

METHAMPHETAMINE

INTRODUCTION

Methamphetamine (also called “meth”) is an illicit, synthetic, central nervous system stimulant chemically related to amphetamine. Methamphetamine has a greater effect than amphetamine and generally lasts longer than cocaine. Methamphetamine is primarily used in three forms:¹



Common slang terms for methamphetamine: meth, speed, crank, ice, chalk, wash, trash, dunk, gak, pookie, cookies, Christina, no doze, white cross, cotton candy, rocket fuel, and Scooby snax.²⁻³

GENERAL PRESENTATION

Both short-term and long-term methamphetamine use have distinct effects on the body and mind. Individual experiences vary. Generally, around 2% of emergency visits are due to methamphetamine use.⁴ Physical trauma (e.g., car accident, gunshot) and psychosis are two of the most reported diagnoses for meth-related ED presentations.⁴⁻⁵ Of those experiencing psychosis, only a few are admitted to the hospital (14%) and placed on a psychiatric hold (11%).⁴⁻⁵ Methamphetamine “overdose” is called overamping.¹³

Short-term use effects:⁶

Long-term use effects:⁷

↑ State of arousal
↑ Euphoria
↑ Energy
↑ Talkativeness
↑ Anxiety

↑ Paranoia
↑ Heart rate
↓ Blood pressure
↑ Respiration rate
↑ Temperature

↓ Movement
↓ Appetite

↑ Paranoia
↑ Hallucinations
↑ Violence
↑ Distractibility

↑ Memory loss
↑ Aggression
↑ Dental problems
↑ Repeat motions

↓ Thinking
↓ Motor skills

HEALTH IMPACT

Methamphetamine negatively impacts major bodily systems like the nervous system and the circulatory system.⁵

Brain

Increased Risk:

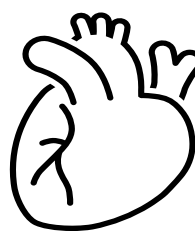
Stroke
Impairment
Seizure
Psychosis



Heart

Increased Risk:

Narrowed blood vessels
High blood pressure
Heart disease
Inflammation
Improper heartbeat



POLYSUBSTANCE USE

Methamphetamine and Opioids

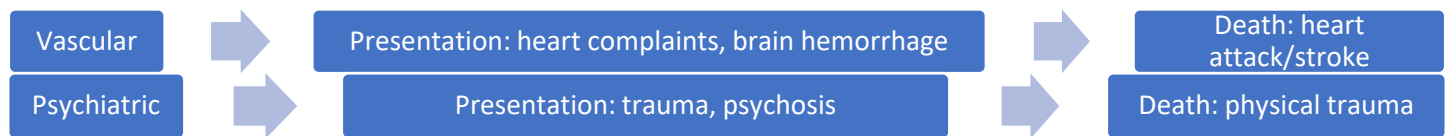
- Combination of opioids and methamphetamine: "poor man's speedball."⁸
- Methamphetamine masks overdose signs (e.g., slowed breathing), resulting in higher chances of accidental overdose.⁹
- Combined use of opioids and methamphetamine doubled between 2011 and 2017.¹⁰
- Individuals in treatment for opioid use are often under treated for methamphetamine use disorder.¹⁰
- Stimulant-related death increases correlate with the opioid epidemic death rate.¹¹

Methamphetamine and Marijuana

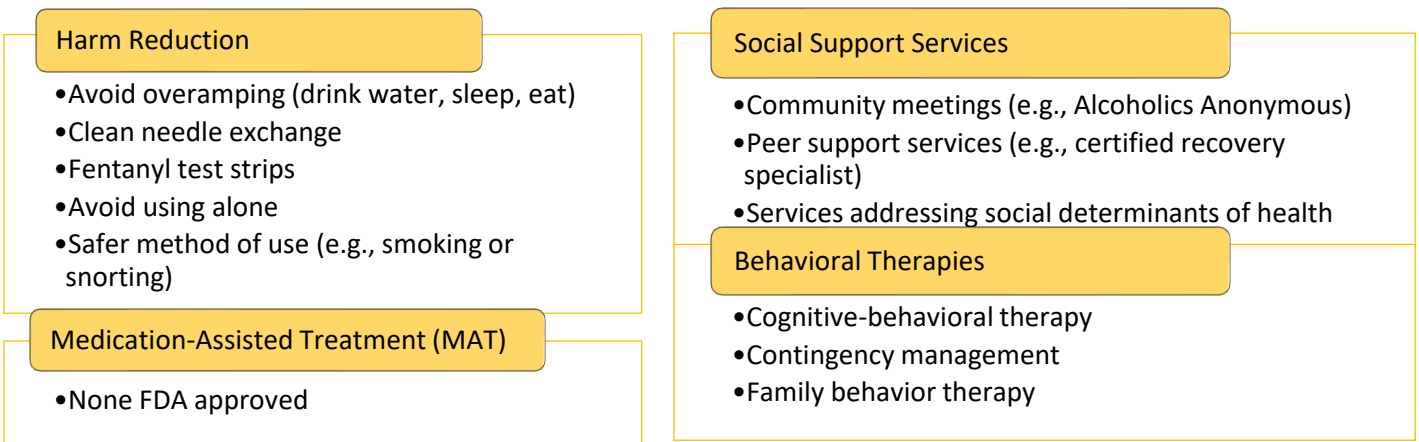
- The combination of marijuana and methamphetamine is called "boo."⁸
- The combination results in the opposite of traditional marijuana effects, such as fast heart rate, high blood pressure, and overheating.¹²
- Marijuana laced with methamphetamine may have an uncharacteristic chemical odor when burning.¹²
- Lacing marijuana with methamphetamine may be an attempt to mask poor quality marijuana.¹²
- The combination is sometimes done in an attempt to soften the come down from methamphetamine after the initial high.¹²

