

## Section 4: Types of Methamphetamine, Manufacture and Labs

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**Drug Guide: Methamphetamine**, Source: [www.drugfree.org](http://www.drugfree.org)

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**Signs You May Be Near A Meth Lab**, Source: [www.kci.org](http://www.kci.org)

**Meth Production and Trafficking**, Source: This information was accessed in 2011 at [www.methresources.gov](http://www.methresources.gov) which now redirects to the ONDCP website (2012).

**Tip Cards for Employees, Home Visitors, and Property Owners**

### Links:

**Be Aware! flyer**, This flyer was accessed in 2011 from the National Drug Intelligence Center (NDIC) which is now closed, and the website redirects to [www.justice.gov/ndic](http://www.justice.gov/ndic).

**Death By Meth**, [www.deathbymeth.blogspot.com/2006/02/red-p-meth-lab-raided-arkansas.html](http://www.deathbymeth.blogspot.com/2006/02/red-p-meth-lab-raided-arkansas.html)

**The Truth about Pseudoephedrine**,  
[www.stltoday.com/news/opinion/article\\_f5170315-4f30-5670-a32e-557707e285dc.html?print=1](http://www.stltoday.com/news/opinion/article_f5170315-4f30-5670-a32e-557707e285dc.html?print=1)

**Technical Support Document: Toxicology/Clandestine Drug Labs: Methamphetamine – Red Phosphorus**, California Office of Environmental Health Hazard Assessment, Volume 1, Number 12  
[http://oehha.ca.gov/public\\_info/pdf/TSD%20Red%20Phosphorus%20Meth%20Labs%2010'8'03.pdf](http://oehha.ca.gov/public_info/pdf/TSD%20Red%20Phosphorus%20Meth%20Labs%2010'8'03.pdf)

**Clandestine Labs Classifications and Hazards**, [www.forensic-applications.com/meth/meth.html](http://www.forensic-applications.com/meth/meth.html)

## From *The Partnership at Drugfree.org* DRUG GUIDE

### What is Methamphetamine?

Methamphetamine (Meth) is an addictive stimulant that strongly activates certain systems in the brain. Federal classification: Schedule II

**What are the street names/slang terms?** Chalk, Crank, Croak, Crypto, Crystal, Fire, Glass, Meth, Tweek, White Cross

**What does it look like?** Methamphetamine is a crystal-like powdered substance that sometimes comes in large rock-like chunks. When the powder flakes off the rock, the shards look like glass, which is another nickname for meth. Meth is usually white or slightly yellow, depending on the purity.

**How is it used?** Methamphetamine can be taken orally, injected, snorted, or smoked.

### What are Methamphetamine Pills?

Meth pills are a combination of the stimulants methamphetamine and caffeine. It is produced in Burma by groups such as the United Wa State Army and marketed predominantly in Thailand. Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. Federal classification: Schedule II

**What are the street names/slang terms?** Yaba

**What do they look like?** A tablet, commonly reddish-orange or green, that fits inside the end of a drinking straw with a variety of logos — “WY” being the most common.

**How are they used?** Normally is it ingested orally.

#### **What are their short-term effects of methamphetamine and methamphetamine pills?**

Immediately after smoking or intravenous injection, the methamphetamine user experiences an intense sensation, called a “rush” or “flash,” that lasts only a few minutes and is described as extremely pleasurable. Oral or intranasal use produces euphoria — a high, but not a rush. Other effects include irritability/aggression, anxiety, nervousness, convulsions, and insomnia.

#### **What are their long-term effects of methamphetamine and methamphetamine pills?**

Meth is addictive, and users can develop a tolerance quickly, needing higher amount to get high, and going on longer binges. Some users avoid sleep for 3 to 15 days while binging. Psychological symptoms of prolonged meth use are characterized by paranoia, hallucinations, repetitive behavior patterns, and delusions of parasites or insects under the skin. Users often obsessively scratch their skin to get rid of these imagined insects. Long-term use, high dosages, or both can bring on full-blown toxic psychosis (often exhibited as violent, aggressive behavior). This violent, aggressive behavior is usually coupled with extreme paranoia. New research shows that those who use methamphetamine risk long-term damage to their brain cells similar to that caused by strokes or Alzheimer’s disease.

## **What is Crystal Meth?**

Crystal Meth is a very pure, smokeable form of methamphetamine. It is a powerful and extremely addictive man-made stimulant. Its use can lead to severe physiological and psychological dependence. Federal classification: Schedule II

**What are the street names/slang terms?** Ice **What does it look like?** Clear crystal chunks, similar in appearance to actual ice or glass, odorless and colorless.

