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NALOXONE: ACCESS, AFFORDABILITY AND AWARENESS VITAL TO SAVE LIVES

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IMPORTANT ANNOUNCEMENT: INTRA-NASAL NALOXONE APPROVED FOR AUSTRALIA

At the launch of the new report, *Saving lives: Australian naloxone access model,* the Minster for Health the Hon Greg Hunt MP announced that Australia's Therapeutic Goods Administration (TGA) has approved intra-nasal naloxone for use in Australia.

"I'm delighted to also announce that nasal spray naloxone, which can be much more easily administered, has now been approved by the TGA for sale in Australia," the Minister said.

Penington Institute Deputy CEO Dr Stephen McNally said that this was an exciting and major step forward.

"Intra-nasal naloxone is so much easier to use than naloxone by injection. This development will have a profound effect on many people's willingness to be trained in how to use naloxone," Stephen said.

> "This TGA approval has been much-anticipated and is a game-changer in naloxone provision."
>
> – Dr Stephen McNally

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Penington Institute is a community-based, not-for-profit organisation that actively supports the adoption of approaches to drug use which promote safety and human dignity. Penington Institute connects substance use research to practical action and supports needle and syringe programs (NSPs) and other evidence-based approaches to reduce drug-related harm.

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Left to right: Penington Institute CEO John Ryan, Pain Australia CEO Carol Bennett and Dr James Petty from Penington Institute. Photo thanks to Pain Australia.

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On 19 September in Canberra the Minister for Health the Hon Greg Hunt MP officially launched a new Penington Institute report: *Saving lives: Australian naloxone access model*.

Attendees included parliamentarians, representatives of peak bodies Pain Australia, the Pharmacy Guild and the Pharmaceutical Society as well as leaders from pharmaceutical companies and peer harm reduction organisations.

Minister Hunt expressed concern about overdose deaths.

"We are not the United States. We do not have catastrophic opioid problems. But we do have a problem, and the levels of prescription overdose deaths are unacceptable," the Minister said.

"This report about the Australian naloxone access model … is extremely valuable.

"We will very, very seriously consider the recommendations here … there has to be more action to get naloxone into the hands of those who need it."

Guests were enthusiastic about the report and responded positively to Narelle who spoke about her experience of overdosing on heroin and then being reversed by ambulance paramedics using naloxone. Although 20 years ago her memories are fresh – and she still has the naloxone box from that time.

Narelle tragically lost her brother Shane to an overdose of pharmaceutical medications.

"My story is a contrast - I'm here today because naloxone saved my life," Narelle said.

"But there are so many others like my younger brother who aren't alive now.

"To think if my parents had naloxone that morning and knew how to administer it and knew how to do all the right things with it, he'd still be here today."

Penington Institute Deputy CEO Dr Stephen McNally said that opioid overdose reversal medication naloxone is a vital medicine, but it is not getting into the hands of those who need it.

"Naloxone is a remarkable medicine which can save many more lives in every corner of the country. Obviously if people cannot get access to it or can't afford it, we simply aren't going to get anywhere," Stephen said.

"If people don't understand how to administer it, we will be held back. We absolutely want to turn the tide on opioid overdose deaths.

"To mid-September this year only 960 scripts have been written for naloxone. This number is far too few to change the overdose trajectory we are facing."

The new report investigated approaches to naloxone provision and distribution in jurisdictions in Canada and the United States and national programs in Norway and Scotland.

The report model is summarised in the infogra

ensuring priority people have easy access to naloxone. These include: people who inject drugs, people prescribed strong opioids, soon-to-be released prison inmates, and the friends and family of people who use opioids.

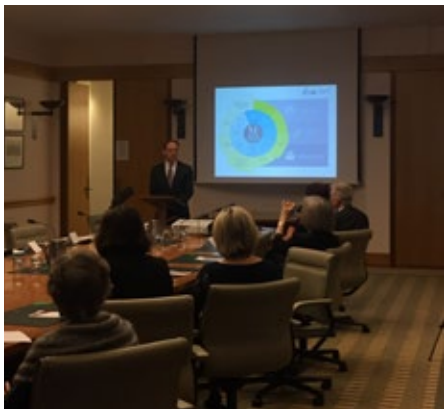
Today people have a choice: either purchase naloxone over-the-counter, which is very expensive, or buy it via a doctor's prescription.

"We have found that prescriptions have proved to be restrictive. People are simply not asking their GP for a script and doctors are not having the conversation about naloxone and so not writing enough scripts," said Stephen.

"Naloxone needs to be freely available if we are serious about saving lives."

To download a copy of the report visit: http://www.penington.org.au/report-naloxone-access/

Sophie Marcard



Minister for Health, the Hon Greg Hunt MP speaking at the Canberra launch

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RISKY 'ROIDS: A GLIMPSE INSIDE THE WORLD OF STEROID USE

A common misconception about people who use steroids is that they all want to have enormous muscles.

"It's not always about being huge," says social researcher Dr Mair Underwood from the University of Queensland. "Most men who use steroids aren't looking for a body that is beyond what is achievable naturally, they just want to get there faster and some don't want to devote their entire life to building muscle.

"Steroids can allow you a little more leniency – you don't have to be as strict with your diet and training. They allow you to have a more social life, rather than a life of no drinking, no junk food and never skipping gym; a life that's a little more sociable. However, there are also many who combine steroids with a very strict diet and training to maximise their gains so be careful not to paint all steroid users as people who are looking for an easy journey".

Mair has been researching men who use steroids for a number of years. She explains that the academic literature places community members into four distinct groups:

1. Expert users: "These guys are very knowledgeable about the risks and effectiveness of their use."
2. Athlete users
3. Wellbeing users: "These are guys who are using in order to have their testosterone at an optimum level for their own wellbeing."
4. YOLO (You Only Live Once) users: "These guys are more likely to combine steroid use with alcohol and other drug use."

