

History of Methamphetamine

Scientists first developed amphetamine-type stimulants—including methamphetamine—as a manmade alternative to the ephedra plant. Ephedra is a type of shrub whose extract has been used in traditional Chinese medicine for over 5,000 years. In 1885, Nagai Nagayoshi, a Japanese chemist, identified the active chemical in ephedra, called ephedrine and from that synthesized meth. It wasn't until 1919 when another Japanese chemist, Akira Ogata, streamlined the process of producing Meth. He used phosphorus and iodine to reduce the ephedrine into a crystallized form, creating the world's first crystal meth. In 1932, American pharmaceutical company Smith, Kline, and French began marketing the amphetamine inhaler called Benzedrine, which was used for asthma and nasal congestion. While initially available without a prescription, people soon discovered its euphoric and energizing side effects. Because of these stimulant-type effects, pharmaceutical companies began to manufacture Benzedrine in pill form for narcolepsy (a sleep disorder).



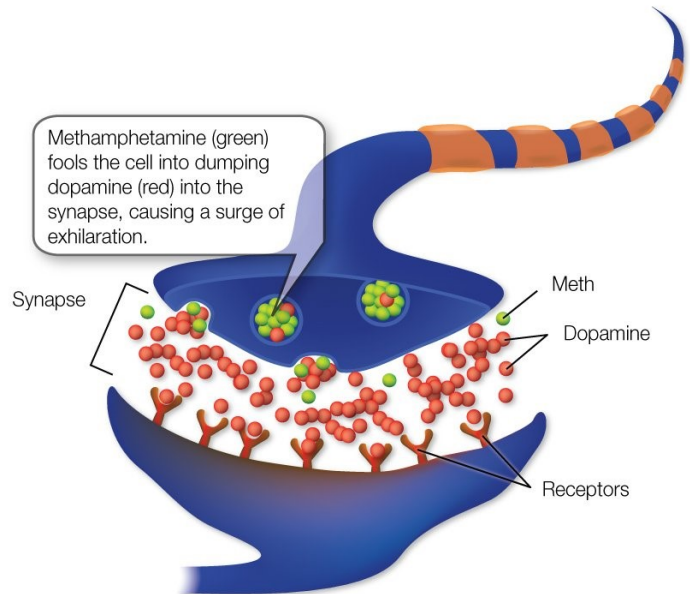
During World War II, the German pharmaceutical company Temmler, marketed Methamphetamine tablets as a nonprescription drug under the brand name Pervitin. Japanese, U.S., British and German military personnel were reported to have used Pervitin to enhance their endurance and ward off fatigue on long campaigns. After World War II, military warehouses had a surplus of methamphetamine, and as a result, pharmaceutical companies began producing methamphetamine pills for mainstream consumption. But amphetamine use began falling out of favor in the late 1950s. In 1959, the FDA began to require prescriptions for Benzedrine. It was also becoming apparent that amphetamines had many harmful effects—including delusions, paranoia, abnormal heartbeat and heart failure—among regular users and addicts. .

By the 1980s, the United States began to tighten regulations around the sale and use of the ephedrine—a pharmaceutical precursor used to make crystal meth. As a result, illegal meth labs turned to an easier to obtain precursor—pseudoephedrine—a chemical found in many cold medicines. Use of crystal meth in the United States exploded in the early 1990s. Between 1994 and 2004, methamphetamine use rose from just under two percent of the U.S. adult population to approximately five percent. In 2006, the United Nations World Drug Report called meth the most abused hard drug on Earth. Today more than 2.5 million people used meth in the past year.

