

Clandestine Drug Lab AWARENESS



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Methamphetamines...



Clandestine

Kept secret or hidden, especially for
some illicit purpose; surreptitious;
furtive

Other Types of Clandestine Laboratories...

- PCP C_6Cl_5OH
- Heroin $C_{12}H_{23}NO_5$
- Ecstasy $C_{11}H_{15}NO$
- HME- a new ordeal

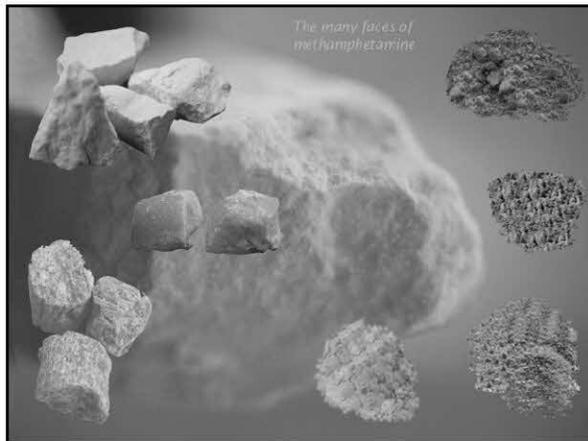


Meth Lab Facts...

- One out of every 5 labs discovered is found because of an explosion or fire.
- An estimated 34 different chemicals can be used to manufacture meth.
- Clean up of an average sized lab costs \$2,500 to \$ 10,000 with decon averaging \$50,000

Approximately 10% of all people who use alcohol become addicted...

Approximately 98% of all people who use meth become addicted...



History of Methamphetamine

- 1887 Amphetamine first synthesized in Germany
- 1932 First medical use: "benzedrine inhaler"
- 1937 Amphetamine available in tablet form
- 1939-42 Used by Allied and Axis troops in WWII
- 1971 Controlled Substances Act of 1970 included restrictions on amphetamine.
- 1980 P-2-P becomes a controlled substance contributing to switch to ephedrine reduction methods.

- 1980-90 Red Phosphorous (Red P) method starts taking over
- 1990-91 Ephedrine reduction method imported to Kansas City area by local dealers. Birch Reduction (Nazi) method discovered in local library- method spreads rapidly
- 1990-93 Mexican National Labs proliferate on the West Coast (Red P Labs)
- 1991-Today Red P and Birch Reduction (Nazi) Labs spread across the U.S.
- 2004- Large federal emphasis on enforcement

- 2007-08 Large national crack down on sale of OTC substances.
- 2010- Upswing very evident
- 2011- Shake "n" Bake method becomes very popular AKA "One-pot method"
- 2012- Increase in labs



Effects of Methamphetamine use

Short Term

- euphoria
- increased alertness
- increased energy
- insomnia
- light & sound sensitivity
- shakes & tremors
- nervousness

- teeth grinding
- dry mouth
- jaw clenching
- enhanced sexual activity



Effects of Methamphetamine use

Long Term

- depression
- irritability
- anxiety
- violent mood change
- paranoia
- hallucinations
- calcium depletion

- weight loss
- meth psychosis



Crank Bugs

Heavy users experience the feeling of that bugs are crawling on or beneath their skin. Users severely injure themselves by scratching, digging, or cutting at their skin or rid themselves of these imaginary "crank bugs"



Meth cycle of abuse

- Rush;** Exhilaration after intake- usually lasts 4-5 minutes, but can last as long as 30 minutes
- High;** Can last 4-16 hours
- Binge;** Repeated use of meth; may continue without sleep for 3-15 days
- Tweaking;** The "coming down" phase that can last up to 24 hours
- Crash;** Continuous sleep for 1-3 days.



Beware of "Tweakers"

During the tweaking phase, meth users can be extremely paranoid, depressed, unpredictable, violent, and dangerous! Remember to always observe the following safety tips when approaching a suspected tweaker.

Beware of "Tweakers"

- Keep a social distance
- Do not shine bright lights at the individual
- Slow your speech and lower the pitch of your voice
- Slow your movements
- Keep your hands visible
- KEEP THE TWEAKER TALKING!

There are 4 main categories of clandestine labs:

- Extraction
- Tableting
- Conversion
- Synthesis
- Urine Reduction



Extraction Labs

In extraction labs, a raw chemical is separated from its source. A raw plant can be changed into a finishing drug or a precursor can be separated from a product. In this process, the chemical structure of the drug is not changed. EX: extraction of hashish from marijuana and opium from the opium poppy.

