

What is a methamphetamine laboratory?

A methamphetamine laboratory is an illicit operation that has the apparatus and chemicals needed to produce the powerful stimulant methamphetamine. (See list of products and equipment.) These laboratories vary dramatically in size and output. Large laboratories, known as super labs, produce 10 pounds or more of the drug per production cycle. Much smaller laboratories—sometimes called box labs—produce as little as an ounce or less of the drug and are small enough to fit in a box or backpack.

How common are they?

Methamphetamine laboratories are increasingly prevalent throughout the United States. In 2002 more than 7,500 laboratories were seized in 44 states, according to the Drug Enforcement Administration (DEA) El Paso Intelligence Center National Clandestine Laboratory Seizure System. While methamphetamine production remains most common in the western portion of the United States—particularly California—seizures of methamphetamine laboratories in the west central part of the country have become more commonplace.

Where are methamphetamine laboratories found?

Methamphetamine laboratories may be located virtually anywhere. Laboratories have been found in secluded rural areas as well as in residential, commercial, and industrial districts. Law enforcement officers have

seized laboratories at private residences, commercial properties, hotels and motels, and outdoor locations. Mobile laboratories have been discovered in automobiles, boats, and luggage.

What are the signs that a methamphetamine laboratory may be present?

The following, often in combination, may indicate the presence of a methamphetamine laboratory:

- Unusual odors (ether, ammonia, acetone, or other chemicals)
- Excessive amounts of trash, particularly chemical containers (see list of products and equipment), coffee filters or pieces of cloth that are stained red, and duct tape rolls
- Curtains always drawn or windows covered with aluminum foil or blackened on residences, garages, sheds, or other structures
- Evidence of chemical waste or dumping
- Frequent visitors, particularly at unusual times
- Extensive security measures or attempts to ensure privacy (no trespassing or beware of dog signs, fences, large trees or shrubs)
- Secretive or unfriendly occupants

What hazards are associated with them?

The chemicals used to produce methamphetamine are extremely hazardous. Some are highly volatile and may ignite or explode if mixed or stored improperly. Fire and explosion

pose risks not only to the individuals producing the drug but also to anyone in the surrounding area, including children, neighbors, and passersby.

Even when fire or explosion does not occur, methamphetamine production is dangerous. Simply being exposed to the toxic chemicals used to produce the drug poses a variety of health risks, including intoxication, dizziness, nausea, disorientation, lack of coordination, pulmonary edema, serious respiratory problems, severe chemical burns, and damage to internal organs.

Inhalation. Inhaling chemical vapors and gases resulting from methamphetamine production causes shortness of breath, cough, and chest pain. Exposure to these vapors and gases may also cause intoxication, dizziness, nausea, disorientation, lack of coordination, pulmonary edema, chemical pneumonitis, and other serious respiratory problems when absorbed into the body through the lungs.

Skin Contact. The chemicals used to produce methamphetamine may cause serious burns if they come into contact with the skin.

Chemical	Hazards
Pseudoephedrine	Ingestion of doses greater than 240 mg causes hypertension, arrhythmia, anxiety, dizziness, and vomiting. Ingestion of doses greater than 600 mg can lead to renal failure and seizures.
Acetone/ethyl alcohol	Extremely flammable, posing a fire risk in and around the laboratory. Inhalation or ingestion of these solvents causes severe gastric irritation, narcosis, or coma.
Freon	Inhalation can cause sudden cardiac arrest or severe lung damage. It is corrosive if ingested.
Anhydrous ammonia	A colorless gas with a pungent, suffocating odor. Inhalation causes edema of the respiratory tract and asphyxia. Contact with vapors damages eyes and mucous membranes.
Red phosphorus	May explode as a result of contact or friction. Ignites if heated above 260°C. Vapor from ignited phosphorus severely irritates the nose, throat, lungs, and eyes.
Hypophosphorous acid	Extremely dangerous substitute for red phosphorus. If overheated, deadly phosphine gas is released. Poses a serious fire and explosion hazard.
Lithium metal	Extremely caustic to all body tissues. Reacts violently with water and poses a fire or explosion hazard.
Hydriodic acid	A corrosive acid with vapors that are irritating to the respiratory system, eyes, and skin. If ingested, causes severe internal irritation and damage that may cause death.
Iodine crystals	Give off vapor that is irritating to respiratory system and eyes. Solid form irritates the eyes and may burn skin. If ingested, cause severe internal damage.
Phenylpropanolamine	Ingestion of doses greater than 75 mg causes hypertension, arrhythmia, anxiety, and dizziness. Quantities greater than 300 mg can lead to renal failure, seizures, stroke, and death.

Source: DEA Office of Diversion Control.

Ingestion. Toxic chemicals can be ingested either by consuming contaminated food or beverages or by inadvertently consuming the chemicals directly. (Young children present at laboratory sites are at particular risk of ingesting chemicals.) Ingesting toxic chemicals—or methamphetamine itself—may result in potentially fatal poisoning, internal chemical burns, damage to organ function, and harm to neurological and immunologic functioning.

In addition, methamphetamine production threatens the environment. The average methamphetamine laboratory produces 5 to 7 pounds of toxic waste for every pound of methamphetamine produced. Operators often dispose of this waste improperly, simply by dumping it near the laboratory. This can cause contamination of the soil and nearby water supplies.

What can I do?

If you suspect that someone in your neighborhood is operating a methamphetamine laboratory, report your concerns to the local police department or sheriff's office immediately. For your own safety, do not investigate the suspected laboratory or confront the occupants. In addition to the hazards discussed above, many laboratories are equipped with security devices or booby traps that could cause serious injuries or death.

Products Used in Methamphetamine Production

Acetone
 Alcohol (isopropyl or rubbing)
 Anhydrous ammonia (fertilizer)
 Ephedrine (cold medications)
 Ether (engine starter)
 Hydrochloric acid (pool supply)
 Iodine (flakes or crystal)
 Kitty litter
 Lithium (batteries)
 Methanol (gasoline additive)
 MSM (nutritional supplement)
 Pseudoephedrine (cold medications)
 Red phosphorus (matches or road flares)
 Salt (table or rock)
 Sodium hydroxide (lye)
 Sodium metal
 Sulfuric acid (drain cleaner)
 Toluene (brake cleaner)
 Trichloroethane (gun cleaner)

Equipment Used in Methamphetamine Production

Aluminum foil	Pails and buckets
Blenders	Paper towels
Cheesecloth	Plastic storage containers
Clamps	Propane cylinders
Coffee filters	Rubber gloves
Funnels	Rubber tubing
Gas cans	Strainers
Ice chests	Tape
Jugs and bottles	Tempered glassware
Laboratory beakers and glassware	Thermometer
Measuring cups	Towels and bed sheets

Other products of interest:

- *Methamphetamine Fast Facts*
- *Crystal Methamphetamine Fast Facts*

For more information on illicit drugs check out our web site at:

www.usdoj.gov/ndic

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NDIC Product No. 2004-L0559-001
 Cover photo: Snohomish Regional Drug Task Force (WA)

Methamphetamine Laboratory IDENTIFICATION and HAZARDS Fast Facts



Questions and Answers



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 a component of the
 U.S. Department of Justice