MAINE METHAMPHETAMINE PREVENTION TOOLKIT

The Maine Methamphetamine Prevention Toolkit was made possible by a grant from the Maine Department of Public Safety, Maine Drug Enforcement Agency through the U.S. Department of Justice Community Oriented Policing Services, Grant #2008-CK-WX-0500.

The opinions contained herein are those of the author(s) and do not necessarily represent the official position of the U.S. Department of Justice. References to specific companies, products, or services should not be considered an endorsement of them by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.

For questions and information about the Toolkit, contact the Maine Methamphetamine Prevention Project at 621-8118.

June 2011 Revised September 2012

MAINE METHAMPHETAMINE PREVENTION TOOLKIT

The Toolkit is an early intervention and prevention strategy for Maine communities. While methamphetamine is not currently a significant drug threat in Maine, other states have reported that widespread use and production of methamphetamine developed overnight. The Toolkit is designed to raise awareness about methamphetamine production and use, and to provide prevention, intervention and public safety resources.

The Maine Methamphetamine Prevention Toolkit was made possible by a grant from the Maine Department of Public Safety, Maine Drug Enforcement Agency through the U.S. Department of Justice Community Oriented Policing Services, Grant #2008-CK-WX-0500.

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For questions and information about the Toolkit, contact the Maine Methamphetamine Prevention Project at 621-8118.

Maine Methamphetamine Prevention Project

The goals of the Maine Methamphetamine Prevention Project are

- to increase awareness about the harm associated with methamphetamine production and use and
- to increase capacity of key institutions and community members to prevent the production and use of methamphetamine in Maine.

Visit <u>www.maineosa.org/prevention/community/meth/</u> for tips for landlords and home visitors, fact sheets, information about Drug Endangered Children, and MethWatch resources for retailers.

Project Consultant: Rebecca Miller, MPH, BSN, CSPI, CHES

June 2011, rev. Dec 2012

MAINE METHAMPHETAMINE PREVENTION TOOLKIT

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- Section 8: Tools and Online Resources
- Section 9: PowerPoint Presentation

Section 1: Contact Information

If you suspect methamphetamine related activity, <u>always</u> put your own safety first. Leave the scene immediately and contact your local police, sheriff, or state police for assistance.

Maine Drug Enforcement Administration

To report suspected methamphetamine use, meth lab or other illicit drug activity: you can provide confidential drug tip information by calling the Drug Tip Hotline at 800-452-6457 or by providing information at www.maine.gov/dps/mdea/drugtip.html

To contact your local Maine DEA district Task Force for general information: www.maine.gov/dps/mdea/districttaskforces.html

Substance Abuse Prevention, Treatment and Recovery

The Maine **Office of Substance Abuse and Mental Health Services** provides leadership in substance abuse prevention, intervention, and treatment. Its goal is to enhance the health and safety of Maine citizens through the reduction of the overall impact of substance use, abuse, and dependency. <u>www.maineosa.orq</u>

The **Information and Resource Center (IRC)** at the Office of Substance Abuse and Mental Health Services houses a collection of books, videos/dvds, and pamphlets which are searchable online, as well as library materials available on loan, and free pamphlets and handouts. Staff will assist with searches for information. <u>www.maineosa.org/irc</u>

The Maine Association of Substance Abuse Programs (MASAP), with its affiliate programs the Maine Alliance for Addiction Recovery (MAAR) and the Maine Alliance to Prevent Substance Abuse (MAPSA), represents and advocates for the continuum of substance use and addiction services throughout Maine, from prevention through treatment to recovery. <u>www.masap.org</u>



Maine Drug Enforcement Agency

Roy E. McKinney, Director 45 Commerce Drive, Suite 1 Augusta, ME 04330 (626-3850)

Statewide Tip Line – 1-800-452-6457 www.maine.gov/dps/mdea

Division I – Commander Ken Pike (822-0371)

- District 1 York DTF (York County) Supervisor Peter Mador – 459-1332
- District 2 Cumberland DTF (Cumberland County) Supervisor Kevin Cashman – 822-0373
- District 3 Western Maine DTF (Franklin, Oxford and Androscoggin Counties) Supervisor Matthew Cashman – 783-5334
- District 6 Mid Coast DTF (Waldo, Knox, Lincoln and Sagadahoc Counties) Supervisor James Pease – 594-6182
- Division II Commander Darrell Crandall (532-5170)
- District 4 South Central DTF (Kennebec and Somerset Counties) Supervisor Lowell "Chip" Woodman – 624-8983
- District 5 North Central DTF (Piscataquis and Penobscot Counties) Supervisor Brad Johnston – 941-4738
- District 7 Down East DTF (Hancock and Washington Counties) Supervisor Corey Bagley – 664-2443
- District 8 Aroostook DTF (Aroostook County) Supervisor Shawn Gillen – 532-5171

December 2012

Section 2: Methamphetamine in Maine

In This Section:

Methamphetamine Threat in Maine, Muskie School of Public Service Research and Policy Brief, University of Southern Maine, September 2007. <u>http://muskie.usm.maine.edu/justiceresearch/Publications/Adult/Methampheta</u> <u>mine Threat in Maine.pdf</u>

Help Prevent Methamphetamine Use in Maine Help Prevent Methamphetamine Manufacturing in Maine

Maine Methamphetamine Prevention Project

Methamphetamine in our backyard, Lewiston Sun Journal (Perspective), February 14, 2010 <u>www.sunjournal.com/node/788963</u>

History of Methamphetamine, <u>www.nationalmethcenter.org</u> This information was accessed in 2011 from <u>www.nationalmethcenter.org</u>, a website that is now disabled.

Research & Policy Brief

Methamphetamine Threat in Maine

Overview

The use of methamphetamine had previously been limited to the Pacific Northwest and to large Western states, but over the past years, the drug has begun to diffuse across the country. Today, the Pacific Northwest, the Southwest, and the Midwest, regions once saturated with methamphetamine, have all decreased their have all decreased their number of methamphetamine laboratories. However, the Eastern corridor is just beginning to feel the effects of the drug, with the number of labs either increasing or staying constant in these states. Without preventative measures, these states could morph into havens for methamphetamine manufacturers. The drug has reached the Maine border, and while comparatively it is not a large problem, the state should take action to prevent the problem from spiraling out of control.

Most of the methamphetamine in the United States is traced back, or found in, domestic clandestine laboratories, so the focus of the fight against ethamphetamine nationally has primarily been on restricting the sale of **precursor chemicals**, chemicals like pseudoephedrine, ephedrine, and phenylpropanolamine, in an effort to cease the production of the drug. Commander Crandall of the Maine Drug Enforcement Agency, however, has noticed a new trend of methamphetamine crossing the Mexican and Canadian border (personal communication, June 13, 2007). This could result in new preventative policies focusing on international negotiations.

The typical user of methamphetamine, a drug that can be smoked, snorted, ingested, or injected, is a rural white male or female. Traffickers used to be limited to motorcycle gangs or members of the club/rave culture, but recently there has been an emergence of Mexican groups taking control of methamphetamine trafficking. These new traffickers are using their previously established drug routes to infiltrate the Eastern seaboard (U.S. Drug Enforcement Agency, 2007)

What Has the Federal Government Done?

The Comprehensive Methamphetamine Control Act was passed by Congress in 1996. This act was passed to identify methamphetamine as being a "dangerous, harmful, and highly addictive drug." The act also went on to state that "aggressive action is needed by law enforcement...and a coordinated effort should be undertaken to fight abuse." Additionally, within the provisions of this act, the penalties for trafficking and producing methamphetamine were increased, as well as for the theft of anhydrous ammonia, and restrictions were placed on the sale of precursor chemicals (Ryan, et al, 2005).

In 2004, the National Synthetic Drugs Action Plan was put into effect. This national plan addresses the problems of synthetic and pharmaceutical drug trafficking and abuse (The White House, 2006).

September 2007

Fast Facts

- In 2005, 108,905 hospital emergency visits were due to methamphetamine abuse in the United States, a 48% increase since 2004
- From 1995-2005 there was an increase in methamphetamine treatment admissions from 47,675 to 152,368 persons across the country
- Between January 2005 and July 2006 there were 31 methamphetaminerelated arrests in Maine. 23 of these arrests were in Aroostook County.

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The Muskie School of Public Service educates leaders, informs public policy and strengthens civic life. The School links scholarship with practice to improve the lives of people of all ages in every county in Maine, and in every state in the nation.

President Bush signed the United States of America Patriot Improvement and Reauthorization Act of 2005 in 2006, an act "that strengthens federal, state and local efforts to combat the spread of methamphetamine" across the country. (Office of National Drug Control Policy, 2007).



What Have Other States Done?

Many states have implemented successful policies and intervention strategies to fight methamphetamine production and addiction.

Montana:

Montana, in addition to following the CMEA guidelines, also imposes a "sales limit of nine grams in a 30-day period." Going beyond legislation, the state has begun the Montana Meth Project, an awardwinning media blitz with the motto "Not Even Once." Through the use of extensive advertising, the project targets kids ages 12-17 almost everyday of the year. Three surveys have been conducted (2005, 2006, 2007), the results of which have proven the effectiveness of the campaign. Many more people now understand the dangers of meth. Since the project and legislation, there has been a 70% decrease in workers testing positive for meth, 41% in criminals testing positive for meth, and 52% decrease in meth-related crime. Lab incident seizures declined by 68%. Arizona is now closely working with Montana to begin its own media storm.

