PENNSYLVANIA CRIMINAL INTELLIGENCE CENTER

Intelligence Brief

15-2011 June 20, 2011

DANGERS OF METHAMPHETAMINE LABS

The growing popularity of methamphetamine over the past 15 years has increased the risk of exposure to the surrounding community and law enforcements personnel. Methamphetamine is a controlled substance that is "cooked" using many common household ingredients (refer to Enclosure A) which can be volatile and generates by-products that can be very harmful to humans.[1] When these products are combined, they emit toxic fumes and may cause chemical burns upon contact.

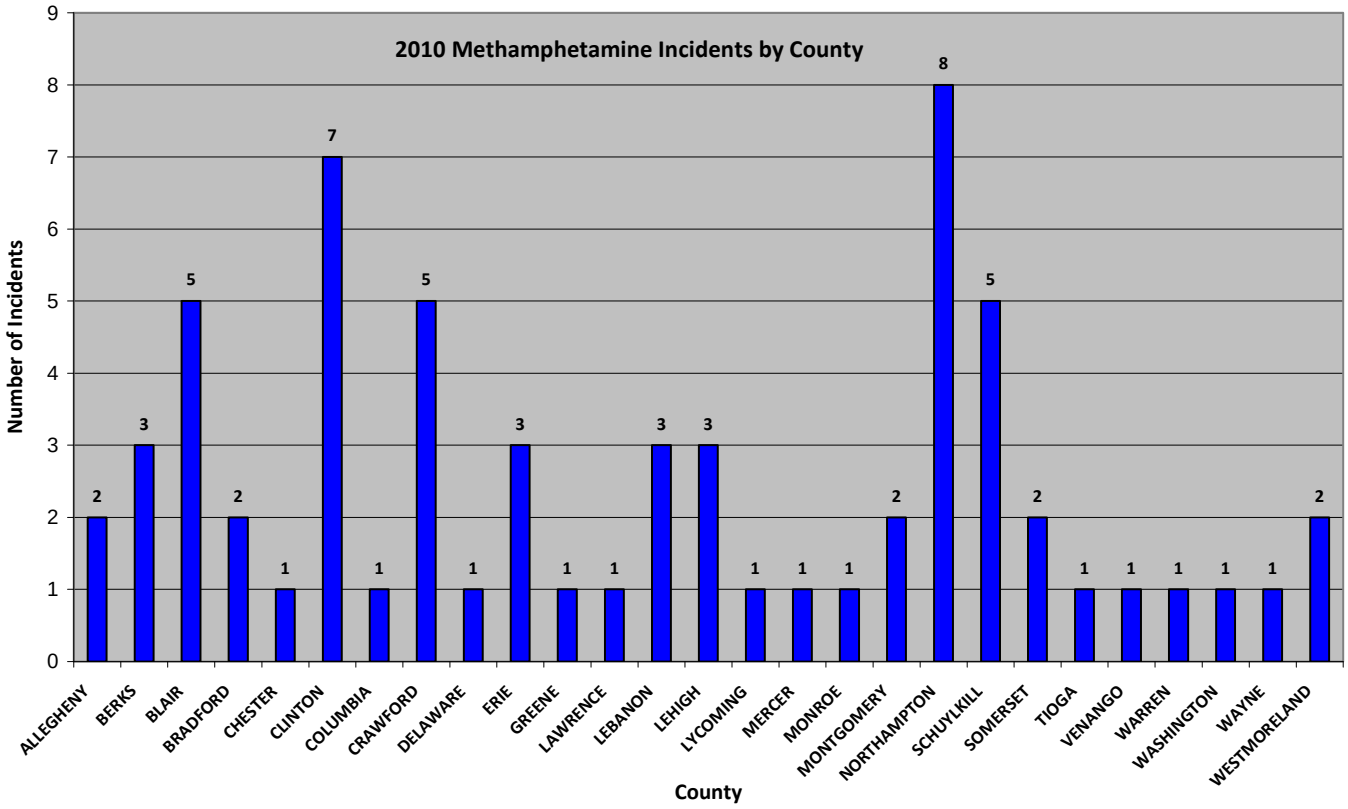
Toxic residue from the cooking process saturates every surface and can remain there for months or years if not properly sterilized. Since the chemicals can be inhaled, ingested, or absorbed through the skin, everyone coming in contact with those surfaces is vulnerable. Acute exposure occurs over a relatively short time and produces symptoms that include: shortness of breath, cough, chest pain, dizziness, lack of coordination, chemical irritation, and burns to the skin, eyes, nose, or mouth. If toxicity levels are fairly high or a person is particularly vulnerable (i.e. pre-existing breathing problems), acute exposure can cause death. Less significant exposure can result in headaches, nausea, dizziness, fatigue, or lethargy, and can lead to other long-term health problems.[2]