**How is it used?** Crystal Meth is usually smoked, but is sometimes snorted or injected. The drug is abused because of its euphoric effects.

**What are its short-term effects?** The drug's effects are similar to those of cocaine but longer lasting. Crystal Meth can cause erratic, violent behavior among its users. Effects include suppressed appetite, interference with sleeping behavior, mood swings and unpredictability, tremors and convulsions, increased blood pressure, irregular heart rate. Users may also experience homicidal or suicidal thoughts, prolonged anxiety, paranoia and insomnia. Crystal meth use by pregnant women can lead to premature birth or birth defects, including heart defects and cleft palate.

**What are its long-term effects?** Long-term effects can include brain damage (similar to the effects of Parkinson's disease or Alzheimer's disease), coma, stroke or death. Signs of chronic use include weight loss, tooth decay and cracked teeth ("Meth Mouth"), psychosis and hallucinations, sores on the body from picking at skin, and formication (an abnormal skin sensation akin to "bugs crawling on skin").

## **What is Methcathinone?**

Methcathinone is a stimulant that is a structural analogue of methamphetamine and cathinone. It is clandestinely manufactured from readily available chemicals. Federal classification: Schedule I

**What are the street names/slang terms?** Cat

**What does it look like?** A white or off-white crystalline powder. Almost exclusively sold in the stable and highly water soluble hydrochloride salt form.

**How is it used?** It is most commonly snorted, although it can be taken orally by mixing it with a beverage or diluted in water and it can be injected intravenously.

**What are its short-term effects?** Methcathinone produces amphetamine-like activity.

**What are its long-term effects?** Little scientific research is available on the long-term effects of methcathinone.

**Source:** [www.drugfree.org/drug-guide/](http://www.drugfree.org/drug-guide/)

## **Diversions- Methamphetamine**

Methamphetamine is often produced using chemicals and other products that are illegally diverted from legitimate sources. Some of the precursor chemicals needed to manufacture meth include pseudoephedrine (contained in over the counter cold medicines), anhydrous ammonia (used primarily as an agricultural fertilizer and industrial refrigerant), and red phosphorus (used in matches).

Some of the common ways used to divert products containing pseudoephedrine include:

- "Smurfing" – making multiple purchases at different locations
- Shelf-Sweeping – the theft of all shelf stock
- Shoplifting
- Theft from wholesalers

Illegal drug makers often steal anhydrous ammonia from areas where it is stored and used, such as farms. Attempted thefts have also occurred at such places as refrigeration systems holding ammonia, underground pipelines carrying ammonia, and rail cars transporting anhydrous ammonia. Often thefts are aborted when thieves are injured or overcome by the toxic gas.

Preventing the theft and diversion of precursor chemicals involves the coordination and cooperation of law enforcement, retailers, farmers, and others who may sell or work with these products. Some methods for preventing retail diversion include setting and enforcing thresholds on the amount of products that can be purchased by customers, storing products behind the retail counter, and establishing education programs for employees.

**Source:** This information was accessed in 2011 at [www.methresources.gov](http://www.methresources.gov) which now redirects to the ONDCP website (2012).

## Signs you may be near a meth lab

Many people may be unaware that they're living near a meth lab. Meth labs turn up in houses, barns, apartments, trailers, campers, cabins and motel rooms – even the backs of pickups. The equipment for a meth lab can be as small as to fit in a duffel bag, a cardboard box or the trunk of a car.

### Here are some things to look for in identifying a meth lab:

- Unusual, strong odors (like cat urine, ether, ammonia, acetone or other chemicals).
- Residences with windows blacked out.
- Renters who pay their landlords in cash.  
(Most drug dealers trade exclusively in cash.)
- Lots of traffic - people coming and going at unusual times. There may be little traffic during the day, but at night the activity increases dramatically.
- Excessive trash including large amounts of items such as: antifreeze containers, lantern fuel cans, red chemically stained coffee filters, drain cleaner and duct tape.
- Unusual amounts of clear glass containers being brought into the home.
- Windows blacked out or covered by aluminum foil, plywood, sheets, blankets, etc.
- Secretive / protective area surrounding the residence (like video cameras, alarm systems, guard dogs, reinforced doors, electrified fencing).
- Persons exiting the structure to smoke
- Little traffic during the day, but high traffic at late hours; including different vehicles arriving and staying for short periods of time.
- Little or no mail, furniture, visible trash and no newspaper delivery.

