidents involving alcohol occurred in the State of Maine, representing 30 percent of all crash fatalities and showing a one-year decrease in an otherwise upward trend since 2002. The number of incapacitating injuries from fatal crashes also decreased in 2008, from 183 to 157.

In 2008, one-third of crashes involving alcohol also involved a driver between the ages of 18 and 25 and crashes among this age group accounted for 13 percent of all alcohol-related fatalities. Figure 26 illustrates these data for 18 to 25 year olds.

Between 2006 and 2008, there were 1,035 Maine Driver Drug Tests conducted, 900 of which had identifiable outcomes and some of which had multiple findings. Over that time period, marijuana was the most frequently detected substance (268), followed by methadone (164), Oxycodone (118) and cocaine (110). Well over half the substances detected were type of prescription drug. Some drugs that are found may not have been responsible for the driver impairment or are being used legitimately. However, the tests are conducted only when the investigator suspects impairment by a substance other than alcohol11.

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11 Commercial Vehicle Drivers can be asked to submit to a urine test to comply with federal requirements.
Poisonings

The general public made just over 24,000 medication verification calls to The Northern New England Poison Center in the first half of 2009 that were categorized as substance abuse (meaning the individual attempted to get high); law enforcement placed just over 1,400 such calls. Both are more than the previous period and continue generally increasing trends in terms of call volume involving substance abuse since 2006. The types of drugs most often requested for identification in the first half of 2009 were opioids and benzodiazepines (see Figure 27), both of which increased since the previous reporting period. The types of drugs for which law enforcement requested identification or information were generally consistent with requests from the public.

In addition, the Poison Center receives reports of substance abuse-related exposures, cases in which a poisoning occurs. The Poison Center received 255 total calls in the first half of 2009, 27 more than the previous 6-month period. Of those, opioids account for the most exposures (62), followed by alcohol or alcohol containing substances (44), stimulants/ street drugs (39), antidepressants (28) and benzodiazepines (25), (Figure 28); opioid exposures continued the upward trend since 2007 and exposures involving antidepressants appear to have increased.

Morbidity and Mortality

Deaths associated with drug use or abuse have generally shown an upward trend, increasing 123 percent from 1999 through 2006, with some fluctuations throughout the years. As Figure 29 shows, deaths associated with cocaine and opioids (other than heroin and methadone) have continued to increase. Deaths associated with cocaine increased from three in 1999 to 22 in

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12 Note that for NNEPC the opioid category is not exclusive to prescription drugs; that is, street drugs such as heroin are also included. This differs from other data sources cited in this report.
2006, and deaths associated with opioids other than heroin and methadone increased from 10 in 1999 to 42 in 2006. Deaths associated with methadone decreased from 65 in 2005 to 49 according to preliminary 2006 data, though these data are not complete. It appears that deaths associated with benzodiazepines and other narcotics continued to decrease in 2006.

Also illustrated in Figure 29 is that drug-related deaths were most often attributed to methadone, followed by other opioids and cocaine in 2006. In addition to narcotic replacement treatment, methadone can be prescribed for the treatment of chronic pain. Poly-drug use, meaning using more than one drug simultaneously, has been shown to increase the risk of overdose and in fact many substance-related deaths involve more than one substance (Hickman et al., 2008; Darke and Zador, 1996; ODC, 2002).

**Figure 29. Number of Deaths Related to Drug Use: 1999 to 2006**

![Graph showing number of deaths related to drug use from 1999 to 2006.](image_url)
A Closer Look: Contributing Factors

Factors contributing to substance use and abuse patterns include substance availability and accessibility, enforcement of drug and liquor laws, individuals’ perceived harm of substances, community/cultural norms, and mental health and co-occurring disorders.

Availability/Accessibility

An important factor that impacts substance use is the availability and accessibility of substances. There are diverse measures and indicators for multiple substances and age groups, some of which are presented here.

One measure of the availability of prescription drugs is the number of prescriptions being reported to Maine’s Prescription Monitoring Program (PMP). Between January and June 2009, 1,216,108 prescriptions were reported to the PMP, which receives reports for Drug Classes C-II through C-IV. This has remained fairly stable in the first half of 2009 although there has been an upward trend since 2005. Prescriptions for narcotics consistently account for the bulk of prescriptions reported to the PMP (50%), followed by tranquilizers and then stimulants (Figure 30)\textsuperscript{13}.

