

Mephedrone, methadrone, and methylone

meph, m-cat, MCAT, Miaow, miaew, 4-mmc, bubbles, white magic, plant feeder

What is it?

Mephedrone (4-methylmethcathinone) is a stimulant which is closely chemically related to amphetamines. Users report that mephedrone produces a similar experience to drugs like amphetamines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder which is usually snorted, but can also be swallowed in bombs (wraps of paper) and may also appear in pill or capsule form.

Mephedrone is probably the most well known of a group of drugs derived from cathinone (the same chemical found in the plant called khat) although two other compounds are also increasingly recognised on the market. These are methadrone and methylone. The effects of methadrone are said to be broadly similar to mephedrone, although methylone is said to give the user an experience more closely related to taking ecstasy (1).

Other less common compounds from the cathinone family that may be used recreationally include flephedrone (4-FMC), bromomethcathinone (4-BMC), ethylone (MDEC), and buphedrone and it is possible that other compounds are in circulation.

Prevalence

It is not known how many people use mephedrone, methadrone, methylone or related cathinone derivatives in the UK. As yet, these drugs do not feature in any of the major surveys of drug use such as the British Crime Survey *Drug Misuse Declared* bulletin and may never do so, depending on how long they remain on the drug scene.

However, anecdotal evidence suggests that the drugs have become popular among club-goers and among more general recreational drug users. They can be bought on the internet and there are a significant number of websites selling mephedrone, methadrone and methylone. Usually, websites advertise the products as plant feeder or not for human consumption .

Price

Mephedrone is mainly sold in bags containing a gram of the drug which retail for between 10 - 15 online or in headshops. It is likely to cost more if bought from a dealer. Methylone is slightly more expensive at between 16 and 20 per gram.

Law

The legal position around this group of drugs is currently quite complex.

The parent drug of all these substances is cathinone, the active constituent in khat. Cathinone is controlled under the Misuse of Drugs Act as a Class C drug. Also controlled is methcathinone, under Class B because it is an analogue of methamphetamine (a Class A drug).

As things stand, all the other derivatives of cathinone mentioned above, such as mephedrone, are not controlled under the Misuse of Drugs Act. This means that currently it is legal to be in possession of these substances.

However, because these substances have drug effects, they are illegal to sell, supply or advertise in the UK under the Medicines Act, even with disclaimers like plant feeder , not for human consumption or for research purposes only . This law only applies to street dealers, retail shops and websites based in the UK.

The Advisory Council on the Misuse of Drugs (ACMD) has been asked to consider the harms associated with cathinone derivatives and whether they should be brought under the control of the Misuse of Drugs Act. The ACMD is expected to publish a report in 2010.

Mephedrone is illegal in Sweden, Denmark, Finland and Israel. As of the 22nd January 2010 it will be a controlled drug in Germany.

Effects/risks

There is no significant clinical literature on the effects of mephedrone and the other cathinone derivatives currently gaining popularity on the drug scene, so we have to rely on anecdotal reports from users.

Many people who have used mephedrone and similar drugs report that their experiences are similar to taking amphetamines, ecstasy or cocaine, producing a sense of euphoria and wellbeing, with users becoming more alert, confident and talkative. People who have used methylone, which is closely chemically related to ecstasy, particularly report a feeling of empathy with those around them.

People who snort these substances can experience extremely sore nasal passages, throats and mouths, with burns or cuts caused by the chemicals sometimes leading to nose bleeds. Some people choose to swallow the drugs instead to avoid these particular problems.

Like other stimulant drugs, the cathinone derivatives can have an impact on the heart. Some users report heart palpitations, or an irregular or racing heartbeat, which may last for some time after taking the drugs. Users can experience blurred vision, hot flushes and muscle tension, particularly in the jaw and face, and some people report that their fingers and other extremities have taken on a blueish pallor after using mephedrone. As with other stimulants, the substances tend to act as appetite suppressants. Nausea and vomiting has been reported, particularly if mixed with other drugs such as alcohol or cannabis.

A particularly concerning feature of many reports about mephedrone use is that once users have started using the drugs in a particular session, it is very hard to stop, with compulsive use leading to a number of unpleasant side effects (2) including insomnia, involuntary muscle clenching and hallucinations. In some cases, it seems, regular or heavy use may develop into psychological dependency.

References

(1) Druglink magazine (March/April 2009) Mephedrone: the future of drug dealing? Mike Power

(2) *ibid.*