

*Fact Sheet:***METHAMPHETAMINE**

Methamphetamine, or meth, is the fastest growing drug threat and the most prevalent synthetic drug manufactured in the United States.¹ Commonly known as “speed,” “chalk,” and “go fast,” meth is an extremely powerful central nervous system stimulant with a high potential for abuse.² It usually comes in the form of a white crystalline powder and is snorted, injected, smoked or taken orally.³ It also comes in solid crystal form, known as “crystal meth,” “ice,” “crystal” and “glass,” which are usually smoked, though it can also be injected.⁴

Methamphetamine is a highly addictive drug that is easily produced by combining a number of chemicals, which can be extracted from readily available products. These products include over-the-counter cold medicines, diet pills and household products such as lithium batteries, matches, tincture of iodine and hydrogen peroxide. Flammable household products, including charcoal lighter fluid, gasoline, kerosene, paint thinner, rubbing alcohol and mineral spirits may be used in the mix. Corrosive products, such as the muriatic acid used in pools and spas, sulfuric acid in battery acid and sodium hydroxide from lye-based drain cleaners, may also be used in the manufacturing process.⁵

Originally confined to the west coast and certain rural mid-western areas, methamphetamine is spreading east and becoming more prevalent in all major U.S. cities.⁶ In fact, an estimated 8.8 million Americans have tried meth at some point in their lives.⁷ Among youth, surveys indicate that the use of meth among 12th graders has steadily increased over the past few years.⁸ In 2000, 2.2% of 12th graders reported that they had used meth within the past year.⁹ This figure climbed to 2.5% in 2001 and 3.0% in 2002.¹⁰ Also, the average age of new meth users fell over the 1990’s – from 22.3 years in 1990 down to 18.4 years in 2000.¹¹

Additionally, the drug is appearing in alarming proportions on the club scene, which may account for its rising popularity among teens. It is emerging in the form of brightly colored pills, reminiscent of another popular and dangerous club drug, Ecstasy. These pills, known as Ya Ba (Thai for “crazy drug”), are a powerful and very pure form of methamphetamine.¹² Primarily found at “raves” and techno parties, there is growing concern that Ya Ba, like Ecstasy, will become a popular club drug and introduce meth to a segment of young people who might otherwise avoid the drug.¹³

Health Effects

Methamphetamine is a highly toxic substance that has dramatic effects on the body. Short-term effects may include increased attention, activity and respiration, along with decreased fatigue and appetite, and hyperthermia (elevated body temperature). Long-term effects may include repetitive motor activity and dependence/addiction psychosis, including intense paranoia, mood disturbances and out-of-control rages. Visual and auditory hallucinations are also common, usually in the form of formication (i.e. the sensation of insects creeping on the skin).¹⁴

Additional problems may also arise, such as rapid, irregular heartbeat, damage to small blood vessels in the brain causing an elevated risk for stroke and extreme weight loss.¹⁵ An overdose of meth can produce extreme hyperthermia, convulsions and death.¹⁶ Meth has been involved in a steadily increasing number of emergency room visits across the country.¹⁷ The total number of meth-related emergency visits rose from 10,447 in 1999 to 14,923 in 2001.¹⁸

New studies are revealing that methamphetamine abuse is far more harmful to the brain than originally thought.¹⁹ Over time, meth use causes a sharp decrease in the brain's ability to produce dopamine, a brain chemical associated with pleasure and reward and also essential for movement.²⁰ A 2001 study suggested that meth also damages areas of the brain that control learning and memory. For this reason, meth is especially harmful to children as it severely impairs their ability to learn.²¹

Recent studies also indicate that those who inject methamphetamine may be at an even higher risk of contracting HIV than heroin injectors.²² One reason cited is that meth increases sexual interest, as opposed to heroin, which produces the opposite effect. This increases the likelihood that users will engage in sexual activity, putting young users at risk for sexually transmitted infections and unplanned pregnancies.²³

Meth Labs

Unlike most other drugs, methamphetamine can be produced with easily obtained, legal substances. It is created primarily in small home-based labs, usually located in areas where the intense smells produced by cooking meth are less likely to attract attention.²⁴ Makeshift labs have been discovered in vehicles, motel rooms, apartments, ranches, houses, restrooms and other locations.²⁵

In a methamphetamine laboratory, the "cook" often handles ignitable, corrosive, reactive and toxic chemicals in the presence of an open flame or heat source. Some of these substances are extremely harmful or lethal when inhaled or touched; others react violently when they are heated, immersed in water, exposed to air or combined.²⁶ These corrosive and reactive materials are often the reasons that meth labs frequently explode.²⁷

