



New synthetic drugs — deceptive and dangerous

Queensland is seeing an expansion in the market for so-called "designer drugs" that mimic the effects of traditional illicit drugs such as LSD, methylamphetamine, ecstasy, cocaine or cannabis. Known by various names — drug analogues, mimetics, research chemicals, new synthetics — new and emerging psychoactive substances (NPS) are often marketed as legal highs or herbal highs. In reality, they're neither legal nor herbal. They are dangerous drugs that the CCC is targeting as an emerging threat to our community.

What you should know

- It is illegal to import, possess, and supply NPS in Queensland. Laws here ban all substances that are intended to have the same effect as scheduled dangerous drugs such as ecstasy, cocaine, amphetamines and cannabis.
- Use of NPS has resulted in death, suicide, serious injury, and adverse health effects. Their long-term effects are currently unknown.
- Suppliers are aggressively marketing NPS to young people by using logos and patterns drawn from popular culture and describing them as safe or legal, or as traditional illicit drugs.
- There is evidence that some drug dealers are targeting remote areas, particularly central and northern Queensland, and vulnerable groups in these locations.
- Organised crime groups are involved in the manufacture and sale of NPS, and are likely to become more heavily involved over the next two to three years.

"Many consumers wrongly believe that NPS are safe compared to other illicit drugs"

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Pill with "e" design, probably marketed as ecstasy, but found to contain PMMA

Source: Queensland Health Forensic and Scientific Services 2012.

"Users do not know what they're buying or consuming"

What are NPS?

"New and emerging psychoactive substances" (NPS) are harmful substances typically designed to mimic traditional illicit drugs. Worldwide, the NPS market is one of the most rapidly evolving illicit drug markets. Although some NPS were developed years or even decades ago, more new substances have been identified in the past five years than in the last 50 years combined, with an average of one new substance detected every week (UNODC 2013).

NPS are not natural products, nor are they safe to consume or legal to possess. Under Queensland law, it is illegal to possess substances that have the same effect as a scheduled dangerous drug. In November 2014, new Federal legislation was passed to prohibit the importation of all new psychoactive substances unless importers can prove they have a legitimate purpose; the Bill is now subject to debate in the Senate (Keenan 2014).

Risks to users of NPS

Many consumers incorrectly believe that NPS are safe, especially in comparison to traditional illicit drugs, but deaths and serious injuries have been associated with NPS since their emergence in Australia. Because NPS use is a relatively recent phenomenon, the full extent of harms — particularly long-term — associated with their use is unknown. But there is growing evidence that NPS are associated with a wide range of undesirable health effects (see Appendix).

NPS use linked to deaths in Queensland

The recent deaths of two men in Mackay believed to be linked to use of synthetic cannabis highlights the potential danger of these drugs. In Queensland, previous incidents of hospitalisation, coma and death have been linked to NPS.

- In March 2012, several university students were hospitalised with ill effects after ingesting synthetic drugs, including one student who was in a coma for a number of days. While attending a party, the students had ingested a cocktail of drugs that included a substance they believed to be "tripstacy", a combination of MDMA and LSD that was allegedly purchased on the internet as a "research chemical" and ingested using a nasal spray. Forensic testing subsequently identified the substance as the synthetic hallucinogen 25I-NBOMe.
- In 2012 three deaths in Queensland were believed to be associated with ecstasy tablets that contained PMMA.
- Between 2011 and 2014, five deaths in Mount Isa were associated with the use of MDPV¹, with three occurring between November 2013 and January 2014. In the most recent cases, two people collapsed and were unable to be revived after exhibiting bizarre behaviour, the third person committed suicide.

The variation in potency and contents of NPS is a particular risk to consumers. NPS are active at low doses, which may increase the risk of overdose.² The slow effects of some NPS may also lead to compulsive re-dosing, especially among inexperienced users or regular users who expect the substance to take effect within a short period of time.

A large number of deaths associated with NPS involve poly drug use (that is, multiple substances being ingested) and health experts have warned about the potentially harmful effects of mixing traditional illicit substances with NPS. Several fatalities in Australia have resulted from traditional illicit drugs being substituted with NPS.

¹ Methylenedioxypyrovalerone.

² For instance, the dose of MDPV is almost 100 times smaller than mephedrone — MDPV is active at less than half a milligram, and often overwhelming at 1mg+.

"There is evidence that some drug dealers are targeting remote areas and vulnerable groups in these locations"

The risks associated with taking NPS are increased by the potential for incorrect identification of these substances. NPS are often given names similar to those of recognised illicit drugs (e.g. Crack Inside, EXTC and Xtacy), and pills and blotter tabs actually containing NPS often bear logos and patterns similar to those for ecstasy and LSD. This means that users of traditional illicit drugs such as methylamphetamine, cocaine and ecstasy³ may be inadvertently consuming NPS.

The reality is that users do not know what they're buying or consuming (see "Deceptive marketing").

The NPS market in Queensland

The CCC has been monitoring the NPS market since 2009, observing growth in the range and availability of these substances. Use of NPS remains quite low in comparison to those for traditional illicit drugs such as cannabis and methylamphetamine. Nevertheless, law enforcement intelligence shows that NPS appeal to a broad cross-section of the community, from school-aged children to over 65s.

Their use is particularly prevalent among recreational drug users and people who are subject to routine drug testing. NPS also appear to be attractive to "high-intensity drug users" who regularly use various types of illicit substances and like to experiment widely with substances. This group will actively seek out NPS, as well as taking them as a substitute for, or in addition to, traditional illicit drugs. Another primary user group are experimental users who do not necessarily have a history of drug use but are attracted by the "research chemical" and "legal high" branding of NPS.