Illinois:

Illinois, in addition to the CMEA statues, has mandated that "all products containing pseudephedrine or ephedrine are designated as Schedule V drugs." Illinois has also collected data on certain "indicators": arrests, seizures and submissions, clandestine lab seizures, prison admissions, and drug treatment admissions. Through presenting the data, the state was able to secure \$3.5 million from the government to combat drug crime in the heavily affected rural areas. Additionally, there is now a meth manufacturing online registry. The results of these new interventions include a 17% decline in meth lab incidents from 2004-2005 year, and a 15.1% decrease in positive workplace drug tests in the first 5 months of 2006. The gap between seizure reporting and drug treatment was also exposed, and can now be addressed by the state in future hearings.

New Hampshire:

In New Hampshire, there was a conference of state legislators to ensure that all were aware of the issues and that preventative legislation was in the works; this conference was an effort to go beyond the CMEA statutes. New Hampshire also wishes to lobby the federal government, with fellow New England states, to gain funding for evidence-based treatment practices for meth addicts. New Hampshire frequently administers regional trainings to help law enforcement and first responders, and has started a public education campaign with DHHS (who serves as the central dissemination locale). The results of these interventions are positive; workplace positive tests have decreased by 25.3% in the first 5 months of 2006.

What Has Maine Done?

The state of Maine has just begun to quantify the impact of methamphetamine while almost simultaneously implementing new legislation and intervention policies to grapple with this identified impact. Earlier, in the 1990s, Maine was faced with a similar methamphetamine problem in Aroostook County. While the problem was isolated to the county, there were over 50 methamphetamine traffickers arrested over an 18 month – 2 year period. One incident yielded the seizure of 7 pounds of methamphetamine, thought to have originated from the Western United States. Through "successful enforcement operations" the problem was quelled,

but seems to have again reemerged. The methamphetamine now, though, originates predominately from Mexico or Canada and is in the more potent crystallized form, according to Commander Crandall from the Maine Drug Enforcement Agency (personal communication, June 13, 2007).

Maine's Office of Substance abuse has sponsored the Maine Methamphetamine Prevention Project, an attempt to increase awareness in regard to abusing or manufacturing methamphetamine. The project is also coordinating an effort to increase the capacity of particular institutions and community members to ensure that the methamphetamine problem does not continue to spread.

Maine's "MethWatch" program is a result of 2005 legislation, and is designed to prevent the abuse of methamphetamine. A voluntary program that is compromised of both members of the community and of members of the state (i.e., law enforcement, state and local police officials, national guard, community activists, and drug prevention personnel), with a main focus on retailers of precursor chemicals. Workers are trained to identify any possible methamphetamine-related activities (Maine Office of Substance Abuse, 2006).

Policy Implications

Through the nation's preventative legislation, and through the public awareness campaigns of several states, domestic manufacturing has greatly decreased. However, while some states have also decreased their methamphetamine use, many are still fighting rising statistics like Maine.



Maine must overcome many hurdles in order to prevent the ballooning of the methamphetamine problem. One hurdle is Interstate 95, a perfect north-south route for traffickers. Another hurdle for Maine is the miles of coastline which offer ample opportunities for maritime smugglers, in addition to the porous Canadian border. The rural culture of Aroostook County coupled with the present abuse and availability of the drug will continue to be a scourge for law enforcement (U.S. Drug Enforcement Agency, 2007).

Because the dismantling of clandestine methamphetamine labs has been successful thus far, the nation now must look to curing addiction. Without the demand, the supply will diminish. Historically, however, methamphetamine addiction has been very hard to treat, with similar success rates to cocaine. There are a few evidence-based treatment methods that are noteworthy, including the Matrix Model, or a similar contingency management plan, and for addict offenders, the Drug Court system. Through continued use of these models, and through additional funding from federal and state governments to cure addiction, the methamphetamine problem that is ravaging the nation could be finally kept at bay.

What is Methamphetamine?

Methamphetamine - often referred to as "meth" is an addictive stimulant that users inject, snort, smoke or swallow. It affects the brain and central nervous system.

As meth enters the body, users feel an intense rush followed by a prolonged feeling of well being. As the high wears off, it leaves the user feeling lethargic, irritable, depressed, and with intense cravings for the drug.

Street Names for Methamphetamine

Meth	Speed	Ice	Tweak	
Crank	Crystal	Glass	Go-Fast	
Pre-made tablets are called YABA tablets.				

Note: Methamphetamine is **not** <u>the drug methadone</u> which is a narcotic pain reliever that is used to treat pain and drug addiction.

Methamphetamine Ingredients

Methamphetamine is made using common household chemicals combined with pseudoephedrine or ephedrine—the active ingredient found in cold tablets or diet drugs Ingredients and supplies can include:

Coffee filtersStarter fluidPaint ThinnerAluminum foilLithium batteriesAcetoneCold packsDranoClear plastic tubingFertilizer containing ammonium nitrateMatchbook Striker Plates

Methamphetamine Manufacture

Most methamphetamine in Maine is made by mixing ingredients in containers like 20 ounce plastic soda bottles, known as "one pot" or "shake and bake" labs. Because this method is portable, producers often discard plastic bottles that may contain toxic or flammable chemicals on the side of the road.

One pot labs can be located anywhere. If you find a discarded plastic bottle that contains an unknown substance, do not pick it up or open it. Call your local police or sheriff about the possible danger.

Signs and Symptoms of Methamphetamine Use

- Not sleeping for extended periods of time
- Extreme weight loss
- Dramatic mood swings
- Increased heart rate, blood pressure, and breathing
- ➢ Hallucinations
- Paranoia or excessive panic
- Nervous activity
- Irritable, aggressive, even violent behavior
- > Open sores caused by picking at the skin
- \succ Tooth decay
- Unpleasant body odor that might smell like glue or mayonnaise
- Unexplained burns from chemicals or fire

Pregnancy & Methamphetamine

Methamphetamine use during pregnancy increases the risk of premature delivery, lower birth weight, learning disabilities and developmental delays. It can also affect development of the baby's brain, spinal cord and heart.

> Concerned about a friend, family member or yourself? Help is available.

Call the Office of Substance Abuse and Mental Health Services, Information & Resource Center at **1-800-499-0027**

or call 2-1-1 (in Maine only, 24 hours a day)

If you are concerned about the safety of a child, call the DHHS 24-hour Hot Line at: 1-800-452-1999.

IMPORTANT WARNING: If you suspect methamphetamine production activity always put your own safety first. Leave the scene immediately and contact your local police or sheriff for assistance.

Maine MethWatch 207.621.8118/Website: <u>http://maineosa.org/prevention/community/meth/methwatch/index.htm</u> Special thanks to the VT Dept. of Public Safety, VT Criminal Justice Training Council, the VT Dept. of Health, Div. of Alcohol and Drug Abuse Programs and the Kansas Methamphetamine Prevention Project for providing the template and information for this handout.

Help Prevent Methamphetamine Manufacturing in Maine

Most methamphetamine in Maine is now produced by small operations, often by people using the "One Pot" or "Shake and Bake" method. These methamphetamine labs can produce less than 2 ounces at a time in about 30 minutes by mixing or shaking ingredients in containers like 20 ounce plastic soda bottles.

- Because this method is portable, producers often discard plastic bottles that may contain toxic or flammable chemicals on the side of the road.
- One Pot labs can be located anywhere someone can hide the common household items used to make methamphetamine and a container for mixing, including homes, hotels, sheds, and cars. They can even be carried in suitcases and backpacks.
- If you find a discarded plastic bottle that contains an unknown substance, do not pick it up or open it. Call your local police or sheriff and alert them to the possible danger.

Signs of a Methamphetamine Lab in a Building or Home

- > Unusual, strong, chemical-like odors
- Unusual number of chemical containers/bottles/jars
- Covered or blacked out windows
- ➤ Lots of traffic, especially at night
- ➤ Exhaust fans
- People demonstrating paranoid or odd behavior
- > People who are secretive and protective of the area.

IMPORTANT WARNING: If you suspect methamphetamine related activity always put your own safety first. Leave the scene immediately and contact your local police or sheriff for assistance.

Ingredients Methamphetamine is made using common household chemicals combined with pseudoephedrine or ephedrine, the active ingredient found in cold tablets or diet drugs. Other ingredients and supplies can include:

Coffee filters	Aluminum foil	Lithium batteries	Acetone
Paint Thinner	Starter fluid	Cold packs	Drano
Clear plastic tubing	Matchbook Striker Plates	Fertilizer containing ammonium nitrate	

Who should be aware?

Retail business owners & employees who sell products that can be used to manufacture methamphetamine: pharmacies, auto and building supply stores, propane exchange locations, convenience and grocery stores.

Anyone who deals with property: realtors, landlords, hotel/motel owners and employees, property inspectors and appraisers.

