

Synthetic Cathinones ("Bath Salts")



- Synthetic cathinones, more commonly known as "bath salts," are drugs that contain one or more human-made chemicals related to cathinone, a stimulant found in the khat plant.
- Synthetic cathinones are marketed as cheap substitutes for other stimulants such as methamphetamine and cocaine. Products sold as Molly (MDMA) can contain synthetic cathinones instead.
- People typically swallow, snort, smoke, or inject synthetic cathinones.

What Are Synthetic Cathinones ("Bath Salts")?

Synthetic cathinones, more commonly known as "bath salts," are human-made stimulants chemically related to cathinone, a substance found in the khat plant. Khat is a shrub grown in East Africa and southern Arabia, where some people chew its leaves for their mild stimulant effects. Human-made versions of cathinone can be much stronger than the natural product and, in some cases, very dangerous.

Usually taking the form of a white or brown crystal-like powder, synthetic cathinones are sold in small plastic or foil packages labeled "not for human consumption." They can be labeled as "bath salts," "plant food," "jewelry cleaner," or "phone screen cleaner." Synthetic cathinones are marketed as cheap substitutes for other stimulants such as methamphetamine and cocaine. Products sold as Molly (MDMA) often contain synthetic cathinones instead.

People can buy synthetic cathinones online and in drug paraphernalia stores under a variety of brand names, which include:

- Bliss
- Cloud Nine
- Lunar Wave
- Vanilla Sky
- White Lightning

Synthetic cathinones are part of a group of drugs that concern public health officials called "new psychoactive substance" (NPS). NPS's are unregulated psychoactive mind-altering substances with no legitimate medical use and are made to copy the effects of controlled substances. They are introduced and reintroduced into the market in quick succession to dodge or hinder law enforcement efforts to address their manufacture and sale.

People typically swallow, snort, smoke, or inject synthetic cathinones.

How Do Synthetic Cathinones Affect The Brain?

Much is still unknown about how synthetic cathinones affect the human brain. Researchers do know that synthetic cathinones are chemically similar to drugs like amphetamines, cocaine, and MDMA.

A study found that 3,4-methylenedioxypyrovalerone (MDPV), a common synthetic cathinone, affects the brain in a manner similar to cocaine, but is at least 10 times more powerful. MDPV is the most common synthetic cathinone found in the blood and urine of patients admitted to emergency departments after taking "bath salts."



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Synthetic cathinones can produce effects that include:

- Paranoia - extreme and unreasonable distrust of others
- Hallucinations - experiencing sensations and images that seem real but are not
- Increased friendliness
- Increased sex drive
- Panic attacks
- Excited delirium - extreme agitation and violent behavior

What Are Other Health Effects Of Synthetic Cathinones?

Raised heart rate, blood pressure, and chest pain are some other health effects of synthetic cathinones. People who experience delirium often suffer from dehydration, breakdown of skeletal muscle tissue, and kidney failure.

The worst outcomes are associated with snorting or needle injection, and intoxication from synthetic cathinones has resulted in death.

Are Synthetic Cathinones Addictive?

Yes, synthetic cathinones can be addictive. Animal studies show that rats will compulsively self-administer synthetic cathinones. Human users have reported that the drugs trigger intense, uncontrollable urges to use the drug again. Taking synthetic cathinones can cause strong withdrawal symptoms that include:

- Depression
- Anxiety
- Tremors
- Problems sleeping

How Can People Get Treatment For Addiction To Synthetic Cathinones?

Behavioral therapy can be used to treat addiction to synthetic cathinones. Examples include:

- Cognitive Behavioral Therapy (CBT)
- Contingency management, or motivational incentives—providing rewards to patients who remain substance free
- Motivational enhancement therapy
- Behavioral treatments geared to teens

As with all addictions, health care providers should screen for co-occurring mental health conditions. While there are no FDA-approved medicines for synthetic cathinone addiction, there are medicines available for common co-occurring conditions.

Connecticut Resources

Department of Mental Health
and Addiction Services

www.ct.gov/dmhas

www.drugfreect.org

National Resources

Substance Abuse and Mental
Health Services Administration

www.samhsa.gov

1.800.662.HELP (4357)

National Institute on
Drug Abuse

www.drugabuse.gov

