

A PREVENTION AND EDUCATION TOOLKIT FOR COMMUNITIES





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METH: GET THE FACTS

Highly addictive, widely available, and cheap, methamphetamine (meth) is an illegal drug commonly used in the United States. Meth production and distribution methods have evolved since the late 1990s and early 2000s, making it an ongoing threat to people and communities all over the country. This document offers facts about meth and the people who use it, as well as its human and environmental costs. The good news is that treatment for meth use disorder works, and recovery is possible.

Methamphetamine is an illicit stimulant that has become cheap and accessible in the United States. According to research from Millennium Health, Arkansas leads the nation in methamphetamine use. In Arkansas, methamphetamine presents as great a problem as opioids, and law enforcement is seeing methamphetamine cut with fentanyl.

In the past decade, the chemical makeup of meth has changed. Methamphetamines today are not the same as methamphetamines ten years ago. Production has transformed, creating a more potent drug that can quickly lead to psychosis.

As a campaign for the Department of Adult, Aging, and Behavior Studies in partnership with the University of Arkansas at Little Rock's MidSOUTH, Me Over Meth offers drug eduMecation, prevention resources, and support for communities across Arkansas.

Undoing methamphetamine substance use in Arkansas will take a community effort, and it is time for Arkansans to step up.

WHAT IS METH?

Methamphetamine is a synthetic amphetamine-type stimulant with a high potential for abuse and addiction. Illegally produced meth appears as a white, odorless, bitter-tasting crystalline powder that dissolves easily in water or alcohol. Methamphetamine hydrochloride, the crystallized form of the drug, is often called "ice," "crystal," or "glass" because it is clear, chunky crystals resemble those substances. The names for meth in pill form include "uppers" and "yaba." "Yaba" means "crazy pill" in the Thai language. It is a tablet of meth combined with caffeine. Other slang terms for meth include "speed," "tweak," "go-fast," "crank," "rocket fuel," and "tina."

Meth can be snorted, smoked, injected, or orally ingested. In 2020, the DEA reported an increase in methamphetamine pills.

Methamphetamine is known to lead to psychosis, violence, impaired thinking-related skills, and life-altering addiction ("Meth Research," 2019).

HOW HAS METH EVOLVED OVER TIME?

Methamphetamine was first developed in Japan. In 1885, Nagai Nagayoshi discovered that ephedra, a plant used to treat breathing conditions such as asthma, also contained ephedrine, a chemical stimulant. Eight years later, he synthesized methamphetamine. In 1919, Akira Ogata discovered a way to break ephedrine down into a crystal-like form. This became the first known formula for crystal meth.

The first amphetamine known to be used in the United States was developed as a nasal decongestant in 1929. The Benzedrine inhaler was sold over the counter throughout the 1930s and '40s. During World War II, pilots used meth to increase their endurance on long missions. The Japanese, German, British, and U.S. military supplied soldiers with meth tablets to help them stay alert and be willing to take risks. Starting in the 1950s, methamphetamine was legally manufactured in the United States. People used it for weight control and to boost energy. Truck drivers would use it to stay awake for long shifts, and athletes would use it to increase their stamina.

In the 1980s, the U.S. government tightened the regulation of ephedrine, one of the ingredients necessary to make meth. Consequently, people illegally manufacturing meth began to use the stimulant pseudoephedrine to make the drug. Pseudoephedrine is one of the ingredients in over-the-counter cold medications.

With the growth of the internet in the 1990s, the recipes for making meth spread, and small labs began to dot the U.S. landscape. Meth labs were often found in rural communities, where their presence went unnoticed. Meth was "cooked" from products and medications

that were commonly found in farm supply, grocery, drug, and hardware stores.

Meth labs and the meth they produced were ravaging rural communities. In 2004, an estimated 12 million people—4.9 percent of people in the United States over the age of twelve—had tried meth at least once.6 Experts speculated that number would keep rising without intervention. Policy makers realized that regulating the sale of cold medicines with pseudoephedrine could slow the manufacturing of meth.

The Combat Methamphetamine Epidemic Act of 2005 restricted the availability of pseudoephedrine. The act required pharmacies and retail stores to move products containing pseudoephedrine behind the counter and limited the quantity that customers could purchase in a single visit. Several medications that could once be purchased over the counter now required a prescription. Meth production began to drop in the United States. Recently, however, meth smuggled from Mexico has led to a resurgence of addiction nationwide.

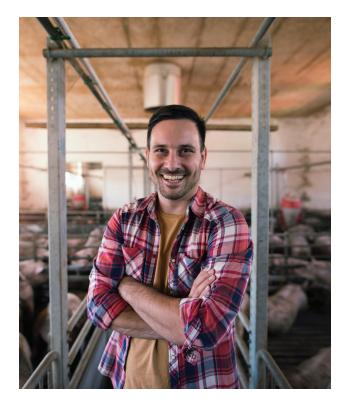
FROM EPHEDRINE TO P2P: THE NEW METH

In the 2000s, the United States and Mexico started to curb the sale of ephedrine. You may have noticed restrictions in purchasing ephedrine likely in response to increases in methamphetamine use in your area. As a result of those restrictions, illicit chemists developed a new, cleaner version of methamphetamine

made from phenyl-2-propanone (P2P). Unlike ephedrine, P2P is used in too many sectors to be regulated, among them racing fuel, tanning, gold mining, perfume, and photography according to reporting from The Atlantic (Quinones, 2021). When methamphetamine is smuggled into the United States in powder or liquid form, domestic conversion laboratories transform it into crystal methamphetamine. These laboratories do not require a significant amount of equipment, so they can be small in size and thus easily concealed, which presents challenges to law enforcement agencies. Methamphetamine pressed into a pill form intended to resemble ecstasy has also recently emerged, potentially in an effort to make methamphetamine more appealing to people who haven't tried it before. As with other illicit drugs like heroin and cocaine, methamphetamine is also sometimes laced with fentanyl.

