

Ecstasy/ MDMA (Class A)



3,4-Methylenedioxyamphetamine (MDMA)

What does it look like and how is it used?

MDMA is often taken in pill form ('ecstasy' pills). In the last decade however, there has been a shift towards MDMA being sold as a powder, which often looks like crushed up, off-white, brownish or yellowish crystals. MDMA powder can be swallowed, dissolved into a drink or snorted.

Pills or powders sold as 'ecstasy' or MDMA **cannot be relied on to contain any MDMA**. Often pills or powders have other drugs and fillers mixed in. This can make things much riskier. The designs on ecstasy pills are not a good guide to their safety and reliability as pills with a 'good reputation' can have their designs copied.

The quantity of MDMA in pills and powders varies all the way from 0% (e.g. pills made of plaster of Paris) to close to 100%, so the user can't guide their dose reliably by the amount of powder or number of pills. This means that users can accidentally take more than intended. A single pill can contain enough MDMA to make some people feel overwhelmed, and on occasion pills and capsules have appeared which have contained quite dangerous amounts in one unit. Someone accustomed to taking several weak pills can overdose if the purity increases.

The popularity of MDMA powder is in part a reaction to the suspicion people have of pills. However potentially harmful substances have been found in **both** pills and powder. Neither type can be relied upon to be unadulterated, or to contain a fixed dose.

What are the effects of taking MDMA?

How soon the effects of MDMA are felt depends on the method in which it is taken. Swallowing an 'ecstasy' pill or MDMA 'bomb' (MDMA powder wrapped in a cigarette paper) may result in a time lag of 20 minutes to an hour before the effects really kick in. Effects peak around 2 hours after a pill is swallowed. If a pill is in fact mostly or all another drug like PMMA (a more potent and much less 'forgiving' drug than MDMA that takes longer to 'kick in') effects may take longer to come on, so taking more to boost the effects without waiting is risky. Snorting MDMA crystal/powder allows for much quicker absorption into the bloodstream and so the effects are felt much sooner but do not last as long.

The effects of MDMA when swallowed last several hours. Although everyone reacts differently, the typical effects reported following a dose of MDMA can be described as follows:

- Increased energy, alertness and wakefulness.
- Higher body temperature, heart rate and blood pressure (especially when dancing)
- Lower aggression and anxiety (though anxiety can sometimes increase in some people).

- Lifted mood or euphoria.
- Increased empathy and sense of intimacy with others.
- Perceptual changes: heightened sense of colour; blurred vision.
- Muscle clenching, especially the jaw.

Anecdotally, it seems that taking very high doses of MDMA may only increase the energising speed like effects of MDMA, not the euphoric or emotional effects. Unpleasant effects, like anxiety, feeling unbearably hot, over-stimulated, or confused are more likely the more a user takes. Very rarely, heart attacks, strokes, and other medical emergencies can be brought on by MDMA, especially in people with pre-existing health problems, or who take it in big amounts and mix it with other drugs.

MDMA makes people feel **thirsty** and users can get dangerously hot if dancing non-stop. Some users have collapsed and even died from overheating and dehydration. In attempting to counter these problems a few people have also **died from drinking too much water**. MDMA affects the body's ability to urinate out excess water, so too much water can cause the blood to become overly diluted, which can cause death (hyponatraemia). A much more common downside to MDMA is that its effects can be overwhelming, which can cause some people to become panicky.

Following MDMA use, there can be a comedown period which may last several days. In this period users may experience the following:

- Depression.
- Fatigue.
- Anxiety.
- Impaired concentration.
- Loss of appetite.
- Insomnia.

Can MDMA be mixed with other drugs?

Drugs that act on the brain will interact in ways we do not yet know, potentially leading to unpredictable problems. Many MDMA-related deaths happen when it is mixed with other drugs. Problematically, some pills or powders themselves may be made of a mixture of drugs. Alcohol can contribute to dehydrating when mixed with MDMA, and can dull the effects of stimulants, which combined with the poor judgement that alcohol causes, could lead to someone taking a more dangerous amount of MDMA.

