

MADNESS of METH

Effects on the body; costs to users, society

- ▶ Highly addictive, causing brain damage
- ▶ Easy but highly dangerous to make; explosions are possible
- ▶ Toxic waste from making meth damages environment
- ▶ Strains law enforcement; requires hazardous cleanup

1 How drug is taken

Methamphetamine is a highly addictive stimulant that can be taken in many ways: snorting, smoking, ingesting and injecting. It enters the bloodstream and is circulated to the brain.

Snorting

Powdered meth is inhaled, causing a euphoria or a "high."

Ingesting

Tablets of meth can be swallowed or mixed with drinks or food. Ingestion produces the same effects as snorting.

Smoking

Smoking meth immediately causes an intense sensation — a "flash" or "rush" described as extremely pleasurable.

Injecting

Injected meth takes effect instantly and has the same intensity as smoking.

▶ Damage to body

Short-term health

While meth can give intense euphoria, it takes away appetite, causing dramatic weight loss. Users tend to be gaunt and malnourished, prone to myriad health complications. Other problems include difficulties with breathing, irregular heartbeat, tremors, convulsions and even death.

Psychological problems

Some users have skin sores from scratching at imaginary bugs. Meth also increases wakefulness, hyperactivity and respiration, which lead to irritability, insomnia, confusion, tremors, anxiety, hallucinations, paranoia and aggressiveness. Severe mood swings cause some users to become manic-depressive and develop suicidal tendencies.

Brain damage

Studies dating back 20 years show that a high dose of meth damages nerve cells in the brain that produce dopamine and other neurotransmitters. Over time, meth appears to deplete the levels of dopamine. The nerve endings die, and regrowth may be limited.

Long-term health problems

Use of meth also increases blood pressure and heart rate, leading to irreversible damage to blood vessels and producing strokes or heart attacks.

Lungs, heart
When meth is smoked, it enters the respiratory system and takes effect in 3 to 5 minutes.

Stomach
The drug enters the digestive system and takes effect in about 15 minutes.

Injecting
The drug enters the bloodstream and goes straight to the brain, taking effect immediately.

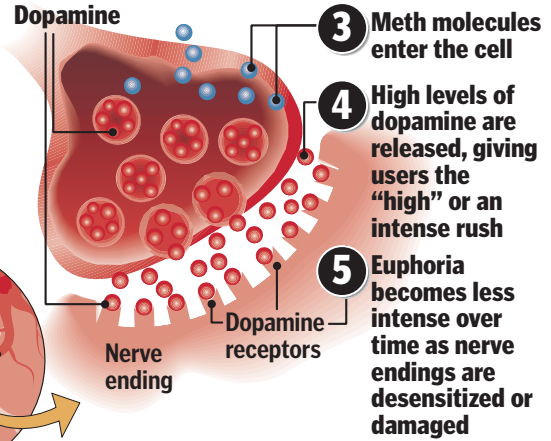
Damage to the body
Long-term use of meth can result in damage to brain-cell endings, cause irregular heartbeat and weaken organs. Incidence of kidney failure and lung disorders are higher.

2 What happens next

Methamphetamine works in a region packed with nerve cells that manufacture dopamine. Dopamine is a biochemical messenger (or neurotransmitter) that controls motivation by triggering pleasurable sensations.

Altering the brain function

Meth produces a storm of neurochemical activity by forcing the brain cells to release high levels of dopamine. It also blocks the nerve cells from reabsorbing used or excess dopamine, which causes a huge buildup.



▶ Why users use

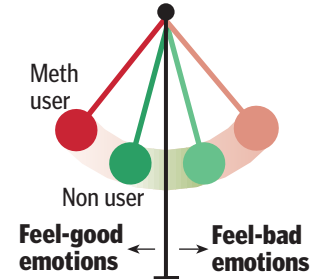
A longer high

A single dose of meth lasts 6 to 8 hours.

A single dose of cocaine lasts 8 to 20 minutes.

Extreme sensations

Meth makes you high but it also drags you way down. The way the drug affects a person can be compared to the swinging of a pendulum. The "feel-good" emotions for the abuser go far beyond their usual boundaries. But the person feels far worse than usual as the pendulum of emotions swings back in the other direction.