WHY SHOULD WE BE CONCERNED ABOUT METH?

Meth use has a severe and costly impact on human health, the environment, and rates of crime in communities. It also costs human lives. Communities suffer when the drug devastates the lives of individuals who use it. Anyone can become addicted, regardless of their profession, race, gender, or socioeconomic class. Straight-A students will steal from their parents to get meth. Children who live in households where meth is used are often endangered, hungry, and neglected.



Meth is accessible—it's often cheaper to buy than cocaine. Even though the key ingredients used to make meth are no longer readily available in the United States, they can be smuggled from China or India to Mexico. The drug is illegally manufactured in Mexico, and then Mexican cartels smuggle it into the United States across the southwestern border using established supply networks for other drugs. Meth crystals that are smuggled into the United States in liquids are recrystallized in illegal conversion labs. Conversion labs don't produce meth; instead, they convert powder meth into crystal meth or recrystallize meth that has been dissolved in water, alcohol, or vehicle fluids.

Meth samples seized by the DEA have proven increasingly pure and potent. In 2001, the samples were 40 percent pure meth combined

with solvents and other chemicals. Since 2013, the samples have become about 95 percent pure. The more potent samples cause smaller amounts of the drug to have a more significant effect on the human body.

Brain: Using meth releases a flood of dopamine, serotonin, and norepinephrine causing an intense high for hours. However, the high is followed by a crash, which leaves users irritable, depressed, and unable to sleep. After a binge, the individual may not sleep for days, leading to hallucinations, paranoia, depression, and anxiety.

Experts estimate that the "new meth" made from P2P may cause psychosis much quicker than methamphetamines made from ephedrine. Either way, **meth use kills your brain's dopamine cells,** leading to psychosis. While some of this damage can eventually be undone with treatment, it takes about a year without substance use.

Heart: Heart disease is the second leading cause of death for meth users. "Meth can raise your blood pressure, constrict blood vessels, speed up heart rate, and cause your heart's muscles to collapse" ("Meth Symptoms," 2022).

Immune System: Meth use weakens the immune system.

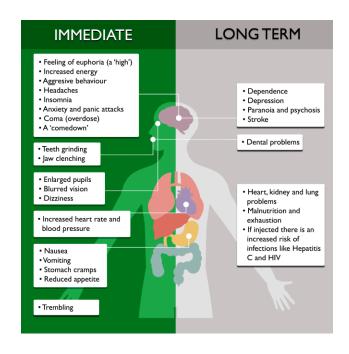
Kidneys: Likely due to toxins in meth, longterm meth use can cause your kidneys to break down. Teeth: The derogatory term "meth mouth" refers to advanced gum disease and tooth decay which causes teeth to crumble or fall out. It is unclear to what degree this phenomenon is due to ingesting chemicals in meth or from long periods of poor oral hygiene.

Skin: Meth use can cause extreme itching, leading people who use meth to scratch sores into their face and skin. This type of hallucination is called formication, or the physical hallucination leading users to think they are covered in insects. When under the influence of meth, users have a higher pain threshold, allowing them to scratch more aggressively than if they were sober.

Overdosing

In Arkansas, overdose from methamphetamine is a problem. The Arkansas State Crime Lab shows a significant increase in deaths related to methamphetamine, fentanyl, and co-occurring use of methamphetamine and fentanyl over the past decade.

In 2022 qualitative research from the Harm Reduction Journal, consistent methamphetamine users separate overdosing from "over-ramping." Over-ramping is described as a state after methamphetamine use where the body becomes overstimulated,



causing the user to go to sleep due to overstimulation. Overdosing from methamphetamine, however, is largely due to heatstroke and heart failure. As the body's temperature rises, organs shut down. During a meth overdose, it is also common for a sharp increase in blood pressure, leading to hemorrhage. There are currently no antidotes for methamphetamine overdose, although researchers from UAMS are working on a drug that would counter the effects of methamphetamine use disorder.

As meth has become more potent, people distributing it have found more ways to conceal it. Meth has been found hidden in various car parts and dissolved in vehicle fluids.

The Centers of Disease Control (CDC) reports drug overdose deaths in several categories. The psychostimulant category includes methamphetamine, Ritalin, caffeine, and amphetamines. In 2016, 7,542 deaths were reported, just a year later, that number increased to 10,333.



METH IS HIGHLY ADDICTIVE

Meth is extremely addictive because it enhances a person's mood and physical energy by releasing high levels of the neurotransmitters dopamine, epinephrine, and norepinephrine in the brain. It also raises a person's adrenaline levels, which increases energy. Meth can be smoked, injected, snorted, or swallowed in pill form. The way it is ingested affects how quickly it takes effect and the length of the high it produces. Smoking or injecting meth causes an immediate euphoric "rush" that is followed by an intense "high," where a person feels confident and energetic for four to sixteen hours. Snorting meth produces a more mellow

high that has a slower onset but can last for up to twelve hours. Swallowing meth pills leads to a high in fifteen to twenty-five minutes, but generally, people who swallow or snort meth don't experience the euphoric rush; they use it to stay awake or suppress their appetite.

Because meth is so addictive, it takes over people's lives as they pursue incredible highs that are followed by overwhelming crashes—and then they desperately attempt to recapture the high. Experts say it's not uncommon for people who use meth to commit crimes that are out of character, such as stealing from family and friends, to obtain money for meth.

SIGNS AND SYMPTOMS OF METH USE

If you suspect someone is using meth, get a professional substance use disorder assessment from a school counselor, county social service agency, or reputable treatment facility.