Additionally, if someone is taking certain medications such as antidepressants or even herbal supplements that affect serotonin, there is an increased risk that taking MDMA (even several days afterwards) could cause too much serotonin to collect in the brain (serotonin syndrome) which is potentially fatal. Serotonin syndrome can also be caused by MDMA mixed with other stimulant drugs.

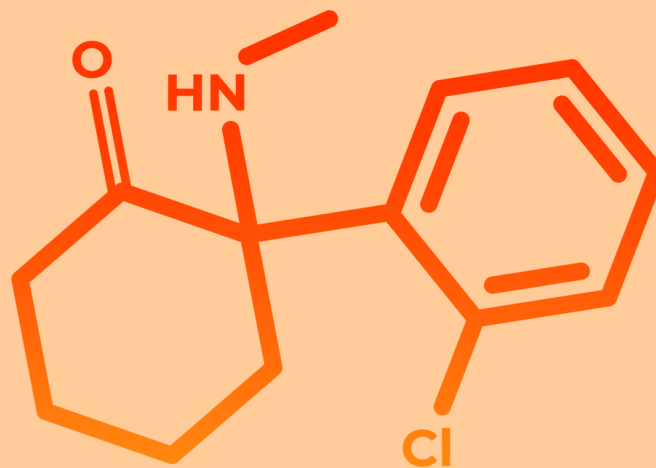
Is MDMA addictive?

MDMA is generally considered to have a **low potential for addiction**, especially when compared to drugs such as alcohol, tobacco or heroin. Although users may report a strong desire to take the drug, they are generally able to stop use if they feel that it is negatively affecting their lives. However, in some cases people have found it difficult to control their use.

Write five bullet points of HARM REDUCTION advice you would give to someone who was going to choose to take MDMA:

- 1.
- 2.
- 3.
- 4.
- 5.

Ketamine (Class B)



Ketamine

What does it look like and how is it used?

Ketamine is a white/transparent when pure, and often sold as a powder of tiny crystals. It is often crushed into a fine powder so it can be snorted up the nose. Occasionally the powder can be other colours, such as off-white or brown.

Ketamine also sometimes comes in pills. These could contain other drugs, which increases the risk of a bad reaction. It has even been sold as or confused with ecstasy pills.

Some people get ketamine in liquid form (or dissolve it) and inject it for a faster, stronger effect. **Injecting drugs is more dangerous for many reasons. For example, it is easier to take too much and can cause injuries and infections such as HIV (sharing needles).**

What are the effects of taking Ketamine?

Ketamine produces very different effects depending on whether someone takes a little or a lot. It is a strong drug and it is easy to take more than intended.

Low to moderate doses

Ketamine can give sensations of lightness (like walking on the moon), dizziness, and euphoria. It makes people's thoughts flow randomly; ideas can seem special and important, or pleasantly or unpleasantly muddled. Things may begin to look and sound different or somehow unreal. There is always a higher risk of accidents whilst using ketamine. Taking any depressant drug, such as alcohol, can very easily and quickly make the effects much stronger and riskier.

Higher doses

The more ketamine that is taken, the harder it is to stand up and move about. Quite large quantities lead to exceptionally odd feelings such as separation between the mind and the physical body, which some find pleasurable and others find distressing. Unpleasant side-effects like nausea and vomiting can occur. Ketamine can produce delusional thoughts much like those associated with schizophrenia. Very large quantities lead to users losing touch with their identity and surroundings altogether, which is called **k-holing**. People k-holing may be unresponsive, although inside their mind they may be experiencing vivid hallucinations. Users can have notions and hallucinations which can feel very real, and can be anything from wonderful conversations with angels, to being convinced they are dying. The risks of accidents, overdoses and anxiety are increasingly significant at higher doses.

Can Ketamine be mixed with other drugs?

When people die after taking ketamine, they have usually combined it with another substance.

Taking with **depressants** (such as alcohol, benzodiazepines such as Valium, or opiates such as heroin) may make the user become unconscious quickly and unexpectedly and can stop their breathing or allow them to suffocate on their own vomit.