The average number of days supplied is a new measure being introduced by the PMP which adjusts for dosage. In the first half of 2009, on average tranquilizers accounted for the most number of days prescribed (28) followed by stimulants (31) and then narcotics (15). However, the average number of days prescribed for tranquilizers and narcotics has increased by two days and 2.4 days, respectively, since the first half of 2005. Note that there are new laws going into effect that will limit the number of days for which prescription narcotics can be prescribed to 15 and the average number of days is expected to remain steady in subsequent reports.

Another important measure of availability is student perceptions of how easy it is to obtain alcohol and drugs. Overall, fewer students believed that alcohol, marijuana and other drugs were easy to get in 2008 compared with 2000 (see Figure 31). However, as Figure 31 also shows, 41 percent of high school students continue to believe it is easy to obtain marijuana, and this is higher than the proportion who think it is easy to obtain alcohol (31%).

\textsuperscript{13} Note that the quality of data received from pharmacies is not monitored.
Among college students, 85 percent of students under 21 thought alcohol was easy to obtain, and 11 percent of students over 21 were willing to provide alcohol to a minor; 15 percent reported they had provided alcohol to a minor at least once within the past month.

In terms of illicit drugs, most enter Maine and the New England region from the American Southwest Region via New York; Maine’s location as a Canadian border state also makes it a target for smuggling operations (NDIC, 2008). Crack cocaine availability in Maine is increasing due to increased distribution from Massachusetts and New York-based gangs. The 2008 Drug Threat Assessment reports that Canadian-based Asian drug trafficking organizations have an increasing presence in New England, smuggling marijuana from Canada through the northern border states. Those marijuana smuggling routes are now beginning to include MDMA and some methamphetamine crossing the border into the United States.

The Maine Health and Environmental Testing Laboratory analyzes evidence submitted to the Drug Chemistry Unit of the Maine Health and Environmental Testing Laboratory. During 2008, the Drug Chemistry Unit conducted confirmatory testing on 854 drug samples. Cocaine was the most common form of drug detected, representing 41 percent of all sample submissions; this was consistent from the prior year. Prescription narcotics (15%), marijuana (9%), heroin (9%) and a wide assortment of other drugs (16%) make up the remaining types of drugs detected by the lab.

**Perceived Harm**

Studies have shown that if a youth believes substance use to be harmful, he or she is less likely to engage in it (OAS, 2001; Bonnie & O’Connell, 2004). Therefore, the perceived level of harm from using substances is an important factor contributing to substance use. According to the 2008 MYDAUS, younger students (grades 6-8) are more likely to perceive substance use as “risky” than are high school students (grades 9-12). Forty-eight percent of students in grades 6 through 8 believe that a few alcoholic drinks posed great risk of harm, compared with 36%.
percent of high school students. Figure 32 illustrates this point by showing the age difference in perception of risk associated with alcohol and marijuana use.

Students are least likely to believe trying marijuana a couple of times poses a great risk, and this is particularly low among students in grades 9 through 12 (18% compared with 41% of students in grades 6 through 8). However, students do perceive regular use of marijuana as risky (45% of high school students, and 78% of middle school students).

Moreover, among all students, the proportion who believe substance use poses great risks of harm has been increasing gradually each year since 2004 (MYDAUS). In particular, perceptions about the harm from alcohol use have increased; from 33 percent among high school students in 2004 to 36 percent in 2008. The proportion of middle school students perceiving alcohol use as harmful increased from 46 percent in 2004 to 48 percent in 2008.

According to the most recent NSDUH, 32 percent of Mainers ages 12 and older perceive great risk associated with smoking marijuana once per month, and 39 percent perceive great risk associated with drinking five or more drinks once or twice per week. However, these data also show that perceptions of risk vary with age. Not surprisingly, 18-25 year olds are least likely to perceive great risk associated with either substance use behavior (as shown in Figures 33 and 34). While perceptions about the risk associated with drinking five or more drinks once or twice per week remains fairly stable since 2003 among this age group, perceptions of risk associated with smoking marijuana once per month declined (from 17% in 2003 to 14% in 2006).
Perceived Enforcement

Perception of enforcement – that is, the risk of getting caught – has also been shown to impact an individual’s decision to engage in certain behaviors. The proportion of students believing that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000 (Figure 35). In 2008, 24 percent thought kids would be caught for drinking alcohol (compared with 20% in 2000) and 30 percent thought they would be caught for smoking marijuana (compared with 25% in 2000).