The following symptoms can indicate meth use:

- loss of appetite—extreme, rapid weight loss
- high energy level or restlessness
- talkativeness
- sores on the skin from scratching at imaginary "crank bugs"
- insomnia
- paranoia
- dry mouth
- dilated pupils
- distorted auditory and visual perceptions
- repetitive motor activity
- decline in performance at school, work, or home



METH CAN DESTROY THE HEALTH OF PEOPLE WHO USE IT

Meth appears to have a neurotoxic effect, damaging brain cells that contain the neurotransmitters dopamine and serotonin. In the short term, meth causes mind and mood changes, such as anxiety and depression, and increased heart rate and blood pressure. People who overdose on meth experience high body temperatures and convulsions, which if not treated, can result in death. Long-term effects can include paranoid or delusional thinking, violent behavior, memory loss, tooth decay and loss, malnutrition, and skin disorders. (Many people who use meth long term start picking at or scratching their skin, believing there are insects under its surface.) Some of these symptoms can persist for months or even years after a person has quit using meth, because long-term meth use can change the structure of the brain, particularly in areas associated with emotion and memory. When people don't recover quickly after quitting, it's harder for them to keep from using again. Injecting meth is also linked to increased transmission of infectious diseases, especially hepatitis and HIV/AIDS.

METH LABS ARE STILL PREVALENT

Even though meth production in the United States has dropped substantially since the Combat Methamphetamine Epidemic Act of 2005, meth labs still exist, and meth is still the most frequently manufactured drug seized in labs across the United States. At the peak of meth production in 2004, there were

23,703 seizures of meth labs, equipment, and chemicals; by 2018, there were only 1,568 lab seizures, and of those labs, 85 percent were small facilities capable of producing two ounces or less of meth. While small labs produce much less meth than cartels smuggle into the country, they have the tragic result of endangering children.

METH THREATENS CHILDREN

Exposure to meth threatens children in many ways. You don't have to use meth to absorb its toxins—living near a production site or inhaling meth smoke will also cause it to enter a person's bloodstream. Because children have smaller bodies and higher rates of metabolism and respiration than adults, they absorb higher levels of the toxic chemicals from meth labs. The explosive ingredients used to make meth also put children at risk for chemical burns and respiratory damage from fires.

The living conditions of a home used for the production of meth or inhabited by adults who use meth also endanger children. The homes are frequently filthy, and the parents may be so consumed with acquiring and using meth that they neglect their kids. Children's play, sleep, and eating areas may be infested with rodents and insects. Law enforcement officials frequently find rotten food, animal feces, used needles, and garbage piled on floors and counters in homes where meth is produced. First responders say they can never fully prepare themselves for the shock of finding young children who haven't eaten, bathed, or been

loved by a sober parent in days or weeks. They describe finding malnourished, frightened, and neglected children with respiratory problems, liver damage, injuries, or other issues. Initially, children who live where meth is made must be held with rubber gloves because their skin and clothing are extremely toxic.

A recent study calculates the long-term health damage to meth-exposed children. Infants exposed to meth in utero are more likely to be smaller than infants not exposed to drugs. By age five, they show above-average levels of anxiety and depression, and they are more emotionally reactive, which can increase behavior problems. They are more likely than other children to have attention problems, be more withdrawn, and show ADHD symptoms. Yet with professional help and a stable home environment, their lives can improve.

METH IS CHEAP AND EASY TO OBTAIN

Most of the meth currently available in the United States is manufactured in Mexico using chemicals from China or India, as Mexico has also restricted sales of ephedrine and pseudoephedrine. Drug cartels in Mexico also use phenyl-2-propanone (also called phenylacetone or P2P) instead of pseudoephedrine to manufacture meth. P2P can be produced in different ways with different chemicals, and as such it's extremely difficult for the Mexican government to control. Because meth is highly addictive, more available, and less expensive than other illegal drugs, such as cocaine or heroin, experts



THE HIGH COST TO CHILDREN

In 2021, a baby from Paragould, AR died from "manslaughter and introduction of a controlled substance into the body of another person" at 8 months old. The infant was in the care of a 30-year-old Paragould woman and according to the probable case affidavit, the infant was taken to Arkansas Children's Hospital with a fractured skill, a fractured femur, and meth in his system. The woman told investigators that she smoked methamphetamine in "close proximity to the infant on the night prior to the incident." Stating she had placed the infant down for a nap approximately 1 and ½ hours prior to finding the infant unresponsive. There were 12 blankets, a towel, two pillows, and some toys in the crib with the infant. The baby's death was determined to be "due to exposure to methamphetamine exposure complicated by an unsafe sleeping environment."



predict that meth use will only increase without intervention at the community, state, and federal levels.

WHO USES METH?

Meth is used all over the country, in urban and rural areas by people of all socioeconomic classes. Some people initially take the drug to cope with working long hours—they hear that it will boost their energy and productivity. It produces an intense euphoria and may also be used for weight loss and sexual endurance.

How many people use meth? According to a 2017 study, an estimated 14.7 million people in the United States—5.4 percent of Americans twelve or older—have tried it at least once.

A study by the Substance Abuse and Mental Health Services Administration reports that about 1.9 million (0.7 percent)27 had used it in the past year (2018) and 1 million (0.4 percent) in the month prior to the survey. Those percentages show an increase from 2005, when fewer than 5 percent of Americans had tried it, but they haven't varied much since 2015.

TEEN METH USE

Some encouraging news is that community action and prevention efforts to reduce teen meth use are working. Among teenagers, meth use has steadily declined since it peaked in 1999. The rate of past year meth use dropped from 4.7 percent in 1999 to 0.5 percent in 2019 among twelfth graders, from 4.6 to 0.5 percent among tenth graders, and from 3.2 percent to 0.5 percent among eighth graders.

