

Prevention Works !

Methamphetamine: A PowerPoint Presentation

Prevention Works! Resource Kit for the
National Prevention Network

April 2006

Methamphetamine (a.k.a. meth)

“The alarming growth of methamphetamine use over the last 10 years and, in part, its popularity can be explained by the drug’s wide availability, ease of production, low cost, and highly addictive nature.”

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What is methamphetamine?

- A powerful stimulant drug, classified as a psychostimulant
- A Schedule II drug (along with cocaine and several other drugs) under the Federal Controlled Substances Act
- A highly addictive drug

What else is methamphetamine called?

- Methamphetamine is also called “speed,” “meth,” and “chalk.” In its smoked form, it is often referred to as “ice,” “crystal,” “crank,” and “glass.”
- A combination of methamphetamine and caffeine, produced in tablet form in Southeast and east Asia, is known as “Yabba” (“Ya Ba” in some references) and is sometimes called “crazy medicine” or “Nazi speed.”

Source: National Drug Intelligence Center, U.S. Department of Justice. June 2003. Yaba Fast Facts: Questions and Answers. www.usdoj.gov/ndic/pubs5/5048/index.htm

Where does meth come from?

- Methamphetamine is a synthetic drug and can be made easily using ingredients that are legally available.
- As efforts to stop meth manufacture in the United States succeed, more of the drug is arriving from Mexico and other countries.

Source: *The CQ Researcher*. July 15, 2005. Methamphetamine: Are Tougher Anti-Meth Laws Needed? Volume 15, Number 25. CQ Press. www.chpa-info.org/Web/advocacy/federal_advocacy/CQ_Press_Meth.pdf#search='Methamphetamine%3A%20Are%20Tougher%20AntiMeth%20Laws%20Needed%20cq%20researcher'

Why do people use meth?

- Initially, methamphetamine decreases fatigue and appetite, heightens attention, and increases activity and respiration, creating feelings of high energy.
- Meth enables people to stay awake and be physically (also sexually) active for long periods.

Source: National Institute on Drug Abuse. April 1998, Reprinted January 2002. Research Report Series: Methamphetamine Abuse and Addiction. www.nida.nih.gov/ResearchReports/methamph/methamph.html

How does meth work?

- Methamphetamine releases large amounts of dopamine in the brain, causing feelings of pleasure and euphoria.

Source: National Institute on Drug Abuse. April 1998, Reprinted January 2002. Research Report Series: Methamphetamine Abuse and Addiction. www.nida.nih.gov/ResearchReports/methamph/methamph.html

- Withdrawal symptoms may include fatigue, depression, anxiety, paranoia, aggression, and an intense craving for more of the drug. In some cases, psychotic symptoms may persist for months or years following use.

Source: Office of National Drug Control Policy. November 2003. Fact Sheet: Methamphetamine. www.whitehousedrugpolicy.gov/publications/factsht/methamph/

How is meth used?

- Injecting or smoking methamphetamine produces a short but intense and pleasurable “rush.”
- When taken orally or by snorting, meth causes a less intense but much longer-lasting high that persists for several hours.

Source: National Institute on Drug Abuse. April 1998, Reprinted January 2002. Research Report Series: Methamphetamine Abuse and Addiction. www.nida.nih.gov/ResearchReports/methamph/methamph.html

How many Americans use meth?

- Lifetime use: 4.9 percent of those aged 12 and over (12 million people)
- Past-year use: 0.6 percent of those aged 12 and over (1.4 million people)
- Past-month use: 0.2 percent of those aged 12 and over (600,000 people)

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. September 16, 2005. The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, In Brief.
<http://oas.samhsa.gov/2k5/meth/meth.htm>

Teens and meth

In the first years of the 21st century, meth use has declined among 12- to 17-year-olds in the general population. Rates in the 2004 National Survey on Drug Use and Health (NSDUH) were:

- Lifetime use: 1.2 percent vs. 1.5 percent in 2002
- Past-year use: 0.6 percent vs. 0.9 percent in 2002
- Past-month use: 0.2 percent vs. 0.3 percent in 2002

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. Updated October 2, 2005. NSDUH 2004. Appendix H, Selected Prevalence Tables, Table H.3—Types of Illicit Drug Use in Lifetime, Past Year, and Past Month Among Persons Aged 12 to 17: Percentages, 2002–2004. <http://oas.samhsa.gov/NSDUH/2k4NSDUH/2k4results/appH.htm#tabh.3>

Teens and meth

Declines also were noted in two of the three grades reported in the 2005 Monitoring the Future survey, in which past-month use was:

- 10th grade—1.3 percent in 2004; 1.1 percent in 2005
- 12th grade—1.4 percent in 2004; 0.9 percent in 2005*

*This decrease is statistically significant.

