**MDMA**

**AKA:** MDMA, 3-4 Methylenedioxy-n-methylamphetamine
Tabs, Pills, Es, Eccies, E, XTC, Molly,

Logo-imprinted tablets including: apples, doves, killers, Mitsubishi, Ferraris, crowns, Euros, Bitcoins, Super Marios, VWs and numerous others

Ecstasy was originally the 'street' name for the compound 3-4 Methylenedioxy-n-methylamphetamine (MDMA).

**DRUG CATEGORY:** MDMA is a stimulant and hallucinogen. Because of its capacity for creating a sense of empathy and closeness to others it is referred to by some as an “empathogen.”

MDMA is part of a large group of drugs - the Phenylethylamines (which relates to their core molecular structure). Related products include MDA, MDEA, MDBD, and DOM. Several hundred phenylethylamines have been synthesised, but not all share the effects of MDMA.

**SOURCE:** Ecstasy is derived from naturally-occurring chemicals found in trees Sassafras Albidum, or Ocotea Pretiosa.

The processes involved are well documented, not least by the late Alexander Shulgin and reached a wider audience in part thanks to his book Pikhal.

They are beyond the means of most amateur chemists, requiring both equipment and chemicals that are expensive or subject to licence. UK-bought MDMA is produced both in the UK and mainland Europe, in illegal laboratories.

**APPEARANCE:** Pure MDMA comes as a white crystalline powder. However, due to the number of different labs and different processes that produce MDMA, appearance is very varied and the product sold in the UK is as likely to be tan/amber coloured. MDMA powder is compressed into tablets, which may come in a wide variety of colours and shapes, and with a wide range of logos.

Imprinted tablets often end up being referred to by the logo on them, so people would refer to Doves, Smiley, Mitsubishi and so on. This sort of branding, initially designed to gain a ‘brand’ a market share is no guide to
quality. Once a brand is established as being “better quality,” other producers copy the design, but may not copy the content.

MDMA is also supplied as a powder, typically in bags small bags.

Capsules are less common now come but did come in a range of colours.

**COSTS:** Ecstasy was initially a relatively expensive drug in the UK, selling for between £10-20 per tablet. Cost (and quality) dropped massively, with tablets selling for £1-2 or less.

MDMA powder, considered to be a better quality product has been more expensive, selling at between £30-50/gm. However with concern that MDMA powder is being adulterated with other white powder stimulants, the price of MDMA powder has dropped in some areas.

Over the past few years there has been a re-emergence of stronger, higher-price pills, selling at around £10 a pil.

**QUALITY:** The quality of all drugs is variable and nowhere is this more true than with MDMA. Users were always at risk of buying low quality tablets. However, as cost dropped, so did quality and some pills sold contain little or no MDMA.

Some will contain other psychoactive substances there is a chance that any old tablet finds its way onto the streets - headache tablets, other medications, veterinary supplies, old capsules filled with any white powder. There are plenty of tales of things like “worming tablet” being sold – partly based on the reality that tablets containing piperazines (an E-like stimulant) were originally used as cattle worming tablets.

Even if the tablet or capsule contains a genuine illegal, psychoactive drug, it may not be MDMA. As the drugs market becomes swamped with newer psychoactive compounds, so products sold as “Ecstasy” could contain other drugs. These could be an MDMA-related compound, such as MDEA or MDA.

Recently, tablets have been found to contain the chemical PMA or PMAA. Although in the same general family as MDMA, PMA is considerably more dangerous, with a slow onset, high risk of overdosing and a significant impact on body temperature. It has caused a number of fatalities in recent years.

Other tablets have been found to contain emergent drugs like methedrone, ketamine, butylone, amphetamine and a host of other compounds.
It should be stressed that tablets containing pure MDMA can still be risky. Some tablets contain very high doses of MDMA, and so fatalities could be due to strong tablets as much as contaminated ones.

For a long time, people who were wary of the pill market would seek out MDMA powder as being better quality. While there is still undoubtedly good quality MDMA powder on the market, there is also a lot of highly contaminated MDMA, bulked out with other white-powder drugs.

**QUALITY CONTROL:** The UK doesn’t currently have any routine MDMA testing processes in place in club settings. In lieu of such a harm-reduction intervention, there are a number of DIY alternatives.

The website Pill Report ([www.pillreports.com](http://www.pillreports.com)) has become increasingly reliable as an international database of pill-feedback. It is primarily user-generated and includes bulletins from agencies where relevant. It is international so people should ensure that they are looking at recent, local reports to ensure that they are relevant.

Testing kits are available, and while they are able to identify the presence of MDMA they cannot reliably indicate the presence of potentially dangerous contaminants.

MDMA can have a distinctive vanilla-esque smell and very bitter taste. However both the smell and taste can be faked.