It's clear that drug education has been successful and needs to continue. In 2003, about 50 percent of twelfth graders were aware that taking crystal meth once or twice was a "great risk." Fifteen years later, nearly 70 percent of twelfth graders see taking crystal meth as a "great risk."

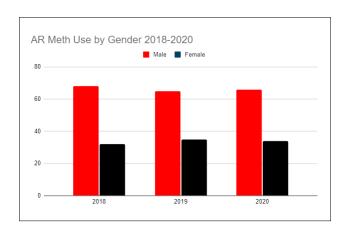
While teen use may be dropping overall, many of the teens who do try meth quickly become addicted—and face all the resulting consequences of addiction. Honor roll students fail school, and teens with clean records start stealing from friends and family to fuel their

addiction. Some teenagers still think of meth as safer, longer lasting, and easier to buy than cocaine. Fourteen-and fifteen-year-olds have been caught using and selling the drug.

ARKANSAS TRENDS

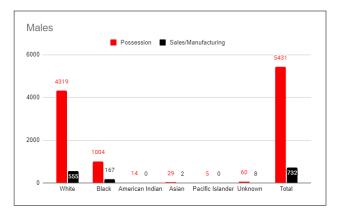
GENDER

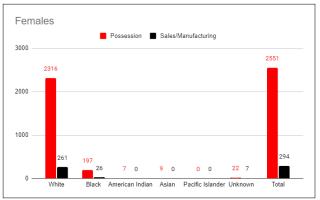
In Arkansas, possession data shows that nearly twice as many men are using methamphetamine than women. In 2020, people who use methamphetamine were 68% male and 32% female. In 2019, 65% male and 35% female. In 2018, 66% male and 34% female.



CRIME

In Arkansas, 4 in 10 violent crimes and 5 in 10 property crimes are related to meth. With white males accounting for 4319 arrests for possession in 2021 and 555 arrests for sales/manufacturing versus 1004 black male arrest for possession and 167 for sales/manufacturing. This trend also holds true for white women with 2316 arrest for possession and 261 for sales/manufacturing versus 197 possession arrests for black women and 26 arrests for sales/manufacturing.





SOME ALARMING INDICATORS

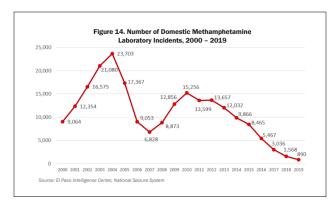
Across the United States, overdose deaths from psychostimulants—the category of drugs that includes meth—have increased more than 800 percent in the past decade. Those numbers may be rising because meth is purer and more potent than ever before. It may also be because people are combining meth with other drugs, including opioids. Some individuals who are trying to stop using opioids turn to meth to ease their withdrawal symptoms. Deaths also may be due to the risky behavior that comes with meth use or its stress on the heart.

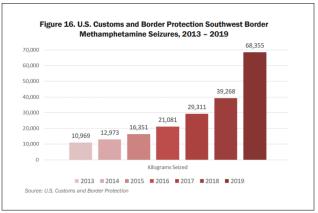
Historically, the major opioid epidemics of the early 1900s and the 1970s were followed by increased use of stimulants—meth or cocaine.34 The United States has been battling an opioid epidemic since 2002, which has intensified since 2013, and meth is cheaper and more accessible than cocaine. In 2014, U.S. Customs seized nearly twenty thousand pounds of meth; in 2019, more than sixty-eight thousand pounds were seized. There is clearly cause for concern about rising meth use.

How is Meth Getting Into The Country?

When ephedrine was readily available, small clandestine laboratories were found across the country. However, smaller labs have largely been replaced by transnational criminal organizations (TCOs) in Mexico, leading to a steady decline in domestic methamphetamine laboratory incidents, but an increase in seizures at the U.S. - Mexico border. Plus, the DEA reports that "many of the domestic methamphetamine laboratories seized in 2019 were small-capacity production laboratories, known as 'one-pot' or 'shake and bake.

Methamphetamine seizures occur in every U.S. state. Mexican TCOs control wholesale methamphetamine distribution, while both Mexican and domestic criminal groups typically control retail distribution in the United States. The SWB remains the main entry point for the majority of methamphetamine entering the United States. Methamphetamine seizures along the SWB increased 74 percent from 2018 (39,268 kilograms) to 2019 (68,355 kilograms) (See Figure 16). Total nationwide methamphetamine seizures increased 77 percent between 2018 (41,396 kilograms)





and 2019 (73,351 kilograms). While methamphetamine precursors are often transported via maritime shipments from China and India, finished methamphetamine is commonly trafficked overland across the SWB. Traffickers employ various techniques to transport and conceal methamphetamine, such as using human couriers, parcel services, and commercial conveyances. Commonly, traffickers transport multi-kilogram shipments of methamphetamine in privately owned vehicles. Fuel tank concealment remains a widely used technique with either packaged methamphetamine or methamphetamine in solution. Methamphetamine concealed in tires and other natural voids in vehicles are other popular methods for smuggling methamphetamine and other contraband into the United States.