Effects of Meth on the Brain:

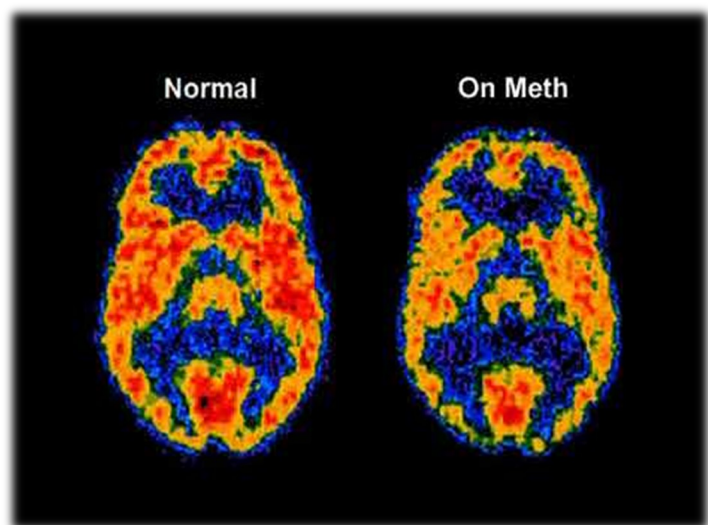
Heavy or long-term methamphetamine use damages the brain both functionally and structurally. It can alter the brain's cellular transporters and receptors. These transporters and receptors are involved in regulating a person's moods, which is why chronic impairment can lead to symptoms of irritability, apathy, rage, depression, insomnia, and anxiety. Meth kills the Glial Cells, these cells are significant part of the central nervous system and responsible for signaling capacities, and fighting infections. The use of meth damages and kills these cells throughout areas in the brain, but especially in the prefrontal cortex. This is the part of the brain that allows you to pay attention, think abstractly, make judgment calls, and make plans.

As a result of the Glial cells being destroyed, the brain cannot produce/make the Myelin cells. Myelin cells, as called white matter, play an important role in signaling between neurons. These cells are responsible for many basic functions of the central nervous system. Additionally, when someone chronically uses meth, it can deplete your dopamine and serotonin, leaving a person prone to dramatic mood effects.



Long Term Effects:

- **Attention:** Various aspects of attention and concentration are affected by chronic use of methamphetamine as a result of damage to the neurons in the frontal and prefrontal cortex of the brain. Chronic issues with being able to focus, switch focus, and concentrate for lengthy periods of time are frequent.
- **Judgment and Problem Solving:** The damage that occurs as a result of meth misuse affects the ability to suppress impulses, and this may lead to poor judgment and problem-solving.
- **Memory:** The ability to encode and recall information is significantly decreased following chronic methamphetamine misuse.
- **Emotional Control:** Many who have chronically misused methamphetamine demonstrate emotional issues that can mood swings, chronic depression, chronic apathy, a loss of motivation, issues with aggression, hostility, irritability, and even self-harming and/or suicidal behaviors.
- **Psychological Issues:** Methamphetamine users are more susceptible to the development of severe psychiatric disorders, including issues with psychotic-like behaviors, such as delusions, and hallucinations.



Effects of Meth on the Body:

The more someone uses meth, the more likely they are to experience adverse side effects.

Short Term Effects:

- Appetite Suppression
- Bursts of Energy
- Dilated pupils
- Dry Mouth
- Euphoria and Rush
- Excessive Sweating
- Extreme Wakefulness
- Headaches
- Increased Activity
- Sleeplessness



Long Term Effects:

- Addiction
- Psychosis including:
 - Paranoia
 - Hallucinations
 - Repetitive Motor Activity
- Memory Loss
- Aggressive or Violent Behavior
- Death

METH

Is a highly potent, dangerous central nervous system stimulant that is used as a recreational drug.

It can remain in your system for several days.

It Can Remain In the Body....

For 72 hours or more depending on genetics, how much was used, and how frequently it is used.

Heart disease is the second leading cause of death for meth users. Meth can raise the blood pressure, constrict blood vessels, speed up your heart rate, and cause your heart's muscles to collapse. Additionally, the immune system can become weakened by meth use and thus increasing the likelihood of infection from pathogens like COVID 19. Meth use can cause rapid tooth decay and gum disease in a condition commonly known as "meth mouth." Symptoms include a clenched jaw, trouble eating, headaches and jaw pain. Treatment can include cosmetic surgery in extreme cases.