### Presence of the multiple items from this list could indicate the existence of a meth lab:

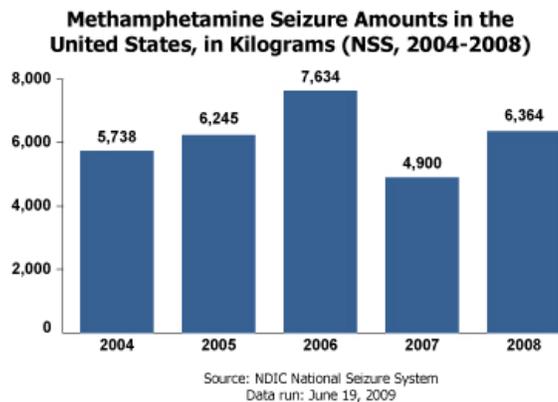
White Gasoline	Batteries/Lithium	Alcohol
Phenyl-2-Propane	Sodium Metal	Ether
Phenylacetone	Wooden Matches	Benzene
Phenylpropanolamine	Propane Cylinders	Toluene/Paint Thinner
Iodine Crystals	Hot Plates	Freon
Red Phosphorous	Ephedrine (over-the-counter)	Acetone
Black Iodine	Cold Tablets	Chloroform
Lye (Red Devil Lye)	Bronchodilators	Camp Stove Fuel/Coleman
Drano	Energy Boosters	Starting Fluid
Muriatic/Hydrochloric Acid	Rock Salt	Anhydrous Ammonia
Battery Acid/Sulfuric Acid	Diet Aids	"Heet"
Epsom Salts		

Source: [www.kci.org](http://www.kci.org)

## Meth Production & Trafficking

Meth is produced in clandestine meth labs, which can be found in a variety of locations, including rural rentals with absentee landlords, urban home or apartment rentals, trailers, motel rooms, houseboats, and mini-storage units.

The number of reported meth lab seizures in the U.S. has steadily decreased each year from a peak in 2004. However, preliminary 2008 data and reporting indicate domestic meth production is increasing in some areas of the country and reported lab seizures in 2008 are outpacing seizures for 2007. The increase in the number of domestic lab seizures is attributable primarily to a rise in small-capacity labs, as individuals and criminal groups are increasingly circumventing state and federal pseudoephedrine (a methamphetamine precursor chemical) sales restrictions by making numerous small-quantity pseudoephedrine product purchases from multiple retail outlets – also known as “smurfing.”



Preliminary 2008 data also indicate an increase in the flow of meth into the United States from Mexico – most likely attributable to the efforts of methamphetamine producers in both countries to reestablish the meth supply chain in the face of disruptions and shortages that began occurring in early 2007 and continued into 2008 as the result of Mexico’s enactment of import and sales restrictions on pseudoephedrine.

Mexican drug trafficking organizations have further adapted their operating procedures in several ways – including smuggling restricted precursor chemicals through new routes, importing non-restricted chemicals instead of traditionally used precursor chemicals, and using alternative production methods.

Preliminary data show fairly consistent levels of meth seizure amounts, as there were 6,335.66 kilograms of methamphetamine seized in the U.S. from January to November 14, 2008.

**Source:** This information was accessed in 2011 at [www.methresources.gov](http://www.methresources.gov) which now redirects to the ONDCP website (2012).

## Employee Safety Tips

Methamphetamine is a dangerous drug that poses serious health and environmental dangers. The drug can be manufactured cheaply using household and agricultural chemicals that are very toxic and can explode or ignite without warning. Individuals who work in or near homes where a meth lab is present are extremely vulnerable and at high risk for injury. Sanitation workers, postal services employees, utility workers, cable installers, meter readers and delivery drivers should all be aware of the risks.

### **BEFORE YOU GO:**

- Communicate your schedule and likely route to your supervisor. Notify your office of your arrival.
- Carry only your ID, a cell phone and/or pager, keys and items necessary to your work.
- Do not wear clothes and shoes that might impede your movement.
- Wear a name badge if you have one, but don't wear it around your neck. A clip-on ID is best.

### **UPON ARRIVAL:**

- Park within direct sight of the home's entry. Park in a well-lit, unobstructed area. Don't park in the driveway of the home.
- As you exit your vehicle, be attentive to people in the area and any unsecured dogs.
- Be aware of any drug paraphernalia in the area surrounding the home.
- Keep your hands as free as possible. Do not be distracted by talking on a cell phone. Carry a personal alarm if feasible.

