

Methamphetamine

Topical Brief Series: Vol. 1, Issue 1

What is Methamphetamine?

Methamphetamine is an addictive, stimulant drug that affects the central nervous system. It is typically used in powder or pill form and can be ingested orally, snorted, smoked, or injected. Methamphetamine is known as meth, blue, ice, speed, and crystal among other names.¹ The term amphetamine has been used broadly to refer to a group of chemicals that have similar, stimulating properties and methamphetamine is included in this group.² According to the National Institute on Drug Abuse (NIDA), "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."³

From the 1930s to the 1960s, U.S. pharmaceutical companies produced and sold many types of amphetamine as prescription and over-the-counter drugs to treat health conditions like asthma, narcolepsy, and depression.⁴ Many

countries involved in World War II provided amphetamine to soldiers for performance enhancement and the drug was used by "actors, artists, athletes, politicians, and the public alike."⁵

By the 1960s, media coverage began drawing simplistic, negative connections between amphetamine and crime, and government officials discussed public safety and drugs as a social concern.⁶ Over-the-counter amphetamines were available until 1959,⁷ and by 1970 all amphetamines were added to the controlled substances list as Schedule II drugs. Schedule II drugs required a new prescription with each fill and strict documentation by doctors and pharmacists.⁸ The reduction in a legal supply of amphetamine led to increased black-market production and sale of various types of amphetamine – including methamphetamine – over subsequent decades.^{9,10} By the early 2000s, approximately 3 million Americans consumed amphetamine-type stimulants nonmedically.¹¹

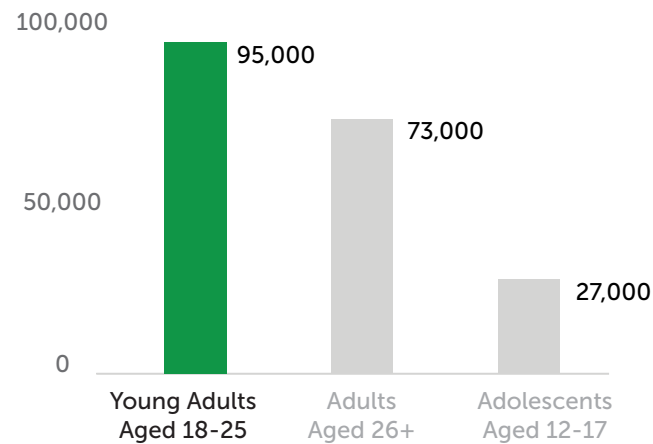
Key Findings

- Methamphetamine use was highest in Western states in 2017;
- Young adults, aged 18-25, had the highest prevalence of methamphetamine use in Colorado and nationally in 2017;
- The average cost of methamphetamine has dropped in Colorado and the U.S. in the past decade;
- The number of Colorado high school students who have ever used methamphetamine has declined in the past five years; and,
- The number of overdose deaths in Colorado due to methamphetamine more than doubled from 2013 to 2017.

National Trends

In 2017 in the U.S., 0.6% of the total population reported using methamphetamine in the past year, which is approximately 1.6 million people. Nearly 760,000 people reported using methamphetamine in the past month. For comparison, just under 500,000 adults reported using heroin during the same time period. An estimated 27,000 adolescents, 95,000 young adults, and 73,000 adults used methamphetamine for the first time in 2017.

A large number of 18-25 year-olds tried methamphetamine for the first time in 2017.



Data source: National Survey on Drug Use and Health, SAMHSA

Between 2016 and 2017, young adults reported a significant increase in use. The highest increase for the age group occurred in past-month use in non-metropolitan, urbanized areas, which are defined as having a population of 20,000 or more. In addition to differences by age group, males were nearly twice as likely as females to report past-month methamphetamine use in 2017.¹²

Despite the recent uptick in young adult methamphetamine use, methamphetamine use by adolescents has decreased since 1999. According to the 2017 Monitoring the Future survey, 8th, 10th, and 12th graders' lifetime use of methamphetamine declined steadily from 1999 to 2017.¹³