Outlook

Mexican TCOs are likely to continue to produce, transport, and distribute high-purity, high potency methamphetamine across the SWB into the United States and will likely continue to adapt their production methods as precursor chemicals become restricted, become temporarily unavailable, or costprohibitive. Domestic production will likely continue declining as methamphetamine produced in Mexico remains a lower cost, higher purity, and higher potency alternative. Conversion laboratories will likely continue to increase, or at least maintain a stable presence, as methamphetamine in solution remains an effective concealment and transportation option. Additionally, TCOs are likely to continue to attempt to expand existing markets or establish new ones by offering methamphetamine in nontraditional forms such as tablets. The price of methamphetamine currently remains low compared to other drugs of abuse despite the impact of the COVID-19

pandemic but has seen price increases during the ongoing pandemic. As the COVID-19 pandemic crisis continues, fluctuations in pricing and availability will likely continue with all drugs of abuse, with the methamphetamine market disproportionately affected.

The Importance of Prevention Efforts

As smuggled meth has spread across the United States, it's now reaching a new generation that hasn't experienced firsthand the lethal and addictive nature of the drug. Preventive action at the state and community levels is essential to stopping this growth. Parents, teachers, and community leaders can take a stand against this drug to prevent meth from becoming the drug of choice for this new generation. One recent study shows that the number of people who use meth for the first time has stayed fairly stable in the past few years. From 2015 to 2018, the number of people who used meth for the first time hovered around two hundred thousand

a year. Another study shows a steady, and somewhat dramatic, increase in meth use since it bottomed out in 2008. Because stimulant use has grown following opioid epidemics in the past, experts speculate the number of first-time users will continue to rise unless education and intervention efforts are maintained.

Meth Use Leads to Increased Crime

When people who use meth can't afford the drug, they often commit crimes—from petty theft to robbery, even murder—to obtain cash for their habit. They'll do anything to get their next fix. Meth use itself increases a tendency to crime because it leads to a willingness to take risks, paranoid thinking, and violent behavior. Between 50 and 70 percent of property crimes—burglary, shoplifting, motor vehicle theft, arson, and vandalism—are committed by people who use meth.

Meth-related crimes can also be violent. A recent study showed that more than 50 percent of 350 respondents in one California county who received treatment for meth addiction reported that their meth use led to violent criminal behavior. Most often that behavior was trying to beat up someone, rob someone, or threaten them with a weapon.

What Does Meth Cost Communities?

Communities affected by meth pay a high price. Meth has a strong link to serious crime. In Arkansas there were 9,008 meth related arrests across the state. Much of the economic damage associated with meth— burglary,

vandalism, theft, and environmental pollution is borne by the community of the individuals who use it.

Access to Meth Treatment is Uneven

Treatment for substance use disorders is more accessible now than it was in the past, but it remains difficult for some to access. The Mental Health Parity and Addiction Equity Act of 2008 requires health insurers to provide the same level of benefits for substance use treatment that they do for medical care. For people who are insured, this can be a lifesaver. The U.S. Department of Health and Human Services has a website to help navigate insurance problems: https://www.hhs.gov/ programs/topic-sites/mental-health-parity/ mental-health-and-addiction-insurance-help/ index.html. And the Substance Abuse and Mental Health Services Administration has a national helpline: 1-800-662-HELP (4357). Throughout the country, many effective treatment approaches are available for substance use disorders, including meth use disorder. Some of these approaches include cognitive-behavioral therapy, motivational enhancement therapy (motivational interviewing), and Twelve Step facilitation. These three approaches have been proven to offer effective treatment for many substance use disorders.

The two models described here offer integrated treatment approaches that are effective for meth use disorder as well as for other addictions.



MYTH: You have to use meth only once to become addicted to it.

FACT: Not everyone who uses meth becomes addicted after a single use. But it is easy for an individual to become addicted to meth in a short period of time because meth drastically and quickly enhances a person's mood. When a person uses meth, high levels of the neurotransmitter dopamine are released into the brain. With each subsequent use, the body's natural supply of dopamine is reduced, leaving a person feeling "flat" and depressed. To feel better, he or she is likely to seek another "hit" from the drug. In contrast to cocaine, which is almost completely metabolized in the body and then quickly removed, meth provides a longerlasting high, and a larger percentage of the drug remains in the body. This results in meth being present in the brain longer, which ultimately can lead to higher rates of addiction.

MYTH: Meth isn't as dangerous as other drugs—it's just speed or diet pills.

FACT: Meth can be made from chemicals that often include battery acid, drain cleaner, lye, antifreeze, and other toxic ingredients, so there is a greater chance that a person who uses meth will require emergency medical attention than a person who uses any other drug. Long-term meth use causes paranoia and delusions, which can last for months or years after a person has stopped using. Meth labs have destroyed the environment where toxic lab byproducts are dumped into soil or drains.

MYTH: Since pseudoephedrine was tightly regulated in 2005, meth is no longer a problem.

FACT: Meth is still accessible. Even though the ingredients needed to make it aren't readily available in the United States anymore, meth is being smuggled across the border from Mexico in record amounts. The meth available in 2020 is more potent than meth was fifteen years ago. It's also cheaper to buy and provides a longer-lasting high than cocaine.

MYTH: States that border Mexico are in the greatest danger from meth.

FACT: Even though most of the meth in the United States comes from Mexico, drug cartels are using established supply channels for other drugs. Meth has been seized in every state in the United States.



MYTH: Meth-related crime is a problem only in large cities.

FACT: Meth-related crime reported in rural communities is significant. In the past decade, rural crime rates have shot up, while crime in many urban areas has gone down. In lowa, for example, the violent crime rate rose by 3 percent statewide between 2006 and 2016, but in small towns violent crime increased by 50 percent. Rising meth use is a factor in the crime rates. Rural sheriffs from Ohio to Oklahoma to Oregon report meth use is up, and with it are crimes committed by people who use meth.

MYTH: Meth labs aren't a problem in the United States anymore because meth is being smuggled from Mexico.