### **WHILE AT THE HOME:**

- Present yourself as calm, confident, observant and in control.
- Be aware of your surroundings and leave if your instincts tell you to.
- Leave the home immediately if you smell chemicals.

### **BE AWARE OF INDICATORS OF METH USE:**

- Hyperactivity and compulsiveness
- Aggressive and violent behavior
- Paranoia and hallucinations
- Restlessness/agitation
- Dilated pupils
- Talkativeness

## Possible Meth Lab Activity

### **UNUSUAL SECURITY / VENTILATION MEASURES:**

- Baby room monitors being used outdoors.
- Video surveillance systems positioned to observe exterior of home.
- Elaborate fencing and heavy duty locks when it is not evident what is being secured.
- Fans positioned to ventilate the home.
- Night vision equipment.
- Protective, aggressive dogs.

### **CHEMICAL ODORS OF METH PRODUCTION:**

- Ether-like: Aromatic, sweet odor often accompanied by a sweet taste. Sometimes described as a "hospital odor". **Nasal irritant**
- Solvent-like: Sweet odor from common solvents used in paint thinners, paint removers, adhesives, and cleaning fluids. Type of odor often found in an auto body shop. **Eye and nasal irritant**
- Ammonia-like: Intense, sharp, irritating odor similar to but much stronger than that of wet diapers, glass cleaners, cattle feedlots or fertilizers. **Eye and nasal irritant**

### **ADDITIONAL INDICATORS OF A METH LAB:**

- Reddish stained coffee filters, canning jars with multi-colored liquids, aquarium-type tubing used in bottles or jugs.
- Battery casings, crumpled/burnt foil.
- Light bulbs with filament removed.
- Windows blacked out or covered.
- Bottles with clear tubing in the cap.
- People in and around meth manufacturing may exhibit respiratory irritation and/or chemical burns.

### **LARGE AMOUNTS OF METH INGREDIENTS SUCH AS:**

- Cold and allergy medicine
- Anhydrous ammonia
- Lithium batteries
- Gas-line additive
- Table or rock salt
- Sidewalk de-icer
- Drain cleaner
- Starting fluid
- Camping fuel
- Matchbooks
- Iodine

For more information on methamphetamine and related concerns, contact the Maine Methamphetamine Prevention Project at (207) 621-8118 or [www.methwatchme.org](http://www.methwatchme.org)

Adapted from the Kansas Methamphetamine Prevention Project.

# Tips for Home Visitors

## Before You Go:

- Ensure that you have obtained as much information about your client as possible.
- If possible, canvass the area around the home's address. Assess potential safety concerns and take precautions.
- Communicate your schedule and likely route to your supervisor. Notify your office of your arrival.
- Carry only your ID, a cell phone and/or pager, and keys.
- Do not wear clothes and shoes that can impede your movement. Pants are best.
- Wear a name badge if you have one, but don't wear one around your neck. A clip-on is best.

## Upon Your Arrival:

- Park within direct sight of the home's entry.
- Park in a well lit, unobstructed area. Don't park in the drive way of the home.
- As you exit the car, be attentive to people in the area and any unsecured dogs.
- Be aware of any meth paraphernalia in the area surrounding the home.
- Keep your hands as free as possible. Do not be distracted by talking on a cell phone. Carry a personal alarm if feasible. (Clip-on)

## Safety During the Visit:

- Present yourself as calm, confident, observant, and in control.
- Position yourself between the client and the exit.
- Sit in a hard backed chair.
- Have an excuse to leave in advance.
- Be aware of your surroundings and leave if your instincts tell you to.
- Pay particular attention to the client's protectiveness relating to certain rooms of the home.
- Leave the home immediately if you smell chemicals.

For more information on methamphetamine and related concerns, contact the Maine Methamphetamine Prevention Project at (207) 621-8118 or [www.methwatchme.org](http://www.methwatchme.org)  
Adapted from the Kansas Methamphetamine Prevention Project.

# Possible Meth Lab Activity

## Unusual Security/ Ventilation Measures:

- Baby room monitors being used outdoors.
- Video surveillance systems positioned to observe exterior of home.
- Elaborate fencing and heavy duty locks when it is not evident what is being secured.
- Numerous fans or industrial-type fans positioned to ventilate the home.
- Alarm systems and large, protective dogs.