Prevalence in regional communities

Supply and use of NPS in Queensland is particularly prevalent in central and northern regions. This is likely to be due to the shortage of traditional illicit drugs in these areas, high levels of disposable income, and recent flooding of drug markets in these areas with NPS. There is also evidence that some drug dealers are targeting remote areas, and vulnerable groups in these locations. Concerns have been raised about NPS use by people in remote communities — including young children — where there is limited access to treatment services and education about the harmful effects of these substances.

Young people and NPS

Young people have frequently been identified as consumers of NPS, and several recent NPS-associated deaths in Australia have been teenagers. Evidence indicates that younger user groups may be particularly susceptible to the harms associated with these substances as they are less likely to have experience consuming traditional illicit substances.

There is also evidence that young people are being aggressively targeted by drug producers and dealers, with pills and blotter tabs resembling the shape of cartoon characters and given playful street names such as "Barts", "Homers", "Smiles" and "Snapchats" (ABC News 2014).



Source: Queensland Health Forensic and Scientific Services 2012.

"Young people are being aggressively targeted by NPS drug producers and dealers"

³ "Ecstasy" is the term commonly used to describe MDMA (3,4-methylendioxymethamphetamine) in pill form.

Deceptive marketing

By marketing the substances as "plant food" or "research chemicals", some suppliers of NPS, particularly online vendors, are misleading prospective customers into believing that NPS are safe and/or legal. Other suppliers seek to normalise the use of NPS by implying that these substances are widely used, or have been scientifically tested. Marketing of these substances as legal highs has also led to the incorrect perception that these substances are legal to possess and safe to consume.

Marketing NPS as legal and safe may be attracting new users to the market, including young people, people who have not previously used drugs, and those concerned about criminal sanctions associated with traditional illicit drug use. NPS are also being marketed as a way to quit traditional drugs, with these substances having brand names such as "quit pot" and "medical marijuana".

Involvement of organised crime

In recent years, organised crime groups have become more involved in importing and distributing NPS in Queensland. The CCC is also seeing the emergence of other suppliers, including people with no previous criminal history or connections with illicit drugs who are entering the market, purchasing large quantities of NPS and on-selling for profit.

There have also been examples of NPS being produced and distributed at a commercial level in Queensland, with some suppliers importing synthesised psychoactive substances from overseas and producing NPS products for domestic distribution — for example, by spraying inert leaf material with psychoactive material.

Queensland-based production and distribution

In 2013, a 22 year-old Brisbane man with no prior history for drug possession or supply was charged with trafficking and producing dangerous drugs following the importation of just under 100 kg of inert plant material and powder used in the manufacture of cannabimimetics (synthetic cannabis). He was allegedly producing and distributing cannabimimetics from his garage in New Farm.

There is also evidence of criminal motorcycle gang (CMG) involvement in the NPS market in Queensland as both users and suppliers of NPS. Organised crime involvement in the NPS market is likely to increase over the next few years as the level of demand for these substances continues to increase. Domestic production of NPS by organised crime groups is also likely to increase, especially if the availability of traditional illicit drugs decreases.

"Organised crime groups have become more involved in importing and distributing NPS in Queensland"

What is the CCC doing about NPS?

The CCC with its partner law enforcement agencies are actively targeting the production, importation, trafficking and possession of NPS.

The CCC's focus is on the drugs markets, commodities and criminal groups that pose the greatest risk to the Queensland community. By bringing together a variety of intelligence and published sources, we increase law enforcement understanding of this market. NPS have been identified as an emerging risk, and understanding the evolution of the market is an intelligence priority for the CCC.

Conclusion

NPS have become an established drug class within the broader Queensland illicit drug market. Although NPS use appears to be lower than some other traditional illicit drugs, the availability of these substances through online marketplaces and traditional supply chains in Queensland is increasing. Suppliers use deceptive tactics to market these substances, in order to maximise profit. Concerns are held for the community, particularly with respect to the marketing of these drugs to young people and the potentially significant harms from their use. Law enforcement needs the assistance of the community in identifying new trends and preventing further growth and involvement of organised crime.

People shouldn't deceive themselves about the use of NPS. Before taking NPS or any other illicit substance, people should be aware that:

- They won't always know what they're buying or taking.
- Using NPS is illegal criminals and organised crime groups are facilitating their supply.
- Using NPS can result in death or coma young people are particularly vulnerable.
- The long-term effects of using NPS are unknown.

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Appendix: Negative health effects reported to be associated with NPS use

A wide range of physical and psychological health effects have been reported to be associated with using NPS.

Psychological	Anxiety, aggressive behaviour, agitation, confusion, dysphoria, paranoia, agitation, irritation, panic attacks, hallucinations, depression, empathy, perceptual disorders, restlessness, self-mutilation, suicidal ideation
Neurological	Seizures, loss of consciousness, tremor, dizziness, memory loss, cerebral edema, headache, light-headedness
Cardiovascular	Tachycardia, hypertension, chest pain, cardiac ischemia, palpitations, vasoconstriction, myocardial infarction
Musculoskeletal	Arthralgia, extremity changes (coldness, discoloration, numbness, tingling), muscular tension, cramping
Metabolic	Hypokalemia, hyperglycaemia
Gastrointestinal	Nausea, vomiting, abdominal pain
Autonomic	Fever, mydriasis
Other	Shortness of breath, dry mouth, nasal pain, tinnitus

Source: Adapted from Santos 2013.



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