Despite being comprised of dangerous chemicals, methamphetamine is synthesized relatively easily and can procure a significant profit for the distributor and a steady supply of the drug for users. These facts have made methamphetamine manufacturing operations the most frequently encountered clandestine laboratories in the United States.[3]

Methamphetamine can be produced using several methods with "recipes" that are readily available on the Internet.[1] The most common processes utilize ephedrine or pseudoephedrine and are known as the Red Phosphorus method or the Birch/Nazi method. The Red Phosphorous method combines ephedrine, red phosphorus (typically from matches), iodine crystals, and other ingredients to produce methamphetamine. The Birch method uses ephedrine, anhydrous ammonia, lithium metal, and other ingredients to produce the drug. An adaptation of this technique, known as the "One-Pot" method, has become increasingly popular as it can be easily transported and produces the methamphetamine faster.[4] The One-Pot method substitutes ammonium nitrate for anhydrous ammonia, which can be more difficult to obtain. This approach is of great concern as it is highly flammable and explosive; it can also resemble plastic, urine-filled bottles discarded along roadways, in garbage bins, or other areas. The presence of solid material in the bottom of the bottle is the best way to differentiate between the two. The table to the right illustrates the growing number of methamphetamine laboratories found in Pennsylvania in the past three years. To date, 56 methamphetamine laboratories have been discovered in 2011, setting a pace to far exceed previous years.[5]

Method	2008	2009	2010
NAZI	9	23	36
RED PHOSPHORUS	19	13	24
UNKNOWN/OTHER	0	3	5
Totals	**28**	**39**	**65**

The chart below depicts the number of incidents involving methamphetamine labs, by county.[5]



Law enforcement personnel are particularly vulnerable to these dangerous chemicals as they frequently enter houses, hotel rooms, storage facilities, vacant buildings, vehicles, and other locations where laboratories might exist without being aware of the inherent dangers. Emergency situations often do not allow adequate time for responders to completely assess the scene for potential danger. Responders have unknowingly triggered explosions and caused fires simply by opening a door or moving a piece of equipment. Some of the chemicals are so volatile that the slightest movement can cause a spark leading to ignition. Poor ventilation in these clandestine laboratories also increases the risk for emergency responders to be sickened or injured from inhaling the toxic fumes.[1]

- March 2010, Westmoreland County: A trooper was treated at a local hospital after performing a consent search on a vehicle used as a traveling methamphetamine laboratory. After observing many indicators of some type of illegal activity, the trooper conducted the search, and upon opening a chest, viewed many materials used in the production of the drug and inhaled fumes with a very strong chemical odor. The trooper experienced an immediate burning sensation in his mouth and throat and later suffered stomach pains.[5]

- December 2010, Bradford County: A municipal officer was treated and released from the hospital after breathing in chemical fumes while executing a search warrant at a suspected methamphetamine laboratory. The officer opened a plastic container with an unknown clear liquid inside and was immediately overcome by a noxious gas.[5]

Not only is the cooking process dangerous, approximately five to seven pounds of chemical waste is generated for every pound of methamphetamine produced. This waste is highly toxic and should be disposed of as hazardous material, but it is often buried near the site, dumped along roadways or into waterways, poured down drains, or placed in common household garbage.[1] This increases the likelihood that unsuspecting individuals could come in contact with the harmful material.

RECOMMENDATIONS AND CONCLUSION

Law enforcement personnel should remain cognizant of the indicators of clandestine methamphetamine laboratories. If some or any combination of the below indicators are present, the scene should be immediately secured and bystanders should be removed from the area. All necessary precautions should be taken to minimize risk of contamination.