Farmers and farm supply store owners and employees: farmland contaminated by dumping of the chemicals used in methamphetamine production, and agricultural chemicals stolen by methamphetamine producers.

Maine Drug Enforcement Agency Drug Tip Line 1-800-452-6457 All calls are anonymous.

You can also make anonymous reports of drug crime on the MDEA website at <u>www.maine.gov/dps/mdea</u>

or use the smartphone application for Android and iPhone at MyPD.

Public Safety and Environmental Hazards of Methamphetamine Labs

- Mixing the chemicals used in methamphetamine production produces toxic and potentially explosive fumes. Breathing fumes may cause permanent damage to nasal passages, lungs, and the brain.
- Lab cleanup is extremely expensive and beyond the financial capabilities of Maine cities and towns. The average cost of cleanup is about \$5,000 but may cost as much as \$150,000, plus the costs to the property owner.
- Careless disposal of contaminated garbage and toxic chemicals can pollute water supplies and leach into the ground, and chemicals can be dumped in bathtubs and sinks. Labs may have many liquids or substances in marked & unmarked containers. Any substances from a meth lab are deemed hazardous waste.
- Six pounds of toxic waste are produced for each pound of methamphetamine manufactured in labs.

Maine MethWatch 207.621.8118/Website: <u>http://maineosa.org/prevention/community/meth/methwatch/index.htm</u> Special thanks to the VT Dept. of Public Safety, VT Criminal Justice Training Council, the VT Dept. of Health, Div. of Alcohol and Drug Abuse Programs and the Kansas Methamphetamine Prevention Project for providing the template and information for this handout.

Methamphetamine in our backyard

By Christine Letcher

Published on Sunday, Feb 14, 2010 at 12:12 am | Last updated on Sunday, Feb 14, 2010 at 12:12 am

It is likely that neighbors in Lewiston were shocked to see drug agents in chemical suits searching a home in their backyard (Sun Journal story Feb. 4). Maine is not exempt from methamphetamine but clearly has been leading the charge to address this dangerous drug and the horrific effects it can have on communities.

In 2005, Maine became one of the first states in the country to restrict the sale of pseudoephedrine. This has been one of the most effective ways that states have been able to reduce home labs and combat the problem.

Locally, Healthy Androscoggin is working with Project Unite, our countywide substance abuse prevention steering committee to address some of these concerns. The Project Unite Committee provides trainings for parents and schools, implements social marketing campaigns to change the community norms around alcohol and drug abuse, and helps coordinate prescription drug take-back programs.

The Project Unite committee has representation from school substance abuse counselors, law enforcement agencies, social services, treatment providers, parents, school administrators, school resource officers, the District Attorney's office, and media/business leaders. One thing that is unique about our coalition is that we have a very successful balance between law enforcement and substance abuse prevention messages. The two work hand in hand to lower our youth use rates in the county.

In fact, in 2007, Healthy Androscoggin completed an extensive needs and resources assessment of the towns in Androscoggin County and engaged community members in a strategic prevention planning process to address the issue of substance abuse. As a result, we created the Alcohol Investigator position as well as the Alcohol Enforcement Team made up of representatives from the Auburn Police Departments, the Lisbon Police Department, Lewiston Police Department, the Androscoggin County Sheriffs' Office and Healthy Androscoggin.

While our underage drinking rates have gone below the state level, we are finding that the use of inhalants and prescription drugs are rising. The latest bust of a meth lab is very concerning to us.

Healthy Androscoggin is a member of the Maine Methamphetamine Prevention Project which has two major goals:

• Increase awareness about the harm associated with methamphetamine production and use.

• Increase capacity of key institutions and community members to prevent the production and use of methamphetamine in Maine.

Maine Methamphetamine Prevention Project has a variety of members ranging from the Director of Maine Drug Enforcement Agency, Roy McKinney to Community Coalitions like Healthy Androscoggin.

Since the spring of 2005, the Maine Drug Enforcement Agency laboratory response team has investigated nearly 70 complaints of drug manufacturing across Maine. Sixteen of those investigations have resulted in the seizure of suspected manufacturing operations.

MDEA manages a team of 14 agents and three forensic chemists from the state's Health and Environmental Testing Lab who are trained and certified to OSHA standards to enter and process crime scenes that contain hazardous materials. At each scene, MDEA's team is supported by the Maine Department of Environmental Protection, as well as local police, fire and EMS crews.

The Maine Alliance to Prevent Substance Abuse oversees the current methamphetamine grant from the Office of Community Oriented Policing Services, U.S. Department of Justice; and is working in partnership with the Maine Drug Enforcement Agency to address these issues.

In fact, there will be a methamphetamine prevention educational training session in Lewiston on May 10, and community members are encouraged to sign up to learn more. Additionally, there is an upcoming inhalant training open to the public on March 3, sponsored by Safe Schools Healthy Students. To find out more about these trainings, call 795-2506 or visit www.healthyandroscoggin.org.

Healthy Androscoggin is a community coalition dedicated to improving the health of Androscoggin County citizens through collaborative planning, community action, education and prevention. The coalition has four main community goals that include: supporting tobacco free lifestyles, increasing physical activity, promoting healthy eating, and preventing substance abuse. Healthy Androscoggin, a Healthy Maine Partnership, is funded in part by the Fund for a Healthy Maine.

Christine Letcher is health promotion coordinator for Healthy Androscoggin.

Methamphetamine History

1887-1893 Amphetamine and methamphetamine were first formulated in Germany and Japan respectively at the close of the 1800s. A Japanese scientist was the first to create crystal methamphetamine in 1919.

1930s-40s Germany and Japan both dispensed methamphetamine to their troops in battle. The Germans mixed the drug with chocolate and handed it out to increase soldiers' stamina in the field. Armies used Meth to push soldiers in WWII.

1950s Japan had large stockpiles of the drug at the end of World War II and it was made available shortly after the war. In 1951, however, the health ministry banned the substance and for the first time, methamphetamine went underground as an illegal drug distributed by the notorious Yakuza. In the United States, methamphetamine was available by prescription for a wide variety of ailments including alcoholism, narcolepsy, depression and obesity.

1960s A desire to experience methamphetamine's incredible "high" begat an increased demand for recreational use of the drug. Small labs began showing up, particularly on the West Coast, as "cookers" manufactured meth for their own use. Some larger-scale "super labs" increased production and the supply on the street.

1970s-80s Recreational use of methamphetamine climbed quietly but steadily until the mid-1980s when federal authorities in both the U.S. and Canada outlawed possession of some chemicals and equipment used to make methamphetamine. Instead of curbing methamphetamine use, the new rules drove labs further underground and the drug's use actually spread from the West to the Midwest and South.

1990s As methamphetamine use continued to grow, state and federal lawmakers passed several laws to slow its manufacture in the U.S. Progress against meth cooking was slow and spotty and its use went on largely unabated.

2000s The biggest advance against methamphetamine manufacture came in 2005 with the federal Combat Methamphetamine Epidemic Act of 2005. Under the law's terms, severe limits were placed on the purchase of the drug's main ingredients– ephedrine and pseudoephedrine as used in cold capsules such as Sudafed. In addition, all drugs containing these key ingredients were placed behind pharmacy counters to avoid theft. As domestic labs were shut down, demand was met by offshore operations, largely in Mexico. U.S. Customs and Border Patrol methamphetamine seizures at just two major U.S.-Mexico border stations soared from 811 pounds in 2004 to 2,960 two years later.

Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website that is now disabled.

Section 3: Facts about Methamphetamine Signs and Symptoms, Biology, and Awareness

In This Section:

Basic Facts about Methamphetamine, Source: This information was accessed in 2011 from www.methresources.gov which now redirects to the ONDCP website (2012).

Signs and Symptoms of Methamphetamine, Source: This information was accessed in 2011 from *NIDA InfoFacts: Methamphetamine* which is no longer available on the NIDA website.

Anatomy of a Meth User, www.kci.org

Methamphetamine Abuse and Addiction, National Institute on Drug Abuse (NIDA) Research Report Series <u>http://www.nida.nih.gov/PDF/RRMetham.pdf</u>

Methamphetamine and Teens, Source: This information was accessed in 2011 from www.theantidrug.com which now redirects to <u>www.drugfree.org</u>.

Biology, Behavior and the Brain: Methamphetamine Addiction, Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website which is now disabled.

Links:

Frontline: The Meth Epidemic, www.pbs.org/wgbh/pages/frontline/meth/ (video)

NIDA Drug Facts: Methamphetamine, www.drugabuse.gov/drugs-abuse/methamphetamine NIDA Drug of Abuse: Methamphetamine, www.drugabuse.gov/publications/drugfacts/methamphetamine Source: National Institute on Drug Abuse (NIDA)

Methamphetamine Use and Risk for HIV/AIDS, Centers for Disease Control (CDC) HIV/AIDS Fact Sheet <u>www.cdc.gov/hiv/resources/factsheets/meth.htm</u>

Technical Support Document: Toxicology/Clandestine Drug Labs: Methamphetamine, California Office of Environmental Health Hazard Assessment, Volume 1, Number 8 <u>http://oehha.ca.gov/public_info/pdf/TSD%20Methamphetamine%20Meth%20La</u> <u>bs%2010'8'03.pdf</u>

Basic Facts about Methamphetamine

Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. Methamphetamine is closely related chemically to amphetamine, but the central nervous system effects of methamphetamine are greater. Both drugs have some medical uses, primarily in the treatment of obesity, but their therapeutic use is extremely limited.