Tableting Labs

Tableting labs manufacture illegal tablets, capsules and pills with tableting machines. These operations are most frequently associated with:

- Amphetamines in the 1960's
- MDA
- MDMA (ecstasy)
- LSD

Tableting Labs...

Most illegal drugs are not manufactured in the US. For example, most MDMA smuggled into the US has been produced in Belgium or the Netherlands.

Conversion Labs

In conversion labs, a raw product is changed into a finished drug. This process changes the drug's chemical structure and may also concentrate or enhance the drug's characteristics. Examples include cocaine to crack and opium to morphine to heroin.

Synthesis Labs

In synthesis labs, a combination of raw materials reacts to change into a drug. A new chemical is created in the process. Examples include ephedrine to methamphetamine and piperidine to PCP.

Illegal controlled substances produced in clandestine labs

- PCP
- LSD
- MDMA (ecstasy)
- GHB
- Cocaine/Crack
- Methcathaneone
- Methamphetamine

Of all the clandestine drug labs seized in the U.S. in the last 10 years, it is estimated that over 90% produced Methamphetamine.

Types of Methamphetamine Labs

1. **Mexican National Labs.** Precursor availability in Mexico sparked interest in meth manufacturing by traditional Mexican cocaine trafficking organizations. These organizations now control the majority of methamphetamine produced in the US.



Mexican National "Super Labs"

Mexican National Super Labs are capable of producing 10-100 pounds of meth per batch. Approximately 5% of the labs seized in the US are "Super Labs" that supply 80-90% of the meth used in the US. They are often located in remote areas of California, Oregon, Washington, and the Southwest but are also spread eastward. The Super Labs are moved frequently to avoid detection.

"Mom & Pop" Labs

AKA "Beavis & Butthead Labs". The majority of methamphetamine labs in the US are small Mom & Pop operations that produce lesser quantities of meth for personal use and smaller scale distribution.



Where are Clandestine Labs found?

- Motels & hotels
- Vacation rentals
- Houses
- Apartments
- Trailers
- Cars
- Trucks
- RV's
- Campgrounds
- Parks
- Forests
- Farm Fields
- Orchards
- Boats
- Self Storage Units
- Outbuildings



Motel Labs

Red P and Nazi meth are easily produced and require little space. Cookers love hotels! Recent explosion in Evansville Indiana caused \$120,000.00; 156 guests had to be evacuated and evaluated, the cook was severely burned. In 2003 309 of the 10,305 labs reported to the DEA were found in hotels.

Motel Labs

- No maid service requested for several days
- Room paid for in advance
- Frequent trips to the ice machine
- Bathroom vent runs constantly
- Gym bags, coolers, and grocery bags are used instead of standard luggage.

Self Storage Units

- Rental of two or more units at a time
- Requiring 24 hour access to units
- Numerous trips to a from units at all hours of the day and night
- "Lookouts" posted during loading and unloading of vehicles
- Items in vehicles are usually covered.

Many self storage facilities operate surveillance cameras around the clock.

Cars and Trucks

Most clandestine labs are moved at least once, and often many times over our roads. Patrol officers have the greatest opportunity to observe these activities and legally interfere with their movement, but they also have the greatest opportunity to inadvertently encounter rolling clandestine labs if they are unfamiliar with obvious lab indicators.

Cars and Trucks

- Windows down or open on cold days
- Rear/side windows covered, darkened or mirrored
- Contents covered with tarps or blankets
- Trash, mismatched items or multiples of smaller items
- Vehicle pulling U-Haul or other type style trailer

Houses, apartments, barns, outbuildings, etc

- Hoses and vents into structures
- Discoloration or corrosion of structures
- Strong or unusual chemical odors
- Excessive trash accumulation
- Windows blacked out
- Fortifications
- Unusual security systems or devices

Houses, apartments, barns, outbuildings, etc

- Lots of traffic- people coming and going at all hours
- Fires and explosions
- Disassemble merchandise in and around the location.

Lab Terminology

- **Precursor**, primary chemical that is changed into the finished product, I.e. ephedrine or pseudoephedrine to methamphetamine.
- **Reagent**, chemical that is used in reactions to convert precursor into the finished product, but does not become part of the finished product.