However, students continue to perceive that they are more likely to be caught by their parents than by police for drinking alcohol. Among high school students, 41 percent thought they would be caught by their parents, compared with only 12 percent who thought a kid in their neighborhood would be caught by the police for drinking alcohol (see Figure 36). Among college students, 34 percent of students over 21 thought it was unlikely they would face legal consequences for furnishing alcohol to minors.

Community/Cultural Norms

Among middle and high school students, 89 percent reported that their parents feel it is “wrong” or “very wrong” to drink alcohol. This was slightly higher for marijuana (94%). Students report similar attitudes among adults in their community: about three out of four students believe that adults in their community think that drinking alcohol is “wrong” or “very wrong,” and four out of five report the same community attitude towards marijuana. Nonetheless, about two in three (59%) knew at least one adult who got drunk or high in the past year.

These indicators have remained fairly stable since 2000 with little to no change from year to year. However, as indicated above, the proportion of students that believe that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000.
Fourteen percent of all students believed that they would be seen as cool for regularly drinking alcohol, and 13 percent thought the same for smoking marijuana. This has decreased slightly since 2006, and across all grades, although the “coolness factor” remains high among older students (Figure 37).

Substance Abuse and Co-occurring Disorders

Approximately 13 percent of Mainers age 18 and older reported that they had a serious mental illness in 2006-07; this was higher among 18-25 year olds (20%) than those 26 and older (11%) (2006-07 NSDUH). These rates have remained fairly steady since 2002-03 (Figure 38).
According to TDS, in the first half of 2009, more than half (52%) of all treatment admissions for substance abuse had a co-occurring mental health disorder\textsuperscript{14}. This has remained steady since 2008 (see Figure 39). Forty-three percent of consumers with a diagnosed mental health disorder were in treatment for alcohol as a primary substance, 29 percent for other opiates/synthetics, 10 percent for marijuana and nine percent for heroin.

\textit{Figure 39. Percent of Total Treatment Admissions That Reported a Diagnosed Mental Health Disorder: January 2005 through June 2009}

\textsuperscript{14} Co-occurring disorders are when both a diagnosable (meeting DSM-IV diagnostic criteria) mental health disorder and a substance abuse disorder occur in the same patient, at the same time.
A Closer Look: Treatment for Substance Abuse

Treatment related to substance abuse is measured in two forms: substance abuse treatment program admissions and general hospital admissions related to substance abuse problems. Substance abuse treatment admissions are an indicator of how many people are seeking treatment for a substance abuse problem. These admissions can be voluntary, but they can also be court-ordered. Hospital admissions (including both inpatient and outpatient services) with the primary diagnosis related to substance abuse problems are an indicator of how many people experiencing hospitalization are doing so with substance abuse problems. These substance-related problems can include diagnoses of intoxication, substance abuse or dependence, and poisonings.

Treatment Program Admissions

Treatment program data echoes the consumption data indicating that alcohol is a major problem in Maine. Between January and June 2009 there were a total of 6,856 admissions to providers of substance abuse treatment throughout the state. As shown by Figure 40, nearly half (47%) of all admissions were for treatment of alcohol as a primary presenting problem, followed by prescription opiates (26%), marijuana (9%), heroin (9%), and to a lesser extent cocaine/crack (5%), methadone (2%) and other drugs (2%) such as methamphetamine, ecstasy or inhalants (TDS).