FACT: Most meth is coming from Mexico, but people are still making small amounts of meth in labs throughout the United States. Meth labs can be easily dismantled, stored, or moved. This portability often helps people who make meth to avoid detection by law enforcement officials. Meth labs have been found in many locations, including apartments, hotel rooms, rented storage spaces, and vans and trucks. Some meth labs have been booby-trapped, and lab operators are often well armed.

MYTH: Meth hurts only the people who use the drug.

FACT: Meth use costs everyone. Meth causes

delusional thinking and a greater willingness to take risks, so people who use meth are more likely to commit crimes. Many cases of domestic violence are meth related. Children whose parents use meth are often abused and neglected. Property values decline and criminal activity escalates when meth comes into a neighborhood.

MYTH: Hardworking people don't use meth.

FACT: Anybody can use meth. Research shows a wide diversity in people who use it, including honor roll students, housewives, executives, mothers, and employees in many industries. People of all races and socioeconomic backgrounds use meth.53 Many people start using meth to have greater energy to produce more at work, at home, or at school.

MYTH: Treatment doesn't work for people addicted to meth and isn't worth the cost.

FACT: Contrary to popular opinion, treatment for meth use disorder does work, and it is a wise investment. Every dollar spent on treatment is estimated to save more than twelve dollars in averted health care, social, and criminal justice costs.

MYTH: Women don't use meth.

FACT: Research indicates that of the people who use meth at some point in their lives, 40 percent are women.



REFERENCES

- Hazelden Betty Ford Foundation, "Methamphetamine (Meth) Addiction," https://www.hazeldenbettyford. org/addiction/types-of-addiction/methamphetamine.
- Drug Enforcement Administration Intelligence Report, "Slang Terms and Code Words: A Reference for Law Enforcement Personnel," July 2018, https://www.dea. gov/sites/default/files/2018-07/DIR-022-18.pdf.
- 3. Paragraph adapted from "History of Meth," History. com, last updated August 21, 2018, https://www.history.com/topics/crime/history-of-meth.
- 4. Narconon International, "History of Methamphetamine," https://www.narconon.org/drug -information/methamphetamine-history.html.
- Narconon International, "History of Methamphetamine," https://www.narconon.org/drug -information/methamphetamine-history.html; "History of Meth," History.com, last updated August 21, 2018, https://www.history.com/topics/crime/history-ofmeth.
- Substance Abuse and Mental Health Services
 Administration, Results from the 2004 National Survey
 on Drug Use and Health: National Findings, DHHS
 Publication No. SMA 05-4062, NSDUH Series H-28
 (Rockville, MD: Substance Abuse and Mental Health
 Services Administration, 2005).
- 7. "Meth vs. Adderall: Science Says They're Almost Identical," The Recovery Village, https://www.therecoveryvillage.com/meth-addiction/meth-vs-adderall/#gref.
- 8. Lee Daniel Hawker, "Is Adderall the Same as Methamphetamine (Meth)?," Clarity, https://claritythailand.com/is-adderall-the-same-asmethamphetamine-meth/.
- Hazelden Betty Ford Foundation, "Adderall Addiction and Side Effects," https://www.hazeldenbettyford.org /addiction/types-of-addiction/adderall.

- E. E. Artigiani et al., Methamphetamine: A Regional Drug Crisis (College Park, MD: National Drug Early Warning System, 2018).
- 11. National Drug Intelligence Center, "Methamphetamine Drug Threat Assessment," March 2005, https://www.justice.gov/archive/ndic/ pubs13/13853/avail.htm.
- U.S. Department of Justice, Drug Enforcement Administration, 2018 National Drug Threat Assessment, October 2018, p. 60, https://www. dea.gov/sites/default /files/2018-11/DIR-032-18%20 2018%20NDTA%20final% 20low%20resolution.pdf.
- Abby Goodnough, "A New Drug Scourge:
 Deaths Involving Meth Are Rising Fast," New York
 Times, December 17, 2019, https://www.nytimes.
 com/2019/12/17/health /meth-deaths-opioids.html.
- 14. Narconon, "Methamphetamine/Meth Addiction Info," https://www.narconon.org/drug-information / methamphetamine-addiction.html.
- National Institute on Drug Abuse,
 "Methamphetamine: What Are the Immediate (Short-Term) Effects of Methamphetamine Misuse
- 16. National Institute on Drug Abuse, "Methamphetamine: What Are the Long-Term Effects of Methamphetamine Misuse?," page last updated October 2019, https://www.drugabuse.gov/ publications /research-reports/methamphetamine/ what-are-long-term -effects-methamphetaminemisuse; Foundation for a Drug-Free World, "The Truth about Crystal Meth: The Deadly Effects of Meth," https://www.drugfreeworld.org /drugfacts/ crystalmeth/the-deadly-effects-of-meth.html.
- 17. National Institute on Drug Abuse, "Methamphetamine: Are People Who Misuse Methamphetamine at Risk for Contracting HIV/AIDS and Hepatitis B and C?," page last updated October