Source: National Institute on Drug Abuse. Table 3: Trends in 30-Day Prevalence of Use of Various Drugs for Eighth, Tenth, and Twelfth Graders. Monitoring the Future 2005 survey.
<http://monitoringthefuture.org/data/05data/pr05t3.pdf>

Teens and meth

The pattern of declining meth use among adolescents seems to be inconsistent with recent press reports of a growing meth epidemic. However, some researchers speculate that meth use may be increasing among high school dropouts, who were not captured in the Monitoring the Future survey, and among young adults.

Source: Johnston, L.D.; O'Malley, P.M.; Bachman, J.G.; Schulenberg, J.E. December 19, 2005. Teen drug use down, but progress halts among youngest teens. University of Michigan News and Information Services: Ann Arbor, MI. <http://www.monitoringthefuture.org/pressreleases/05drugpr.pdf>

Who uses meth?

- Meth use is greatest among those ages 19 to 40.

Source: Office of National Drug Control Policy. December 19, 2005. National Survey Finds Overall Youth Drug Use Down Again: Declines Seen in Meth, Marijuana, Steroids, Ecstasy, and Alcohol. Media Campaign Flash.

- Average age of first use of meth has increased to 22.1 years in 2004.

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. September 16, 2005. The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, In Brief.
<http://oas.samhsa.gov/2k5/meth/meth.htm>

Who uses meth?

- Males and females use meth at similar rates; in some studies, men are slightly more likely to do so.

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. September 16, 2005. The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, In Brief. <http://oas.samhsa.gov/2k5/meth/meth.htm>

- Men who have sex with men appear more likely than other men to use meth and to do so in conjunction with unsafe sex, greatly increasing their risk for HIV/AIDS and other STDs.

Source: Specter, Michael. May 23, 2005. Higher risk: Crystal meth, the Internet, and dangerous choices about AIDS. *The New Yorker*. www.newyorker.com/fact/content/articles/050523fa_fact

Ethnic/racial prevalence of methamphetamine use

- Native Hawaiian/Pacific Islander: 2.2 percent
- Persons reporting two or more races: 1.9 percent
- American Indian/Alaska Native: 1.7 percent
- White: 0.7 percent
- Hispanic: 0.5 percent
- Asian American: 0.2 percent

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. September 16, 2005. The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, In Brief.
<http://oas.samhsa.gov/2k5/meth/meth.htm>

Meth's impact is regional

- Meth continues to spread eastward and into rural America, but its impact is still greatest in Hawaii and other western States. Cities reporting the highest percentages of meth treatment admissions in 2005, in order, include San Diego, Los Angeles, Minneapolis/St. Paul, Denver, Seattle, San Francisco, Atlanta, and St. Louis.
- Reported treatment admissions for meth in 2005 were substantially lower in such places as Baltimore, Boston, Chicago, Detroit, New York, and Newark.

Source: NIDA's Community Epidemiology Workgroup. June 2005. Epidemiological Trends in Drug Abuse: Advance Report. www.drugabuse.gov/PDF/CEWG/AdvReport605.pdf

Addiction to methamphetamine

- Lag time between first use of meth and addiction is estimated to be from 2 to 5 years.
- However, clinical experience and anecdotal information strongly indicate that among those who inject or smoke the drug (as many regular users are known to do), addiction may be established in *less than 1 year*.

Source: The Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment. 1999. Treatment Improvement Protocols: TIP 33: Treatment for Stimulant Use Disorders, Chapter 2.
www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.57619

Addiction to methamphetamine

In 1993, there were 21,000 treatment program admissions of persons with a primary methamphetamine use problem. Ten years later, in 2003, that number had increased to 117,000, according to the SAMHSA/Office of Applied Studies Treatment Episode Data Set.

Source: The Substance Abuse and Mental Health Services Administration/Office of Applied Studies. September 16, 2005. The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, In Brief.
<http://oas.samhsa.gov/2k5/meth/meth.htm>

Meth and health

- Effects of chronic meth abuse include organ toxicity, compromised health (e.g., malnourishment, poor hygiene), dental problems, and dermatitis.
- Chronic psychological effects include various psychiatric disorders such as psychosis, paranoia, and suicidal tendencies.