Lab Terminology

- **Solvent**, used to dissolve solid precursors or to separate chemicals in reaction. Most solvents are highly flammable.
- **Catalyst**, substance that initiates a chemical reaction, I.e lithium metal.
- **Exothermic**, a chemical reaction producing its own heat.

Lab Terminology

- **pH Scale**, meth is very alkaloid & acidic.



Clandestine Lab Equipment

Meth cookers utilize a wide variety of equipment, ranging from very specialized chemical apparatus to common household items. Large scale and/or Mexican National labs often use specialized chemical apparatus while smaller "Mom & Pop" labs use easily obtained, inexpensive, common household items.



Specialized chemical apparatus...

Not what the typical homeowner should have!

- Triple neck flasks
- Single neck flasks
- Reflux columns
- Heating mantels
- Rheostats
- pH paper
- Gram scales
- Plastic tubing



Improvised lab equipment

- Canning jars
- Water jugs
- Crock pots
- Blenders
- Kitchen utensils
- Coffee grinders/filters
- Turkey basters
- Hot plates



Improvised lab equipment

- Cast iron skillets
- Pressure cookers
- Electric frying pans
- Pyrex/corning cookware
- Thermoses or coolers
- Propane tanks
- Plastic gas cans



Methamphetamine lab hazards

- Suspects
- Weapons
- Explosives
- Booby traps
- Chemicals and wastes
- Contaminated syringes
- Atmosphere



Suspects and weapons

Meth cooks are generally users. Law enforcement officers must anticipate that suspects are armed with an array of weapons. These are always high risk situations.



Suspects and weapons

Meth cooks post lookouts, guard dogs, and other vicious animals to protect their lab sites. They also utilize various types of electronics to monitor activities.



Chemicals and wastes

- Flammable
- Combustible
- Corrosive
- Caustic
- Reactive
- Toxic
- Bio-Hazardous



Chemicals and wastes

It is estimated that 10-20 percent of all labs are discovered as a result of a fire or explosion.



Refrigerator Fires



Flammable chemicals and waste include:

- Red Phosphorus (possibly white or yellow)
- Solvents
- Coleman fuel
- Anhydrous ammonia
- Propane
- Solvent vapors
- Acids
 - hydriodic
 - hydrochloric
 - hypochloric
 - sulfuric
- Bases
 - anhydrous ammonia
 - sodium hydroxide
 - lye



Reactive chemicals and waste include:

- Sodium and lithium metal (react violently with water)
- Strong acids and bases (react violently when mixed)
- Red phosphorus
- Ethers
- Anhydrous ammonia

Environmental concerns

- For each pound of meth produced, app 6 to 10 pounds of hazardous waste are generated

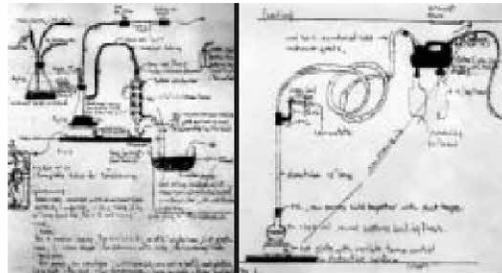
This waste is typically:

- Buried
- Burned in barrels or pits
- Dumped into nearby streams, lakes, etc
- Poured into sewage or septic tanks

Classification of Methods

Classified by the precursors used in the manufacturing process

- Phenyl-2-Propanone (P-2-P/Methylamine)
 - AKA P-2-P METHOD
- Ephedrine Reduction
 - Red P METHOD (red phosphorus)
 - Nazi METHOD (anhydrous ammonia)
 - Thionyl Chloride METHOD
 - Shake n' Bake or One-pot method



Anhydrous Ammonia method

- As in the Red P process, the meth is converted from meth oil/meth base into its salt form- methamphetamine hydrochloride by bubbling hydrogen gas through the solvent.
 - Bubble hydrogen chloride gas through solvent (lower pH <3-4)
 - Crystals form = methamphetamine hydrochloride
- 11) Conversion HAZARDS- Caustic, Corrosives, & Poisonous Gases

Thionyl Chloride method

- Also commonly referred to as the:
 - Hydrogenation METHOD
 - Shake-N-Bake METHOD
 - Paint Shaker METHOD





Taking Good Medicine...



To Bad Places...

Thanks



The greatest casualty is being forgotten™
www.woundedwarriorproject.org

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