During this same time period, 60 percent of treatment admissions reported a secondary substance for treatment, and 30 percent had a third substance as well. Marijuana was the most frequently cited secondary substance (32%), followed by other opiates/synthetics (25%) and alcohol (15%). Among those entering the treatment system in the first half of 2009, nearly three-quarters (73%) of adults over age 40 received treatment services for alcohol as a primary

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15 These data exclude shelter/detox admissions. Note that data represent January to June 2009 unless otherwise noted.
16 Primary presenting problem is defined as the first-listed ailment when a consumer enters treatment.
presenting problem compared to younger consumers (under 18) who were more likely to receive treatment for use of marijuana (54%) followed by alcohol (29%) (TDS). Consumers ages 18-24 sought treatment for a wider array of substances with more than one-third (35%) in treatment for use of prescription narcotics, one-third in treatment for alcohol (34%), 11 percent seeking treatment for marijuana and 12 percent in treatment for heroin/morphine (an additional three percent were seeking treatment for methadone). Consumers, particularly juveniles, are often court-ordered to seek treatment and do not always enter treatment of their own accord.

Treatment for Alcohol. The majority of treatment admissions in Maine are still for alcohol as a primary presenting problem although such admissions have generally decreased since the first half of 2005 (Figure 41). The first half of 2009 saw an increase in the number of admissions for alcohol for the first time since 2007.

Treatment for Prescription Narcotics. The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 64 percent (691 admissions) in Maine since the first half of 2005. Treatment admissions for this group of substances as the primary substance increased steadily through the first half of 2009. While admissions continues to increase, they appear to have leveled off recently. As illustrated in Figure 42, admissions for Oxycodone (which includes OxyContin®) specifically drive this trend, while admissions for other opiates/synthetics decreased at the same time. Moreover, 60 percent of these admissions were among individuals between the ages of 18 and 29; 24 percent were among adults between the ages of 30 and 39.

There have been fewer than 100 primary treatment admissions per year for benzodiazepines. As a secondary substance, treatment admissions for this category of prescription drugs increased sharply between 2005 and 2007. After declining during 2008, secondary admissions for benzodiazepines again increased in the first half of 2009, continuing the upward trend (to 162 from 136 in the second half of 2008).
Treatment for Marijuana. There continue to be more secondary treatment admissions for marijuana in the first half of 2009 (see Figure 43) and both increased slightly during the past six months. Sixty-nine percent of persons admitted for marijuana as the primary substance were under the age of 29, and 56 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.

Treatment for Other Illegal Drugs. Treatment admissions for heroin/morphine as the primary substance increased sharply in the second half of 2008, from 454 cases to 637 cases, a 40 percent increase (Figure 44). Although there was a slight decrease in the first half of 2009 (to 593 cases) the admissions remain higher than they have been since 2005. As with prescription narcotics, 62 percent of these admissions are between the ages of 18 and 29. Among those admissions, 76 percent report injecting the drug and 19 percent report inhaling it.

It is unknown if this trend will continue, but it could reflect one of two things, or both: first, in a worsening economy, heroin is cheaper. Second, as more doctors participate in the PMP it is possible that access to prescription narcotics is more difficult and people are switching to heroin. According to key informant interviews, “Heroin [use] is surging in York County and up the coast, particularly among people working in the fishing industry.” Another stated that “addicts are changing their substance of choice depending upon what is available at the moment.”

Figure 44 also shows that primary treatment services for both methadone and crack/cocaine continued to decline during the first half of 2009.
Hospital Admissions

Inpatient Admissions. Substance-related hospital inpatient admissions totaled 2,223 of all 163,705 inpatient hospital admissions in 2006 (1.4%). Of those substance-related hospital admissions, the substance most often associated with primary diagnoses was non-narcotic prescription drugs, including stimulants and depressants, as well as anti-psychotic medications (2006 MHDO; see Figure 45). Combining opioids (of which all but 20 diagnoses were related to prescription narcotics, with 13 being heroin-specific and seven being opium-specific) and other prescription and over-the-counter medications, legal medications were the substances associated with more than 60 percent of primary diagnosis of substance abuse.

As shown in Figure 46 below, prescription drugs are the most often-associated substance for substance-related inpatient hospital admissions in all Maine counties, when county population is taken into account17 (2006 MHDO). Franklin and Hancock counties have relatively equal proportions of admissions related to alcohol and prescription drugs, but there are many more hospitalizations associated with prescription drug misuse in Kennebec, Penobscot, Piscataquis, Sagadahoc, Somerset, and York counties. These hospital admission data support the self-reported alcohol consumption patterns, but stand out against the relatively low reported levels of prescription drug misuse.

