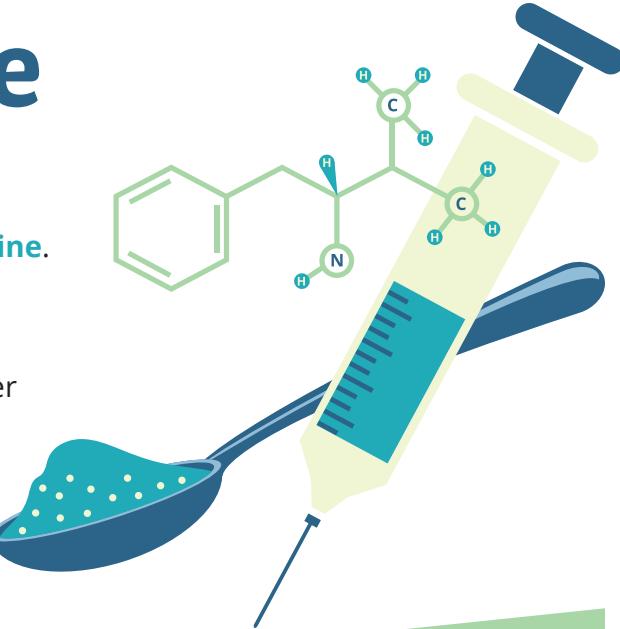


Methamphetamine (Meth)

The most commonly misused stimulant globally is **methamphetamine**. Meth use surpasses opioid use in some regions of the U.S. and is a major contributor to violent crime.

Methamphetamine is typically found as a white, bitter-tasting powder or pill or as glass-like fragments or shiny, bluish-white rocks.

ALERT: Meth is also found pressed into counterfeit pills disguised as ecstasy to attract new users and is also found mixed with highly deadly synthetic opioids like fentanyl.



A Closer Look

The majority of meth encountered in the U.S. is produced by transnational criminal organizations in Mexico. Over the last decade, meth supply and purity have increased considerably while the price has dropped to historic lows. Meth production is associated with chemicals that are toxic to both human and environmental health.



The use of meth, exposure cases reported to U.S. Poison Control Centers, overdose deaths, and treatment for meth use disorder have all been increasing over the past decade.

- ▶ In one year alone, the number of adults aged 26 or older who used meth **increased 43%**
- ▶ Meth is now involved in more deaths than prescription opioids or heroin, with the **number of deaths involving meth quadrupling** between 2013 and 2019



In contrast to other stimulant drugs, meth is not processed quickly within the body, enabling the drug to linger longer in the brain causing extended stimulant effects.

When taken in low doses, meth increases the release of dopamine at much higher levels than cocaine. And unlike cocaine, meth blocks the re-uptake of dopamine, leading to an accumulation of excess dopamine between the brain nerve cells that contributes to the risk of addiction and neurotoxicity.

A New Wave

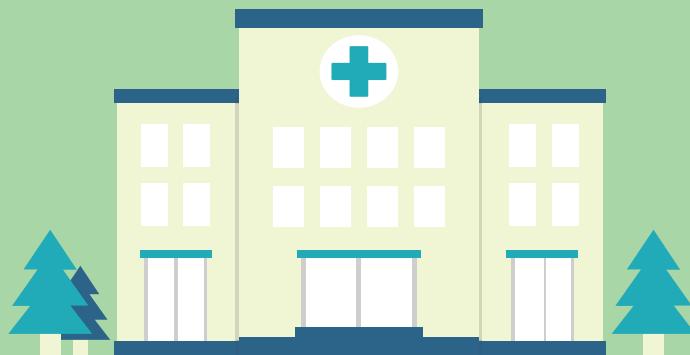
The rise in meth use and the associated morbidity and mortality along with co-use of opioids represents the new wave of the opioid epidemic.



- ▶ Between 2008 and 2017, there was a **490% increase** in heroin treatment admissions also reporting meth use.



The co-use of opioids and meth increases the risk for overdose, adverse health outcomes, death, and poses challenges for recovery.



Long-Term Effects of Meth

Long-term meth use is associated with significant structural and functional changes in some areas of the brain that can be permanent or may last for months or years after last use. Such changes can result in a decline in motor speed, impaired verbal learning, emotional and cognitive problems, and increased risk for stroke and Parkinson's disease.

Long-term meth use can also result in permanent damage to the heart. Some chronic users of meth exhibit violent behavior, delusions, hallucinations, paranoia, confusion, mood disturbances. Chronic users tend to experience serious dental issues (meth mouth), severe itching resulting in sores, and they are also at higher risk for infectious diseases like HIV and hepatitis due to risky sexual behaviors and injection practices.



The tremendous dopamine release and intense brain reward stimulated by methamphetamine use result in long-term changes to brain structure and function. **This makes meth one of the most addictive drugs known to humanity and attributes to the high relapse rates.**



Recovery is Achievable

Behavioral and contingency management therapies are currently the most effective treatment and current research is underway for developing both medicinal and non medicinal interventions to treat the addiction as well as to offset the impairments associated with chronic meth use such as enhancing cognitive functioning.

For help, call 1-800-662-HELP (4357),
which is a FREE, CONFIDENTIAL, 24/7,
365-days-a-year helpline or visit,
<https://findtreatment.samhsa.gov/>

Other Impacts

- While it is not known whether exposure to secondhand meth smoke can cause adverse health effects, people can test positive if exposed to secondhand meth smoke.
- Meth misuse during pregnancy is associated with premature delivery, placental abruption, small birth weight, and both heart and brain abnormalities.
- Societal costs, such as unemployment, crime, and child neglect or abuse, due to meth misuse is high, costing the U.S. about \$23.4 billion dollars in 2005, according to a 2009 RAND study.



Resources

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