

Original page:

<http://www.webmd.com/content/Article/109/109326.htm>

Meth 101

Methamphetamine use has taken off in the U.S., but what makes it such a hot commodity?

By [Martin Downs](#)
WebMD Feature

Reviewed By [Louise Chang, MD](#)

[sponsored](#)

Featured Centers

- [Cancer Support](#)
- [Suffer from Migraines?](#)
- [Get Rx Savings Tips](#)
- [Bipolar Treatment](#)

Use of methamphetamine, a powerful and addictive stimulant, is rampant and spreading across the United States, reaching levels that have been called "epidemic."

In places where it hasn't been a problem in the past, it may seem to have come out of nowhere, but methamphetamine has been a fixture of the American drug scene for a long time.

A lot of recent news coverage has focused on the impact of methamphetamine among gay men, who are taking it, having risky sex, and possibly fanning the flames of HIV/AIDS. Michael Siever, PhD, director of the Stonewall Project, a San Francisco outreach program for gay men, says the drug is nothing new in his neighborhood.

"I've been doing work on methamphetamine in the gay community for about 15 years now," he tells WebMD.

From War to Prison

Like several other drugs that are now illegal, methamphetamine got off to a legitimate start. During World War II, soldiers on all sides were given the drug to help keep them in fighting form. Throughout the 1950s, doctors commonly prescribed methamphetamine as a diet pill and antidepressant, known by the brand name Methedrine.

Today, there are many slang names for it, including "ice," "crystal," "glass," "Tina," "crank," and just "meth." Though it's sometimes sold in pill form, meth mainly comes in the form of a white powder or crystals. It can be swallowed, snorted, injected, or as is becoming more common, smoked.

When it's smoked or injected, it brings on an immediate and intense euphoric rush that lasts several minutes. Taken other ways, the high comes on more gradually, producing an elevated sense of well-being, increased alertness and activity, and decreased appetite, which lasts up to 12 hours. The effects of meth are often compared to those of cocaine.

Meth works by flooding the brain with massive amounts of dopamine, a neurochemical normally released in small amounts in response to something pleasurable. It also raises blood pressure, heart rate, respiration, and body temperature.

The Crash

Of course, the high comes at a cost. When the drug wears off, dopamine in the brain is depleted, and users are left feeling depressed, fatigued, and irritable. After heavy use, some people become psychotic and paranoid, and they may experience a state of "anhedonia," or an inability to feel any pleasure, which makes them crave the drug.

"It takes the brain months and months to recover," Richard Rawson, PhD, a professor of psychiatry and assistant director of the Integrated Substance Abuse Programs at UCLA, tells WebMD.

What's more, research on rats and monkeys has shown that methamphetamine use may permanently damage the brain cells that make dopamine, as well as those that make serotonin, another brain chemical involved in pleasure.

Roots in California, Growing Nationwide

In the early 1960s, recreational drug users, mainly heroin addicts in California, started injecting Desoxyn, a prescription form of methamphetamine.

Not long after, however, the black market for meth took root in San Francisco. Motorcycle gangs, notably the Hell's Angels, started to make and distribute the drug. It followed where they went, which meant that for decades meth use was limited to California, some other areas of the West, and a few pockets in the Midwest.

Cooking Meth

Methamphetamine can be cooked up easily, just about anywhere, using common household ingredients -- rubbing alcohol, drain cleaner, iodine, etc. -- and equipment such as coffee filters, hotplates, and Pyrex dishes. Meth "cooks" taught others to make the drug, who in turn taught others.

By the mid-1980s, some Mexican drug cartels had gotten involved in the trade, but most meth was still produced locally at makeshift clandestine labs. Rawson says he learned from meetings with government drug officials that an agreement once existed between major West Coast meth dealers and East Coast cocaine traffickers that neither would move into the other's side of the Mississippi River. Any such agreement must have fallen apart, because in recent years meth has been spreading eastward.

7 Years Before Treatment

From 1992-2002, the rate of admissions into treatment programs for methamphetamine abuse increased fivefold nationally. In California, the rate quadrupled. But in Arkansas, it was about 18 times higher in 2002 than it was 10 years earlier. Iowa's rate was 22 times higher.

According to these statistics, published by the U.S. Department of Health and Human Services, the Northeast is the only region that appears to have had uniformly low rates and little change.

Nevertheless, "treatment admissions are a lagging indicator," Rawson says. "One of the things that has been documented in the data is that meth users generally will use for on average seven years before they hit the treatment system."