- 2019, https://www.drugabuse.gov/publications/research -reports/methamphetamine/are-people-who-misuse -methamphetamine-risk-contracting-hivaids-hepatitis-b-c.
- U.S. Department of Justice, Drug Enforcement Administration, 2018 National Drug Threat Assessment, October 2018, p. 64, https://www. dea.gov/sites/default /files/2018-11/DIR-032-18%20 2018%20NDTA%20final %20low%20resolution.pdf.
- U.S. Department of Justice, Drug Enforcement Administration, 2019 National Drug Threat Assessment, December 2019, https://www.dea. gov/sites/default/files/2020-01/2019-NDTAfinal-01-14-2020_Low_Web -DIR-007-20_2019.pdf.
- 20. Lynne M. Smith et al., "Developmental and Behavioral Consequences of Prenatal Methamphetamine Exposure: A Review of the Infant Development, Environment, and Lifestyle (IDEAL) Study," Neurotoxicology and Teratology 51 (September– October 2015): 35–44, doi: 10.1016/j.ntt.2015.07.006.
- 21. Dan Levin, "The Parents Passed a Drug Test.
 Should They Get Their Children Back?," New York
 Times, November 22, 2019, https://www.nytimes.
 com/2019/11/22/us /opioids-foster-care-ohio.
 html?searchResultPosition=12.
- 22. Frank Morris, "Methamphetamine Roils Rural Towns Again Across the U.S.," NPR, October 25, 2018, https://www.npr.org/sections/health-shots/2018/10/25 /656192849/methamphetamine-roils-rural-towns -again-across-the-u-s.
- 23. Office of National Drug Control Policy, National Synthetic Drugs Action Plan, October 2004, https://popcenter.asu.edu/sites/default/files/problems/meth_labs/PDFs /USNDCP_2004.pdf.
- 24. Wisconsin Alliance for Drug Endangered Children, "Identifying DEC Children," http://www.wisconsindec.org/identifying-dec-children.html.
- 25. National Institute on Drug Abuse,
 "Methamphetamine: What Are the Long-Term
 Effects of Methamphetamine Misuse?," page last
 updated October 2019, https://www.drugabuse.gov/
 publications/research -reports/methamphetamine/

- what-are-long-term-effects -methamphetamine-misuse; Jeremy D. Martinez, ed., A Clinician's Guide to Methamphetamine (Center City, MN: Hazelden Publishing, 2018); Partnership to End Addiction, "Methamphetamine (Meth)," https://drugfree.org/drugs/methamphetamine-meth/; Carol L. Falkowski, Dangerous Drugs: An Easy-to-Use Reference for Parents and Professionals, 2nd ed. (Center City, MN: Hazelden Publishing, 2003).
- 26. Lloyd D. Johnston et al., Monitoring the Future: National Survey Results on Drug Use: 1975–2017: 2017 Overview, Key Findings on Adolescent Drug Use (Ann Arbor: Institute for Social Research, The University of Michigan, 2018), http://www. monitoringthefuture.org/pubs/monographs /mtf-overview2017.pdf, cited in National Institute on Drug Abuse, "Methamphetamine: Overview," page last updated October 2019, https://www.drugabuse.gov/ publications /research-reports/methamphetamine/ overview.
- 27. Substance Abuse and Mental Health Services Administration, Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health, HHS Publication No. PEP19-5068, NSDUH Series H-54 (Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2019), https://www.samhsa. gov/data/report/2018-nsduh-annual-national-report.
- 28. National Institute on Drug Abuse, "Monitoring the Future Study: Trends in Prevalence of Various Drugs," https://www.drugabuse.gov/trends-statistics / monitoring-future/monitoring-future-study-trends-in-prevalence-various-drugs; Lloyd D. Johnston et al., Monitoring the Future: National Survey Results on Drug Use: 1975–2017: 2017 Overview, Key Findings on Adolescent Drug Use (Ann Arbor: Institute for Social Research, The University of Michigan, 2018), pp. 25, 72, http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2017.pdf.
- Lloyd D. Johnston et al., Monitoring the Future: National Survey Results on Drug Use: 1975–2017:
 2017 Overview, Key Findings on Adolescent Drug Use (Ann Arbor: Institute for Social Research, The University of Michigan, 2018), p. 26, http://www.



- monitoring the future.org/pubs/monographs/mtf-overview 2017.pdf.
- Abby Goodnough, "A New Drug Scourge:
 Deaths Involving Meth Are Rising Fast," New York
 Times, December 17, 2019, https://www.nytimes.
 com/2019/12/17/health /meth-deaths-opioids.html.
- 31. E. E. Artigiani et al., Methamphetamine: A Regional Drug Crisis (College Park, MD: National Drug Early Warning System, 2018).
- 32. E. E. Artigiani et al., Methamphetamine: A Regional Drug Crisis (College Park, MD: National Drug Early Warning System, 2018).
- 33. National Institute on Drug Abuse,
 "Methamphetamine: What Is the Scope of
 Methamphetamine Misuse in the United States?,"
 page last updated October 2019, https://www.
 drugabuse.gov/publications/research-reports /
 methamphetamine/what-scope-methamphetaminemisuse -in-united-states; Mbabazi Kariisa et al.,
 "Drug Overdose Deaths Involving Cocaine and
 Psychostimulants with Abuse Potential—United
 States, 2003–2017," Morbidity and Mortality Weekly
 Report 68, no. 17 (May 3, 2019): 388–95, doi: http://
 dx.doi.org/10.15585/mmwr.mm6817a3.
- German Lopez, "The Rise in Meth and Cocaine Overdoses, Explained," Vox, January 30, 2020, https://www.vox.com/policy-andpolitics/2020/1/9/21055113/opioid -epidemicstimulants-cocaine-meth-drug-overdose-death.
- 35. U.S. Customs and Border Protection, "CBP Enforcement Statistics Fiscal Year 2020," https://www.cbp.gov/newsroom/stats/cbp-enforcement-statistics.
- Mbabazi Kariisa et al., "Drug Overdose Deaths Involving Cocaine and Psychostimulants with Abuse Potential—United States, 2003–2017," Morbidity and Mortality Weekly Report 68, no. 17 (May 3, 2019): 388–95, doi: http://dx.doi.org/10.15585/mmwr. mm6817a3.
- 37. Substance Abuse and Mental Health Services Administration, Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health, HHS