Mair says there's also a fifth group: men who use steroids to counteract the physical effects of their other drug use. "They might be on ice or heroin and they use steroids so they don't look like they are on ice or heroin," Mair says.

But what exactly are steroids?

Steroids – in this case short for anabolic androgenic steroids (or AAS) – are synthetic variations of the male sex hormone testosterone. The term "anabolic" refers to muscle building and "androgenic" refers to increased male sex characteristics. Generally the goal of taking steroids is to increase muscle mass, but they can also be used for wellbeing reasons and are used by trans men to transition.

When people use steroids they are introducing synthetic testosterone to their body. This results in the body thinking that there is enough testosterone present and stopping natural production of testosterone. People who use steroids will call this "being shut down", and describe changes in mood, libido and sexual function whilst they are shut down.

People who use steroids usually inject the steroids, but general practitioner Dr Beng Eu from Prahran Market Clinic has recently seen patients who are taking pill steroids.

"In the last six months I've started having people coming in using oral steroids again. I haven't heard of that for 15 years because of the side effects on the liver. We don't use them medically anymore," says Beng.

Beng helps patients to monitor the side effects of their steroid use (he doesn't condone steroid use nor can he prescribe steroids). The potential side effects are many and varied.

"Steroid use increases cholesterol and therefore increases the risk of heart disease in some people, including heart attacks," Beng says.

"Steroid use can raise blood pressure, it can affect moods and that ranges from some people with some aggression while they are on the steroids to increased anxiety when they are off the steroids.

"There have been reported cases of depression when people come off the steroids, in the 'off' cycle. So there are significant mental health issues at the different phases of steroid use.

"There can also be liver issues in particular because of some people using oral steroids - that can affect the liver significantly."

Side effects can also include kidney disease, severe acne, oily skin and hair, and hair loss. There are also the risks of injecting-related injury and disease.

"Due to the potential side effects of these substances, it is important that people who use performance and image enhancing drugs get medical advice to discuss, monitor and manage appropriately any side effects they may have," Beng says.

The men Mair interviews for her research are usually expert users and do not see themselves as at risk of blood-borne viruses.

"I have never spoken to a steroid user who has shared a needle or even a vial of steroids. Their use is much more solitary. They are not getting together to get high. They are not using in a social way. There's no desperation factor," Mair says.

"So they find the [NSP] emphasis on blood-borne viruses stigmatising, they find it degrading. If the worker mentions blood-borne viruses they may become turned off from engaging with that health service again because they feel that the worker does not understand the nature of their practice."

So what should NSP workers do?

"The guys tell me that they are concerned about bacterial infections, about abscesses and about post-injection pain. They say: 'We are concerned about preventing injection-related risk; we just don't want it framed in terms of blood-borne viruses.'

"For the NSP worker, the best thing to do is to frame advice in terms of 'we want to help you prevent abscess and infection'. The term 'infection' includes blood-borne viruses, but you don't need to specifically mention blood-borne viruses.

"It's the same sort of advice you would give to help someone prevent blood-borne viruses – swabbing everything, not sharing any injecting equipment, cleaning hands, not re-capping each other's syringes – you can still give this advice, but give it in the context of bacterial infection, abscess and infection in general."

NSP workers also need to be aware of a new trend Mair has seen in her research – the use of insulin to boost the impact of the steroids.

"I have noticed an increase in the use of insulin as a performance and image enhancing drug. The insulin is meant to make the steroids more effective," Mair says.

But there are potentially catastrophic implications of using insulin.

"You can't overdose on steroids but you can easily overdose on insulin," Mair explains. "For example if you misunderstand the markings on the syringe, then you can overdose and die."

Mair's top tips for NSP workers relating to clients who inject steroids:

- Encourage clients to stock up with enough of the right kind of equipment. Most prefer a bigger gauge needle for drawing up and a smaller needle for injecting, but remember that people have individual preferences.
- Remember that the client may also be injecting insulin so may need standard 27g fits.
- Frame health discussions in terms of preventing injecting related injury and infections, rather than focusing on blood-borne viruses.

Mair's research community of men who inject steroids (expert users) also have some direct advice for NSP workers:

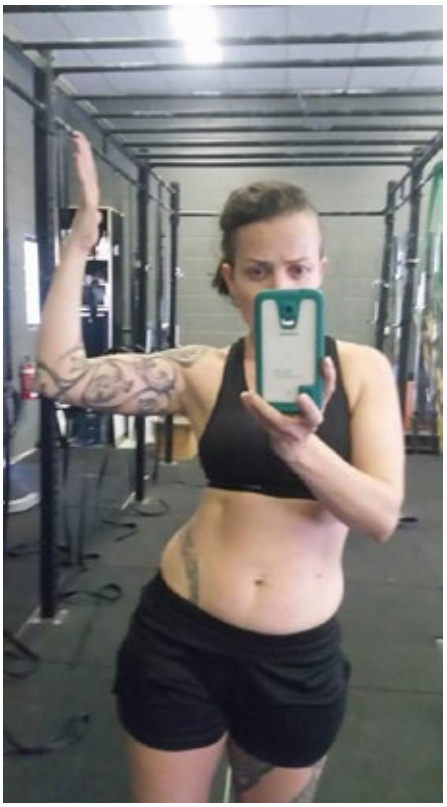
- "Don't judge us."
- "Gain our trust before trying to influence us. This can take weeks or months."
- "Don't offer advice that's not requested. Listen. Ask questions. Learn of our experiences. Get to know us."
- "Have a brew, chat, sit, get to know the person, learn our drivers. Don't focus on what we use."
- "Learn more about people who use steroids and steroid use."