TOXICITY and TREATMENT

There are two primary causes of death from methamphetamine poisoning: vascular and psychiatric.⁵



Research on treatments is ongoing. Current research explores use of harm reduction and traditional best practices.^{5, 13}



1. Ford, A. (2022). *Forms of Meth*. Nevada Attorney General Aaron D. Ford. https://ag.nv.gov/Hot_Topics/Issue/Meth_Forms/. 2. Editorial Staff. (2022, February). *Meth Street Names, Nicknames & Slang Terms*. American Addiction Centers. <https://americanaddictioncenters.org/meth-treatment/slang-names>. 3. KCI. (2022). *Slang, Jargon, and Nicknames for Crystal Meth/Methamphetamine*. KCI.org The Anti-Meth Site. http://www.kci.org/meth_info/slang_names.htm. 4. Jones, R., Woods, C. & Usher, W. (2018). Rates and Features of Methamphetamine Related Presentations to Emergency Departments: An Integrative Literature Review. *Journal of Clinical Nursing* 27(13-14):2569-2582. 5. Coffin, P. (2022, January 12). *Updates on New Methamphetamine and Cocaine Health Risks: Improved Screening and Action to Save Lives*. PowerPoint. COSSAPResources.org https://www.cossapresources.org/Content/Documents/webinar/Presentation_Slides_UpdatesNewMethCocaine_Jan1222.pdf?F=true. 6. Steinkellner, T., Freissmuth, M., Sitte, H. H., & Montgomery, T. (2011). The ugly side of amphetamines: short- and long-term toxicity of 3,4-methylenedioxymethamphetamine (MDMA, 'Ecstasy'), methamphetamine and D-amphetamine. *Biol Chem*, 392(1-2), 103-115. doi:10.1515/BC.2011.016. 7. NIDA. 2022, January 12. What are the long-term effects of methamphetamine misuse?. Retrieved from <https://nida.nih.gov/publications/research-reports/methamphetamine/what-are-long-term-effects-methamphetamine-misuse> on 2022, June 1. 8. Jefferson County Arkansas Sheriff. *Drug Slang Terms*. Jefferson County Arkansas Sheriff. https://www.jeffco.org/plugins/show_image.php?id=335. 9. Editorial Staff. (2022, January 31). *Mixing heroin & meth: Effects, dangers & treatment*. American Addiction Centers. <https://americanaddictioncenters.org/heroin-treatment/combination>. 10. Yen Li, M., Alba, G. A., Mitton, J., & Bearnot, B. (2021). Care-engaged individuals with polysubstance use in Northeastern US are undertreated for methamphetamine use disorder: a retrospective cohort study. *Addict Sci Clin Pract*, 16(1), 57. doi:10.1186/s13722-021-00267-1. 11. Ciccarone, D. (2021). The rise of illicit fentanyl, stimulants and the fourth wave of the opioid overdose crisis. *Curr Opin Psychiatry*, 34(4), 344-350. doi:10.1097/YCO.0000000000000717. 12. Recovery Village. (2022, May 11). *Weed Laced with Meth*. The Recovery Village. <https://www.therecoveryvillage.com/meth-addiction/meth-and-weed/>. 13. Workit Health. (2022, April 28). *5 Ways to Reduce Harm While Using Meth*. Workit Health. https://www.workithealth.com/blog/harm-reduction-meth/?utm_medium=cpc&utm_source=google&utm_term=&utm_campaign=&hsa_acc=7207320339&hsa_cam=13707675042&hsa_grp=124989997420&hsa_ad=530690616196&hsa_src=g&hsa_tgt=dsa-39587879683&hsa_kw=&hsa_mt=&hsa_net=adwords&hsa_ver=3&gclid=CjwKCAjwzeqVBhAoEiwAOErMzW5rGAazRyqH9dTBe9XdVFPzjOs1oJvylaUya7TgCW0nVMg80FPYXBoCSioQAvD_BwE