Outpatient Admissions. Outpatient hospital admissions for substance abuse constituted one percent of all outpatient visits in 2006 (46,800 out of 4,096,360 total outpatient visits). Alcohol and opioids (excluding heroin, opium and methadone) dominated the landscape. Overall, there were 15,733 outpatient admissions primarily related to alcohol in 2006, and 19,843 primarily related to opioids18.

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17 Per capita hospital admission rates were calculated with the following formula: (Number of Hospitalizations)/Total County Population*100,000.

18 This is based on the ICD-9 diagnostic code assigned by the facility providing treatment.
Moreover, when broken out by county (see Figure 47), it is clear that Cumberland County has a disproportionate number of alcohol-related visits, while hospitals in Penobscot (and to a lesser degree, Hancock and Piscataquis) bear the brunt of opioid outpatient visits. This may reflect disparities in the availability of some types of outpatient treatment services, particularly for rural communities.

![Figure 47. Hospital Outpatient Admissions Related to Alcohol and Prescription Drugs Per 100,000, by County: 2006](image)

**Emergency Room Admissions.** The Drug Abuse Warning Network (DAWN) collects data from a sample of Maine hospitals regarding Emergency Room/Department treatment. While these data must be interpreted with caution and cannot be used to represent the entire state, they reflect similar trends that are seen elsewhere. From January 2008 through June 2008, the majority of cases were for adverse reactions to substances (as opposed to accidental ingestion, malicious poisoning or detoxification). Opiates and narcotic analgesics are most often mentioned as causes of admission, followed by alcohol and marijuana.
Conclusions

Alcohol remains the substance most often used by Mainers across the lifespan and the substance for which most seek treatment. Great progress has been made towards reducing the rate of alcohol use among Maine’s youth as evidenced by the most recent data trends that show an overall decline in both lifetime use and past 30-day use of alcohol. However, heavy drinking and binge drinking are high among young adults, and often higher than the national averages. Moreover, alcohol as the primary presenting problem still makes up the largest percent of admissions for substance abuse treatment in Maine. Young adults are the most likely age group to binge drink and to drink heavily.

Prescription drugs continue to pose a serious threat to Maine. While pinpointing the extent of prescription drug use is difficult because of a wide range of definitions among various data sources and lack of comparable data, 11 percent of students in grades 6-12 have used prescription drugs for a reason other than their intended purpose at least once in their lifetime, and five percent had misused prescription drugs in the past 30 days. Among adults, 14 percent of young adults ages 18-25 had used pain relievers for non-medical purposes within the past year. Moreover, the majority of criminal cases receiving pretrial services are substance-abuse related, and the service population most commonly abuses opiates (pills, heroin and methadone). Similarly, law enforcement agencies report that prescription drugs contribute to both property crime and violent crime. Finally, prescription drug misuse is having a large impact on treatment and hospitalizations in Maine as the number of primary treatment program admissions attributed to prescription narcotics has grown by 64 percent since the first half of 2005, although this may be starting to level off.

In terms of illicit drugs, the most commonly used illegal drug in Maine is marijuana. Among the 18-25 year old population, Maine holds the third highest rate in the nation for marijuana use in the past month. Forty percent of young adults used marijuana in the past year, and only 14 percent think smoking marijuana once per month poses great risks. Moreover, recent data indicate that 13 percent of high school students in Maine have used marijuana in the past 30 days and 23 percent have used it at least once, although both these rates have been declining. However, many students continue to think that trying marijuana once or twice does not pose any risks or harm.

Although there is no current data on consumption of heroin within the adult population, treatment data suggest that heroin use is on the rise. Admissions to treatment for heroin increased by 40 percent in the last half of 2008 to levels not seen since 2005, and admissions in the first half of 2009 remained high; 62 percent of these admissions involved individuals between the ages of 18 and 29. Key informants indicate that heroin is an increasing problem in the southern and coastal areas of the state, particularly among people working in the fishing industry. While it is unknown if this trend will continue, the worsening economy coupled with the increased monitoring of prescription drugs could be pushing abusers of prescription narcotics to switch to less expensive heroin.
References


Office of Diversion Control (2002). *Summary of Medical Examiner Reports on Oxycodone-Related Deaths*. Department of Justice, Drug Enforcement Administration: Washington, DC.