The chemicals or ingredients needed to manufacture methamphetamine are often illegally diverted from legitimate sources. Some of these precursor chemicals 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).

Methamphetamine comes in more than one form – it can be smoked, snorted, injected, or orally ingested, though smoking has become more common recently. Smoking leads to very fast intake into the brain, which multiplies the user's potential for addiction and health implications.

Street methamphetamine is referred to by many names, such as "speed," "meth," and "chalk." Methamphetamine hydrochloride, clear chunky crystals resembling ice, which can be inhaled by smoking, is referred to as "ice," "crank," "crystal," "tina," and "glass."

Source: This information was accessed in 2011 from www.methresources.gov which now redirects to the ONDCP website (2012).

Signs & Symptoms of Methamphetamine

There are certain signs associated with meth use that can be noticeable from the first time someone tries the drug. Not every user will display every one of these symptoms; other illicit drugs may also cause similar signs.

Signs of early meth use include:

- Euphoric "high" state (excessively happy)
- Decreased appetite
- Increased physical activity
- Anxiety, shaking hands, nervousness
- Incessant talking
- Rapid eye movement
- Increased body temperature (can rise as high as 108 degrees and cause death)
- Dilated pupils
- Sweating not related to physical activity

If you suspect someone might be using meth, symptoms can include:

- Paranoia
- Sleeplessness and severe depression
- Nausea, vomiting, diarrhea
- Extreme irritability and anxiety
- Seizures
- Teeth grinding, bad teeth, and body odor
- Skin ulceration and infections, the result of picking at the skin or imaginary bugs
- Auditory and visual hallucinations
- Violent and erratic behavior
- Nervousness
- Anhedonia loss of pleasure
- Dryness of mucous membranes
- Burnt or blistered lips and/or fingertips from holding hot "Ice Pipes"

Source: This information was accessed in 2011 from *NIDA InfoFacts: Methamphetamine* which is no longer available on the NIDA website.

ANATOMY OF A METH USER

Extreme loss of appetite Malnutrition Anorexia Extreme rise in body temperature, which can cause brain damage Loss of vision Tooth decay Dry mouth Permanent nerve damage

Self-inflicted wounds from removing hallucinartory 'crank bugs' / 'meth bites' Sores take longer to heal

Breakdown of muscle tissue which may lead to kidney failure Putrid body odor

Bone loss from mineral and vitamin difficiencies Hair loss

Resipiratory failure Toxic vapors scorch or burn the exophagus and lungs Crystals form in lungs Chest pain High blood pressure Build-up of fluid in the lungs and brain Liver damage Kidney and lung disorders

www.kci.org ©2008

METH RESPECTS NO ONE!

Meth is different; it isn't going away. Once it gets into your community, it stays.

Source: www.kci.org

Topics in Brief National Institute on Drug Abuse



Methamphetamine Addiction: Progress, but need to remain vigilant– November 2011

A Research Update from the National Institute on Drug Abuse

Declines in Methamphetamine Abuse by Youth

- Approximately 13 million people 12 years and older have abused methamphetamine in their lifetimes; in 2010, approximately 353,000 were current users (NSDUH).
- According to NIDA's 2010 Monitoring the Future Survey, the abuse rate among 8th 10th, and 12th graders declined significantly between 1999 and 2007 and has remained unchanged since then (Figure 1).
- Abuse remains noteworthy in certain areas of the country with indicators suggesting particular problems in Hawaii, the West Coast, and the Midwest.
- Methamphetamine's potent addiction
 liability and destructive health and social
 consequences make its abuse particularly dangerous.



Methamphetamine acts by increasing the release of dopamine in the brain, which leads to feelings of euphoria. However, this surge of pleasure is followed by a "crash" that often leads to repeated use of the drug and eventually to difficulty feeling any pleasure at all, especially from natural rewards. Long-term methamphetamine abuse also results in many damaging physical and psychiatric effects, such as:

- Addiction
- Violent Behavior
- Anxiety
- Confusion
- Insomnia
- Psychotic symptoms (e.g. paranoia, hallucinations, delusions)
- Cardiovascular problems (e.g. rapid heart rate, irregular heartbeat, increased blood pressure, stroke).

What Does Methamphetamine Do to the Brain?

Methamphetamine's adverse effects on the brain are clear. Imaging studies have demonstrated



changes in the dopamine system (important for reward, motivation, and learning) as well as structural and functional deficits in brain areas associated with emotion and memory. These may account for the psychiatric and cognitive problems observed in chronic abusers. Fortunately, some of the methamphetamine-induced deficits in dopamine function have been shown to recover, at least partially, with extended abstinence (Figure 2). But even

with the partial recovery found in some brain regions following protracted abstinence, other regions do not show recovery of function—suggesting that long-lasting and even permanent brain changes may result from methamphetamine abuse.

Methamphetamine and HIV

Methamphetamine is inextricably linked with HIV, hepatitis C, and other sexually transmitted diseases. Its abuse increases the risk of contracting HIV not only through the use of contaminated injection equipment, but also through increased risky sexual behaviors and through physiological changes that may favor HIV transmission.

Methamphetamine abuse may also affect HIV disease progression. For example, clinical studies suggest that current methamphetamine abusers on highly active antiretroviral therapy may be at greater risk of developing AIDS than non-users, possibly due to poor medication adherence or interactions between methamphetamine and HIV medications. Similarly, preliminary studies suggest that interactions between methamphetamine and HIV itself may lead to more severe consequences for HIV-positive patients who abuse methamphetamine, including greater brain damage and cognitive impairment. More research is needed to better understand these interactions.

Treatments for Methamphetamine Addiction

Methamphetamine addiction can be successfully treated. For example, the Matrix Model consists of a 16-week intervention that includes intensive group and individual therapy to promote the behavioral changes needed to remain abstinent, prevent relapse, and establish a lifestyle unrelated to drugs. When applied to methamphetamine abusers, the Matrix Model has been shown to significantly reduce drug use (Figure 3).

Motivational Incentives for Enhancing Drug Abuse Recovery (MIEDAR), an incentive-based method for promoting cocaine and methamphetamine abstinence, is another treatment that has demonstrated efficacy in methamphetamine abusers through NIDA's National Drug Abuse Clinical Trials Network.

There are currently no medications approved for the treatment of methamphetamine addiction. However, NIDA has made medications development a high priority. For example, a recent clinical trial revealed that the antidepressant bupropion, marketed as Welbutrin® is effective in reducing methamphetamine abuse in low/moderate users. Additional clinical trials of



bupropion, and other medications (e.g., the antidepressant Mirtazapine) are currently underway. NIDA is also pursuing the novel approach of using vaccines, where antibodies are generated against the drug itself, to treat methamphetamine addiction. The antibodies would bind methamphetamine while it is still in the bloodstream, reduce its entry into the brain, and block its rewarding effects.

For further information please visit NIDA on the web at <u>www.drugabuse.gov</u> or contact:

Public Information and Liaison Branch Office of Science Policy and Communications Phone 301-443-1124/Fax 301-443-7397 information@nida.nih.gov

National Institute on Drug Abuse, U.S. Department of Health and Human Services

NATIONAL INSTITUTE

Meth And Teens (Source: Parents: The Anti-Drug)

Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. Methamphetamine is closely related chemically to amphetamine, but the central nervous system effects of methamphetamine are greater. Both drugs have some medical uses, primarily in the treatment of obesity, but their therapeutic use is limited.

Street methamphetamine is referred to by many names, such as "speed," "meth," and "chalk." Methamphetamine hydrochloride, clear chunky crystals resembling ice, which can be inhaled by smoking, is referred to as "ice," "crystal," and "glass."

<u>Health Hazards</u>

Neurological hazards. Methamphetamine releases high levels of the neurotransmitter dopamine, which stimulates brain cells, enhancing mood and body movement. It also appears to have a neurotoxic effect, damaging brain cells that contain dopamine and serotonin, another neurotransmitter. Over time, methamphetamine appears to cause reduced levels of dopamine, which can result in symptoms like those of Parkinson's disease, a severe movement disorder.

Addiction. Methamphetamine is taken orally or intranasally (snorting the powder), by intravenous injection, and by smoking. 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. Users may become addicted quickly, and use it with increasing frequency and in increasing doses.

Short-term effects. The central nervous system (CNS) actions that result from taking even small amounts of methamphetamine include increased wakefulness, increased physical activity, decreased appetite, increased respiration, hyperthermia, and euphoria. Other CNS effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness. Hyperthermia and convulsions can result in death.

Long-term effects. Methamphetamine causes increased heart rate and blood pressure and can cause irreversible damage to blood vessels in the brain, producing strokes. Other effects of methamphetamine include respiratory problems, irregular heartbeat, and extreme anorexia. Its use can result in cardiovascular collapse and death.