▶ Why use is increasing

Easy and cheap to make

Meth is relatively easy to make with ingredients available from stores. The highly addictive nature of the drug keeps the demand strong.

Authorities are slow to act or ill-equipped

Lack of resources and few, if any, restrictions on key ingredients, such as ephedrine or pseudoephedrine, allow underground meth labs to flourish.

▶ Forms of meth Methamphetamine comes in powder, pill, capsule and solid forms.



Powdered meth
Snorting, ingesting



Meth "ice"
Large crystals used mainly for smoking



Meth crystals
Melted and injected

Images courtesy of DEA

One gram of meth sells for about \$100, but it costs as little as \$5 to make, earning it the nickname poor man's cocaine. By comparison, a dose of crack cocaine — generally from 1/10 to 1/2 gram — typically sells from \$10 to \$20, according to the U.S. Drug Enforcement Administration. In 2000, 4 percent of Americans used meth, mostly in the West, Southwest and Midwest.

A telling look at the users

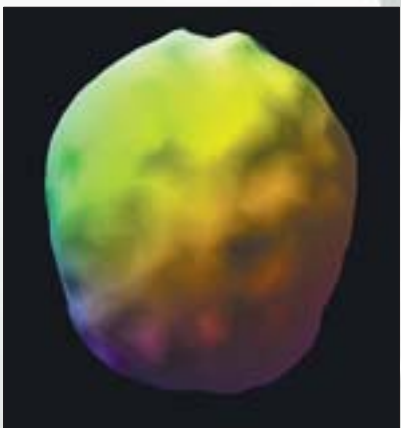
Methamphetamine can drastically age users beyond their years.

Mug shots of a 10-year meth user

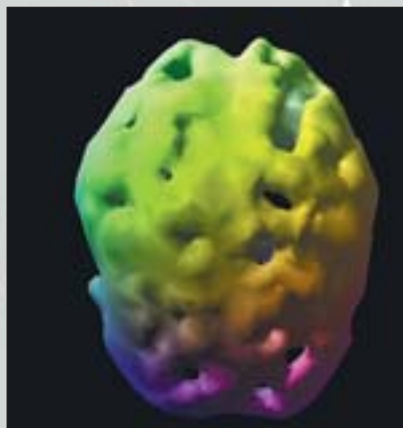


Images courtesy of DEA

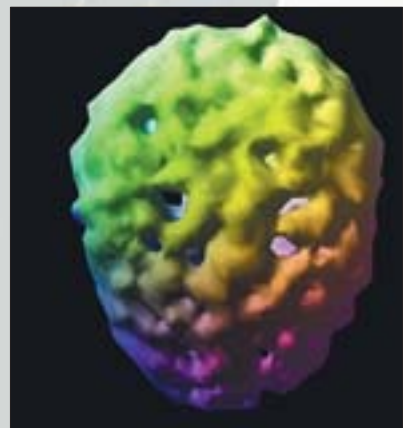
▶ Brain damage from meth use



Normal: Three-dimensional model from a scan of a non-user's brain. Image shows normal brain activity in all areas.



Frequent use: Scan from the brain of a 36-year-old user who had been abusing meth for 10 years. The holes show lack of brain activity, indicating possible damaged cells.



Heavy use: Scan of the brain of a 28-year-old user who had been using meth heavily for eight years. There are more holes than the frequent user's brain.

▶ Costs to you

Increase in crimes and violence

Law enforcement has linked meth use to child and spousal abuse, property crimes, fraud and homicide.

Dangerous meth making

Meth manufacturing endangers society and the environment. It releases harmful toxic chemicals to the environment. Chemicals used to produce the illegal drug are extremely volatile and toxic. Toxic byproducts can poison streams and kill vegetation and livestock.

Costly cleanup

Cleanups cost federal taxpayers \$2 million in 1995. By 2002, it was \$23.8 million.

Spotting a user

Frequent meth users typically are:

▶ Gaunt, and lose extreme amounts of weight

▶ Paranoid, usually energetic, easily agitated and able to go without sleep for extended periods

▶ Not hygienic, have rotten teeth and may have skin sores from picking at imaginary bugs. They can have pale and discolored skin.