These chemicals also pose an environmental hazard when dumped, as they often are, on public grounds. For every pound of meth produced, between five and six pounds of highly toxic waste is generated. Lab operators routinely dump hazardous waste on the land and into streams, landfills and sewage systems. Vegetation is distressed where the hazardous waste is dumped and fumes from the manufacturing of meth can kill trees surrounding a drug lab. The threat of groundwater contamination also exists.²⁸

Child Victims

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.²⁹ Police found many of these children naked and malnourished, experiencing extreme physical and emotional distress.³⁰ 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.³¹ Chronic exposure to meth lab chemicals can damage the brain, liver, kidneys and spleen and can also cause cancer.³²

Additionally, fetal exposure to methamphetamine is a growing problem in the U.S. In 2002, research indicated that meth use during pregnancy might result in prenatal complications, increased rates of premature delivery and altered neonatal behavioral patterns, such as abnormal reflexes and extreme irritability.³³

Prevention

Currently there are no known pharmacological agents to treat methamphetamine addiction.³⁴ Behavioral therapy is the only available treatment. These behavioral treatments seek to modify the patient's expectancies, behavior and skills in coping with stress.³⁵ Because meth addiction is so difficult to treat, resulting in the lowest addiction recovery rate of any illicit drug (less than 7 percent), prevention is key.³⁶ Informing parents so that they can educate their children about the dangers of meth is crucial.

SOURCES:

- ¹ Swetlow, Karen. *OVC Bulletin, Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims*, (2003) U.S. Department of Justice
- ² *Methamphetamine Abuse and Addiction* (Revised January 2002) National Institute on Drug Abuse (NIDA).
- ³ *Infifax: Methamphetamine* (Revised June, 2003). National Institute on Drug Abuse (NIDA). [Online: <http://www.drugabuse.gov/Infifax/methamphetamine.html>]
- ⁴ *Ibid.*
- ⁵ Swetlow, Karen. *OVC Bulletin, Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims*, (2003) U.S. Department of Justice
- ⁶ *Methamphetamine Abuse and Addiction*, op. cit.
- ⁷ *Ibid.*
- ⁸ Johnson, LD, O'Malley, PM, Bachman, JG. *Monitoring the Future National Results on Adolescent Drug Use: Overview of key findings, 2002* (2003) National Institute on Drug Abuse.
- ⁹ *Ibid.*
- ¹⁰ *Ibid.*
- ¹¹ *Results From the 2001 National Household Survey on Drug Abuse: Volume I. Summary of National Findings* (2002) National Household Survey on Drug Abuse, Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA).
- ¹² *Yaba Fast Facts* (2003) National Drug Intelligence Center (NDIC) [Online <http://www.usdoj.gov/ndic/pubs5/5048/index.htm>]
- ¹³ *Ibid.*
- ¹⁴ *Methamphetamine Abuse and Addiction*, op. cit.
- ¹⁵ *Infifax: Methamphetamine*,. op. cit.
- ¹⁶ *Methamphetamine Abuse and Addiction*, op. cit.
- ¹⁷ *Emergency Department Trends from the Drug Abuse Warning Network (DAWN), Preliminary Estimates, January-June 2002* (2002) Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA).
- ¹⁸ *Ibid.*
- ¹⁹ *Methamphetamine Abuse and Addiction*, op. cit.
- ²⁰ *Ibid.*
- ²¹ *Ibid.*
- ²² *Ibid.*
- ²³ *An Ethnographic Comparison of HIV Risk Behaviors Among Heroin and Methamphetamine Users* (1999) American Journal of Drug and Alcohol Abuse.
- ²⁴ *Methamphetamine Abuse and Addiction*, op. cit.
- ²⁵ Mena, Jennifer. *Orange County Program Helps Rescue Children Found at Drug-Making Sites*, Monday, November 6, 2000. LA Times.
- ²⁶ Swetlow, Karen. *OVC Bulletin, Children at Clandestine Methamphetamine Labs: Helping Meth's Youngest Victims*, (2003) U.S. Department of Justice
- ²⁷ *Methamphetamine Abuse and Addiction*, op. cit.
- ²⁸ *Clandestine Drug Labs*, Tacoma-Pierce County Health Department [Online: <http://www.tpchd.org/eh/CDL/#Enviro>]
- ²⁹ *Meth Alert*, op. cit.
- ³⁰ *Ibid.*
- ³¹ Marcus, Adam. *Meth Kitchens Hazard for Emergency Crews*, 2001. Healthscout
- ³² *Ibid.*
- ³³ *Methamphetamine Abuse and Addiction*, op. cit.
- ³⁴ *Ibid.*
- ³⁵ *Ibid.*
- ³⁶ Bonne, Jon. *Meth's Deadly Buzz* (2001) MSNBC News Special Reports.