Mephedrone (4-methylmethcathinone) is a synthetic central nervous system stimulant. It is chemically similar to the cathinone compounds found in the east African plant khat and is less potent than amphetamines. People sometimes confuse mephedrone with methedrine, methadone, methedrone (4-methoxymethcathinone) and methylone (bk-MDMA) because they sound the same. However, they are all different.

Mephedrone is often sold as ‘plant food’, ‘pond cleaner’ or ‘bath salts’ on the internet. It has little odour, is white, off-white or yellowish and is available as a powder, capsules or pills which look like Ecstasy making it easy for mephedrone to be sold as E to unknowing buyers. The powder can be snorted, swallowed in bombs (wraps of paper), injected, or ‘shelved’ (used rectally). Users sometimes use both orally and nasally: swallowing some mephedrone first, then snorting some, then taking more orally.

Mephedrone is an illegal Class C drug. Possession, importation or supply can lead to fines and/or imprisonment.

What mephedrone does

Reports on effects come primarily from people who have used the drug as there have not yet been formal published studies into psychological and behavioural effects of mephedrone on humans. Users say the effects are similar to ecstasy/MDMA – but with more stimulant and less sensual/empathy effects.

- When snorted the effects are usually felt within a few minutes and the peak is reached within 30 minutes or less.
- When taken orally it takes 15-45 minutes to feel the full effect though if taken on a full stomach, onset can be considerably slower. The effects then last between 1-3 hours.

Users describe the physical effects as:

- fast/erratic heart-beats due to increased heart rate and blood pressure
- muscular tension in the jaw leading to teeth grinding, and limbs
- nose-bleeds
- shrunken genitals (men only)
- dilated pupils, blurred vision
- dry mouth/thirst, decreased appetite
- sweating. (Sweat can retain the distinctive fish-like scent of mephedrone for several days.)
- unusual body sensations (hot flushes, goose bumps) and changes in body temperature regulation

The main effects felt by users include:

- initial 'head rushes', followed by euphoria/elevated mood
- feelings of openness and empathy and decreased hostility
- a lowering of social inhibitions
- increased talkativeness
- mild sexual stimulation
- elevated appreciation of music
- poor concentration
- time distortions
- Heavy use can cause visual hallucinations and some users have experienced anxiety, paranoia and depression.
- The after-effects are similar to speed come-downs, involving fatigue, dizziness, and low mood. Some people say they have had bad headaches and nausea after taking the drug.
Long-term effects

As yet there have not yet been any formal studies relating to toxicity, interactions with other drugs or possible long term effects. Like other stimulants, cathinone derivatives can affect the heart and vascular system.

- Some users report experiencing heart palpitations, or an irregular or racing heartbeat which can last for some time after taking the drugs.
- Others say their fingers and other extremities have turned blue after using mephedrone. If this occurs users should seek urgent medical attention as the consequences of prolonged vasoconstriction can be loss of fingers, toes etc.
- A particularly concerning feature of mephedrone use for some people is that once users have started using the drugs in a particular session it is very hard to stop (UK users call this ‘fiending’). People start out intending to take only a small amount but end up consuming their entire supply. This type of compulsive use can lead to a much greater risk of serious side effects such as heart problems, and increases the likelihood of unpleasant effects including extreme agitation, insomnia, involuntary muscle clenching and hallucinations.
- With increased doses comes the increased likelihood of negative effects including uncomfortable changes in body temperature (sweating and chills), heart palpitations, impaired short term memory, insomnia, tightened jaw muscles and grinding teeth, muscle twitches, dizziness, light headedness, and vertigo.

As with other similar stimulant-type substances, there is no reported physical withdrawal syndrome, although regular or heavy use can lead to dependency.

Mephedrone has been associated with a number of deaths internationally, usually in cases where the person has also taken other drugs. This means that it is difficult to say what role mephedrone may have played in these fatalities.

Harm reduction

- No use is the safest option. If you are using mephedrone use occasionally (less than weekly) and moderately.
- These products are not advisable for people who have or have previously had mental health and/or drug and alcohol issues, or heart or blood pressure problems.
- Do not use if pregnant or breastfeeding or are responsible for children. Have children cared for by someone who is not using.
- Ensure that all surfaces and utensils used for taking mephedrone are cleaned and put out of reach of children.
- Avoid mixing mephedrone with other drugs, especially alcohol, stimulants or prescribed medicines.
- Swallowing is safer than snorting which can cause painful ‘nose burns’ and nose bleeds, as well as extremely sore throats and mouths.
- Chewing sugar free gum helps stop damage caused by teeth grinding and jaw clenching.
- Keep hydrated by drinking water or sports drinks in small, regular amounts.
- Wearing sunglasses in bright sunlight helps avoid potential damage to retinas because of dilated pupils.
- If you are using in bars or nightclubs stay close to friends; look out for each other and only purchase from reliable sources.
- Do not attempt to drive or operate heavy machinery while under the influence of mephedrone.

Looking for help?

If you’re looking for more information, or maybe want to talk to someone for yourself or someone close to you give Auckland CADS a call on 845-1818

For confidential advice, support or information on alcohol & drug services in your region contact Alcohol & Drug Helpline on 0800-787-797 10am to 10pm daily

Use your first aid skills and CALL for an ambulance (111) if you are concerned about a person’s health.