Appendix

Organized by the State of Maine Office of Substance Abuse (OSA) within the Department of Health and Human Services and based on a national model from the National Institute on Drug Abuse (NIDA), the Community Epidemiology Surveillance Network (CESN) is a multi-agency work group that studies the spread, growth, decline and development of substance use in Maine and its communities. The CESN aims to provide updated trend reports twice a year.

In addition to efforts represented by the CESN, OSA received funding from the federal Substance Abuse and Mental Health Services Administration (SAMHSA) to perform epidemiological work as part of the Strategic Prevention Framework State Incentive Grant (SPF SIG), currently in its fourth year. The idea behind SPF SIG is for state agencies to use the findings from public health research along with evidence-based prevention programs to build the capacity within states to implement and monitor substance abuse prevention strategies. Moreover, SPF SIG requires data-driven decision making. Pulling from multiple data sources, the State compiled Maine’s SPF SIG Substance Abuse Epidemiological Profile in 2005 to examine substance use and consequence information. It is from this work that OSA identified its current SPF SIG-funded prevention priorities of underage drinking, high-risk drinking among 18-25 year olds, and misuse of prescription drugs among 18-25 year olds.

Due to their similarities in purpose and data sources, the CESN and SPF SIG reports have been joined in this semi-annual publication. Both the CESN report and the State’s epidemiological study draw data from similar sources, including: Behavior and Risk Factors Surveillance System (BRFSS); Fatality Analysis Reporting System (FARS); Juvenile Crime and Data Book; Higher Education Alcohol Prevention Partnership (HEAPP); Incidence of Prohibited Behavior and Drug and Violence Prevention, Safe and Drug Free Schools (SDFS); Maine Drug Enforcement Agency (MDEA); Maine General Population Household Survey (MGP); Maine Youth Drug and Alcohol Survey (MYDAUS); National Center for Health Statistics (NCHS), Multiple Cause of Death Public Use Files (ODRVS); National Survey on Drug Use and Health (NSDUH); Prescription Monitoring Program (PMP); Northern New England Poison Center (NNEPC); Treatment Data System (TDS); Uniform Crime Reporting (UCR); Youth Risk Behavior Surveillance System (YRBSS), the state forensic laboratory, and key informants.

Description of Sources

Information for this report was gathered from a number of data sources. A detailed description of each source is provided here, consisting of information about the data included in each source, the indicator’s strengths and weaknesses, and retrieval or contact information. While each indicator provides a unique and important perspective on drug use in Maine, none should individually be interpreted as providing a full picture of drug trends in Maine.
This report includes data available through June 2009 and updates the April 2009 CESN report. Older and unchanged data were included in this report when more recent data were not available. These data are subject to change.

**Behavioral Risk Factor Surveillance System (BRFSS).** The BRFSS is a national survey administered on an ongoing basis by the National Centers for Disease Control and Prevention (CDC) to adults in all 50 states and several districts and territories. The instrument collects data on adult risk behaviors, including alcohol abuse. BRFSS defines heavy drinking as adult men having more than two drinks per day and adult women having more than one drink per day, and binge drinking as males having five or more drinks on one occasion and females having four or more drinks on one occasion. The most recent data available are from 2007. Older data are also included for trending analyses. Both state and national data are available. Retrieval: [http://www.cdc.gov/brfss](http://www.cdc.gov/brfss)

**Fatality Analysis Reporting System (FARS).** FARS was created by the National Highway Traffic Safety Administration (NHTSA) and contains data on all fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public and result in the death of a person (occupant of a vehicle or a non-occupant) within 30 days of the crash. FARS has been operational since 1975 and has collected information on over 989,451 motor vehicle fatalities and collects information on over 100 different coded data elements that characterize the crash, the vehicle, and the people involved. Retrieval: [http://www-fars.nhtsa.dot.gov/Main/index.aspx](http://www-fars.nhtsa.dot.gov/Main/index.aspx)

**Higher Education Alcohol Prevention Partnership (HEAPP).** Maine’s Higher Education Alcohol Prevention Partnership (HEAPP) is a partnership between Maine’s colleges and universities and the Maine Office of Substance Abuse to bring about long-term, systemic change in how high-risk drinking and other substance abuse issues are addressed at the state and local levels. The Partnership’s efforts include collaborative events, projects, resources and student surveying which benefit not only participating campuses but also Maine’s higher education community and the state as a whole. The HEAPP Student Survey is an online survey that was sent to all students with an email address at participating institutions; it was first administered in 2008 and is scheduled to be administered again in 2009. This survey collects information on student substance use, risk factors and behaviors and general health indicators. Please note that data contained in this report are preliminary. Contact: Rebecca Ireland, Director; Maine’s Higher Education Alcohol Prevention Partnership; rebecca.ireland@maine.gov; (207) 287-6479.