How Dangerous Is It to Teens?

While meth use in the U.S. has been declining, widespread media coverage about the drug often raises many questions and causes parents to worry about whether their children are exposed to or using this dangerous substance. Meth is a stimulant drug used for the euphoria it produces and for weight loss and increased libido. The down side of the high is addiction

and a variety of toxic short- and long-term effects. One of the most serious and unpleasant side effects is "meth mouth," where the users' teeth rot from the inside out.

Parents need to talk to their kids about meth and the reality of what it does to the body. Parents also need to know when their teen might be using meth. Some of the most common signs and symptoms are extremely dilated pupils, dry or bleeding nose and lips, chronic nasal or sinus problems and bad breath. Because meth is a stimulant, users also experience hyperactivity and irritability. This includes a lack of interest in sleep and food, leading to drastic weight loss or anorexia. It may also cause users to be aggressive, nervous, and engage in disconnected chatter.

Some short-term effects are irritability, anxiety, insomnia, Parkinson-like tremors, convulsions and paranoia. Longer-term effects can include increased heart rate and blood pressure, damage to blood vessels in the brain, stroke and even death. Psychotic symptoms can sometimes persist for months or years even after the user has stopped taking the drug.

Meth use is declining among youth. The Monitoring the Future study shows that among 8th, 10th, and 12th graders, meth use has declined by 28, 47, and 51 percent respectively in the past three years.

It is important to note that **marijuana is still the single largest drug of abuse in this country** — 15 million current or past month users compared to one million meth current or past month users. **Meth is often in the news because of its dramatic effects and consequences.** Illegal meth labs often explode, creating danger to communities through fires. Meth labs on public lands create dangers to hikers and tourists, and children of meth users are often abandoned or neglected and are flooding the social services systems in many areas. Meth is easily made with common ingredients and readily available household equipment, making it widely and inexpensively available.

Adult methamphetamine addicts often become so obsessed with the drug that they neglect their children. Twenty percent of the meth labs raided in 2002 had children present. In addition to general neglect, children living in meth labs face a variety of dangers including the usual meth lab hazards — fires, explosions and exposure to extremely toxic chemicals. Chronic exposure to meth lab chemicals can damage the brain, liver, kidneys and spleen and can also cause cancer.

If you suspect a teen in your life is using meth or is exposed to meth, the time for a courageous conversation is now. Discuss the risks and effects of using this substance. Even without addiction, experimentation is too great a gamble. If something interrupts your conversation, pick it up the next chance you get.

Source: This information was accessed in 2011 from www.theantidrug.com which now redirects to <u>www.drugfree.org</u>.

Biology, Behavior, and the Brain: Methamphetamine Addiction

Methamphetamine is a powerful drug, roaring through our reservations at an alarming rate of "speed." Maybe you've seen a movie that depicts some of the paranoid behaviors of a meth addict, or maybe there's someone from your own life experience who has used crystal meth. I know that has been true in my life. Though we may have seen the outward effects of crank use, most of us have no idea how this deadly, persuasive menace affects us at a biochemical level.

Classified by the scientific community as a psychomotor stimulant, methamphetamine acts as a chemical messenger in the sympathetic nervous system. This is the system responsible for "fight or flight" and other similar behaviors. For this reason, scientists call methamphetamines, cocaine, and other central stimulants sympathomimetics, meaning they act upon the sympathetic nervous system.

Chemical Characteristics of Methamphetamines

Chemical messengers, or neurotransmitters, communicate information at specific receptor sites. Methamphetamine is a compound that mimics a neurotransmitter at **serotonin** (5-HT) and **dopamine** (DA) receptor sites, which means that it relays information as though it were that specific neurotransmitter. The relationship between receptor and receptor site is similar to that of a lock and its key; the receptor site (lock) is prepared to receive only information that the specific neurotransmitter (key) recognizes as its chemical counterpart.

Methamphetamine increases the release and blocks the uptake of dopamine. These monoamines, along with norepinephrine, (NE), and epinephrine (E), play a critical role in understanding the way in which methamphetamines act upon neurotransmitters in the sympathetic nervous system and act on the behavior of the organism.

Behavioral Effects of Methamphetamine

The dopamine and serotonin systems influence aggressive, defensive, social and sexual behaviors. Users of methamphetamines exhibit exaggerations in these behaviors. Bipolar (manic-depressive) people might also behave this way. People using speed also exhibit behaviors similar to a schizophrenic.

In animal studies, methamphetamine consumption stimulates locomotor activity, and produces stereotypic behaviors. These have been related to the norepinephrine, dopamine and serotonin systems.

Drug-related stereotypy is term referring to repetitive behaviors. In rats, stereotypic behaviors may include head sways, hyperactivity, avoidance behaviors, and automutilation (self-mutilation).

E.Rylander, a researcher in the 1960's, studied several Danish methamphetamine users. He was the first to note a behavior known as *Punding*. Punding is performing a useless task compulsively again and again. This seems to be the human equivalent of drug-related stereotypy.

Interestingly, these Danish users reported being aware of their Punding behavior, but were unable to cease performing it. The behavior could be assembling, disassembling, and reassembling an apparatus after a compulsive fashion. Punding is known colloquially as *"tweaker habits,"* and could include coloring, writing, playing cards, or taking apart items in a prolonged and bizarre manner.

Amphetamine psychosis is another prominent aspect of methamphetamine use, and is nearly identical to full-blown schizophrenia. There is a direct relationship between this psychosis and the alterations in the DA system. Other similarities include hallucinations, aggression, and increased excitability.

Biology, Behavior, and the Brain

Animal studies have cast a fascinating light into drug studies at a cellular level. The basic assumption behind all drug use is that it does not take place repeatedly in the absence of some kind of reinforcement or reward. One contemporary model used as a framework for the biological basis of addiction is called the "Brain Reward System." This model studies the psychological and chemical aspects of drug addiction, proposing that an organism engages in a drug-seeking behavior because it is somehow rewarding for them to do so. Experiments show that an animal will work to obtain electrical stimulation to the lateral hypothalamic brain region. Drugs such as methamphetamine lower the threshold for this rewarding brain stimulation.

For psychologists, these are important activities to investigate, because it is essential to understand what the "hook" is for people who get "hooked." (The trouble with drugs is that people who use 'em just keep on using!) The answer to the question, "WHY "is a bit involved, however.

Biopsychology and Addiction

Biopsychology is the study of behavior from a biological perspective. Researchers have established that central stimulants, including methamphetamine, have very specific actions on certain brain structures. These structures, including the brain's pleasure centers, are stimulated, which creates a pleasurable effect on the organism. Studies also show that when an animal receives a stimulant, its reward threshold (minimum level at which an organism becomes sensitive to a pleasurable stimulus) is reduced, an immediate response to a small amount of drug. This electrochemical stimulation is what produces sensations of euphoria.

The sensation of euphoria encourages the organism to repeat the pleasure-producing behavior, but a tricky thing happens after the user experiences the initial enjoyment: It quits being as enjoyable. The reward threshold increases again, meaning that while these drugs may be pleasurable at first, the sensitivity to the drug quickly goes down, and the drug fails to yield the same euphoric results.

This phenomenon is called "Chasing the Ghost" by drug users. There could be an internal mechanism that serves to protect the system from toxification (poisoning), yet the insanity of addiction drives the creature to pursue the pleasurable sensation again and again.

The destructive action of this drug is compelling and profound. Though it is unlikely that drugs will affect every being identically, this overview of the biopsychology of methamphetamine use paints a dark image for anyone who considers using meth.

One might wonder how an understanding of neurotransmitters and Brain Reward Systems can have any impact on the monstrous problem of drug addiction. Some argue that it is a problem only experienced by people of weak moral constitutions or defective characters. In reality, methamphetamine abuse and addiction is an affliction of many people in many cultures. "Fathers, soldiers, sons," anyone can join the ranks of methamphetamine addicts. It remains a leveling influence, a great "respecter of no one."

Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website which is now disabled.

Dopamine Pharmacology Blood capillary Q Ð Tyrosine Ŀ Q Þ Q 🗋 00 Tyrosine hydroxylase D α-Methyl-p-tyrosine °000g ° 0 DOPA Dopa decarboxylase Carbidopa o 0 Dopamine o Drugs that affect dopamine o Synthesis inhibitors \odot a-Methyl-p-tyrosine (blocks tyrosine hydroxylase) Carbidopa (blocks dopa decarboxylase) Vesicular dopamine. Amine depletors Reserpine (interferes with dopamine storage) 68 **Reuptake inhibitor** Cocaine (blocks reuptake of synapsic doparnine) Amine releaser Amphetamine (facilitates synaptic release of B) dopamine) Receptor blockers Chlorpromazine, Haloperidol (blocks postsynaptic dopamine receptors) Catabolic inhibitors ⊛ Pargyline (blocks action of MAO) Tropolone (blocks action of COMT) Reserpine Receptor agonists Apomorphine, Piribedil (stimulates postsynaptic <u>ල</u>ං dupamine receptors) ¢ Ó Amphetamine Pargyline Dopamine autoreceptor Deaminated metabolite (DOPAC) 0 Chloropromazine D 0 Haloperidol 3-O-Methyl dopamineo HVA Ď ٥ Apomorphine сомт Tropolone MÀO Piribedil Postsynaptic receptors Postsynaptic membrane Cocaine

Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website which is now disabled.