**DOSE RANGE:** Given that most people will be buying impure powder or tablets of unknown strength, it is difficult for people to assess and regulate their intake.

A fairly typical dose range would be from 75-150mg of MDMA. Doses over 175mg would be considered a heavy dose increasing the risks of toxic reaction.

125mg would be a fairly typical tablet dose.

If buying MDMA powder at 80% purity, a dose of 150mg would equal 120mg of pure MDMA. 150mg is the equivalent of about five grains of rice.

**METHODS OF USE:** MDMA tablets are usually swallowed. MDMA powder is often snorted, or wrapped in a cigarette paper and swallowed. Pills and powders have also been used rectally. Injecting is rare.

**MECHANISM of ACTION:** MDMA increases levels of serotonin, dopamine and nor-adrenalin. Use results in increased release of stored chemicals and inhibits
their reuptake. MDMA is also probably a serotonin agonist (mimic). Compared to a drug like amphetamine, MDMA has less dopaminergic action and more serotoninergic action, so is less rewarding and possibly therefore less habituating.

**EFFECTS:** MDMA starts working approximately half-an-hour after it has been swallowed. Users may initially experience a warm glow spreading rapidly through the body, and experience some slight dizziness, disorientation, breathlessness and exhilaration. Nausea may be present.

For the next 3 to 5 hours, or possibly slightly longer, the user may experience some of the following:

- Sense of wellbeing and contentment, intense happiness, increase in pulse-rate, feeling warm or flushed, feeling restless, anxiety and paranoia, feeling increasingly friendly to other people, and a sense that this friendliness is reciprocated, tightness and clenching of the jaw muscles, dilated pupils, an increase in energy, suppression of the appetite and no desire to sleep, enhanced appreciation of visual and auditory stimulation, some mild visual distortion, a decreased desire to urinate, feeling sexually aroused, increased tactility.

Of course, any individual’s experience of MDMA depends on the strength and quality of the drug, and the user’s mood and environment. In some settings, such as when MDMA is used to explore self-awareness, the restlessness and anxiety is less pronounced. The cumulative effect of MDMA, especially when seen in the context of club drugs, is of increased appreciation of music and light shows, the energy to dance all night, and a sense of unity and friendship with other clubbers.

**INDICATORS of USE:** During use, key indicators include significantly dilated pupils, increased perspiration, clenching and grinding of the jaws, jerky, erratic movements, tactility, altered perceptions.

**HEALTH IMPLICATIONS:** Much has been made of the health risks attached to MDMA especially of Ecstasy-related deaths. While much research is still on going, the following health risks are apparent:

- Toxic or allergic reactions to MDMA itself; some people are sensitive or allergic to the drug; such sensitivity can result in illness or death.
- Overdose from high-strength MDMA, or taking a large amount of it
- A toxic or allergic reaction to substances that have been sold in place of MDMA; this includes reactions to similar substances (e.g. PMA) but also to other substances such as penicillin or other substances.
Injury or fatality caused by the effects of MDMA; examples include people with heart conditions who have heart-attacks as a result of taking use.

Heat-stroke: a risk especially when MDMA is taken in a hot night-club, especially if the user is dancing a lot. Heatstroke can cause death as internal organs cease working.

Water intoxication; in an attempt to reduce the risks of heat-stroke, a user may drink lots of water. The combination of drinking too much water and restricted kidney function due to MDMA can cause levels of fluid within the brain to increase, leading to unconsciousness, coma, and possible death.

The triggering of other conditions: Ecstasy has been linked to a number of conditions which may have previously been latent, and triggered by taking MDMA. Evidence is strong, for example, that Ecstasy can trigger Epilepsy in some individuals.

Long-term psychiatric damage: some users have experienced long-term depression after using MDMA; this is more common in regular users. There is some evidence that ecstasy use, especially long-term use, adversely affects neurotransmitter transmission systems in the brain.

Long-term damage to internal organs has not been discounted; organs considered, by some, to be at risk include the liver, the kidneys, the heart and the brain.

**REDUCING HARM:** For people determined to take MDMA, there are a number of things that can be done to reduce – but not remove – risks. The following harm reduction information is not intended to promote use and cannot ensure safety.

**Before:** Research local warnings about pills; look on www.pillreports.com

- Ensure that you are in good physical and mental health before use; use for people with pre-existing health problems is especially risky;
- Use should not take place on top of other substances (including alcohol) and can be especially risky on top of some anti-depressants
- Use should take place in an environment where you feel safe, with a sober person, who you trust, and who will seek help if you need it;

**Dose:** as you cannot be sure about the strength or quality of what you are taking, use ¼ to ½ a tablet to start with, or 1/10th gram or less of powder. Allow up to two hours for the drug to work. Even if nothing happens after two hours, don’t use any more; the drug may be having an undetectable effect of which you are unaware.
If you like the effects and want to use more, use a smaller second dose, and don’t keep redosing all evening.