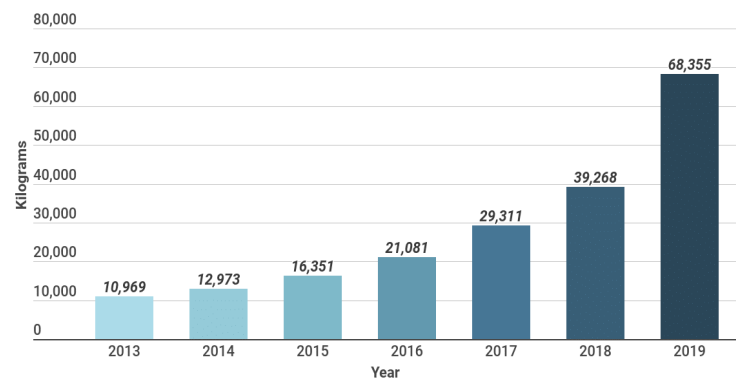
How is Methamphetamine Manufactured/Distributed?

Currently most methamphetamine in the United States is produced by transnational criminal organizations (TCOs) in Mexico). This meth is highly pure, potent, and low in price. When methamphetamine is smuggled into the United States it will most often come in a powder or liquid form and laboratories in the United States will transform it into crystal meth. These domestic 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 . Congress in 2005 passed the Combat Methamphetamine Epidemic Act which required that pharmacies and other retail stores to keep logs of purchases of products containing pseudoephedrine and limits the amount of those products an individual can purchase per day . Restrictions on the chemicals used to make methamphetamine in the United States have dramatically reduced domestic production of the drug. Mexico has also tightened its restrictions on pseudoephedrine and other methamphetamine precursor chemicals. But manufacturers adapt to these restrictions via small- or large-scale "smurfing" operations: obtaining pseudoephedrine from multiple sources, below the legal thresholds, using multiple false identifications. Manufacturers in Mexico are also increasingly using a different production process (called P2P) to make methamphetamine that does not require pseudoephedrine.

Methamphetamine Seizures 2013-2019

Kilograms Seized at Southwest US Border

insightcrime.org



April 2021

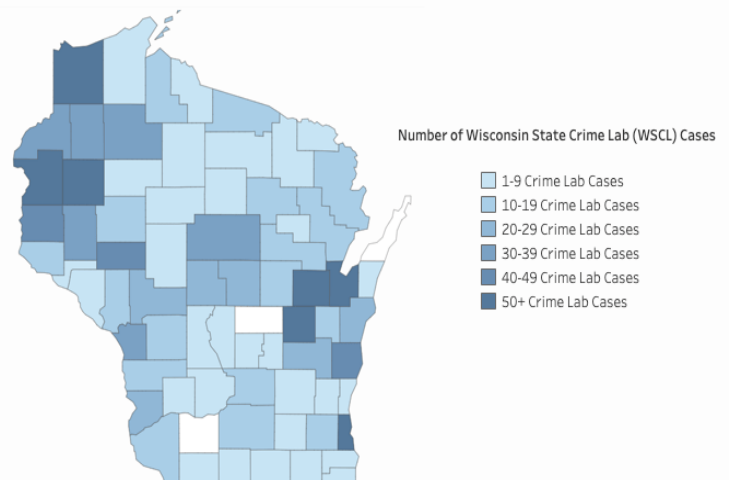
Source: 2020 DEA Drug Threat Assessment

Meth and Wisconsin

Methamphetamine production was most prevalent primarily in rural counties in northwestern Wisconsin, but then problem has now begun to spread south and east, and meth use has increased in major metropolitan areas like Milwaukee and Madison. Much of the methamphetamine available in Wisconsin has come from Mexico, transported to Wisconsin from California and other southwest border states. As homemade meth labs have decreased in rural areas, the Wisconsin Department of Justice has been able to place more emphasis on traditional illicit drug trafficking routes for methamphetamine flowing across state borders.