Section 4: Types of Methamphetamine, Manufacture and Labs

In This Section:

Drug Guide: Methamphetamine, Source: www.drugfree.org

Diversion – Methamphetamine, Source: This information was accessed in 2011 at www.methresources.gov which now redirects to the ONDCP website (2012).

Signs You May Be Near A Meth Lab, Source: www.kci.org

Meth Production and Trafficking, Source: This information was accessed in 2011 at 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.

Death By Meth, <u>www.deathbymeth.blogspot.com/2006/02/red-p-meth-lab-</u> <u>raided-arkansas.html</u>

The Truth about Pseudoephedrine, <u>www.stltoday.com/news/opinion/article_f5170315-4f30-5670-a32e-</u> <u>557707e285dc.html?print=1</u>

Technical Support Document: Toxicology/Clandestine Drug Labs: Methamphetamine – Red Phosphorus, California Office of Environmental Health Hazard Assessment, Volume 1, Number 12 <u>http://oehha.ca.gov/public info/pdf/TSD%20Red%20Phosphorus%20Meth%20L</u> <u>abs%2010'8'03.pdf</u>

Clandestine Labs Classifications and Hazards, <u>www.forensic-applications.com/meth/meth.html</u>

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/

Diversion- 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 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)	Bronchodialators	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

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 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

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 <u>www.methwatchme.org</u> 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

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.

Section 5: Methamphetamine Prevention, Intervention and Treatment

In This Section:

Early Intervention, Source: This information was accessed in 2011 at www.methresources.gov which now redirects to the ONDCP website (2012).

Methamphetamine Prevention, Source: This information was accessed in 2011 at www.methresources.gov which now redirects to the ONDCP website (2012).

Holding Meth At Bay Is Difficult Process, Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website which is now disabled.

Intervention Strategies, Source: This information was accessed in 2011 at www.methresources.gov which now redirects to the ONDCP website (2012).

Links:

Prevention: Methpedia.org, http://methpedia.org/prevention

Treatment: Methpedia.org, http://methpedia.org/treatment-resources

Preventing Methamphetamine Use in Your Community, CADCA Strategizer #53 <u>www.cadca.org/resources/detail/preventing-methamphetamine-use-your-</u> <u>community</u>

Combating Methamphetamine Abuse, BJA Fact Sheet, U.S. Department of Justice, Bureau of Justice Assistance, Office of Justice Programs, October 2009 www.bja.gov/Publications/CombatMethFS.pdf

Early Intervention

Recognizing early signs and symptoms of meth use is a first step in early intervention. There are certain signs associated with meth use that can be noticeable from the first time someone tries the drug. Not every user will display every one of these symptoms; other illicit drugs may also cause similar signs.

Signs of early meth use include: euphoric high state (excessively happy), decreased appetite, increased physical activity, anxiety, shaking hands, nervousness, incessant talking, rapid eye movement, increased body temperature (can rise as high as 108 degrees and cause death), dilated pupils, and sweating not related to physical activity.

Intervention and treatment works differently for each person. A licensed practitioner can help to guide individualized assessments and treatment plans, including a range of services from support groups to psychiatric care, until an effective plan is determined. However, if you recognize these signs or symptoms in friends or family members, there are a few steps to keep in mind and prepare for before discussing the issue with them:

Be safe – Never confront a person who is high on meth. Methamphetamine users frequently become psychotic (i.e., gross mental impairment characterized by delusions, hallucinations, incoherent speech, agitated behavior, loss of touch with reality) from using meth, and their behavior could pose real danger to you. Talk at a time and in a place that feels safe. If the person becomes angry or violent, leave and bring up the subject later when everyone is calm.

Plan what to say – Tell them that you're worried and that's why you want to talk. Be specific about how you know that they are using and why you are concerned. You may want to have a hotline number or some facts on hand about real examples of people who have sought treatment and have overcome their meth addiction.

Listen – After you finish talking, ask what they think – and listen. It's critical that you hear what they're saying so you can offer to help. But you shouldn't feel like you have to personally solve this problem – there are counselors and other professionals who are specially trained to help at times like this.

Keep at it – Getting someone to seek treatment might be a continuous process – not a one-time event. In highly structured interventions, led by professionals, the discussions are planned to guide the person from one step to the next in gaining sobriety and entering treatment, increasing the likelihood of success.

Once your friend or loved one commits to entering treatment, the first task for a practitioner is to determine the severity of drug use and the level of "life functioning" in legal, family, medical and psychiatric arenas.

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

Methamphetamine Prevention

At the present time, research about prevention programs specifically focused on meth is limited. At least one research project points to the success of a comprehensive approach to meth prevention for a youth audience. In this report, the combination of a school-based prevention program, plus a family-focused intervention, shows promise in reducing adolescent meth use

Currently, more research must be conducted to determine the effectiveness of prevention programs focused on meth use in the young adult population, particularly since meth usage typically starts in the late-teen years or early twenties – a time when young adults are less likely to be involved in school, family or community prevention programs.

Although meth-specific prevention research is limited, the National Institute on Drug Abuse has developed "Prevention Principles" to serve as the foundation of effective substance abuse prevention programs to combat general drug abuse; these principles are grounded in research about effective drug abuse prevention programs.

According to these principles, drug prevention programs should be comprehensive, and they are most effective when they address individual risks for abusing drugs; include family, school, and community prevention efforts; and are consistent with an overall campaign message and delivery. As such, drug prevention programs should be comprehensive and inclusive, aiming to prevent all illicit drug use, often by preventing use of those drugs considered the drugs of first use.

Addressing Risk and Protective Factors – Many factors can contribute to a person's risk for drug abuse, from aggressive behavior and exposure to substance abuse to poverty and peer pressure. Protective factors, including strong family bonds and academic success, can help to counter those risk factors. Prevention programs should work to strengthen those protective factors while addressing all forms of drug abuse – whether taken alone or in combination with other drugs. Education about drug abuse should address illegal and legal drugs, including prescription and over-the-counter medications. All programs should be tailored to address risks specific to the local community and audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness.

Prevention Planning – Family, school, and community programs should all be incorporated to maximize prevention campaign effectiveness. **Family-based prevention** programs should strive to enhance family bonding and relationships. Parental monitoring and supervision are critical for drug abuse prevention. **Prevention programs in the school setting** can be designed to address a wide range of school-aged students, from elementary school-aged children to high school-aged teens, depending on the substance and nature of the drug-related topics. **Programs aimed at key transition points**, such as the transition to middle and high school, have proven effective, even among high-risk families and children. Reaching people in various settings – school, clubs, faithbased organizations, through the media, etc. – can help to validate and maximize prevention efforts.

Message Delivery – When communities adapt programs to match their needs, they should retain core elements of the original research-based prevention program. All programs should include guidelines for teacher training, interactivity (role-playing, peer discussion groups, etc.), and long-term planning.

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

PREVENTION: Holding meth at bay is difficult process

The concept of drug abuse prevention sounds pretty simple on the surface: (1) Identify populations that are vulnerable to the temptations of drug use, and (2) give them information they can use to make the choice not to get involved. Easily stated, not as easily completed.

Some of the potential problems: lack of funding for materials and trainers; some governments not receptive to anti-drug programs; difficulty getting communities into motion. To put the difficulty into perspective, look at some basic groups that need large doses of prevention:

The individual child The big risks are those with drug-abusing friends, children with lots of free time on their hands or so-called "latchkey" kids who have three to five unsupervised hours to spend alone every day after school. To keep this group on the straight and narrow requires lots of information, mentoring and supervision -- none of which are cheap or easy to provide.

Families One of our greatest challenges is identifying and assisting families who need help with preventing their children from becoming involved with drugs. Methamphetamine has a real attraction for youth because of its seeming power to give them more energy. Young women also find the appetite-suppressing nature of the drug appealing because it helps them lose weight. Parenting and anti-drug programs are essential in helping families understand the environment in which their children are living, the indicators of drug usage, and how parents can educate and interact with their children to prevent drug abuse and addiction.

Schools Critical elements of in-school anti-drug work are teaching teachers the basics of drug-abuse prevention and providing it on a steady basis. Many schools are now overwhelmed with demands for good test scores and limited budgets. As a result, students may not be exposed to drug education on more than a hit-and-miss basis. Some prevention experts think only consistent K-12 drug education will keep the vulnerable students from using drugs.

Communities As risks for drug epidemics in neighborhoods become apparent, members must step up and endorse a variety of processes -- from placing billboards and passing out literature to building coalitions of individuals or neighborhoods and organizing meth action teams. Once more, good prevention programs grow not only from good training and training materials but from inspiration from within the communities themselves.

Source: This information was accessed in 2011 from www.nationalmethcenter.org, a website which is now disabled.