**DHHS Health and Environmental Testing Laboratory, forensic section.** The forensic laboratory data include information on drugs identified by lab tests. The lab reports results of toxicological analyses of substances submitted in law enforcement operations to the National Forensic Laboratory Information System (NFLIS) of the federal Drug Enforcement Agency (DEA). Data are current through 2008 and reflect only those cases referred to the laboratory, so are not
necessarily reflective of all samples seized in Maine. Contact: Chris Montagna, DHHS, chris.montagna@maine.gov; (207) 287-1708.

Key informant interviews. Interviews were conducted with representatives from law enforcement, health care, and social services across the state to obtain informal reports on drug trends throughout the state. Each informant was chosen to provide a different perspective of substance use and abuse in Maine, with special knowledge of a particular population or area of the state. Key Informants remain confidential in this report. Questions may be directed to Sarah Goan, Hornby Zeller Associates, Inc; sgoan@hornbyzeller.com; (207) 773-9529.

Maine Health Data Organization (MHDO). MHDO data includes all inpatient admissions to all hospitals in Maine for calendar year 2006. Data categories created by the authors include alcohol, opioids, illegal drugs, and pharmaceuticals. All drug categories include intoxication, abuse, dependence, and poisoning cases related to the drug. The opioid category includes methadone, heroin, and opiates. The illegal drug category includes crack/cocaine, cannabis, and hallucinogens. The pharmaceuticals category includes all other non-opioid medications (including stimulants and depressants). Data are compiled annually and are therefore not available on a more frequent basis. Contact: Maine Health Data Organization (MHDO) – Lisa.Parker@maine.gov; (207) 287-6745.

Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR). UCR data include drug and alcohol arrests. Drug arrests include sale and manufacturing as well as possession of illegal substances. Liquor arrests include all liquor law violations. OUI arrests are arrests for operating a motor vehicle under the influence of a controlled substance. DPS data are now available from 2007. Arrest data may reflect differences in resources or focus of law enforcement efforts so may not be directly comparable from year to year. Retrieval: http://www.maine.gov/dps/cim/crime_in_maine/cim.htm

Maine Youth Drug and Alcohol Use Survey (MYDAUS). The MYDAUS is a statewide survey administered biennially by the Maine state Office of Substance Abuse (OSA) to students in grades 6 through 12. This survey collects information on student substance use, including binge-drinking. MYDAUS defines binge-drinking as consuming five or more drinks in a row. As of the date of this report, the most recent data available are from 2008. Trending data from 2000, 2002, 2004 and 2006 are also included in this report. Contact: Melanie Lanctot, Research Analyst, Office of Substance Abuse, melanie.lanctot@maine.gov; (207) 287-2964

National Survey on Substance Use and Health (NSDUH). The NSDUH is a national survey administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) to youth grades 6 through 12 and adults ages 18 and up. The instrument collects information on substance use and health. NSDUH defines Illicit Drugs as marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used non-medically; Binge Alcohol Use as drinking five or more drinks on the
same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days; Dependence or abuse based on definitions found in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV); and Serious Mental Illness (SMI) as a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. Data for SMI are not defined for 12 to 17 year olds; therefore, "Total" estimate reflects ages 18 or older for this category. Data are available from 2006-2007. Older data are also included in trending analyses in this report. Regional, state and national data are available. Contact: Jim Colliver, PhD, Division of Population Surveys, Office of Applied Studies, SAMHSA; James.Colliver@samhsa.hhs.gov; (240) 276-1252.

