

Do You Know...

Street names: E, XTC, Adam, the love drug

What is it?

The chemical name for ecstasy is 3,4-methylene dioxymethamphetamine, or MDMA. The chemical structure and the effects of MDMA are similar to amphetamine (a stimulant) and to mescaline (a hallucinogen).

What's sold as ecstasy often contains drugs other than MDMA, which may or may not be similar in effect to MDMA. Some of the other drugs include caffeine, ephedrine, amphetamine, dextromethorphan, ketamine and LSD. Ecstasy sometimes contains highly toxic drugs, such as paramethoxyamphetamine (PMA), which can be lethal even in low doses. MDMA affects the chemistry of the brain, in particular by releasing a high level of serotonin. Serotonin is a chemical in the brain that plays an important role in regulating mood, energy level and appetite, among other things.



Ecstasy

MDMA was patented in 1913 and has been used experimentally, most notably as a supplement to psychotherapy in the 1970s. It was made illegal to possess, traffic, import or produce MDMA in Canada in 1976 and in the United States in 1985.

Where does ecstasy come from?

Ecstasy is made in illegal labs with chemicals and processes that vary from lab to lab. What's sold as ecstasy often contains unknown drugs or other fillers.

What does ecstasy look like?

Ecstasy is usually sold as a tablet or capsule that is swallowed. It may also be sold in powder form, or the tablets may be crushed and then snorted. There are also rare reports of the drug being injected.

Ecstasy tablets come in different shapes, sizes and colours, and are often stamped with a logo, such as a butterfly or clover, giving them a candy-like look. This "branding" of ecstasy tablets should not be mistaken for an indication of quality, as manufacturers may use the same logo, and low-quality copycats are common. Tablets that are sold as ecstasy may not contain MDMA.

Who uses ecstasy?

The increased use of ecstasy as a recreational drug began in the 1980s in the United States. Young people at raves (all-night dance parties) were the group most commonly associated with ecstasy use. While still used by young people in clubs and at parties, ecstasy is now also used by a wider range of people in a variety of settings.

A survey of Ontario students in grades 7 to 12 reported a decline in past-year use of ecstasy from six per cent in 2001 to 3.2 per cent in 2009. A 2008 survey of Canadians (aged 15+) reported that 1.4 per cent had used ecstasy at least once in the past year.

How does ecstasy make you feel?

How ecstasy affects you depends on several things:

- your age and your body weight
- how much you take and how often you take it
- how long you've been taking it
- the method you use to take the drug
- the environment you're in
- whether or not you have certain pre-existing medical or psychiatric conditions
- whether you've taken any alcohol or other drugs (illegal, prescription, over-the-counter or herbal).

In low to moderate doses, ecstasy can produce feelings of pleasure and well-being, increased sociability and closeness with others. Like all stimulant drugs, ecstasy can make users feel full of energy and confidence.

Even at low doses, ecstasy can also have strong negative effects. Higher doses are unlikely to enhance the desirable effects, and may intensify the negative effects. These effects include grinding of teeth and jaw pain, sweating, increased blood pressure and heart rate, anxiety or panic attacks, blurred vision, nausea, vomiting and convulsions.

After the initial effects of the drug have worn off, users may also experience after-effects such as confusion, irritability, anxiety, paranoia, depression, memory impairment or sleep problems.

How long does the feeling last?

The effects of ecstasy usually begin within an hour, and may last four to six hours. The duration of the after-effects cannot be predicted as precisely, though they may last for days or weeks.

Is ecstasy dangerous?

It can be. Although some people regard ecstasy as a relatively safe drug, a growing number of deaths have been associated with it. As with many illegal drugs, these risks increase with the amount taken and frequency of use.

A major factor in many ecstasy-related deaths is the dehydration and overheating that can result when ecstasy is taken in conjunction with all-night dancing. Ecstasy increases body temperature, blood pressure and heart rate, which can lead to kidney or heart failure, strokes and seizures. Ecstasy may cause jaundice and liver damage.

People with high blood pressure, heart or liver problems, diabetes, epilepsy or any mental disorder are the most vulnerable to the potential dangers of ecstasy. Part of the danger is that people may not be aware that they have these conditions, and the effects of ecstasy can trigger symptoms.

As with all illegal street drugs, the purity and strength of ecstasy can never be accurately gauged. When you take ecstasy, you don't know what you're taking, or how it will affect you.

Combining ecstasy with other drugs, whether illegal or prescription, may cause a toxic interaction. Several prescription medications are known to interact with ecstasy, including a type of antidepressant called monoamine oxidase inhibitors (MAOIs) and ritonavir, a protease inhibitor used to treat HIV.

Driving or operating machinery while under the influence of ecstasy, or any drug, increases the risk of physical injury to the user and others.

Is ecstasy addictive?

It's not uncommon for ecstasy to take on an exaggerated importance in people's lives. Signs of addiction include strong cravings for the effects of the drug, taking more of the drug than intended, and continuing to use the drug despite the problems it may cause.

Tolerance to ecstasy builds up very quickly. This means the more often you take ecstasy, the less effect the drug has. Taking more of the drug may not achieve the desired results, as frequent ecstasy use depletes serotonin and other brain chemicals that give the ecstasy "high."

There is little evidence to indicate that MDMA can produce physical dependence or withdrawal symptoms.

What are the long-term effects of taking ecstasy?

Animal research has established that ecstasy use can damage the brain cells that release serotonin. Research on humans is limited, but there is some evidence to suggest that ecstasy can damage the cells and chemistry of the human brain, affecting functions such as learning and memory.

The risk of damage caused by ecstasy use may be linked to the amount taken and the frequency of use. However, some research suggests that even occasional use of small amounts of ecstasy may damage the brain cells that release serotonin, and that these effects may be long lasting. It is not known whether these effects may be permanent.

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