Terms from the world of steroid use:

- **Cycle on and off:** the more traditional way of using steroids. The person injects steroids for a period of 6-12 weeks, then tapers down and has a "break" of no steroids for a period of 6-12 weeks during which post-cycle therapies are often employed to help counter side-effects and restart natural production of testosterone. The logic behind cycling is that is minimises the harm of steroid use as it gives the body a break. Cycling is the traditional way of using steroids, and is more suited to competitive body-builders who want to be at their best for a particular competition date, or those who can handle the fluctuations in appearance and mood that come with the changes in hormone levels caused by cycling on and off.
- **Blast and cruise:** a newer way of using steroids. The person first "blasts" by using steroids for 6-12 weeks then tapers down to a dose that is at about the level of testosterone the man would produce naturally. Consumers call this lower dose a "cruise", "physiological" or "TRT" (testosterone replacement therapy) dose. They stay at this cruise level for another period of 6-12 weeks before ramping up to another "blast".

Mair says that this type of use suits men who "want to look good all the time" and also want to avoid the negative side effects of coming completely off testosterone, which can include depression, anxiety and low sex drive. The logic behind blasting and cruising is that they minimise the harms caused by the wild fluctuations in hormones that accompany cycling, and that they are more likely to maintain the muscle between blasts (as compared to someone who cycles off completely).

Sophie Marcard



Dr Mair Underwood

"Stop telling us what size needle to use. There's no reason to pin with 23g or 25g if we're not using much. A 27g would be much better and less scar tissue," – comment from one of Mair Underwood's research participants.

However, Penington Institute's project lead Crios O'Mahony disagrees. "A 27g isn't long enough and you'll end up with abscesses," Crios says.

"Steroids need to be injected into muscle. You should never use a needle that is less than 1 inch long. If you do you may end up with an infection."

FEELING HOT, RED AND SWOLLEN?

INJECTING-RELATED INJURY AND DISEASE PART 1

Injecting drug use is associated with a range of health problems. The ones we're most familiar with are overdose and viral diseases like hepatitis C and HIV. However, there are other conditions affecting people who inject drugs that, despite being much more common, are somewhat neglected in discussions around the consequences of injecting.

Injecting-related injury and disease – often referred to by the acronym 'IRID' – is an umbrella term for a range of conditions associated with injecting drug use. In contrast to the big-ticket items like HIV or overdose, IRID is more likely refer to things like bacterial infections, vein damage and bruising.

Dr Phill Read, director of the Kirketon Road Centre in Kings Cross, Sydney, describes IRIDs as "complications from injecting" that are "not related to the specific pharmacological effects of the drug being injected".

"IRIDs therefore don't include drug overdose nor blood borne virus infections such as hepatitis C or HIV," says Phill.

IRIDs are not caused by effects of the drugs. Instead, they're caused by a multitude of other factors related to injecting such as injecting practices and equipment.

People who inject drugs experience a range of barriers to accessing health services such as stigma, low service engagement and low health literacy. So, while IRIDs are generally minor and highly treatable, people often do not seek treatment for their IRIDs.

Phill says that left untreated, IRIDs can lead to serious chronic health conditions and, in rare cases, can lead to the loss of fingers or limbs and even death.

Frontline workers are uniquely positioned to provide support and advice to clients about IRIDs but knowing how to bring up these minor conditions can be difficult.

Phill says the best thing frontline workers can do is to "be alert to IRIDs" and feel confident in asking clients about their veins or injecting technique. It's also important to know where to refer clients if they present with an IRID.

What is an IRID and what causes them?

Many IRIDs are often found at the site of injection such as vein damage or an abscess but can also be further away on the body. Some IRIDs are whole-body conditions, such as an infection in the blood stream.

Phill splits up IRIDs into three broad categories:

1. **Cutaneous IRIDs** are those which relate to the skin. These include abscesses (collections of pus at the injecting site), cellulitis (a bacterial infection characterised by hot, red or swollen skin), and skin ulceration (sores that don't go away). These are easily treated if addressed early, though if left untreated they can cause significant health problems.

2. **Vascular conditions** are those relating to blood vessels. These are mainly caused by poor injecting technique, reusing equipment or not using filters. The needle becomes damaged even after a single use, so reusing needles can cause considerable damage to veins and this gets worse the more a needle is reused.
   Filters are another important way to prevent vein damage. Not using filters allows small, non-soluble particles into the blood stream which damage and even block veins and arteries. At their most severe, a blockage (thrombosis) can result in the loss of an appendage like a finger or a limb. (You can read more about **filters** in *Anex Bulletin's* previous edition. It's important to note that a filter won't protect against blood-borne viruses, no matter the type of filter.)
3. The final category is made up of **internal bacterial or fungal infections** related to injecting such as infections of the blood (septicaemia), bone (osteomyelitis), joints (septic arthritis) and the heart (endocarditis). These conditions are quite serious and may be caused by minor infections that are left untreated, leading to more serious conditions.

How common are IRIDs?

Exact information about the number of people who have or have ever had an IRID are very difficult to estimate. This is for a range of reasons, including low health service engagement amongst people who inject drugs.

Phill advises that at the Kirketon Road Centre around one-in-four clients report having experienced an IRID at some point in their life, and around 10-12 per cent of consultations involved treatment of an IRID.

Risk factors

While there are a number of things people can do to minimise the risk of injecting-related injury, Dr Sarah Larney from the National Drug and Alcohol Research Centre says that injecting always carries some risk of injury. Phill agrees, noting that injecting-related infections and injuries occur even in hospital settings.

Sarah has identified a number of risk factors for IRIDs:

- repeated use of the same injection site;
- not cleaning the injection site;
- use of non-sterile equipment; and
- poor injecting technique.

Other risk factors include scratching or skin-picking, injecting in sites other than on the arms (e.g. feet, legs or groin) and injecting in prison (due to a lack of access to sterile equipment).

What can be done to prevent IRIDs?