Intervention Strategies

Screening, Brief Intervention, Referral and Treatment (SBIRT)

The majority of people who require treatment for illicit drug or alcohol use are either unaware that they need help or choose not to seek it. To combat this public health challenge, SBIRT was created to encourage health care providers to help diagnose, intervene in, and treat drug abuse before it becomes a more serious problem. Federally-funded SBIRT programs are already established in 17 states and territories.

Primary care centers, hospital emergency rooms, trauma centers, and other community settings provide opportunities for early intervention with at-risk substance users. In these settings, medical professionals screen for drug using behavior and provide brief substance abuse intervention, if necessary.

The main components of SBIRT include:

- **Screening** To quickly assess the severity of substance use and identify the appropriate level of treatment.
- **Brief intervention** To increase insight and awareness regarding substance use and motivate patients to change their behaviors.
- **Referral to treatment** To provide those identified as needing more extensive treatment with access to specialty care.

Drug Courts

A drug court can be defined as a special court given the responsibility to handle cases involving substance-abusing offenders through comprehensive supervision, drug testing, treatment services, and immediate sanctions and incentives. Drug courts can be used as a tool in the fight against meth as they combine intensive rehabilitation services for addicts with legal requirements to complete treatment. They offer longer treatment periods, an emphasis on addressing co-occurring mental health disorders, and intensive community supervision and monitoring.

For more than a decade, a number of drug courts have been extremely effective in stemming the tide of meth-affected areas of the nation. Federally-funded drug courts in California, Oregon, Hawaii, Nevada, Oklahoma, and Kentucky have been using the drug court model to successfully intervene and manage the methamphetamine-addicted offender. Drug courts in these states have used the coercive power of the justice system with effective treatment strategies to successfully intervene and manage the meth-addicted offender.

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

For more information about SBIRT: <u>www.whitehouse.gov/sites/default/files/page/files/sbirt_fact_sheet_ondcp-samhsa_7-25-111.pdf</u>

For more information about Drug Courts: <u>www.nij.gov/topics/courts/drug-courts/welcome.htm</u>

For information about Maine's Adult Drug Courts: <u>http://www.courts.state.me.us/maine_courts/drug/index.html</u>

Section 6: Drug Endangered Children

In This Section:

Methamphetamine: Children At Risk, Source: Maine Methamphetamine Prevention Project

National Guideline for Medical Evaluation of Children Found in Drug Labs, Source: <u>www.nationaldec.org</u>

Drug Affected Children: Roles and Responsibilities of Child Protective Workers, Source: Maine Dept. of Health and Human Services

Links:

National Alliance for Drug Endangered Children,

www.nationaldec.org

Methamphetamine/Dexatroamphetamine and Pregnancy,

Organization of Teratology Information Specialists (OTIS), Raising Mom's Awareness, Reducing Baby's Risk. Source: <u>http://www.otispregnancy.org/files/methamphetamine.pdf</u>

METHAMPHETAMINE: CHILDREN AT RISK

Risks to children include:

- Exposure to explosive, flammable, toxic ingredients stored in kitchen cabinets, bathrooms and bedrooms
- Access to methamphetamine and paraphernalia
- Presence of loaded weapons in the home and booby traps (due to paranoia of methamphetamine users)
- Physical and sexual abuse
- Exposure to high risk populations (sexual abusers, violent drug users)
- Neglect including poor nutrition, poor living conditions
- Presence of pornography

If a pregnant woman uses meth, the baby may experience:

- Premature birth
- Growth retardation
- Withdrawal symptoms including abnormal sleep patterns, high pitched cry, poor feeding
- Cerebral injuries
- Limpness
- Apparent depression
- Shaking and tremor
- Irritability
- Fits of rage
- Sensitivity to stimuli including human touch and regular light
- Coordination problems
- Birth defects (6 times more likely) including effects on the central nervous system, heart and kidneys
- Cerebral palsy and paralysis are common

The effects of meth last longer than crack and can lead to more damage. Levels of meth present in breast milk are higher than the level in blood.

Sources: Dr. Rizwan Shah, Iowa Child Protection Council; Dr. Michael Sherman, Chief of Neonatology at UC Davis; Dr. Annette Grege, Yellowstone Pediatric Neurology.

Medical personnel may notice:

Agitation, inconsolability, tachycardia, respiratory problems (often meth kids present with asthma), nausea, protracted vomiting, hyperthermia, ataxia, roving eye movements, seizures, and headaches.

Source: Mesa Center Against Family Violence

Parents who use meth often exhibit:

- Extreme mood fluctuations
- Violent behavior
- Depression
- Poor impulse control
- Bizarre behaviors
- Lack of attention to hygiene
- Acute psychotic episodes
- Poly-drug use

As meth use continues, the parent is unable to provide basic needs to the child. Due to changes in brain chemistry, the parent loses the capacity to care about anything but meth.

Children whose parents use or manufacture meth may experience:

- Respiratory problems
- Delayed speech and language skills
- Higher risk for kidney problems and leukemia
- Malnourishment
- Poor school performance/attendance problems
- Isolation
- Physical, sexual and emotional abuse
- Poor dental health
- Hyperactivity and attention disorders
- Lice
- Obesity
- Other developmental problems
- Violent behavior
- Drug usage
- Lack of boundaries/easy attachment to strangers

If you suspect meth production, leave the area immediately and contact local law enforcement!





PERSONNEL DECONTAMINATION

Decontamination of the children should occur prior to transport to the medical facility as medically appropriate. Basic life support takes precedence over decontamination. Removal of clothing, cleansing of the skin and hair with running water and new clothes are the minimum requirements of decontamination. DO NOT USE WETWIPES!

LAW ENFORCEMENT

Immediate

1. Document the quantity and types of chemicals present and document how found i.e. uncapped, in tin cans, so that the exposure of the child can be determined. Document the condition of the home. Document odors and state of lab (actively cooking, decanting stage, drying stage etc.) Document the people at the scene and those who also reside in the home. This information should be conveyed to medical facility.

2. Personnel on scene should be both clan lab and DEC certified in order to be able to accurately collect, document and photograph the scene as to aid in the child endangerment prosecution i.e. height of chemicals, location of drugs, general state of children, guns, pornography.

3. Collect and submit all the required data to appropriate databases.

4. Transport child as per local DEC protocol in conjunction with CPS.

Within 24-72 hours

1. Children need to be interviewed by personnel trained in the forensically correct method for children. Coordinate this process with CPS.

Follow-up

1. Update databases as needed.



FOR DRUG ENDANGERED CHILDREN

NATIONAL GUIDELINE FOR MEDICAL EVALUATION OF CHILDREN FOUND IN DRUG LABS

MEDICAL PERSONNEL

Symptomatic - Immediate

- Head to toe exam of the children within 2 to 4 hours to ensure medical stability and document any acute findings that might need treatment or change over time. This may occur in an ED, physician's office or by EMT's on scene. This should include but not be limited to a good pulmonary exam, skin exam, neurologic exam and affect (scared, happy, detached). May include observations by EMT's, RN on scene or other personnel to document the affect of the children.
- 2. Collect urine for toxicology. This should happen as soon as possible but <u>must</u> occur within 12 hours for optimal results. Submit to a lab that screens for any detectable level (quantitative or confirmatory) and reports for the level of detection of the test <u>not</u> just at NIDA standards. Chain of Evidence forms may be utilized or usual medical protocols for urine toxicology screens may be followed.
- Blood tests. Can be done acutely or within 24-72 hours: a CBC (anemia, cancers, thrombocytopenias), Chemistry Panel to include BUN/Cr and LFT's (kidney and liver damage, electrolyte imbalances), Hepatitis B and C panels.

Asymptomatic - Within 24-72 hours

- 1. A complete medical evaluation.
 - 2. If seen within 12 hours, collect urine for toxicology
 - 3. Blood tests as above.
 - 4. Developmental evaluation using an age appropriate standardized tool.
 - 5. Mental health evaluation.
- 6. Dental evaluation.

Follow-Up

- 1. Repeat medical evaluation in 30 days, 6 mos. & 1 yr.
- 2. Follow up developmental evaluations as needed based on the initial evaluations.
- 3. Follow up mental health interventions and assessments as needed.

EMERGENCY ACTIVATION

Transport immediately to the ED by emergency personnel if there is an explosion, active chemicals at the scene or the child appears ill or has obvious chemical contamination i.e. fast breathing, obvious burns, lethargy or somnolence.

CHILD PROTECTIVE SERVICES

Immediate

 Assist law enforcement in the collection and documentation of the scene from the child's perspective. Decide who will photograph scene.
 Transport child as needed to facility as designated in your local DEC protocols.

3. Placement of children in a safe environment as per local protocol.

Within 24-72 hours

 There may have been other children in the family or home who were not present at the time of the seizure. All children who have lived in the home will need to be examined and their information collected for tracking.
 The medical histories of the children need to be investigated and documented.

Follow-up

1. Input all the gathered information into a database as determined by the local, state and national protocols.

EMERGENCY DEPARTMENT

1. Complete medical evaluation to assess <u>acute medical</u> <u>needs</u>.

2. Specific attention to the pulmonary exam as the chemicals can cause acute respiratory problems. RR's, O2 saturation and a CXR in the symptomatic child are the minimum required.