Methamphetamine cases in Wisconsin

In 2018, a total of 1,452 meth cases were handled by the Wisconsin State Crime Lab



Source: Wisconsin Department of Justice

*Cases without a county identified are included in the total, but are not displayed in a particular county

Methamphetamine Prevention

At the present time, research about prevention programs specifically focused on meth is limited. Currently, more research needs to be conducted to determine the effectiveness of prevention programs focused on meth use in the young adult population, particularly since meth usage typically starts in the late-teen years or early twenties – a time when young adults are less likely to be involved in school, family or community prevention programs. Although meth-specific prevention research is limited, the National Institute on Drug Abuse has developed “Prevention Principles” to serve as the foundation of effective substance abuse prevention programs to combat general drug abuse; these principles are grounded in research about effective drug abuse prevention programs.



- **Addressing Risk and Protective Factors:**

- Many factors can contribute to a person’s risk for drug misuse, from aggressive behavior and exposure to substance misuse to poverty and peer pressure.
- Protective factors, including strong family bonds and academic success, can help to counter those risk factors.
- Prevention programs should work to strengthen those protective factors while addressing all forms of drug misuse – whether taken alone or in combination with other drugs.
- All programs should be tailored to address risks specific to the local community and audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness.

- **Prevention Planning:**

- **Family-based prevention:** These programs should strive to enhance family bonding and relationships. Parental monitoring and supervision are critical for drug abuse prevention.
- **Prevention programs in the school setting:** These programs can be designed to address a wide range of school-aged students, from elementary school-aged children to high school-aged teens, depending on the substance and nature of the drug-related topics.
 - Reaching people in various settings – school, clubs, faith based organizations, through the media, etc. – can help to validate and maximize prevention efforts.

- **Message Delivery:**

- When communities adapt programs to match their needs, they should retain core elements of the original research-based prevention program. All programs should include guidelines for teacher training, interactivity (role-playing, peer discussion groups, etc.), and long-term planning.

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Acorn	Election Day	Karate	Squat
Academy	Escrima	Kata	Stuffing
Black Belt	Family	Matchat	Thankful
Blue	Fall	Mayflower	Thanksgiving
Bo Staff	Feast	November	Tradition
Brown	Gather	Orange	Troops
Celebrate	Gobble	Pie	Turkey
Cesar	Gone	Pilgrim	Veterans Day
Cold Mornings	Gratitude	Plymouth	Warrior
Corn	Heroes	Potatoes	Yellow
Cornucopia	Holiday	Pumpkin	
Cranberry	Honor	Red	
Dependable	Kai	Sensei	

McFarland is a small community south of Madison in Dane County. In January of 2017, a group of concerned citizens came together to discuss substance abuse problems in the McFarland area. The McFarland RADAR is a result of these meetings

We are comprised of local representatives from schools, businesses, churches, village administration as well as parents, and youth—all working together to promote healthy lifestyles

For more information go to: <https://www.radarmc.com/>



For time, day and place of meetings, please contact Cathy Kalina at CathyK@fsmad.org

The McFarland RADAR (RADAR stands for Relevant Alcohol & Drug Awareness Resources) Coalition works to develop, implement and support environmental strategies to reduce substance abuse.

We believe by working together, we can nurture social and environmental changes to make the McFarland area a safer and healthier place, brightening the future of our children, youth and families.

McFarland RADAR Mission Statement

“The mission of McFarland’s RADAR Coalition is to promote healthy lifestyles in the McFarland area through alcohol and drug abuse prevention and education efforts.”

HOW CAN YOU HELP?

We are asking you to give the gift of time. Make a difference in the lives of our youth and our community by

1. Working with us in providing support for planning, project management and awareness campaigns
2. Helping with coalition events, conferences, workshops, and fairs held throughout the year.
3. Being a voice for change in our community, it is time to come together and be that force for change in the McFarland area.