Sarah says that both prevention and early intervention are key for addressing IRIDs. Washing hands thoroughly and swabbing sites prior to injecting reduce the risk of infection, and ensuring that new, unused needles are used for each injection minimises the risk of getting a vein injury.

Phill agrees, saying that IRIDs are most commonly caused by a breakdown of good injecting practice. This includes proper preparation before injecting, good injecting technique and then adequate post-injection care (applying pressure to an injection site afterwards, discarding used equipment etc.).

Both Phill and Sarah note that people who inject drugs who have an IRID often delay seeking care. By the time they present for treatment at a GP and hospital, the opportunity for early intervention has often passed and the IRID may have developed into a more significant problem

NSP staff are therefore ideally placed to provide early interventions to people with IRIDs such as advice and referrals.

Sarah says that the best way to do this is to check-in with NSP clients about minor things, like asking about veins and their general wellbeing.

What can NSP staff do?

Phill says that the best thing NSP staff can do is to touch base with their clients every time they see them.

"Ask them about their veins, ask about their injection technique and if they need a refresher. Those quick, casual interventions can be quite effective over time," Phill says.

Sarah agrees, noting that "checking in with clients about their well-being can really show that you care and helps build rapport. Having a good relationship with a client means more opportunities to engage them about their health."

Dr James Petty

Dr Sarah Larney

MOVING BEYOND SHAME AND STIGMA:

INJECTING-RELATED INJURY AND DISEASE PART 2

Frontline workers such as those in needle and syringe programs play a critical role in reducing the harms associated with injecting-related injuries and disease (IRID). It can, however, be hard for front-line workers to know how to engage with clients about IRIDs, especially when there are other important things to address such as blood-borne viruses. (You can read more about the technicalities of IRIDs in the part 1 article in this edition of the *Anex Bulletin*).

Kevin Winder from peer-based Harm Reduction WA says it's important that staff treat clients first and foremost as a health consumer.

"The clients are accessing a health service, the same as someone with diabetes or a broken leg, and they should be provided with the same level of service," Kevin says.

"One thing that really stops people who inject drugs from accessing health services is worrying about how they will be treated by service staff, especially if they're presenting with scars, track marks, vein damage or abscesses. There is a lot of embarrassment that comes with that.

"That embarrassment and those negative reactions from health workers – which is quite a common experience – really drive that lack of engagement with mainstream health services."

Sarah Larney from the National Drug and Alcohol Research Centre agrees, saying that stigmatising responses from frontline or medical staff can have a negative impact on people's wellbeing.

"People can experience a lot of shame about IRIDs. So, for example, if abscesses are left untreated, they can actually start to smell, which is quite distressing for a person, but they still might not present for treatment if they anticipate a negative reaction from doctors or nursing staff," Sarah says.

While some clients may have significant health problems (both injecting-related and otherwise), Kevin says that it was important not to overload clients with information: "You choose your battles".

"It could well be that someone is clearly in ill health or has got lots of injecting-related injuries that are visible but they are really reluctant to access services. If you overload them or try to push them into treatment, you're just going to drive them away," he says.

"So, we really try to target the interventions for each client on a given day. You go for the thing that's putting them at the most risk of harm, and try to reduce that level of risk."

Dr James Petty

Kevin Winder

IS THAT MEOW MEOW OR KRONIC?

The lowdown on new psychoactive substances

Today's digital era presents an abundance of novel and exciting thrills, but for people who use drugs, new technologies in the form of illicit substances are fraught with inherent risk.

New and emerging drugs are known as novel or new psychoactive substances (NPS). These are synthetic drugs designed to mimic illicit substances like cannabis, cocaine, heroin, ecstasy or LSD.

Professor Rachel Sutherland from the National Drug and Alcohol Research Centre (NDARC) says there are more than 600 identified novel psychoactive substances, and the continual emergence of new substances makes it difficult to understand the effects of each drug.

"The main concern is there are so many NPS, and we really know very little about them," Rachel says.

"For most NPS we don't have much information about the short and long-term effects, the toxicity, and all those kinds of long-term health concerns. For the most part, there is a lack of evidence regarding their harms."

NPS are commonly known as designer drugs, research chemicals, synthetic drugs, analogues or legal highs. However they are often wrongly perceived as "legal" by some people who use them.

Manufacturers of these drugs often develop new chemicals to replace those that are banned. This means that the chemical structures of the drugs are constantly changing to try to stay ahead of the law. Most states in Australia have now introduced blanket bans on all NPS.