Possible indicators of a clandestine methamphetamine laboratory include:

- A large amount of cold tablet containers that list ephedrine or pseudoephedrine as an ingredient.
- Jars containing clear liquid with a white or red colored solid on the bottom.
- Jars labeled as containing iodine or dark, shiny, metallic purple crystals inside of jars.
- Jars labeled as containing red phosphorus or a fine, dark red or purple powder.
- Coffee filters containing a white pasty substance, dark red sludge, or small amounts of shiny white crystals.
- Bottles labeled as containing sulfuric, muriatic, or hydrochloric acid.
- Bottles or jars with rubber tubing attached.
- Glass cookware or frying pans containing a powdery residue.
- An unusually large number of cans of camp fuel, paint thinner, acetone, starter fluid, lye, and drain cleaners containing sulfuric acid, or bottles containing muriatic acid.
- Large amounts of lithium batteries, especially ones that have been stripped.
- Soft silver or gray metallic ribbon (in chunk form) stored in oil or kerosene.
- Propane tanks with fittings that have turned blue.
- Strong smell of urine, or unusual chemical smells like ether, ammonia or acetone.

If you encounter a clandestine methamphetamine laboratory:

- **DO NOT** touch anything in the lab.
- **DO NOT** turn on/off any electrical power switches or light switches.
- **DO NOT** eat or drink in or around a lab.
- **DO NOT** open or move containers with chemicals or suspected chemicals.
- **DO NOT** smoke anywhere near a lab.
- **DO NOT** sniff any containers.
- **DO NOT** attempt to dilute a suspected One-Pot laboratory with water (the lithium metal is water-reactive and can ignite or explode when exposed to water).
- **DO** remain upwind and uphill from hazardous substances to avoid contamination.
- **DO** decontaminate yourself and your clothing, especially before entering a vehicle.
- **DO** wash your hands and face thoroughly.
- **DO** contact your local police.

Law enforcement agencies in Pennsylvania that encounter suspected methamphetamine laboratories or dump sites should contact the Pennsylvania State Police Clandestine Laboratory Response Team (CLRT) for assistance.

- Agencies within the jurisdictions of Troops F, H, J, K, L, M, N, P, and R should contact Sergeant James B. Kemm, CLRT Eastern Section Supervisor, at (717) 648-0884 or cell (215) 520-0444.

- Agencies within the jurisdictions of Troops A, B, C, D, E, and G should contact Sergeant James B. Basinger, CLRT Western Section Supervisor, at (814) 332-6911 or cell (814) 280-2140.

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1 Scott, M.S. and Dedel, D. (2006, August). Clandestine methamphetamine labs: 2nd edition. United States Department of Justice: Office of Community Oriented Policing Services. Retrieved from http://www.cops.usdoj.gov/ric/ResourceDetail.aspx?RID=29.

2 Meth lab. (2010). Meth Kills: The Campaign Against Methamphetamine. Retrieved from http://meth-kills.org/meth-lab.html.

3 Methamphetamine facts & figures. White House Office of National Drug Control Policy. Retrieved from http://www.whitehousedrugpolicy.gov/about/index.html.

4 "One pot" methamphetamine laboratories. (2009, June 2). Pennsylvania State Police Intelligence Brief 09-09.

5 Pennsylvania State Police, Bureau of Criminal Investigation, Clandestine Laboratory Response Team.

ENCLOSURE A

WAGE A WAR ON ILLEGAL METHAMPHETAMINE PRODUCTION!

Several over-the-counter products may be used to produce methamphetamine. Methamphetamine is a dangerous highly addictive illegal drug.

Please note the following chemicals and equipment frequently found at methamphetamine lab sites:

CHEMICALS

Common Chemicals
Cold Tablets
Alcohol
(Isopropyl or Rubbing)
Brake Cleaner
Lithium Batteries
Matches/Road Flares
Muriatic Acid
Red Devil Lye
Paint Thinner
Acetone
Table/Rock Salt
Iodine Products
Anyhdrous Ammonia
Fertilizer

Equipment
Coffee Filters
Rubber Tubes/Gloves
Gas Cans
Hotplate
Excess Jugs/Bottles
Funnels
Blender
Aluminum Foil
Duct Tape/Clamps
Strainer
Thermometer
Pyrex or Corning
Dishes

EQUIPMENT

BE AWARE! BE SAFE! MAKE THE CALL!

The manufacturing of methamphetamine can be hazardous to **EVERYONE.**

Contact your local PSP Station if you suspect someone of purchasing items to manufacture methamphetamine.

Pennsylvania State Police

Response 24 hours a day / 7 days a week

This message is brought to you by the Pennsylvania State Police - Bureau of Drug Law Enforcement