- Publication No. PEP19-5068, NSDUH Series H-54 (Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2019), https://www.samhsa.gov/data/report/2018-nsduh-annual-national-report.
- Gregory Midgette et al., What America's Users Spend on Illegal Drugs, 2006–2016 (Santa Monica, CA: RAND Corporation, 2019), https://www.rand.org/ content/dam/rand /pubs/research_reports/RR3100/ RR3140/RAND_RR3140.pdf.
- 39. German Lopez, "The Rise in Meth and Cocaine Overdoses, Explained," Vox, January 30, 2020, https://www.vox.com/policy-and-politics/2020/1/9/21055113 /opioid-epidemic-stimulants-cocaine-meth-drug-overdose -death.
- Frances Robles, "Meth, the Forgotten Killer, Is Back. And It's Everywhere," New York Times, February 13, 2018, https://www.nytimes. com/2018/02/13/us/meth-crystal -drug. html?action=click&module=RelatedLinks&pgtype =Article.
- 41. Madeline St. Amour, "Cost of Meth Cleanup Can Sneak Up on Homeowners, Who Get Stuck with Expenses," Times-Call, July 6, 2018, https://www.timescall.com/2018/07/06/cost-of-meth-cleanup-can-sneak-up-on-homeowners-who-get-stuck-with-expenses; Beth Edwards, "Buyer Beware: Cleanup of Former Meth Labs Costly for New Homeowners," Indiana Environmental Reporter, August 17, 2018, https://www.indianaenvironmentalreporter.org/posts/meth-lab.
- 42. Parkland Health and Hospital System, "Parkland Program for Pregnant Women with Addictions Improves Health of Babies, Mothers," June 12, 2017, https://www.parklandhospital.com/news-andupdates/parkland -program-for-pregnant-womenwith-addiction-1007.
- 43. Narconon, "Why Crime Is a Direct Result of Meth Addiction," https://www.narconon.org/blog/narconon/why-crime-is-a-direct-result-of-meth-addiction.
- 44. Mary Lynn Brecht and Diane M. Herbeck, "Methamphetamine Use and Violent Behavior: User Perceptions and Predictors," Journal of Drug Issues



- 43, no. 4 (June 14, 2013): 468–82, https://doi.org/10.1177/0022042613491098.
- 45. National Institute on Drug Abuse, "Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition): Is Drug Addiction Treatment Worth Its Cost?," page last updated January 2018, https://www.drugabuse.gov/publications/principles-drugaddiction-treatment-research-based-guide-thirdedition/frequently-asked-questions/drug-addiction-treatment-worth-its-cost.
- 46. Hazelden, "Meth: A Dangerous, Addictive Drug Sweeps the Nation," "Alive and Free" column, January 24, 2005, www.hazelden.org/servlet/hazelden/cms/ptt /hazl _alive_and_free. html?sh=t&sf=t&page_id=29556 (page discontinued).
- 47. Frank Morris, "Methamphetamine Roils Rural Towns Again Across the U.S.," NPR, October 25, 2018, https://www.npr.org/sections/health-shots/2018/10/25/656192849 /methamphetamine-roils-rural-towns-again-across-the-u-s.
- 48. Carol L. Falkowski, "Methamphetamine Across America: Misconceptions, Realities and Solutions," Spectrum: The Journal of State Government 77, no. 4 (Fall 2004): 30–32; Carol L. Falkowski, Dangerous Drugs: An Easy-to-Use Reference for Parents and Professionals, 2nd ed. (Center City, MN: Hazelden, 2003).
- 49. Currently, there are no medications that are FDA-approved to treat meth use disorder, as noted in the following source: Abby Goodnough, "A New Drug Scourge: Deaths Involving Meth Are Rising Fast," New York Times, December 17, 2019, https://www.nytimes.com/2019/12/17/health /meth-deaths-opioids.html.
- U.S. Department of Justice, Drug Enforcement Administration, 2018 National Drug Threat Assessment, October 2018, https://www.dea.gov/sites/default/files/2018-11 /DIR-032-18%202018%20 NDTA%20final%20low%20 resolution.pdf.

- 51. Alan Greenblatt, "In Rural America, Violent Crime Reaches Highest Level in a Decade," Governing, July 2018, https://www.governing.com/topics/publicjustice-safety/gov-crime-rural-urban-cities.html.
- 52. Arezou Rezvani, Rachel Martin, and Danny Hajek, "A New Wave of Meth Overloads Communities Struggling with Opioids," NPR, June 20, 2018, https://www.npr.org/sections/ health-shots/2018/06/20/619929939/a-new-wave -of-meth-overloads-communities-strugglingwith-opioids; Abby Goodnough, "A New Drug Scourge: Deaths Involving Meth Are Rising Fast," New York Times, December 17, 2019, https:// www.nytimes.com/2019/12/17/health/methdeaths -opioids.html; Frances Robles, "Meth, the Forgotten Killer, Is Back. And It's Everywhere," New York Times, February 13, 2018, https://www. nytimes.com/2018/02/13/us/meth-crystal -drug. html?action=click&module=RelatedLinks&pgtype =Article.
- 53. Frank Morris, "Methamphetamine Roils Rural Towns Again Across the U.S.," NPR, October 25, 2018, https://www.npr.org/sections/health-shots/2018/10/25 /656192849/methamphetamine-roils-rural-towns -again-across-the-u-s.
- 54. National Institute on Drug Abuse, "Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition): Is Drug Addiction Treatment Worth Its Cost?," page last updated January 2018, https://www.drugabuse.gov/publications/principles-drugaddiction-treatment-research-based-guide-third-edition/frequently-asked-questions/drug-addiction-treatment-worth-its-cost.
- 55. Substance Abuse and Mental Health Services Administration, "2018 NSDUH Detailed Tables," August 20, 2019, https://www.samhsa.gov/data/report/2018-nsduh -detailed-tables.