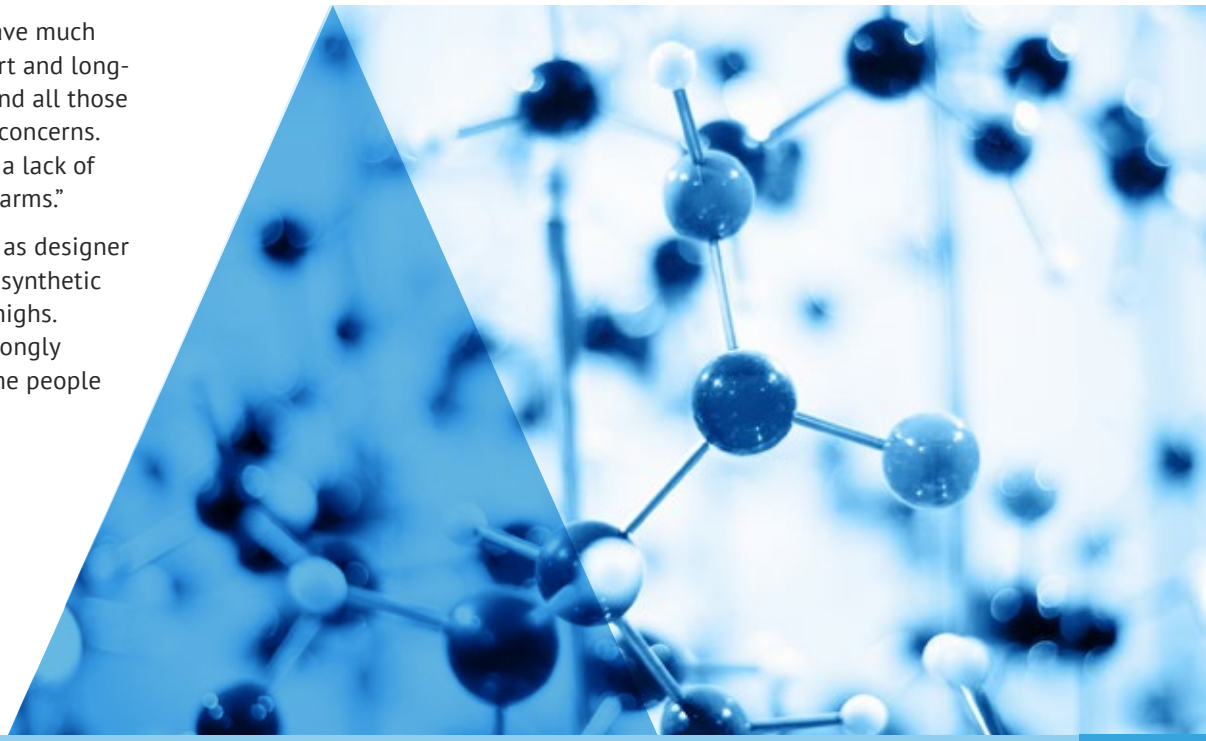
In Queensland, New South Wales and South Australia there is now a total ban on possessing or selling any substance that has a psychoactive effect other than alcohol, tobacco or food. In other states and territories specific NPS are banned and emerging ones are regularly added to the list.

Research in the 2016 National Drug Strategy Household Survey reports that synthetic cannabinoids are the most widely used NPS.

Edith Cowan University Researcher Dr Stephen Bright says many people who use drugs are unknowingly consuming NPS, which are commonly mixed with traditional illicit substances like heroin, amphetamines and ecstasy.

"The biggest category of people using NPS is people who are unintentionally using them. They have no idea they're using a fentanyl analogue, or some kind of other novel opioid. They think they're using heroin. They think they're taking MDMA when they're actually taking MDPV or some other weird drug," says Stephen.

Stephen says NPS sold as traditional illicit substances posed particular risks for people who inject drugs. Some NPS are of much higher potency than their traditional counterparts and it is often difficult to identify a particular NPS without prior substance testing.



While research conducted in 2017 by the European Monitoring Centre for Drugs and Drug Addiction shows a decrease in the number of reported novel psychoactive substances, it found an increase in the number of novel opioids, like fentanyl analogues, which have also been identified in Australia.

Stephen reports that some novel opioids are of much higher potency than heroin. Overseas needle and syringe programs have responded by introducing greater access to naloxone. He suggests similar measures would also be effective in Australia and that introducing drug testing in supervised injecting facilities could decrease the risk of overdose from NPS.

"What we're seeing overseas, in terms of what needle and syringe programs can do, is ensuring people have access to decent quantities of naloxone.

"If you've overdosed on fentanyl, you're going to need a hell of a lot more naloxone than you would for heroin," comments Stephen.

> "Some of the more innovative places in Canada and Europe have introduced drug testing facilities within the NSPs. They allow people to come in and get their drugs tested before they use them so they know what they're using."

While rates of NPS use are low among the general population, Rachel says the rates are elevated among people who use other illicit substances. What's more, while there is a lack of Australian research there is international evidence to suggest NPS are frequently used by those in prisons and other people subject to regular drug testing.

"There have been some suggestions that NPS will be used among people who are trying to avoid workplace drug testing, or in the prison setting for example. It does largely appear to be confined to other illicit substances users. There is other international evidence of elevated rates of use of NPS among other populations like prisoners and homeless people," Rachel says.

Rachel says it was possible to detect NPS in urine, hair, or blood samples, but that identification is complicated by the number and continual evolution of NPS.

"Because there are so many substances – there are six or seven hundred substances that fall within the NPS category – it's difficult to talk about NPS as a single entity because there is such a range of different substances. Certainly, biological sampling can pick up certain NPS."

While NPS have typically been associated with the 'dark web', Rachel says most NPS are acquired through the same methods as traditional drugs.

"People are still obtaining from in person sources, so friends or dealers. There are some who obtain NPS from online sources, but NPS are predominantly obtained from friends and dealers as with all kind of other illicit substances," she says.

NDARC research shows most NPS have a scientific name and a street name and are more commonly referred to among the general population by their street name. Some examples of NPS include those known as meow meow, DMT, kronic and BZP.

Most NPS are scientifically categorised by their effects. Popular categories include cannabinoids, and cathinones and phenethylamines which have both psychoactive and stimulant effects. Other substances are structurally diverse and not confined to one particular category.

Synthetic cannabinoids often appear as dried plant matter sprayed with a dissolved substance. Other NPS can appear as pills, small pellet-like tablets, injectable liquids, white powder, crystals, or on a blotter tab.

Tom de Souza

Notes for needle and syringe program workers:

- NPS can be more potent than traditional substances and therefore carry greater risk of overdose.
- NPS are often sold as or mixed with traditional illicit substances.
- Greater access to naloxone can decrease the risk of overdose from opioid NPS.
- NPS are continually emerging and evolving and little is understood about the long-term health risks and other concerns.
- The individual effects of particular NPS are difficult to identify.

AFTER THE CODEINE BATTLE

When painkilling drugs featuring codeine were pulled from the shelves of pharmacies across Australia in February 2018, the debate was fierce (as outlined in volume 15 edition 1 of the *Anex Bulletin*).

