

Methamphetamine



What is Methamphetamine?

A drug with immense abuse potential, methamphetamine (known on the street as "speed," "meth," "crank," "crystal-meth," and "glass") is a central nervous system stimulant of the amphetamine family. Like cocaine, it is a powerful "upper" that produces alertness, and elation, along with a variety of adverse reactions. The effects of methamphetamine, however, are much longer lasting than the effects of cocaine, yet the cost is much the same. For that reason, methamphetamine is sometimes called the "poor man's cocaine."

As with many drugs, methamphetamine, if prescribed by a physician, is legally available in the United States for the treatment of attention deficit disorders and obesity. Unfortunately, much of the methamphetamine available on the street is illicit methamphetamine from clandestine laboratories in the United States.

Production originally concentrated in clandestine labs throughout the Western and Southwestern United States, but has spread to the Central United States and beyond. In addition to the clandestine laboratories in the United States, organized crime groups in Mexico appear responsible for increased methamphetamine production on both sides of the border during the 1990's.

Pharmacology – Methamphetamine

***Word On The Street**

Meth, crystal, crystal meth, ice, fire, croak, speed, crank, glass, crypto, white cross. Methamphetamine is used in pill form, or in powdered form by snorting or injecting. Crystallized methamphetamine known as "ice," "crystal," or "glass," is a smokable and more powerful form of the drug. Methamphetamine can elevate your mood, induce euphoria, increase alertness, reduce fatigue, increase energy, decrease appetite, increase movement and speech, and provide a sense of increased personal power and prowess. Unlike a cocaine high which is brief, the effect of meth lasts for six to eight hours or more depending how much you do.

***What is it?**

Meth 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. It is usually white or slightly yellow, depending on the purity. Also called d-desoxyephedrine, Meth is a potent stimulant synthetic drug of the amphetamine series, used in medicine as an appetite suppressant in treating obesity and as a stimulant of the central nervous system in treating anesthetic overdose and narcolepsy. Methamphetamine was introduced into medicine in 1944 and sold under Methedrine and other trade names. Its action is similar to that of amphetamine. It may be administered orally, snorted, smoked or injected. If smoked or injected, users report increased energy and motivation often coupled with a false sense of invincibility. If snorted or swallowed, the onset is not as extreme and not accompanied by an initial "rush".

***In The Brain**

Meth is known for its ability to increase focus and mental alertness, eliminate fatigue and decrease the appetite for longer durations than cocaine. It enables people to work around the clock, often for days on end. Meth suppresses appetite, and in small doses is used by young women trying to lose weight. Meth is addictive, and users can develop a tolerance quickly, needing more and more to get high, and going on longer and longer binges. Some users avoid sleep for 3 to 15 days while binging.

***In The Body**

Meth initiates all the symptoms of the fight-or-flight syndrome: it increases the heart rate and blood pressure, constricts blood vessels, dilates the bronchioles (breathing tubes), increases blood sugar, and generally prepares the body for emergency. It also improves the symptoms of asthma and breaks down fat to create energy and therefore contributes to weight loss.

***How It Works**

Euphoria, blood pressure, appetite and attention are all regulated by a related group of neurotransmitters: the biogenic amines or monoamine neurotransmitters. Normally, these sensations are caused when neurons communicate with each other and fire impulses through the brain via the neurotransmitters. Monoamine neurotransmitters release their neurotransmitters into the synaptic cleft and act on their receptors. Then the monoamine neurons recapture them by pumping them back into the neuron. This is how the neurons stop the transmission. Stimulants interfere with the recapture

mechanism by blocking the sites where the neurotransmitters are normally taking, leaving them to stay in the synaptic cleft longer and continue to stimulate the receptors.

***The Down Side**

The ability of methamphetamine to overcome fatigue and provide increased energy has led to considerable abuse of the drug. Its untoward effects on the body (such as increased heart rate and blood pressure) render it a dangerous drug when misused; and because of the rapid development of tolerance common to the amphetamines (a condition in which the user requires increased doses for a consistent effect), it is unsatisfactory for prolonged use. The euphoria, excitement, and sleeplessness experienced by persons on the drug may give way to severe depression once the dose wears off. The excessive use of methamphetamine can eventually induce a toxic psychosis characterized by paranoid delusions and hallucinations. 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.