Retrieval: http://www.oas.samhsa.gov/statesList.cfm

Northern New England Poison Center (NNEPC). The Northern New England Poison Center provides services to Maine, New Hampshire, and Vermont. Data include the number of confirmed exposures to illegal substances and misuse exposures to legal substances, as well as the number of information requests received associated with each substance. NNEPC collects detailed data on specific substances involved in poisonings, including the categories of stimulants/street drugs, alcohol, opioids, asthma/cold and cough, benzodiazepines, antidepressants, and pharmaceuticals, as well as other substances. The category of stimulants/street drugs includes marijuana and other cannabis, amphetamine and amphetamine-like substances, cocaine (salt and crack), amphetamine/dextroamphetamine, caffeine tablets/capsules, ecstasy, methamphetamine, GHB, and other/unknown stimulants/street drugs. The category alcohol includes alcohol-containing products such as mouthwash. The opioid category includes Oxycodone, Hydrocodone, buprenorphine, methadone, tramadol, morphine, propoxyphene, codeine, hydromorphone, stomach opioids, Meperidine (Demerol), heroin, Fentanyl, and other/unknown opioids. The asthma/cold and cough category includes eye, ear, nose, and throat medications. Data available from the poison center are reported on a continual daily basis and are included through December, 2008. These data are only reflective of cases in which the Poison Center was contacted. Contact: Karen Simone, Director, Northern New England Poison Center; simonk@mmc.org; (207) 662-7221.

Office of Data, Research and Vital Statistics (ODRVS). ODRVS is a program within the Maine CDC and the data include Maine resident deaths included in the death certificate statistical file that included any mention of the drug in question and are tentative for 2005 and 2006. Data include unintentional, self-inflicted, assault and undetermined intent deaths. Drug categories include methadone, cocaine, benzodiazepines, other opioids, and other narcotics. The Other opioids category includes codeine and morphine. The other narcotics category includes both synthetic and unspecified narcotics, excluding heroin, methadone, codeine, and morphine. The death data are compiled on an annual basis so are not available to track changes that may occur over shorter time frames. Contact: Kim Haggan, Office of Data, Research and Vital
Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is an on-going, population-based surveillance system designed to identify and monitor selected maternal behaviors and experiences before, during, and after pregnancy among women who have recently given birth to a live infant. Data are collected monthly from women using a mail/telephone survey. For more information, contact Kim Haggan, PRAMS Coordinator or email Maine.Prams@maine.gov
Retrieval: http://www.maine.gov/dhhs/bohodr/prams.htm

Prescription Monitoring Program (PMP). PMP maintains a database of all transactions for class C-II through C-IV drugs dispensed in the state of Maine. Drug categories used in this report include narcotics, tranquilizers, stimulants, and other prescriptions. Other prescriptions include those that are not narcotics, tranquilizers or stimulants, including products such as endocrine and metabolic drugs, analgesics and anesthetics, gastrointestinal agents, and nutritional products. The counts included in this report represent the number of prescriptions filled between July 2008 and December 2008. Prescription counts do not reflect amounts in terms of dosage or quantity of pills, but do represent the volume of active prescriptions during the time period. Contact: Daniel Eccher, PMP Coordinator, Office of Substance Abuse, daniel.eccher@maine.gov; (207) 287-3363. Retrieval: http://www.maine.gov/dhhs/osa/data/datastats.htm

Treatment Data System (TDS). TDS is a statewide database that includes information about clients admitted to treatment in OSA-funded facilities through December 2008. Analyses in this report are based on clients’ reported primary drug of choice. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, and prescription drugs. Contact: Stacey Chandler, Office Specialist I, Office of Substance Abuse, stacey.chandler@maine.gov; (207) 287-6337. Retrieval: https://portalx.bisoex.state.me.us/jav/osa_tdsreports/home.do

Youth Risk Behavior Surveillance System (YRBSS). The YRBSS is national survey administered biennially by the National Centers for Disease Control and Prevention (CDC) to students in grades 9 through 12. The survey collects information on youth risk behaviors, including substance use. The YRBSS defines binge-drinking as consuming five or more drinks of alcohol in a row; first drink of alcohol as first drink other than a few sips; and inhalant use as sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high. The most recent YRBSS data is available for 2007, and older data is included as well for trending reports. Both state and national data are available. Retrieval: http://apps.nccd.cdc.gov/yrbss
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