"There was this great fear (before the rescheduling)," recalls Monash Addiction Research Centre Associate Professor Suzanne Nielsen.

"It was one of the more controversial decisions I'd seen about rescheduling a drug, given the debate," says Suzanne.

"A study at the time said most consumers and pharmacists were against it, while GPs were for it. The main concerns were the potential time and expense associated with forced GP visits and a negative impact on pain management."

The argument the other way was all about community health and safety. Before the rescheduling, evidence suggested roughly 540,000 Australians were using codeine for non-medical reasons, and about 58,000 said they could not stop or cut down on their usage (Australian Institute of Health and Welfare *National Drug Strategy Household Survey 2016*). Some people dependent on high doses were reported to be taking upward of 60 or 100 tablets per day, suffering migraine-like headaches if they stopped.

On 1 February 2018, codeine drugs such as Nurofen Plus® were categorised as Schedule 4, meaning prescription only. It's still so recent that data on its real-world ramifications have not yet emerged. However, at a recent *Talking Point* presentation, Suzanne gave a sneak preview of the potential impacts, according to a "first cut" analysis of a Codeine Cohort Survey, pre-and-post-reschedule.

The group is made up of people who regularly used for more than a year with many people using codeine on a daily basis. Of this group 58 per cent considered it would be impossible or difficult to give up the drug.

A first glance at this survey, conducted before the rescheduling, and then one month after, and again five months after, would suggest the effects of the rescheduling have been underwhelming.

Suzanne says the early data suggested that there had not been a meaningful long-term overall spike in subsidised Panadeine Forte® scripts, but among the cohort of people using codeine regularly there was an increase. This was backed by the Pharmacy Guild of Australia which said Government data from February to May showed there had been just over 14 per cent more prescriptions dispensed under the PBS for pain relief medicines containing 30mg of codeine compared to the same period last year.

Suzanne reports there was also very little evidence of the predicted major rise in visits to Emergency Departments by people seeking codeine.

In the survey taken five months after codeine disappeared from pharmacy shelves, Suzanne says the data suggests one-third of the studied group had a small amount of codeine left and those with remaining codeine were mostly using codeine infrequently.

"About three in 10 people using over the counter [codeine] were also using prescription [codeine] before the rescheduling, and that increased to 45 per cent in the month afterwards," Suzanne says.

"Overall, visits to GPs for codeine appear to still be on average less than one per person per month. We need to look in detail at the data over time to see if people are using other medications or substances."

Melbourne pharmacist and former national councillor for the Pharmacy Guild of Australia Angelo Pricolo reports that, anecdotally, it would seem that a lot of customers have switched to mixes of paracetamol and ibuprofen that were "much safer" than codeine and a "better analgesic" in terms of less side effects, no drowsiness and not being addictive.

"I think I heard that there was a 30 per cent spike in Maxigesic sales after the rescheduling," Angelo says. "That's a good outcome."

Angelo's view is that the transition away from over-the-counter codeine had gone "pretty smoothly".

"The world hasn't caved in," he says.

"We've lost a bit of the over-the-counter population and nobody is sure where they've gone but the vast majority of customers have adapted to the re-scheduling.

"From a harm reduction point of view, it's a good outcome. But the unfortunate thing is that the vast majority of people using codeine in that smaller dose were doing it responsibly, legitimately and comfortably. They were using that formulation for pain relief and a few of them have been caught up in the greater good."

Sydney GP and addiction medicine expert Dr Hester Wilson says in the wake of the rescheduling, some patients did present with codeine addiction issues.

"A few people have come in requesting help for their codeine dependence and the majority of them have started on Suboxone, a buprenorphine, have settled and it's been brilliant."

Suzanne and Hester both say that codeine dependent clients should be treated using the same broad frameworks as opioid addictions.

"Codeine is a drug that is metabolised in our body and becomes morphine," Hester says. "So what you're taking when you take codeine is actually morphine. You treat it just the same as you would with any other opioid."

Suzanne says it is important those with codeine dependence receive treatment.

"We know from previous research that most people who use codeine have not sought help and perceive drug treatment to be very confronting," she says. "Stigma plays out in many ways, both with internalised stigma around developing problems with codeine and also as stigma expressed towards other people who use substances. They feel that their codeine use is different to illicit drug use. In many ways stigma acts as a barrier to treatment."

Nick Place

Associate Professor Suzanne Nielsen

Dr Hester Wilson

Angelo Pricolo

WOMEN WITH COMPLEX TRAUMA: "IT'S ABOUT BUILDING RAPPORT"

Dr Natalie Peach

Associate Professor Katherine Mills

Mishma Kumar

There is a well-established relationship between substance use and complex trauma, which usually arises from traumatic events that occurred in childhood or over a long period of time. As Canadian addiction expert Dr Gabor Maté told the ABC: "early trauma is at the heart of pre-disposing people to being vulnerable to addiction".

A woman accessing a needle and syringe program is very likely to have experienced trauma such as sexual abuse, rape or domestic violence. Yet NSP workers have the biggest challenge on their hands, as theirs is the briefest intervention in the health sector.

Someone who can better explain the motivations of these women to keep using is Dr Natalie Peach. She's the project coordinator on the COPE-A study at the National Drug and Alcohol Research Centre (NDARC). This study is trialling psychological therapies for co-occurring traumatic stress and substance use in adolescents.

"Often people self-medicate because of the post-traumatic symptoms that they're experiencing, such as intrusive memories, hypervigilance and changes in mood," Natalie says.

"The drugs can numb those symptoms but the person gets into a cycle where they can't properly process the trauma.

Not only can avoidance prolong the symptoms, but using substances can put the individual into a vicious cycle of being in dangerous situations and experiencing adult cumulative trauma.

