

blowing
smoke!

fast facts on

synthetic cannabinoids

what are they and what are the risks?



ncpic

national cannabis
prevention and
information centre

what are synthetic cannabinoids?

A wide range of 'herbal' products, claiming to have similar effects to cannabis, have been available in Australia for many years. They have been sold in a range of retail outlets but many of these products are now bought online.

The recent introduction of synthetic cannabinoid products (often called 'synthetic cannabis') onto the Australian market, however, has led to concerns regarding public health and safety around what were once referred to as 'legal highs'.

Synthetic cannabinoids are manufactured chemicals that are designed to activate the same chemical systems in the brain as the main active ingredient in cannabis, delta-9-tetrahydrocannabinol (THC). These drugs therefore have similar physical and psychological effects as cannabis, but are almost always more potent in their effects, because of the way they are manufactured.

are they legal?

NO.

Cannabis is included as a prohibited substance under Schedule 9 of the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). Schedule 9 of the SUSMP consists of substances which are considered harmful, and are illegal to make, own, sell or use under state and territory drugs and poisons legislation.

Recommendations for the appropriate classification or scheduling of substances included in the SUSMP are made by the Advisory Committee on Medicines Scheduling, a statutory committee established under Commonwealth legislation. Scheduling recommendations are made by this committee primarily on the basis of public health matters, such as the risks of harms to the community.

As of 2012, a group entry for all synthetic cannabinomimetics has been included in Schedule 9.

This places any drug/chemical that mimics the effects of cannabis in the same category as botanical cannabis where Schedule 9 (S9) drugs and poisons are substances and preparations for which the sale, distribution, use, and manufacture of such substances without a permit is strictly prohibited by law.

are synthetic cannabinoids safe?

NO.

Synthetic cannabinoids are sometimes called ‘research chemicals’, produced in laboratories and not yet tested or approved for human consumption. The vast majority have only been recently synthesised and very little, if anything, is known about the risks associated with their use. What little we know is concerning, for example, many of these chemicals are much more potent than THC, and have unpredictable effects.

When these products are tested they are found to have variable combinations and concentrations of synthetic cannabinoids within products, such that using different brands, or even different batches of the same brand, can produce dramatically different effects. Even within the same packet the dose can be very different as the synthetic cannabinoids, which are usually dissolved in acetone and sprayed on some herbal material, can vary in the level of exposure to the chemical spray.

There is no evidence to suggest that synthetic cannabinoids or products marketed as such are safe. In this respect consumers should be advised to use caution in relation to any representations of uncontrolled substances as legal or safe.

what are the risks of synthetic cannabinoids?

It is believed that these compounds work on similar receptors in the brain as cannabis, so it may be assumed that the risks associated with their use are similar to those for cannabis. There have been serious physical effects reported including loss of consciousness, increased blood pressure and heart rate and a series of heart attacks. It is the mental health/psychological impacts that are the most concerning, as they are much more common. These include panic attacks, severe anxiety, and depression. There are many case reports now of users experimenting with these products that need to seek emergency medical assistance. The most troubling, especially amongst young people, are the many reports of severe hallucinations associated with synthetic cannabinoid use, that seem to persist (especially among heavy users) and lead to what has been described as a pre-psychosis-like state.

Some of the other reported negative effects associated with use include the following:

- dry mouth
- vomiting
- seizures
- agitation and aggression
- high blood pressure/heart rate and chest pains
- relapse of psychotic disorders

In addition, almost all synthetic cannabinoid products are smoked, so all the harms associated with smoking any substance need to be considered.

are they addictive like cannabis?

There have been reports of regular use of these products leading to addiction. Regular users report tolerance to the effects (needing more to have the same effect) and withdrawal symptoms when they try to stop or cut down. It is not well studied at this stage, but users report similar symptoms to those seen with cannabis use but with some additional 'flu like symptoms' and for some, significant anxiety. Reported withdrawal symptoms include:

- drug craving
- restlessness
- sleep problems and nightmares
- profuse sweating
- nausea and headaches

Australian drug treatment services are now reporting increasing presentations with problems associated with synthetic cannabinoids. In general, like cannabis, withdrawal can usually be managed at home with social support, especially as the anxiety has been reported to pass quite quickly once users actually stop. If you are experiencing problems stopping synthetic cannabinoid use, see the last page for referral information.

who uses synthetic cannabinoid products and why?

Although we know little about why people choose to use these products, the following reasons have been suggested from surveys of users and retailers:

- the effect
- they are perceived to be legal
- they are readily available and their packaging and promotion is highly attractive
- they are perceived as safe
- they are not easily detectable in routine, standard urine and blood tests

As they are often promoted as being 'undetectable', synthetic cannabinoid products may be particularly attractive to workforces that are subject to regular workplace drug testing or among those tested in the criminal justice system. Anecdotal evidence and media reports suggest that miners, as well as those in the armed forces and transport industry amongst others, are likely to be attracted to these products.

Recently, routine point-of-care tests (urine drug screens for example) for the most common synthetic cannabinoids are now available and their use is likely to become more common in workplaces.

in summary

Synthetic cannabinoid products are so new that they have never been tested on animals, let alone humans. Those who choose to experiment with these products truly are being the ‘guinea pigs’ for the future.

They are illegal according to Commonwealth legislation but it is important to note that enforcement of Commonwealth scheduling decisions is implemented within the states and territories under local drugs and poisons legislation. Commonwealth controls are automatically adopted through reference in Victoria, the Northern Territory and the Australian Capital Territory. See the NCPIC Factsheet (<http://ncpic.org.au/workforce/beer-and-other-drug-workers/cannabis-information/factsheets/article/synthetic-cannabinoids>) for Australian legislative changes at the state/territory level. As you won’t know what’s in it, you can never know if it is legal no matter where you live. It is also worth noting that Australian Customs controls make these substances illegal to import. Therefore purchasing these substances from overseas could potentially result in seizure of the imported product.

- they are not safe
- serious toxicity, addiction and withdrawal is being reported
- negative effects on physical and mental health
- routine tests are now becoming available for workplace testing

if I know someone who has a problem with synthetic cannabinoids, or I need help myself, where can I go?

The Cannabis Information and Helpline provides a nationally available free call service for people who use cannabis as well as products that mimic the effect of cannabis, such as synthetic cannabinoids, or for those concerned about friends or family members. Callers will receive reliable, evidence-based information and support and advice about how to communicate with users and help engage them in interventions.

the cannabis information and helpline number is

1800 30 40 50

for more information on cannabis and synthetic cannabinoids go to the NCPIC website –

www.ncpic.org.au

The Centre has also written a bulletin on the issue – *Synthetic cannabinoids: The Australian experience* which is available at the website.