# **Drug Facts: Methamphetamine**



## What Is Methamphetamine?

Methamphetamine is a powerful, highly addictive stimulant that affects the central nervous system. Crystal methamphetamine is a form of the drug that looks like glass fragments or shiny, bluish-white rocks. It is chemically similar to amphetamine, a drug used to treat attention-deficit hyperactivity disorder (ADHD) and narcolepsy, a sleep disorder. Other common names for methamphetamine include blue, crystal, ice, meth, and speed.

## **How Do People Use Methamphetamine?**

People can take methamphetamine by:

- Smoking
- Swallowing (pill)
- Snorting
- Injecting the powder that has been dissolved in water/alcohol

Because the "high" from the drug both starts and fades quickly, people often take repeated doses in a "binge and crash" pattern. In some cases, people take methamphetamine in a form of binging known as a "run," giving up food and sleep while continuing to take the drug every few hours for up to several days.

#### **How Does Methamphetamine Affect The Brain?**

Methamphetamine increases the amount of the natural chemical dopamine in the brain. Dopamine is involved in body movement, motivation, and reinforcement of rewarding behaviors. The drug's ability to rapidly release high levels of dopamine in reward areas of the brain strongly reinforces drug-taking behavior, making the user want to repeat the experience.

#### What Are The Effects of Methamphetamine Misuse?

Taking even small amounts of methamphetamine can result in many of the same short-term health effects as those of other stimulants, such as cocaine or amphetamines. These include:

- Decreased appetite
- Increased physical activity
- Rapid and/or irregular heartbeat
- Increased blood pressure and body temperature

People who inject methamphetamine are at increased risk of contracting infectious diseases such as HIV and hepatitis B and C. These diseases are transmitted through contact with blood or other bodily fluids that can remain on drug equipment. Methamphetamine use can also alter judgment and decision-making leading to risky behaviors, such as unprotected sex, which also increases risk for infection.

- Methamphetamine is a powerful, highly addictive stimulant that increases the amount of the natural chemical dopamine in the reward areas of the brain, strongly reinforcing drug-taking behavior.
- Other names for methamphetamine include blue, crystal, ice, meth, and speed.
- People who inject methamphetamine are at increased risk for contracting HIV and hepatitis B and C.
- Methamphetamine is addictive but it can be treated utilizing cognitive-behavioral therapy (CBT) and motivational incentives.
- Increased wakefulness
- Faster breathing



800.232.4424 (phone) 860.793.9813 (fax) www.ctclearinghouse.org Methamphetamine use may worsen the progression of HIV/AIDS and its consequences. Studies indicate that HIV causes more injury to nerve cells and more cognitive problems in people who use methamphetamine than it does in people who have HIV and don't use the drug. Cognitive problems are those involved with thinking, understanding, learning, and remembering.

Long-term methamphetamine use has many other negative consequences, including:

- Extreme weight loss
- Severe dental problems
- Changes in brain structure and function
- Confusion
- Sleeping problems
- Paranoia

- Addiction
- Anxiety
- Intense itching, leading to skin sores from scratching
- Memory loss
- Violent behavior
- Hallucinations

## **Connecticut Resources**

CT Department of Mental
Health and Addiction Services
www.ct.gov/DMHAS

**24/7 Access Line** 1.800.563.4086

United Way 2-1-1 www.211ct.org 2.1.1 or 1.800.203.1234

## **National Resources**

Substance Abuse and Mental Health Services Administration www.samhsa.gov

## Can A Person Overdose On Methamphetamine?

Yes, a person can overdose on methamphetamine. An overdose occurs when the person uses too much of a drug and has a toxic reaction that results in serious, harmful symptoms or death.

### **How Can A Methamphetamine Overdose Be Treated?**

Because methamphetamine overdose often leads to a stroke, heart attack, or organ problems, first responders and emergency room doctors try to treat the overdose by treating these conditions, with the intent of:

- Restoring blood flow to the affected part of the brain (stroke)
- Restoring blood flow to the heart (heart attack)
- Treating the organ problems

## Is Methamphetamine Addictive?

Yes, methamphetamine is highly addictive. When people stop taking it, withdrawal symptoms can include:

#### **How Is Methamphetamine Addiction Treated?**

Anxiety

Fatigue

• Severe depression

Psychosis

• Intense drug cravings

While research is underway, there are currently no government-approved medications to treat methamphetamine addiction. The good news is that methamphetamine misuse can be prevented and addiction to the drug can be treated with behavioral therapies. The most effective treatments for methamphetamine addiction so far are behavioral therapies, such as:

- Cognitive-behavioral therapy (CBT), which helps patients recognize, avoid, and cope with the situations likely to trigger drug use
- Motivational incentives, which uses vouchers or small cash rewards to encourage patients to remain drug-free

Research also continues toward development of medicines and other new treatments for methamphetamine use, including vaccines, and noninvasive stimulation of the brain using magnetic fields. People can and do recover from methamphetamine addiction if they have ready access to effective treatments that address the multitude of medical and personal problems resulting from long-term use.