And trauma has long-lasting effects. The longitudinal Adverse Childhood Experiences (ACE) study by the US Centers for Disease Control and Prevention began in 1995. This research found that the greater the number of childhood adversities experienced, the more susceptible an adult is to not only problematic substance use, high-risk sex, depression and suicidal ideation, but also to physical conditions such as obesity, increased inflammatory response, heart disease, cancer and lung disease.

The priority of an NSP is to offer health information and to be confidential and accessible, so clients often won't be receptive to offers of treatment – either for trauma or substance use.

Mishma Kumar is Overdose Prevention Program Team Leader at Odyssey House. She says, "Usually when someone comes to an NSP they just want to leave with equipment.

"There are a whole lot of things happening in their heads that aren't to do with them talking about their history," Mishma says.

> "They might be avoiding trying to think about their history, or they might even want to go use because they've been triggered. The last thing they may want to do is talk to an NSP worker, not even knowing if that person is a drug and alcohol clinician or a doctor."

Talking to a client is opportunistic chess, says Dr Richard Cash. He's a psychologist and trainer for Phoenix Australia – formerly the Australian Centre for Posttraumatic Mental Health – and provides policy support for services that want to act in a trauma-informed way.

"If I [as an NSP worker] had five minutes with someone, there would be a bunch of considerations around the time, the privacy, what they've actually asked to engage in, what the likelihood is that I'm going to have an ongoing relationship with this person," Richard says.

"It's important not to overstep the boundaries of your role. Someone might want to have a chat about what else the service can do and that might give me an opportunity for a very brief intervention or to provide support that might allow that person to engage more directly with another part of the service down the line."

Mishma cautions that NSP workers risk coming across either as having a saviour complex or as judgmental if they push the idea of treatment too hard. "It's about building rapport," she says, which can range from casual conversation to advice to help reduce the harms of substance use.

There's also the issue that an NSP might have intoxicated or aggressive people in the vicinity.

"What you wouldn't do is ask a woman to open up, because that's highly unsafe," says Mishma. "Even if you can find a quiet space, if you open a can of worms it's very hard to shove them back in.

"They might not want to touch the trauma for years, or they might want to touch it, but after detox."

Mishma recommends acknowledging that the woman has various needs and that there might be organisations that can help. One might be the nearest Centre Against Sexual Assault (CASA).

"It's about having that information on hand so you don't have to go looking for brochures. You can say, 'I can help you make the phone call if you want, if it's too scary.'"

If a woman is being responsive to this approach, she might be interested in treatment. However the idea of being assessed can be intimidating to a client unwilling to immediately tackle her substance use, hence the importance of having confidential services such as CASA or a family-violence organisation on speed-dial.

In 2016, NDARC published its second edition of guidelines on managing mental health conditions among AOD clients, including how to **informally assess** for a history of trauma and PTSD.

"Although it may not be within an NSP worker's capacity, knowledge of treatment options may be useful information to guide clients who are interested in seeking help," says NDARC's Associate Professor Katherine Mills, who is leading the COPE-A trial.

NDARC has also developed a **booklet** about trauma and substance use for clients themselves – handy if all the NSP worker has time to do is hand over some literature.

Jenny Valentish

Women in abusive relationships

At Hair Expo in June 2018, the seminar '**Safe Hands**' gave hairdressers tips on how to identify signs of family violence, the idea being that a salon might be one of the few places that a woman in a controlling relationship goes without her partner. According to Mishma, an NSP might be another.

"I think there is very much a space to have those conversations, but in a very delicate, non-judgmental way," she suggests. "Not saying, 'Have you thought about leaving?' Because that is so close to the middle or end of the process."

Mishma recommends asking the client if they would like the NSP worker to call a family violence organisation, emphasising that the service is confidential and that the woman can move at their own pace.

"It's also about acknowledging that the relationship does give them something," Mishma says. A violent partner may offer protection from others, for instance. "Or maybe they're worried that another relationship could be worse and at least they know how to handle this one."

SCOTLAND: HIV OUTBREAK AMONG PEOPLE WHO INJECT DRUGS

Since the end of 2014, Glasgow, Scotland has seen more than 130 diagnosed cases of HIV within the community of "public injectors" – people who inject drugs in public places and who are often experiencing homelessness.

With 400-500 individuals estimated to regularly inject in public places in Glasgow city centre, this rate of HIV diagnoses is dramatically higher than the UK rate for people who inject drugs of 0.85 per cent. Traditionally in the Glasgow area the number of cases thought to be transmitted through injecting drug use is on average 10 new cases per year

Dr Erica Peters, an infectious diseases and general medicine consultant at Queen Elizabeth University Hospital in Glasgow, explains that the outbreak was not caused by just one factor.

"Glasgow has had, and continues to have excellent injecting equipment provision services and opiate replacement services. However we know from hepatitis C that there is ongoing transmission risk despite this," Erica says.

"It seems that the introduction of HIV into this reasonably closed group has resulted in rapid spread.

"There is also some sexual risk and an increase in intravenous cocaine use in recent years. Primarily the drug of choice is heroin.

"In addition the use of novel psychoactive substance benzodiazepines has possibly resulted in higher risk behaviour. All of these things may have been factors and a single factor has not been identified."

The factors that caused the outbreak to be sustained are also varied.

> "Engagement in health care is historically difficult for these people. Levels of testing have not been particularly high.

"Difficulties around accommodation and ongoing mental health and addiction problems continue to be priorities.

"We are aware that sharing and sexual risk persists," Erica explains.

The Scottish health authorities have undertaken a number of initiatives to help curtail the outbreak:

- Ensured that harm reduction and in particular injecting equipment provision services are robust.
- Introduced a new "low dead space needle" to reduce any residual blood even if sharing does occur.
- Made foils available to encourage movement away from intravenous use.
- Linked HIV drugs to opioid replacement therapy prescriptions through community pharmacies. This means if you go in for your methadone you will also get your HIV treatment. Previously people with HIV had to attend a hospital to get treated and also get their medication.
- Increased testing within addiction medicine services and the prison sector. "We recommend three-monthly testing in those from Glasgow city centre who have been injecting," Erica says.
- Introduced a pilot project using incentivised testing in a drug crisis centre and a community pharmacy with shopping vouchers available if a person tests.