**During:**

- Keep cool: take time out from dancing in club settings and get in to a cool environment to lose heat; remove scarves or hats to help cool down.
- Use cool water on face and neck to help cool down
- Stay hydrated – sipping around a pint of water per hour. Don’t use caffeinated energy drinks as they can increase heart problems and dehydration.
- The safest option would be to drink sports rehydration drinks as they will help replace lost minerals along with fluids;
- Don’t panic if you can’t pee – it doesn’t mean you are dehydrated: MDMA affects kidney function and reduces urine output.
- Don’t drink too much water as this can be dangerous
- MDMA can make users feel sexually aroused; ensure you are around friends who you trust and ensure you have condoms with you in case things go further
- Jaw clenching can damage teeth – use gum to help protect you from grinding

**After:** Lots of people report a seriously dip in mood after using MDMA – the dreaded “mid-week blues.” At this point people may have low levels of serotonin which can leave the person feeling sad, weepy, depressed and experiencing poor quality sleep.

The temptation is for people to escape this low mood through use of other drugs (like cannabis or tranquillisers) or use of stimulants to lift mood. Use of any drugs is liable to worsen mental wellbeing.

Healthy diet, including bananas, dairy, poultry, nuts and pulses can help the brain’s levels of serotonin get back to normal. Some people advocate the use of supplements such as 5-HTP. Natural sleep and moderate exercise can help. If low mood persists, seek help.

Have a good long break (three or more weeks minimum) before use of more MDMA. Allow yourself to fully recover.
**Emergencies:**

**Panic attacks:** if you feel or someone you are looking after start getting panicky (heart racing, breathing getting very fast, feeling very anxious) the following might help:

- Sit down with your back against something solid (wall, fence);
- Bring knees up and have head between knees;
- Take deep regular breaths in through the nose and breath out through the mouth;
- If you are helping a person who is panicking, provide reassurance, by talking calmly and ensuring that they aren’t being hassled by lots of people;
- If the symptoms get worse or there are persisting chest pains seek medical help urgently.

**Convulsions:** MDMA and related compounds can cause convulsions. If you are with someone having a convulsion:

- Don’t try to restrain them or put anything in their mouth
- Do move furniture or other hazards out of the way so the person won’t hit them
- Do place a pillow, cushion or folded jacket under the person’s head cushion it
- Always send someone to get help

**Overheating:** MDMA-type drugs can cause a dangerous increase in body temperature. This can be fatal. Signs of overheating aren’t always easy to spot but can include:

- Feeling very hot
- Stopping sweating
- Cramps in legs and arms
- Headaches
- Feeling anxious or panicky

**Dealing with overheating:**

- It’s a medical emergency: dial 999 or get on-site medics to help;
- Keep the person cool;
- Get them in to fresh air. (At a festival this includes taking them out of sleeping bag or tent);
- Remove any heavy outer clothes;
- Spray them with cool water;
- If they are shaking or convulsing don’t restrain them as this will make them hotter;
- Don’t try and make them drink anything at this stage – it could make things
worse;
• Tell the emergency services the person may have taken an MDMA-type drug.

LEGAL STATUS: Ecstasy is a Class A, Schedule 1 drug, and currently has no medical or therapeutic use in the UK.

TRENDS: MDMA was initially popular in the US Gay club scene, in the early ‘80s came back to the UK and whilst initially primarily popular in the UK Gay music scene, rapidly spread to other club-goers, fusing with the emergent Acid House scene. It rapidly increased in popularity across many music scenes, including the raves and free parties, the Manchester clubs and then on in to other cultural settings.

Some commentators dubbed 1988 the “Second Summer of Love,” and for the next two or three years Ecstasy maintained high levels of popularity.

Things started to change around the time of the Castlemorton Free Festival (1992) and went in to decline as legislation and enforcement impacted both on the rave/festival scene and the supply of MDMA.

The golden-age of Ecstasy seemed to be on the wane, as some users, concerned about over-priced drugs of disputable quality turned to other products instead.

However, although not born out by the trend data, MDMA seems to be enjoying something of a renaissance. Whilst nowhere near the scale in the late 80s, there is an increase in higher quality MDMA and some increase in use.

OTHER INFORMATION: Ecstasy is often described as a new drug, but it was first produced as long ago as the 1930s. Having been used as an appetite suppressant, and a military brainwashing drug, Ecstasy experienced a renaissance in the sixties and seventies as a tool for psychotherapy, and then made the jump into the club scene. It was only made illegal in the USA in 1985, though had been illegal in the UK far longer.