Taking ketamine with **stimulants** (such as cocaine and ecstasy) may overload someone's heart. The chance of agitation and anxiety is also increased. Stimulants may keep them moving when the effects of ketamine would otherwise have immobilised them, increasing the chance of accidental injury.

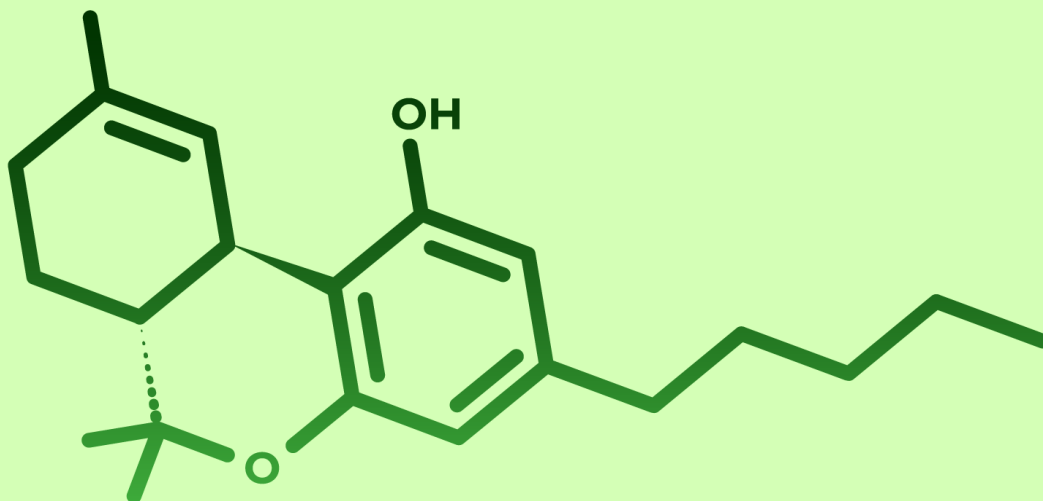
Is Ketamine addictive?

Whilst many people use ketamine on occasion without feeling cravings, some people get addicted to ketamine use and may use it daily. People can struggle and fail to be able to stop using ketamine. Tolerance builds up, so users need much more ketamine to get the effects they like. Signs of tolerance should be considered an early warning sign of addiction and harmful use.

Write five bullet points of HARM REDUCTION advice you would give to someone who was going to choose to take Ketamine:

- 1.
- 2.
- 3.
- 4.
- 5.

Cannabis/ Marijuana/ Weed (Class B)



**Tetrahydrocannabinol
(Cannabis)**

What is it and how is it used?

The hallucinogenic effects of cannabis are mainly due to a compound in cannabis called **THC (tetrahydrocannabinol)**. The other important compound in cannabis is **CBD (cannabidiol)**. Skunk and other forms of strong cannabis contain high levels of THC but very little, or no, CBD. It's thought that CBD can balance out some of the effects of THC and make users less likely to feel anxious and paranoid. A user can't tell from looking or smelling cannabis whether there's a balance of CBD and THC in it, but in general, hash may have more CBD than skunk.

The two main ways that people get the cannabis chemicals into their body are through the lungs, by smoking or vaporizing it, or through the gut (orally), by eating or drinking it or by holding cannabis oil under the tongue. The effects of cannabis when smoked or vaporized appear almost immediately, reach their strongest in the first 15 minutes or so, start to fade before an hour has passed, and are nearly gone after about 3 hours, although the exact timings vary from person to person. When used orally, the effects of cannabis take much longer to appear and rise to their peak, a person might feel nothing for an hour. Then the effects can last 5 hours or even more. This time can be very different from person to person. The under-the-tongue route produces effects roughly halfway between vaping /smoking and oral use.

