

Methamphetamine Misuse And The Risk For HIV/AIDS And Hepatitis B And C



What Is Methamphetamine?

Methamphetamine is a powerful, highly addictive stimulant that affects the central nervous system. Also known as meth, blue, ice, and crystal, among many other terms, it takes the form of a white, odorless, bitter-tasting crystalline powder that easily dissolves in water or alcohol.

Methamphetamine was developed from its parent drug, amphetamine, and was used originally in nasal decongestants and bronchial inhalers. Like amphetamine, methamphetamine causes increased activity and talkativeness, decreased appetite, and a pleasurable sense of well-being or euphoria. However, methamphetamine differs from amphetamine in that, at comparable doses, much greater amounts of the drug get into the brain, making it a more potent stimulant. It also has longer-lasting and more harmful effects on the central nervous system. These characteristics make it a drug with high potential for widespread misuse.

How Is Methamphetamine Misused?

Methamphetamine comes in several forms and can be smoked, snorted, injected, or orally ingested. The preferred method of using the drug varies by geographical region and has changed over time.

Smoking or injecting methamphetamine puts the drug very quickly into the bloodstream and brain, causing an immediate, intense "rush" and amplifying the drug's addiction potential and adverse health consequences. The rush, or "flash," lasts only a few minutes and is described as extremely pleasurable. Snorting or oral ingestion produces euphoria—a high, but not an intense rush. Snorting produces effects within 3 to 5 minutes, and oral ingestion produces effects within 15 to 20 minutes.

Methamphetamine is most often misused in a "binge and crash" pattern. Because the pleasurable effects of methamphetamine disappear even before the drug concentration in the blood falls significantly, users try to maintain the high by

taking more of the drug. In some cases, people indulge in a form of bingeing known as a "run," foregoing food and sleep while continuing to take the drug for up to several days.

Why Are People Who Misuse Methamphetamine At Risk for HIV/AIDS And Hepatitis B And C?

Methamphetamine misuse raises the risk of contracting or transmitting HIV and hepatitis B and C—not only for individuals who inject the drug but also for noninjecting methamphetamine users. Among people who inject drugs, HIV and other infectious diseases like hepatitis B and C are spread primarily through the re-use or sharing of contaminated syringes, needles, or related paraphernalia. But regardless of how methamphetamine is taken, its strong effects can alter judgment and inhibition and lead people to engage in risky behaviors like unprotected sex.

- Methamphetamine is a powerful, highly addictive drug. It is also known as meth, blue, ice, and crystal.
- Methamphetamine misuse increases the risk for acquiring HIV/AIDS and hepatitis B and C due to:
 - Re-use or sharing of contaminated needles or syringes
 - Lowered inhibition leading to risky behaviors such as unprotected sex
- Individuals who misuse methamphetamine are also at risk for addiction, anxiety, insomnia, mood disturbances, and violent behavior.



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Methamphetamine misuse is associated with a culture of risky sexual behavior, both among men who have sex with men and in heterosexual populations, a link that may be attributed to the fact that methamphetamine and related stimulants can increase libido. (However, long-term methamphetamine misuse may be associated with decreased sexual functioning, at least in men.) The combination of injection practices and sexual risk-taking may result in HIV becoming a greater problem among people who misuse methamphetamine than among other drug users, and some epidemiologic reports are already showing this trend. For example, while the link between HIV infection and methamphetamine misuse has not yet been established for heterosexuals, data show an association between methamphetamine misuse and the spread of HIV among men who have sex with men.

What Is The Effect Of Methamphetamine Misuse On HIV Disease?

Methamphetamine misuse may also worsen the progression of HIV disease and its consequences. In animal studies, methamphetamine has been shown to increase viral replication. Clinical studies in humans suggest that current methamphetamine users taking highly active antiretroviral therapy (HAART) to treat HIV may be at greater risk of developing AIDS than non-users, possibly because of poor medication adherence. Methamphetamine users with HIV also have shown greater neuronal injury and cognitive impairment due to HIV, compared with those who do not misuse the drug.

Are There Other Effects Of Methamphetamine Misuse In Addition To The Risk for HIV and Hepatitis B And C?

Long-term methamphetamine misuse has many negative consequences, including addiction. Addiction is a chronic, relapsing disease, characterized by compulsive drug seeking and misuse and accompanied by changes in the brain.

As is the case with many drugs, tolerance to methamphetamine's pleasurable effects develops when it is taken repeatedly. Individuals often need to take higher doses of the drug, take it more frequently, or change how they take it in an effort to get the desired effect. Individuals who chronically misuse methamphetamine may develop difficulty feeling any pleasure other than that provided by the drug, fueling further misuse. Withdrawal from methamphetamine occurs when the individual stops taking the drug; symptoms of withdrawal include depression, anxiety, fatigue, and an intense craving for the drug.

People who misuse methamphetamine long term may also exhibit symptoms that can include significant anxiety, confusion, insomnia, mood disturbances, and violent behavior. They also may display a number of psychotic features, including paranoia, visual and auditory hallucinations, and delusions (for example, the sensation of insects creeping under the skin). Psychotic symptoms can sometimes last for months or years after a person has quit misusing methamphetamine, and stress has been shown to precipitate spontaneous recurrence of methamphetamine psychosis in people who misuse methamphetamine and have previously experienced psychosis.

How Can A Person Get Help For Methamphetamine Misuse?

A person can call Connecticut's 24/7 Access Line at 1.800.563.4086 to speak with trained staff about methamphetamine misuse and receive referrals for treatment in their community. If a person is also concerned about their HIV and/or Hepatitis B and C status, they can speak with their medical care provider or visit the Connecticut Department of Public Health website at <https://portal.ct.gov/DPH> for testing information.

Connecticut Resources

**CT Department of Mental
Health and Addiction Services**

www.ct.gov/DMHAS

24/7 Access Line

1.800.563.4086

**CT Department of Public
Health**

www.ct.gov/DPH

National Resources

**Substance Abuse and Mental
Health Services Administration**

www.samhsa.gov

**Centers for Disease Control
and Prevention**

www.cdc.gov



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