## Chemical Odors Associated with Meth Production:

- Ether-like: Aromatic, sweet odor often accompanied by a sweet taste. Sometimes described as a "hospital odor" **Nasal irritant.**
- Solvent-like: Sweet odor from common solvents used in paint thinners, paint removers, adhesives, and cleaning fluids. Type of odor often found in an auto body shop. **Eye and nasal irritant.**
- Ammonia-like: An intense, sharp, irritating odor similar but much stronger than that from wet diapers, glass cleaners, cattle feedlots or fertilizers. **Eye and nasal irritant.**

## Additional Indicators of a Meth Lab:

- Numerous chemical containers, matchbooks with striker plates removed, abundance of cold tablet/diet pill containers.
- Reddish stained coffee filters, canning jars with multi-colored liquids, aquarium-type tubing used in bottles.
- Battery casings, crumpled/ burnt foil.
- Windows blacked out or covered.
- People in and around meth manufacturing may exhibit respiratory irritation and/or chemical burns to skin.

## Indicators of Meth Use:

- Dilated pupils
- Restlessness/agitation
- Paranoia and hallucinations
- Hyperactivity and compulsiveness
- Aggressiveness and violent behavior
- Talkativeness

If you suspect methamphetamine production, leave the home immediately and contact your local law enforcement agency.

# Tips for Property Owners

Methamphetamine is a dangerous drug that poses serious health and environmental dangers. The drug can be manufactured in homes, apartments, garages and outbuildings using toxic household and agricultural chemicals that can explode or ignite without warning. Innocent bystanders visiting or living near the site of a meth lab are extremely vulnerable and at risk for injury.

## Potential Costs of Labs on Your Property:

- Lost rental income while property is cleaned to remove all traces of meth contamination.
- Properly cleaning a property can cost up to \$10,000. In most cases, the property owner is responsible.
- Compromised health of tenants, staff and yourself.
- Possible premise liability lawsuit
- Decline in property values.

## Be A Vigilant Property Owner!

- Perform background checks on all individuals applying to live in the property.
- Perform regular inspections of the rental property.
- Train your staff about drug paraphernalia and the dangers and warning signs of meth use/ manufacture.
- In multiple-housing properties, host tenant "Neighborhood Watch" meetings or safety socials and distribute methamphetamine education materials.
- Screen tenants.

## Safety While Visiting the Property

- Keep your hands as free as possible.
- Leave the home immediately if you smell chemicals.
- Do not touch any suspicious items.
- Be aware of your surroundings and leave if your instincts tell you to.
- Call law enforcement and report any suspicious activities or items.

For more information on methamphetamine and related concerns, contact the Maine Methamphetamine Prevention Project at (207) 621-8118 or [www.methwatchme.org](http://www.methwatchme.org)

Adapted from the Kansas Methamphetamine Prevention Project.

# Property Inspections

## Chemical Odors of Meth Manufacture:

- Ether-like: Aromatic, sweet odor often accompanied by a sweet taste. Sometimes described as a "hospital odor". **Nasal irritant**
- Solvent-like: Sweet odor from common solvents. Used in paint thinners, paint removers, adhesives and cleaning fluids. Type of odor often found in an auto body shop. **Eye and nasal irritant**
- Ammonia-like: Intense, sharp, irritating odor similar to, but much stronger than, that of wet diapers, glass cleaners, cattle feedlots or fertilizers. **Eye and nasal irritant**

## Large Quantities of Meth Ingredients:

- Canning jars with multi-colored or layered liquids
- Aquarium tubing used in bottles or jugs
- Cold and allergy tablets
- Lithium battery casings
- Anhydrous ammonia
- Table or rock salt
- Gas-line additive
- Drain cleaner
- Camping fuel
- Matchbooks
- Starter fluid

## Tenant Behavior:

- Respiratory irritation and/or chemical burns
- Hyperactivity and compulsiveness
- Aggressive and violent behavior
- Paranoia and hallucinations
- Restlessness/agitation
- Dilated pupils
- Talkativeness

## Unusual Security/Ventilation Measures:

- Baby room monitors being used outdoors
- Video surveillance systems positioned to observe exterior of home.
- Elaborate fencing and heavy duty locks when it is not evident what is being secured.
- Fans positioned to ventilate the home.
- Windows blacked out or covered.
- Protective, aggressive dogs.
- Night vision equipment.

**Be sure to include outbuildings on your inspection, including garages, storage sheds and barns.**