The most common way of using cannabis in the UK is also the worst for a user's health. That is adding it to tobacco in a cigarette paper, rolling it with no filter and smoking this 'joint'. Tobacco smoke can give the user lung cancer, COPD, and other potentially deadly diseases. Tobacco is also addictive, much more so than cannabis, so smoking cannabis joints can be a 'gateway' to a harmful and expensive tobacco addiction. Or it might lead a person to craving more joints, and so smoking more cannabis than a person might otherwise. Smoking cannabis as well as tobacco might lead to more harm than smoking tobacco only.

What are the effects of taking Cannabis?

People use it looking for fun and laughter, some hope for medical benefits, some want help to relax. Some people use cannabis out of habit or because they find it difficult to resist. Cannabis can deliver the positive effects its users hope for, but it doesn't always do so, and it can cause harm too. Cannabis is often taken to help people relax and feel pleasantly sleepy and 'stoned', or in another setting, people use it to socialize, feel 'high' and laugh. It can make people clumsy with their bodies and words. Less like alcohol, cannabis also can alter the senses in unusual ways, so music, food, films, computer games might seem different, more fascinating, and easier to feel immersed in.

Cannabis has some side effects such as drying out the mouth and eyes (which can look red and feel itchy) and generating a strong appetite; 'the munchies'. Especially for someone who has never taken cannabis before, the effects can be hard to predict, and can be unpleasant for some people. It's common for people to try cannabis and not want to use it again.

Taking too much too fast (which is easy when the cannabis is very strong) can be horrible. Someone may suddenly look and feel pale, shaky, and ill, (sometimes called greening out, or pulling a whitey) they may even vomit or collapse. This effect can be a result of a rapid drop in blood pressure. If someone does feel ill, it usually doesn't last long and the person may recover faster if they lie down with their feet up. Whatever the drug is, never leave someone alone who is vomiting and intoxicated, as there is a risk of choking. If they are vomiting and intoxicated make sure their airways are cleared and put them in the recovery position. Combining cannabis with alcohol or other drugs can make a person feel awful.

Even people who have enjoyed using cannabis before can unexpectedly find that it gives them bad rather than good feelings. Sometimes people just feel overwhelmed and might need to lie down for a bit, especially if they get more stoned than they intended to. Even when taking a typical amount, users might find that they feel worried, suspicious, sad, confused, or even feel trapped going round in circles of weird thoughts.

Usually, if someone becomes panicked, confused, or behaves oddly when intoxicated on cannabis, they will be alright given time, especially if they are reassured and guided to breathe slowly and relax. Sometimes, they will feel fine after a few minutes, sometimes they will not feel good, but will be able to hold out with some friendly support until they sober up a bit. If someone remains very frightened or paranoid, and does not seem to respond to reassurance, or their behaviour is very alarming, call an ambulance.

It can be common for people who are intoxicated on cannabis (especially strong 'skunk' strains which are high in THC and low in CBD) to say things or feel things which are just like symptoms of psychosis, for example to think other people are taking about them or being paranoid. However, if a person has sobered up, but are still feeling paranoia or delusional ideas, it is important to get medical help. Sometimes (though rare), getting intoxicated on cannabis can trigger a mental health crisis such as a 'psychotic episode', which carries on even after the person should have sobered up. This can be a serious situation, and they need to have medical assistance to give them the best chance of getting better fast without any lasting effects. This usually only happens to people who already have a vulnerability to mental health problems.

Can Cannabis be mixed with other drugs?

Drugs that act on the brain will interact in ways we do not yet know, potentially leading to unpredictable problems. For example, if a user drives when stoned or high then they **double** their chances of having a fatal or serious injury car crash, but if they drive after mixing cannabis with alcohol, they are **16 times more likely** to crash.

Smoking or vaping cannabis with tobacco increases the risk of becoming addicted to nicotine which is the addictive drug in tobacco.

Is Cannabis addictive?

Around 9% of users get addicted to cannabis.

Write five bullet points of HARM REDUCTION advice you would give to someone who was going to choose to take Cannabis:

- 1.
- 2.
- 3.
- 4.
- 5.



All information comes from the Drug Science website. For more information about MDMA, Cannabis, Ketamine and other drugs, go to the **Drug Science** website: www.drugscience.org.uk/drug-information/