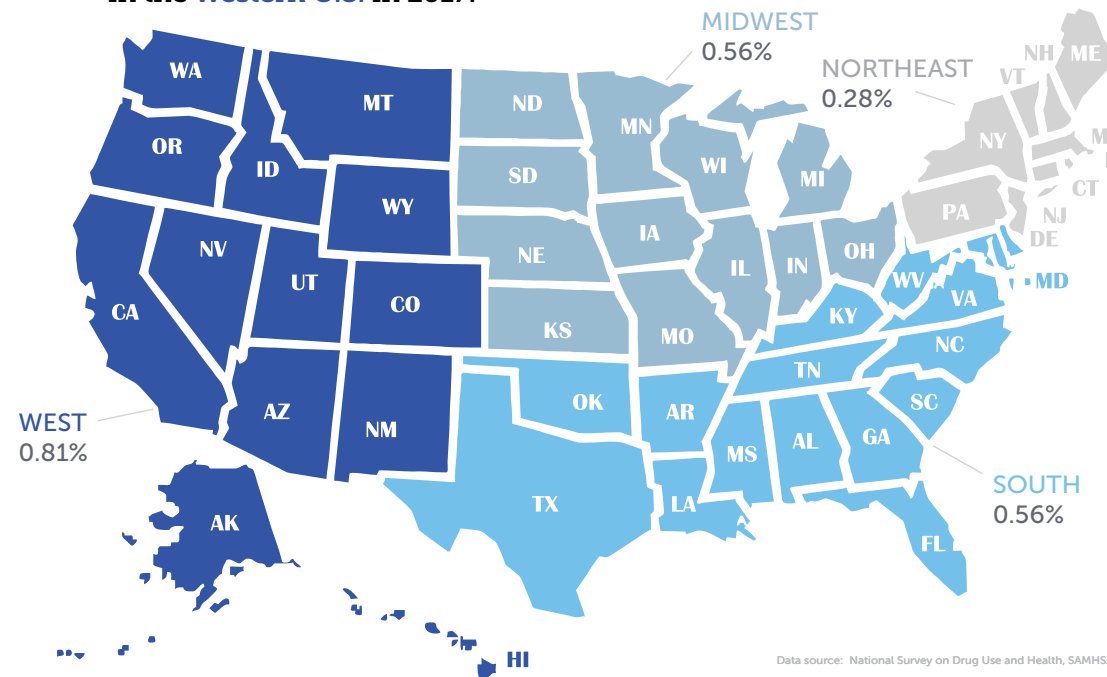
The amount of methamphetamine smuggled into the U.S. has increased significantly in recent years. According to U.S. Customs and Border Protection (CBP), nationwide seizures of methamphetamine increased 279% between

2012 and 2018.¹⁴ Most methamphetamine available in the U.S. is produced in Mexico and smuggled across the Southwest border (SWB), and seizures of methamphetamine on the SWB have more than tripled since 2012.¹⁵ Methamphetamine from Mexico remains a high-purity, high-potency, low-cost alternative to smaller quantities of methamphetamine manufactured in the U.S. As a result, most U.S. labs produce small amounts for personal use.¹⁶

Nationally, the number of people with a methamphetamine use disorder increased significantly from 684,000 in 2016 to 964,000 in 2017. A methamphetamine use disorder includes clinically significant impairment, such as health problems, disability, and failure to meet work, school, and home responsibilities due to methamphetamine use.¹⁷

The rate of substance abuse treatment facility admissions for methamphetamine misuse decreased from 68 per 100,000 in 2005 to 49 per 100,000 in 2015, although the rate varies greatly by geographic region. Admissions to treatment facilities for methamphetamine misuse are drastically higher in the western U.S. East of the Mississippi River, less than one percent of admissions to treatment facilities listed methamphetamine as the primary substance. Regions west of the Mississippi River experienced admission rates for methamphetamine ranging from 12-29%.¹⁸

Use of methamphetamine was highest in the Western U.S. in 2017.

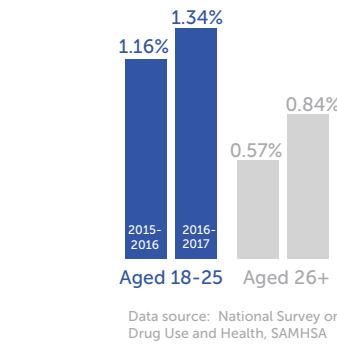


Data source: National Survey on Drug Use and Health, SAMHSA

Trends in Colorado

In Colorado, the percentage of adults using methamphetamine in the past year increased from 0.65% to 0.91% between 2015 and 2017, with individuals aged 18-25 experiencing the highest prevalence in 2017. Colorado was one of 13 states that had a statistically significant increase in use in one or more age groups.²¹ The average age of first use of methamphetamine in Colorado for individuals seeking treatment was 21 years old.²² As use of the drug has increased, the price has steadily decreased in the past decade. In Denver in 2010, an ounce of methamphetamine cost \$1400 on average as compared to \$350 in 2018.²³ The local downward trend in pricing follows a national trend. The price per gram of methamphetamine fell 13.6% in the U.S. from 2012 to 2017.²⁴

Young adults had the highest prevalence of past-year methamphetamine use in 2017.