Erica reports that there are also new HIV clinics in the homeless addiction centre, geographically close to our patients, with appointments available as well as "drop in" services.

"There are two consultants and this means sexual health including contraception, hepatitis C, skin and soft tissue infections can all be treated at the same time. There is a nurse-led clinic and they can facilitate hepatitis C treatment as well.

"We also have sexual health nurses that do partner notification in addition to clinical support.

"Most importantly we have nurses on doing outreach on the street. They have developed strong links with the homeless third sector organisations in addition to other health and social partnerships involved with this group.

"They support patients and work closely with all the agencies and consultants. Without their work we would not have been as successful in getting patients treated."

The results are looking positive.

"At present we have 77 per cent [of people from this group] on effective treatment with an undetectable viral load, but 94 per cent are currently receiving treatment. Some people have not had on treatment bloods done so the effective number may well be an underestimate. This is all in line with our 'treatment as prevention' strategy," says Erica.

So what lessons are there for Australia in general, and for NSP workers in particular?

"The biggest lesson for us was that this could happen despite very good harm reduction and opiate replacement programs. We were not expecting this.

"Like Australia, we have had a big push on hepatitis C case finding and we thought our blood-borne virus testing was reasonably good.

"We have found that less testing was happening than we thought, and probably those with the biggest risk were the ones that weren't tested for a variety of reasons," Erica says.

"I think surveillance for BBV in this population needs to be ongoing. We should realise that risk behaviour continues despite high quality harm reduction and we shouldn't forget sexual risk."

"However we have shown that even in this very vulnerable group treatment can happen effectively. It does need a rapid and robust response with significant investment in staffing and multiple agencies working together to support these individuals."

Sophie Marcard

OVERDOSE DEATHS ON THE RISE, BENZOS IMPLICATED: REPORT

Australia's Annual Overdose Report 2018 **– a Penington Institute publication – is warning that benzodiazepines, including sleeping tablets and anxiety tablets, have now become a hidden epidemic in Australia and are causing an increasing number of overdoses each year.**

In 2016, benzodiazepines contributed to the deaths of 650 Australians and this number has doubled in the past decade. Deaths involving benzodiazepines have jumped from 812 in the period 2002-2006 to 2,177 in the five years 2012-2016.

Grampians Community Health chief executive Greg Little is concerned about the increase in overdoses, particularly in regional areas.

"People often don't understand or appreciate that the majority of deaths from drugs is not from illegal substances such as heroin or methamphetamine, but from prescribed drugs," Greg says.

"The medication is prescribed for a purpose but the lack of understanding in the community about the risk of not following directions, seeing it as a long-term way of easing pain or anxiety is a real, life-threatening problem.

"Accidental overdose is an example of this. It is also a huge risk when people use multiple substances such as mixing depressants and stimulants."

Penington Institute CEO John Ryan says that accidental death due to drug use is dramatically increasing in Australia.

"Overdose is a very big issue for the community. This is why campaigns such as International Overdose Awareness Day are so important," John says

"This year we saw 747 IOAD events registered on our overdoseday.com website. We conservatively estimate that there were at least another 100 events held at a grassroots level by not registered with us."

Highlights of the day include the lighting up purple of the CN Tower in Toronto, a campaign across 2,500 Boots Pharmacy shops in the UK and first-time events in 19 countries including Mexico, Cote d'Ivoire, Romania, Tanzania and Togo.

IOAD activities in Winnipeg, Canada

IOAD activities in Côte d'Ivoire (credit: Adeolu Ogunrombi), Africa

The key findings of *Australia's Annual Overdose Report 2018* include:

- Pharmaceutical opioids continue to dominate overdose deaths; however, heroin deaths are on the rise again.
- Most overdose deaths occur in middle-aged Australians (approximately 70 per cent of all overdose deaths occur among 30-59 year olds). What's more from 2002 to 2016 the annual number of deaths in the 30-59 age bracket has risen from below 600 to just below 1200.
- Deaths involving amphetamines have grown considerably in the last five years and amphetamines have overtaken alcohol as the third most likely drug to be implicated in a death (behind opioids and benzodiazepines).
- While men make up two-thirds of accidental drug-related deaths, deaths among women are growing at a significantly faster rate than men.
- Aboriginal and Torres Strait Islander people are dying from overdose at three times the rate of non-Indigenous Australians.
- The rate of overdose deaths in rural and regional Australia has grown significantly compared to metropolitan Australia.
- In 2016, nearly 68,000 potential years of life were lost in Australia to accidental drug-related death. This equates to an average of 33 years of life lost for every person who dies from a accidental overdose.

Key takeaways for NSP workers from the report:

- If your client is also taking benzos, remind them of the risk of overdose from using different drugs at the same time especially stimulants (e.g. crystal methamphetamine) plus depressants.
- Encourage people who inject heroin, use methadone/Suboxone® and/or use pharmaceutical opioids to learn how to use naloxone. They should then get some naloxone either via prescription from a doctor or from a pharmacy.
- Learn how to use naloxone yourself and get some naloxone. (It's important to note that naloxone will not reverse the effects of benzos, but in the case of using multiple substances reversing the effects of the opioids may be enough to allow time for ambulance paramedics to arrive.)

To request a copy of *Australia's Annual Overdose Report 2018* visit: http://www.penington.org.au/australias-annual-overdose-report-2018/

Sophie Marcard

IOAD activities in Hong Kong (credit: Kaz Basnet)

IOAD activities in Porto, Portugal (credit: leonorclemos)