Mephedrone, Methedrone, 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 methedrone and methylone. The effects of methedrone 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), MDPV (methyleneoxyxpyrovalerone) and buphedrone and it is possible that other compounds are in circulation.

Prevalence
It is not known how many people use mephedrone, methedrone, 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. However, anecdotal evidence suggests that the drugs have become popular among club-goers and among more general recreational drug users.

Prior to their classification under the Misuse of Drugs Act, they could be bought legally on the internet or in headshops. Websites and shops advertised the products as ‘plant feeder’ or ‘not for human consumption’. This is because vendors were under the mistaken belief that this offers protection from prosecution under the Medicines Act. Neither mephedrone nor any of the cathinone derivatives have legitimate uses as fertiliser products.

Now that the drugs are classified under the Misuse of Drugs Act, it is illegal for websites and headshops to sell the drugs.

Price
Prior to the drug’s classification, mephedrone was mainly sold in bags containing a gram of the drug which retailed for between £10 - £15. Methylone was slightly more expensive at between £16 and £20 per gram. There may have been changes to the average price since the drug’s classification.
Law
All cathinone derivatives, including mephedrone, methylone, methedrone and MDPV are Class B drugs under the Misuse of Drugs Act 1971. It is illegal to be in possession of the drugs and to sell them. The substances are controlled under generic legislation i.e. all cathinone derivatives are covered by the Misuse of Drugs Act.

In 2009, the Advisory Council on the Misuse of Drugs (ACMD) was asked by the government to consider the harms associated with cathinone derivatives and whether they should be brought under the control of the Misuse of Drugs Act. On 29 March 2010, the ACMD recommended that mephedrone and other cathinone derivatives should be brought under the control of the Act as Class B drugs (2). The legislation was passed on 16 April 2010.

Mephedrone is illegal in Sweden, Denmark, Finland, Israel and 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 sniff 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 (3) including insomnia, involuntary muscle clenching and hallucinations. In some cases, it seems, regular or heavy use may develop into psychological dependency.

Mephedrone has been implicated in a number of deaths although, contrary to many media reports, a causal role in fatalities has not yet been conclusively proven.

The use of MDPV (methylenedioxypyrovalerone) is concerning because the potency is higher than other cathinone derivatives. People who are used to using mephedrone or other similar drugs may take too much MDPV in the mistaken belief that it will behave the same. In August 2010, media reports suggested that there were some isolated incidents of hospitalisations following the use of 'Ivory Wave', a drug which sellers claim is legal but which in fact may contain MDPV, a Class B drug. As with all drugs of this type, the product label may mask any number of substances underneath.

References
(2) ACMD report on the cathinones can be found here: http://drugs.homeoffice.gov.uk/publication-search/acmd/acmd-cathinodes-report-2010
(3) op cit Power
### Other Sources of information

<table>
<thead>
<tr>
<th>Local organisations that offer Assessment &amp; Treatment options for people with addictions:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMART</strong> – Substance Misuse Assessment &amp; Referral Team Poole - Tel 01202 735777</td>
</tr>
<tr>
<td><strong>BEAT</strong> – Bournemouth Engagement and Assessment Team - Tel 01202 558855</td>
</tr>
<tr>
<td><strong>YADAS</strong> – Tel 01202 741414 <a href="http://www.edasuk.org/treatment/poole/poole-yadas/">www.edasuk.org/treatment/poole/poole-yadas/</a></td>
</tr>
<tr>
<td><strong>REACH YP</strong> – Tel 0800 0434656 <a href="http://www.edasuk.org/treatment/dorset/sh/">www.edasuk.org/treatment/dorset/sh/</a></td>
</tr>
<tr>
<td><strong>ADDACTION</strong> – Tel 01202 558855 <a href="http://www.addaction.org.uk">www.addaction.org.uk</a></td>
</tr>
<tr>
<td><strong>EDP</strong> – Tel 01305 571264 - email <a href="mailto:info@edp.org.uk">info@edp.org.uk</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National organisations that offer treatment, advice, information &amp; support for people with addictions:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alcohol Change</strong> – Tel 020 3907 8480 <a href="http://www.alcoholchange.org.uk/">www.alcoholchange.org.uk/</a></td>
</tr>
<tr>
<td><strong>FRANK</strong> – Tel 0300 1236600 Text 82111 <a href="http://www.talktofrank.com/">www.talktofrank.com/</a></td>
</tr>
</tbody>
</table>

Contact us: Helpline 01202 733322 (Weekdays 8.30am to 4.30pm, 24-hour answer phone)
Email: admin@edasuk.org
EDAS Head Office - 56 Ashley Road, Parkstone, Poole BH14 9BN

**Statement**
Our information and research is designed to help you make informed choices about the services that we provide. From time to time, for illustrative purposes, we may make reference to commonly available products (such as relaxation CDs and popular self-help books). We do not endorse or advertise the use of any specific product.

**Disclaimer:**
While we make every effort to use up-to-date and reliable sources, we cannot accept liability for errors in the sources that we use and also cannot guarantee to find all the information relevant to your enquiry or request. All responsibility for interpretation of and action upon that information rests with you. This information and advice is offered on the understanding that if you intend to support your treatment with complementary or alternative approaches then it is advisable to consult your GP to ensure that they have a complete understanding of your situation and the complementary or alternative approach that you are considering.

ID: ED-DS-21112011v2
Literature search completed: Drugscope - October 2012
Sheet published: October 2012
Review Date: October 2013

This organisation has been certified as a producer of reliable health and social care information.
[www.theinformationstandard.org](http://www.theinformationstandard.org)