3. Blood tests as needed in addition to a CBC, Chemistry Panel to include BUN/Cr and LFTS.

4. Collect urine for toxicology. This should happen as soon as possible but <u>must</u> occur within 12 hours for optimal results. This should be submitted to a lab that screens and reports for the level of detection of the test <u>not</u> just at NIDA standards. Chain of Evidence forms may be utilized or usual medical protocols for urine toxicology screens may be followed.

Drug Endangered Children Roles and Responsibilities of Child Protective Services

Office of Child and Family Services, DHHS, 2 Anthony Avenue, Augusta ME 04330

If you suspect that a child has been harmed/affected by drugs, call the DHHS 24-hour Hot Line at 1-800-452-1999.

The DHHS organizational unit based in the Augusta Central Office operates a 24-hour "hot line" which is responsible for the receipt, screening, and disposition of reports of suspected child abuse and/or neglect.

	Program Administrators	
District 1	Mark Dalton (PA) Biddeford	286-2400/286-2508
	Kristen Brown (APA)	
	Sanford office	490-5400
District 2	Julie McShane (PA) Portland	822-2000/822-2231
	Brian Walsh (APA) Portland	
District 3	Cathy Lachapelle (PA) Lewiston	795-4300/795-4620
	Farmington office	778-8400
	South Paris office	744-1200
District 4	Ilene Ford (Acting PA) Rockland	596-4200/596-4262
District 5	Ellen Beerits (PA) Augusta	624-8000/624-8088
	Martha Proulx (APA Augusta	
	Kim Miller (APA) Skowhegan	474-4800/474-4850
District 6	Bobbi Johnson (PA) Bangor	561-4100/561-4220
	Robin Whitney (APA)	
Districts 7 & 8	B Marie Kelly (PA) Ellsworth	667-1600/667-1625
	Rebecca Bolstridge (APA)	
	Machias office	255-2000 / 255-2024
District 8	Caribou office	493-4000/493-4140
	Houlton office	532-5000/532-5106
	Ft. Kent office	834-7700/834-7720

Drug Affected Infants - DHHS has the responsibility to respond to reports from health care providers that an infant has been born that is affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure to either legal or illegal drugs regardless of whether the infant is abused or neglected.

Drug Affected Baby (DAB) Reports - All reports from health care providers alleging that an infant has been born that is affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure (legal or illegal substances) will have the report type of "drug affected baby." All reports of the type "drug affected baby" are appropriate and are sent to the District.

For more information:

Angie M. Bellefleur, Associate Director, Policy and Prevention (207) 624-7900

Section 7: Law and Policy

In This Section:

Policy & Legislation, Source: This information was accessed in 2011 at www.methresources.gov which now redirects to the ONDCP website (2012).

Links:

FEDERAL LAW Combat Methamphetamine Epidemic Act: Title VII of Public Law 109-177 www.deadiversion.usdoj.gov/meth/index.html

Methamphetamine Remediation Research Act of 2007: Public Law No: 110-143 www.govtrack.us/congress/bill.xpd?bill=h110-365

Methamphetamine Production Prevention Act of 2008 http://www.deadiversion.usdoj.gov/fed_regs/rules/2010/fr03231.htm

MAINE LAW An Act To Further Restrict the Availability of Methamphetamine and Amphetamine Pills

www.mainelegislature.org/legis/bills/bills 125th/chappdfs/PUBLIC436.pdf

Maine Meth Watch Program and An Act to Prevent the Manufacturing of Methamphetamine in Maine.

www.mainelegislature.org/ros/LOM/LOM122nd/10Pub401-450/Pub401-450-46.htm

An Act To Restrict Further the Amount of Methamphetamine Precursors That May Be Bought or Sold

www.mainelegislature.org/legis/bills/bills 125th/chappdfs/PUBLIC584.pdf

Policy & Legislation

Both federal- and state-level legislation has provided increased funding to train law enforcement personnel in the cleanup of dump sites and the remediation of former meth labs, provided support for meth prevention and treatment programs, limited the quantity of cold medicines containing pseudoephedrine or ephedrine that may be sold over-the-counter, and required proper identification is shown when purchasing products which may be used in the making of meth.

Key pieces of federal meth-related legislation include:

Combat Methamphetamine Epidemic Act (CMEA) of 2005: This law regulates retail over-the-counter sales of products containing ephedrine, pseudoephedrine, and phenylpropanolamine. Retail provisions of the CMEA include daily sales limits and 30-day purchase limits, placement of product out of direct customer access, sales logbooks, customer ID verification, employee training, and self-certification of regulated sellers.

Methamphetamine Remediation Research Act of 2007: This law establishes a research program to develop guidelines, based on the best currently available scientific knowledge, for the cleanup and remediation of former meth labs, including guidelines regarding preliminary site assessment and the remediation of residual contaminants.

Methamphetamine Production Prevention Act of 2008: This law requires retail sellers of legal substances used in the production of methamphetamine to use an electronic logbook or a bound paper book to obtain required information (i.e., name and address of purchaser, date and time of sale, and quantity sold) for sales of listed chemicals (e.g., legal substances used in the production of methamphetamine).

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

Section 8: Tools and Resources

In This Section:

Glossary of Terms

Links:

Methpedia website <u>www.methpedia.org</u> includes information, tools and resources for community coalitions, prevention, treatment and law enforcement.

Real Estate: How to Avoid Buying a Meth House, http://realestate.msn.com/article.aspx?cp-documentid=23154768

Rural Law Enforcement Methamphetamine Initiative (RLEMI) <u>www.methpedia.org/rlemi</u> (includes newsletters and webinars)

Prevention of Methamphetamine Use and Associated Harm: Logic Model Documentation, Source: PIRE, February 8, 2008. <u>www.pire.org/logicmodels.htm</u>

Methproject.org www.methproject.org

Meth Prevention Education Planning Toolkit for Community Educators & Teachers <u>www.csrees.usda.gov/nea/food/pdfs/toolkit.pdf</u> and <u>www.methfreemt.org</u>

Oklahoma Prevention of Methamphetamine Abuse Project, <u>www.ok.gov/odmhsas/Prevention Programs/Initiatives/Oklahoma Methamphetamine</u> Prevention Initiative/index.html

METHAMPHETAMINE GLOSSARY

<u>Clan lab</u> – Short for clandestine laboratory i.e. a lab that is hidden and is used to illegally manufacture controlled substance such as methamphetamine.

<u>Crank bugs</u> -Tactile hallucination (also known as formication) after using stimulants which creates the illusion of bugs burrowing under the skin. The feeling that these "crank bugs" are crawling under their skin will cause users to scratch their skin sometimes to the point of developing sores

<u>Crystal Meth</u> - The street name for the crystal form of the drug.

Dopamine - A type of neurotransmitter similar to adrenaline which affects the brain processes that control movement, emotional response, and the capacity to feel pleasure and pain. When addicts use meth over and over again, the drug actually changes their brain chemistry, destroying the wiring in the brain's pleasure centers and making it increasingly impossible to experience any pleasure at all.

Ice - Pure methamphetamine hydrochloride, the smoked form of the drug

<u>Methamphetamine</u> – (meth," "ice," and "glass") A schedule II drug, methamphetamine is a powerful, highly addictive stimulant drug that dramatically affects the central nervous system. Methamphetamine comes in several forms, including powder, crystal, rocks, and tablets.

Meth abuse – Slang for wasting the meth e.g. dropping or spilling some on the floor.

<u>Meth Mouth</u> - A term for the advanced tooth decay typically associated with heavy methamphetamine use and attributed to a combination of dry mouth, poor dental hygiene, high consumption of carbonated beverages and teeth clenching

One Pot Method, Shake and Bake, Backpack Method – These terms refer to a method of creating meth in small batches using a single portable container such as a 2 liter soda bottle that can be easily discarded.

Point or slammer – The needle used for injecting drugs.

Precursor chemicals - A chemical that when combined with another chemical, results in a new product. The process of making methamphetamine starts with the precursor (ephedrine or pseudoephedrine), and other chemicals are added to produce the drug.

Rock, crack, crystal, glass – Slang terms that denote the appearance of the drug

<u>Smurfing</u> - Shopping from store to store to buy small quantities of pseudoephedrine needed to manufacture the methamphetamine.

<u>Speed bumps</u> - Skin rashes or infection at the site of injection.

<u>Stimulants</u> - A class of drugs that elevate mood, increase feelings of well-being, and increase energy and alertness. Methamphetamine is a stimulant.

Tooter - The straw used to snort the drug

Teener - 1/16 ounce of meth

Tweak and Tweaking - Tweak refers to crystal meth. The behavior referred to as "tweaking," occurs at the end of a binge when an abuser is irritable and paranoid. The user (aka tweaker) craves more methamphetamine, but finds it difficult to achieve the original high. This causes frustration and unstable behavior in the user.

PowerPoint Presentation: Methamphetamine in Maine: Understanding the Drug and What You Can do at the Community Level. http://www.maine.gov/dhhs/samhs/osa/prevention/co mmunity/meth/resources/index.htm