

# Methamphetamine

## Methamphetamine

Methamphetamine is a powerfully addictive stimulant. It is a type of amphetamine only available by a prescription. It cannot be refilled. It is prescribed for some people who have attention deficit disorder (ADD) and obesity (for weight control).

As a street drug, methamphetamine is known as "chalk," "meth" and "speed." In its smoked form, it is known as "crystal," "crank," "glass" and "ice," among others. Street dealers sell methamphetamine as a fine, white crystalline powder that may be smoked, snorted, injected with a needle or taken by mouth (ingested).

Methamphetamine can be made using over-the-counter medicines in homes, garages or apartments. "Meth labs" — which can be taken apart, stored and moved — release poisonous gas into the air. Making 1 pound of methamphetamine creates 5 to 7 pounds of toxic waste. Many people who run meth labs dump the toxic waste down kitchen drains or in yards or fields.

## Addiction

Methamphetamine is highly addictive. The drug disrupts the way the brain releases dopamine, a chemical that provides pleasure. A build-up of dopamine gives the user feelings of euphoria (pleasure).

Although similar to amphetamine, the effects of methamphetamine are more severe. It causes increased activity, decreased appetite and a general sense of well-being. The effects of methamphetamine can last 6 to 8 hours.

After the initial rush, the user may be easily agitated and can cause violent behavior.

Right after smoking or injecting the drug, the user gets an intense, pleasurable rush that lasts for a few minutes. (The residue from smoking ice can be resmoked. Effects may last for 12 hours or more.)

Snorting the drug produces euphoria, which takes effect in 3 to 5 minutes. Taking the drug by mouth produces euphoria, which takes effect in 15 to 20 minutes.

Taken even in small doses, methamphetamine can increase wakefulness and physical activity, and decrease appetite. The drug can cause psychotic behavior, brain damage and withdrawal symptoms such as depression, anxiety and paranoia when the user tries to stop.

Damage to the brain is similar to damage caused by Alzheimer's disease, stroke and epilepsy.

Long-term use can cause violent behavior, anxiety, confusion and insomnia. Users can also have paranoia, delusions and hallucinations (heard, not seen).

After the high wears off, the user crashes. Because the pleasurable effects wear off while the drug is still in the bloodstream, users try to keep the high by taking a lot of the drug repeatedly over several days (binging). Some users need more methamphetamine to get the same level of pleasure as the first use. This process is known as tolerance.

# **Effects of Methamphetamine Use**

Methamphetamine can cause the following effects.

#### **■** Short-term:

- increased attention and activity
- decreased appetite
- euphoria and rush
- increased breathing rate, heart rate and blood pressure
- increased body temperature (hyperthermia).

## ■ Long-term:

- addiction
- paranoia, hallucinations, mood disturbances, repetitive motor activity
- stroke
- severe dental problems
- weight loss.

# **Problems (Complications)**

The drug can cause several heart-related problems: rapid heart rate, irregular heartbeat, increased blood pressure, stroke and inflammation of the heart lining.

Psychotic symptoms can sometimes last for months or years after drug use has stopped. People who inject the drug are at an increased risk for getting HIV and hepatitis B and C. An increase in body temperature and convulsions occur with an overdose.

### **Treatment**

There is currently no medicine to treat methamphetamine addiction. The best available treatment is cognitive behavioral therapy (CBT) to help the user learn coping skills to help break the cycle.

CBT teaches the user to recognize the situations when they are most likely to use methamphetamines, how to avoid those situations and how to cope with the problems related to drug abuse. Drug abuse recovery support groups may also be helpful. Talk with your health care provider about resources.