Another way to track the spread of methamphetamine is by looking at police and DEA busts. For example, in Florida, 15 meth labs were raided in 2000, compared with 215 in 2004. In Vermont, there were zero busts from 2000-2003, and one in 2004.

Why We Use

Methamphetamine lacks the glamour that movies and music have imparted to cocaine and heroin. Typical users still tend to be low-income and white.

"They take it because they want to work more hours and lose weight," Rawson says. "It's looked at as a functional tool, not a status symbol."

Increase in sexually transmitted infections via meth-fueled gay orgies has gotten a lot of attention, but heterosexual men and women use it for sex, too.

Meth Sex

"Methamphetamine is associated with sexual behavior like no other drug," Rawson says.

In a study published in the *Journal of Substance Abuse Treatment*, Rawson surveyed 464 alcohol, opiate, cocaine, and methamphetamine users about how their drug of choice related to their sexual thoughts, feelings, and behavior. Eighty percent of the male meth users identified themselves as heterosexual.

Meth users were the most likely to say their drug use heightened their sexual pleasure, that it made them obsessed with sex, and that they had sex more often while using the drug. They were also the most likely to say they had

engaged in risky sexual behavior and sex acts that were unusual for them while on meth. Many also said that sex was so closely tied to their drug use that they would have difficulty separating the two.

There wasn't much difference between the answers of men and women who used meth, but among cocaine users there was a significant gender difference, even though the two drugs have similar effects.

Meth enhances the sexual experience, but that's not all. "Because it has such a long effect, of 8-12 hours, and it can delay orgasms, people have these sexual marathons," Rawson says.

Sleep doesn't get in the way, either, as long as there's a supply of meth. "You can get high and party for 24, 48, 72 hours without stopping," Siever says.

Shutting Off the Tap

In an effort to put a clamp on meth production, Congress passed the Methamphetamine Control Act in 1996. The law tightened restrictions on the sale of chemicals used in making methamphetamine, particularly pseudoephedrine, the nasal decongestant in Sudafed and other over-the-counter cold medicines. The process of meth cooking turns pseudoephedrine into methamphetamine.

An amendment to the law, passed in 2000, further restricted the amount of pseudoephedrine that consumers are allowed to buy at one time.

States have been busy passing their own laws regulating the sale of pseudoephedrine. In July 2005, state lawmakers in Oregon, where meth treatment admission rates are six times the national average, passed a law requiring a doctor's prescription for pseudoephedrine. In Oklahoma, another state dealing with widespread meth use, you have to show ID and give your signature to buy products containing pseudoephedrine.

In many other states, pharmacies have voluntarily put pseudoephedrine products behind the counter, and other stores, such as gas stations and convenience stores, have stopped carrying them.

Do these kinds of restrictions help curb meth use? Rawson says that in the short term, they seem to. Choking local production may dry up the market temporarily, but he says, "once the market is there, it will seek out the supply from the larger bulk traffickers."

So-called "super labs" across the border, in Mexico, now supply as much as 65% of America's meth. Another new bill, aimed at Mexico, was approved by the U.S. House of Representatives in July 2005. The bill calls for the U.S. to withdraw foreign aid to any country that imports more pseudoephedrine than it needs for manufacturing cold medicine. Reporters at the *Oregonian* in Portland found that Mexico imports twice the amount it legitimately needs.

People Have No Idea

Rawson says he thinks that above all, Americans need to be educated about the dangers of methamphetamine. Public service campaigns in parts of the country where meth has not yet gained a foothold would be especially helpful, he says. The drug's relative obscurity and lack of information about it is often what gets people in trouble.

"I've tagged along at the back end of this epidemic talking about treatment," Rawson says. "Every place you go you hear people say, 'You know, I just had no idea what I was getting involved in.'"

Siever says he hears the same thing from men who knew nothing about meth before they came to San Francisco. "It's story that gets repeated frequently, no matter how much information we put out there," he says.

Published Aug. 1, 2005.
Medically updated April 6, 2006.

SOURCES: Richard Rawson, PhD, adjunct associate professor of psychiatry, UCLA, associate director, UCLA Integrated Substance Abuse Programs. Michael Siever, PhD, psychologist; director, the Stonewall Project, San Francisco. National Institute on Drug Abuse. U.S. Department of Health and Human Services, Office of Applied Studies, Substance Abuse and Mental Health Services Administration. CDC. Drug Enforcement Administration. The Portland *Oregonian*, July 20, 2005; July 27, 2005. *Atlanta Journal-Constitution*, April 17, 2004. U.S. Pharmacist, July 2004. *Journal of Substance Abuse Treatment*, March 2002. *Journal of Psychoactive Drugs*, April-June 2000.