Source: The Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment. 1999. Treatment Improvement Protocols: TIP 33: Treatment for Stimulant Use Disorders, Chapter 2.
www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.57619

Meth and health

Among bingers, who repeat cycles of use and experience both the initial “rush” and subsequent dysphoria of withdrawal (sometimes referred to as “tweaking”), effects include:

- Not eating
- Depression
- Increased paranoia
- Belligerence
- Aggression

Source: The Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment. 1999. Treatment Improvement Protocols: TIP 33: Treatment for Stimulant Use Disorders, Chapter 2. www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.57619

Meth and health

Methamphetamine can increase the libido, although long-term use may result in sexual dysfunction. Use of methamphetamine has been linked with rougher sex practices, which can cause abrasions, bleeding, and increased risk of contracting HIV/AIDS and other STDs. Intravenous drug use and increased sexual risks among meth users place them at the highest risk for HIV of any group.

Source: U.S. Drug Enforcement Administration. Fact Sheet: What Meth Can Do to Your Health.
www.dea.gov/pubs/pressrel/methfact04.html

Meth and dental health

“Meth mouth” includes rampant caries (cavities) due to the combined effects of meth’s acidic nature, its xerostomic (dry mouth) effect, and the tooth grinding and teeth clenching often observed in meth addicts. Added to these effects, methamphetamine use often makes its users crave high-calorie (i.e., sugar-laden) soft drinks.

Source: American Dental Association. Updated August 9, 2005. Dental Topics A to Z: Methamphetamine Use.
www.ada.org/prof/resources/topics/methmouth.asp

Meth use and crime

A 2005 report on the progress of California's Proposition 36 program for court referral of non-violent offenders to treatment noted that more than half (52.7 percent) of the 51,033 offenders who entered drug treatment during the program's third year reported methamphetamine as their primary drug problem.

Source: Douglas Longshore, Ph.D.; Darren Urada, Ph.D.; Elizabeth Evans; Yih-Ing Hser, Ph.D.; Michael Prendergast, Ph.D.; and Angela Hawken. July 22, 2005. Evaluation of the Substance Abuse and Crime Prevention Act: 2004 Report. UCLA Integrated Substance Abuse Programs. www.uclaisap.org/Prop36/documents/sacpa080405.pdf

Meth use and crime

During FY 2003, 4,456 Federal offenders were sentenced for methamphetamine-related charges in U.S. courts. Most were white (59.3 percent), male (85.9 percent), and U.S. citizens (76.9 percent).

Source: U.S. Sentencing Commission. 2005. *Sourcebook of Federal Sentencing Statistics, 2003*.
www.ussc.gov/ANNRPT/2003/table33.pdf

Meth ingredients

- Over-the-counter cold medicines and diet pills
- Lithium camera batteries
- Matches
- Tincture of iodine
- Hydrogen peroxide

Source: Office of National Drug Control Policy. February 6, 2004. Fighting Methamphetamine in the Heartland: How Can the Federal Government Assist State and Local Efforts?
www.whitehousedrugpolicy.gov/news/testimony04/020604/020604.pdf

Flammable products often used in the meth-making process

- Charcoal lighter fluid
- Gasoline
- Kerosene
- Paint thinner
- Rubbing alcohol
- Mineral spirits

Source: Office of National Drug Control Policy. February 6, 2004. Fighting Methamphetamine in the Heartland: How Can the Federal Government Assist State and Local Efforts?
www.whitehousedrugpolicy.gov/news/testimony04/020604/020604.pdf

Other dangerous meth ingredients

- In making meth, such corrosive products as muriatic acid, sulfuric (battery) acid, and sodium hydroxide from lye-based drain cleaners may be used.
- Nearly all of the chemicals used to produce methamphetamine are flammable and corrosive poisons.

Source: Office of National Drug Control Policy. February 6, 2004. Fighting Methamphetamine in the Heartland: How Can the Federal Government Assist State and Local Efforts?
www.whitehousedrugpolicy.gov/news/testimony04/020604/020604.pdf

Other dangerous meth ingredients

Anhydrous ammonia, normally used as a fertilizer or refrigerant—is a potentially explosive and lethal gas used in the “Nazi method” of illegal meth manufacture. In the environment, it can cause serious harm to people making meth, emergency responders, and others.