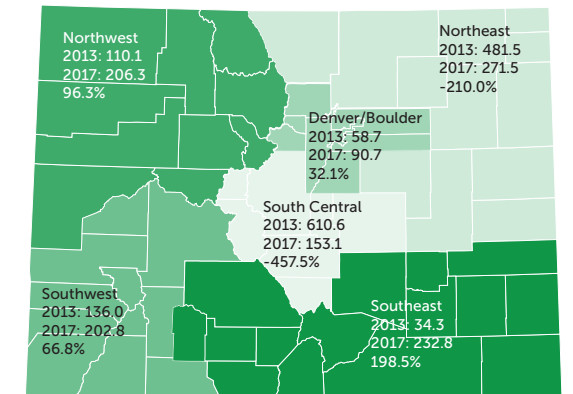
Data source: National Survey on Drug Use and Health, SAMHSA

Encouragingly, rates of Colorado high school students who ever used methamphetamine dropped 38% between 2013 and 2017. The decrease was steeper among high school females, who already used methamphetamine at lower

rates. In 2017, only 2% of Colorado high school students reported using methamphetamine one or more times during their life.²⁵ However, troubling trends remain. The percentage of youth who believe there is great risk from limited use of methamphetamine fell from 90% in 2013 to 84% in 2018. At the same time, the proportion of youth who reported "easy or somewhat easy access to methamphetamine" increased.²⁶

As the rate of methamphetamine use by adults in Colorado increased, so did the rate of people seeking treatment for addiction to the drug. From 2013 to 2017, the rate of people seeking treatment for methamphetamine increased 52% across the state, with the largest increases for adults aged 25 to 34. Regionally, the highest rate of treatment admissions occurred in Eastern Colorado. Statewide, treatment admissions for methamphetamine accounted for 23% of all admissions, which is second only to alcohol.²⁷

The Southeast region had the highest increase (rate per 100,000) of people seeking treatment for methamphetamine between 2013 and 2017.



Data Source: Drug and Alcohol Coordinated Data System

Treating Misuse

Research has found methamphetamine "alters brain structures involved in decision-making and impairs the ability to suppress habitual behaviors that have become useless or counterproductive. Changes in brain structure and function could explain why methamphetamine addiction is so hard to treat and has a significant chance of relapse early in treatment."²⁸ Symptoms of withdrawal from methamphetamine include depression, anxiety, fatigue, and an intense craving for the drug.

Currently, the most effective treatments for methamphetamine addiction are behavioral therapies, such as cognitive-behavioral interventions. Although no pharmacological approaches to treating methamphetamine use disorder currently exist, the NIDA is funding research to investigate potential treatments.²⁹

Impact

Methamphetamine misuse has led to public health and safety issues. Nationwide, overdose deaths from the category of drugs that includes methamphetamine increased more than seven-fold between 2007 and 2017. In Colorado, between 2013

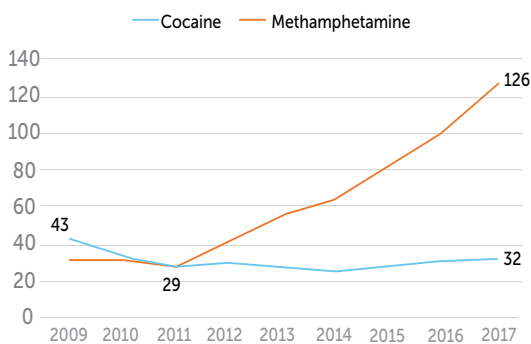
*More than **2x** the number of overdose deaths due to methamphetamine occurred in Colorado in 2017 compared to 2013.*

and 2017, the rate of overdose due to methamphetamine more than doubled.³⁰ Methamphetamine misuse may include short- and long-term negative health effects such as memory loss, psychosis (paranoia, hallucinations, repetitive motor activity), addiction, aggressive or violent behavior, severe dental problems, skin sores, and weight loss. Methamphetamine misuse – especially intravenous use of the drug – is associated with increased transmission of infectious diseases, such as hepatitis and HIV/AIDS.³¹ In Colorado, injection of methamphetamine increased 1.5 times from 2013 to 2017.³²

In addition to health impacts, methamphetamine misuse impacts public safety. According to the Colorado Division of Criminal Justice, the rate of stimulant offenses in Colorado rose steeply

Stimulant Offenses in Colorado, 2009-2017

(rate per 100,000)



Data source: Colorado Bureau of Investigation

from 2011 to 2017. Stimulant offenses include the manufacture, sale, and possession of methamphetamine.³³ The U.S. Department of Justice states methamphetamine is the drug that contributes most to violent crime. Another concern for public safety is driving under the influence of drugs and alcohol. Following alcohol and cannabis in toxicology results, the most common drug detected for 2017 case filings was methamphetamine.³⁴

Due to public health and safety impacts, methamphetamine misuse incurs a sizable cost for communities. A 2009 RAND Corporation report found methamphetamine misuse cost the nation approximately \$23.4 billion in 2005.³⁵

Methamphetamine has public health, public safety, and economic implications for Colorado and the U.S. Raising public awareness of methamphetamine in our communities is an important step to understanding and addressing the issue.

For more information...

on this research brief, including references, please contact:

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