

Methamphetamine

The National Institute on Drug Abuse reports the following symptoms for methamphetamine use.

Taking even small amounts of methamphetamine can result in many of the same physical effects as those of other stimulants, such as cocaine or amphetamines, including increased wakefulness, increased physical activity, decreased appetite, increased respiration, rapid heart rate, irregular heartbeat, increased blood pressure, and hyperthermia.

Long-term methamphetamine abuse has many negative health consequences, including extreme weight loss, severe dental problems (“meth mouth”), anxiety, confusion, insomnia, mood disturbances, and violent behavior. Chronic methamphetamine abusers can also display a number of psychotic features, including paranoia, visual and auditory hallucinations, and delusions (for example, the sensation of insects crawling under the skin).

The United States Department of Justice reports;

At low doses, methamphetamine produces such effects as increased wakefulness, increased physical activity, increased heart rate and blood pressure, decreased appetite, increased respiration and body temperature (hyperthermia), and euphoria. High-dose chronic use has been associated with irritability, tremors, convulsions, anxiety, paranoia, and neurotoxic effects that cause damage to neurons and blood vessels. Aggressive and violent behavior, often directed at spouses and children, pose a significant risk to those individuals in contact with methamphetamine addicts.

The Institute for Intergovernmental Research states;

Methamphetamine can cause sleeplessness, increase wakefulness and physical activity, and decrease appetite. . . chronic abusers exhibit symptoms that include violent behavior, anxiety, confusion, and insomnia. They also display a number of psychotic features, including paranoia, auditory hallucinations, mood disturbances, and delusions (for example, the sensation of insects creeping on the skin, called "formication"). The paranoia can result in homicidal as well as suicidal thoughts. . . Chronic abuse can lead to psychotic behavior, characterized by intense paranoia, visual and auditory hallucinations, and extremely violent behavior. . . There are several symptoms that occur when a chronic user stops taking the drug. They include depression, anxiety, fatigue, paranoia, aggression, and an intense craving for the drug.

Scientific studies raise concern over the toxic effects of methamphetamine on the brain. Researchers have reported that as much as 50 percent of the dopamine-producing cells in the brain can be damaged after prolonged use. They also have found that serotonin-containing nerve cells may be damaged even more extensively. Whether this toxicity is related to the psychosis seen in some long-term methamphetamine abusers is still an open question.

Methamphetamine

From Wikipedia, the free encyclopedia

This article is about the free base and salts of methamphetamine. "Meth" redirects here. For other Methamphetamine[^{note 1}] (pronunciation: /ˌmɛθæmˈfɛtəmiːn/; contracted from N-methyl-alpha-methylphenethylamine) is a neurotoxin and potent psychostimulant of the phenethylamine and amphetamine classes that is used to treat attention deficit hyperactivity disorder (ADHD) and obesity. Methamphetamine exists as two enantiomers, dextrorotary and levorotary.[^{note 2}] Dextromethamphetamine is a stronger central nervous system (CNS) stimulant than levomethamphetamine; however, both are addictive and produce the same toxicity symptoms at high doses. Although rarely prescribed due to the potential risks, methamphetamine

hydrochloride is approved by the United States Food and Drug Administration (USFDA) under the trade name Desoxyn. Recreationally, methamphetamine is used to increase sexual desire, lift the mood, and increase energy, allowing some users to engage in sexual activity continuously for several days straight.

Methamphetamine may be sold illegally, either as pure dextromethamphetamine or in an equal parts mixture of the right and left handed molecules (i.e., 50% levomethamphetamine and 50% dextromethamphetamine). Both dextromethamphetamine and racemic methamphetamine are schedule II controlled substances in the United States. Similarly, the production, distribution, sale, and possession of methamphetamine is restricted or illegal in many other countries due to its placement in schedule II of the United Nations Convention on Psychotropic Substances treaty. In contrast, levomethamphetamine is an over-the-counter drug in the United States.[note 3]

In low doses, methamphetamine can cause an elevated mood and increase alertness, concentration, and energy in fatigued individuals. At higher doses, it can induce psychosis, rhabdomyolysis and cerebral hemorrhage. Methamphetamine is known to have a high potential for abuse and addiction. Recreational use of methamphetamine may result in psychosis or lead to post-withdrawal syndrome, a withdrawal syndrome that can persist for months beyond the typical withdrawal period.[i] Unlike amphetamine, methamphetamine is neurotoxic to humans, damaging both dopamine and serotonin neurons in the CNS.[i] Entirely opposite to the long-term use of amphetamine,[iii] there is evidence that methamphetamine causes brain damage from long-term use in humans;[ii] this damage includes adverse changes in brain structure and function, such as reductions in gray matter volume in several brain regions and adverse changes in markers of metabolic integrity.[ii]