Source: Centers for Disease Control and Prevention. April 15, 2005. Anhydrous Ammonia Thefts and Releases Associated With Illicit Methamphetamine Production—16 States, January 2000–June 2004. *MMWR Weekly*. 54(14); 359-361. www.cdc.gov/mmwr/preview/mmwrhtml/mm5414a4.htm

Meth wastes can injure or kill

The waste produced during the manufacture of methamphetamine—corrosive liquids, acid vapors, heavy metals, solvents, and other harmful materials—can cause disfigurement or death when touched or inhaled.

Source: U.S. Drug Enforcement Administration. 2002. Fact Sheet: Meth in America: Not in Our Town.
www.usdoj.gov/dea/pubs/pressrel/methfact01.html

Meth labs are dangerous, costly

- At least 15 percent of meth labs are discovered as a result of a fire or explosion.

Source: U.S. Department of Justice, Office of Justice Programs, Office for Victims of Crime. June 2003. Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims. Bulletin NCJ 197590.
www.ojp.usdoj.gov/ovc/publications/bulletins/children/

- Thanks to improved methods, the cost of cleaning up meth lab sites decreased to about \$2,000 in 2005, but could be much higher for “super lab” sites.

Source: Joseph T. Rannazzisi, Deputy Chief, Office of Enforcement Operations, Drug Enforcement Administration. September 27, 2005. Statement Before the House Judiciary Committee; Subcommittee on Crime, Terrorism, and Homeland Security. H.R. 3889, the Methamphetamine Epidemic Elimination Act of 2005.
www.usdoj.gov/dea/pubs/cngrtest/ct092705.html

Meth labs are unhealthy to adults, children, and newborns

Chronic exposure to the chemicals used in meth manufacture may cause cancer; damage to the brain, liver, kidney, spleen, and immunologic system; and birth defects.

Source: U.S. Department of Justice, Office of Justice Programs, Office for Victims of Crime. June 2003. Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims. Bulletin NCJ 197590.
www.ojp.usdoj.gov/ovc/publications/bulletins/children/

Meth use and pregnancy

Possible effects found in the few human studies that exist include increased rates of premature delivery, placental abruption (early separation of a normal placenta from the wall of the uterus), retarded fetal growth, and cardiac and brain abnormalities.

Source: Volkow, Nora, M.D., Director, NIDA. April 21, 2005. Testimony Before the Subcommittee on Labor, Health, and Human Services; Education; and Related Agencies. Committee on Appropriations, U.S. Senate.
www.hhs.gov/asl/testify/t050425b.html

Children at meth labs or with meth-using parents

Children living at methamphetamine labs or with meth-using adults are at increased risk for severe neglect. Also, they are more likely to be physically and sexually abused by family members and known family associates than children who are not exposed to meth use and manufacture.

Source: U.S. Department of Justice, Office of Justice Programs, Office for Victims of Crime. June 2003. Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims. Bulletin NCJ 197590.
www.ojp.usdoj.gov/ovc/publications/bulletins/children/

Children at meth labs or with meth-using parents

The Drug Enforcement Administration's El Paso Intelligence Center reported 14,260 meth lab incidents in 2003, with at least 1 child present at 1,442 of these lab incidents. Nearly 1,300 incidents involved a child being exposed to toxic chemicals. Of children present at these sites, 724 were taken into protective custody, 44 were injured, and 3 were killed.

Source: Office of National Drug Control Policy. February 6, 2004. Fighting Methamphetamine in the Heartland: How Can the Federal Government Assist State and Local Efforts?
www.whitehousedrugpolicy.gov/news/testimony04/020604/meth.html

Key points on methamphetamine

- Meth is a powerful, highly addictive stimulant that can be made easily from legally available products.
- Twelve million Americans ages 12 and over have used meth at least once; use is most common between ages 19 and 40.
- Meth's impact is greatest in the West but is spreading across the United States.
- Meth labs use and produce toxic, explosive chemicals; meth labs are dangerous and expensive to clean up.
- Exposure to chemicals used to make meth may cause cancer, damage the brain and other organs, and result in birth defects.

Meth resources on the Web

- www.methresources.gov
- <http://oas.samhsa.gov/amphetamines.htm>
- <http://store.health.org/catalog/results.aspx?h=drugs&topic=6>
- www.ncsacw.samhsa.gov/MethamphetamineList.htm

Prevention resources on the Web

- <http://preventionpathways.samhsa.gov>
 - <http://modelprograms.samhsa.gov>
 - <http://preventionplatform.samhsa.gov>
 - www.ncadi.samhsa.gov
- ...and* your State's National Prevention Network membership.