

## Regional Overview

### 2.7 Oceania



Table 2.7.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Oceania

Country/territory with reported injecting drug use <sup>a</sup>	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)	Harm reduction response <sup>i</sup>			
					NSP <sup>b</sup>	OST <sup>c</sup>	Peer-distribution of naloxone	DCRs <sup>d</sup>
Australia	93,000 (68,000-118,000) <sup>[1]</sup>	2.1 <sup>[2]</sup>	49 <sup>[2]</sup>	4.0 <sup>[3]</sup>	✓ (6,327 <sup>e</sup> ) <sup>[4]</sup>	✓(2,732) <sup>f</sup> (B, M) <sup>[5]</sup>	✓ <sup>[6]</sup>	✓2 <sup>[6]</sup>
Federated States of Micronesia	nk	nk	nk	nk	✗	✗	✗	✗
Fiji	nk	nk	nk	nk	✗	✗	✗	✗
Kiribati	nk	nk	nk	nk	✗	✗	✗	✗
Marshall Islands	nk	nk	nk	nk	✗	✗	✗	✗
New Zealand	15,000-20,000 <sup>[7,8]</sup>	0.2 <sup>[7]</sup>	52-84 <sup>[7]</sup>	nk	✓(213 <sup>g</sup> ) <sup>[8]</sup>	✓(B, M) <sup>[9]</sup>	✗	✗
Palau	nk	nk	nk	nk	✗	✗	✗	✗
Papua New Guinea	nk	nk	nk	nk	✗	✗	✗	✗
Samoa	nk	nk	nk	nk	✗	✗	✗	✗
Solomon Islands	nk	nk	nk	nk	✗	✗	✗	✗
Timor Leste	nk	nk	nk	nk	✗	✗	✗	✗
Tonga	nk	nk	nk	nk	✗	✗	✗	✗
Vanuatu	nk	nk	nk	nk	✗	✗	✗	✗

nk – not known

a Countries with reported injecting drug use according to Larney et al 2017. The study found no reports of injecting drug use in Nauru or Tuvalu.

b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.

c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.

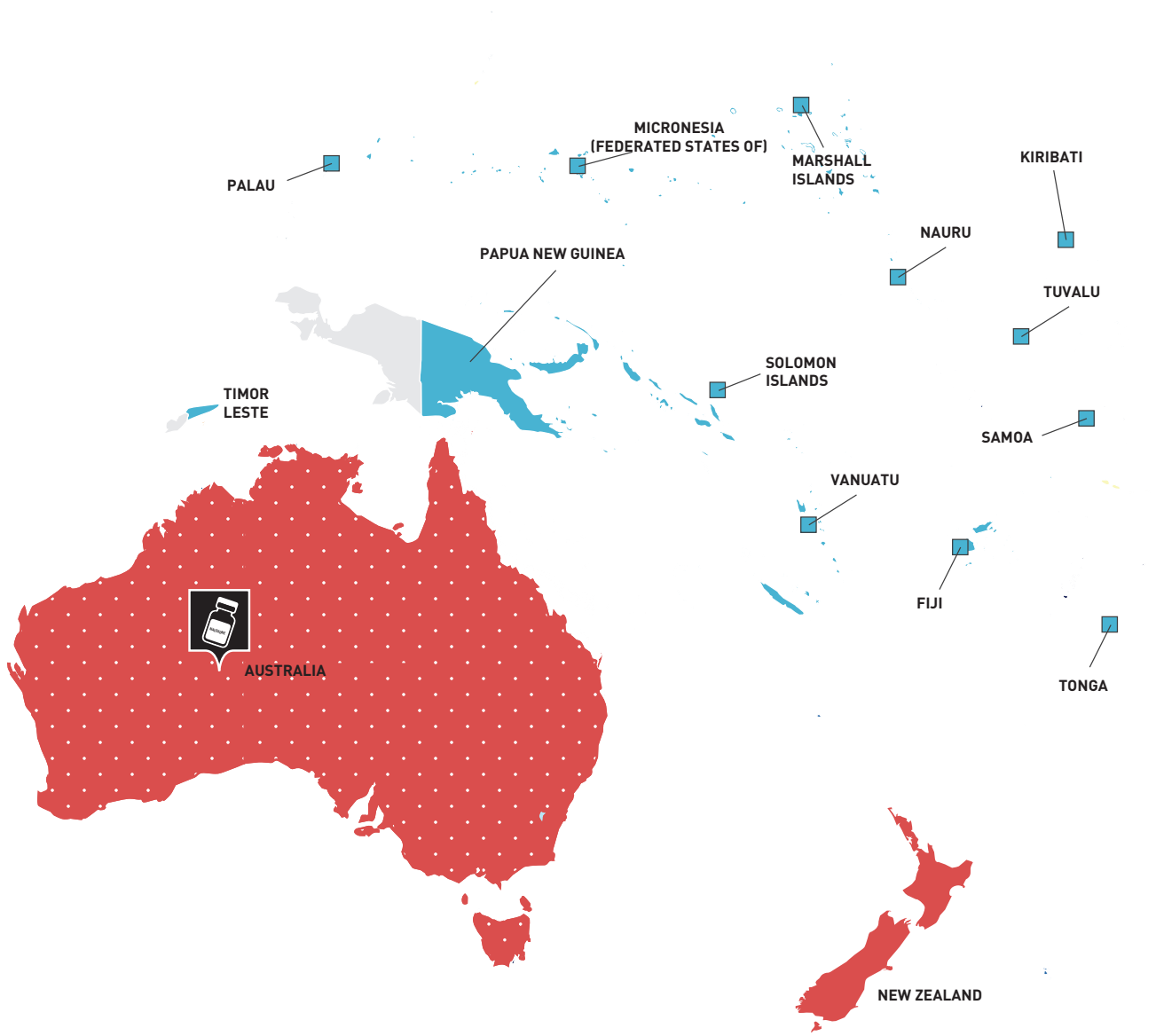
d Drug consumption rooms, also known as supervised injecting sites.

e 2,422 pharmacies, 784 secondary sites and 323 syringe dispensing machines.

f This refers to the number of dosing points in the country.

g 190 pharmacies and 23 peer-based needle programmes.

Map 2.7.1: Availability of harm reduction services



- Both NSP and OST available
- OST only
- NSP only
- Neither available
- Not Known
- DCR available
- Peer-distribution of naloxone

# Harm reduction in Oceania

## Overview

The prevalence of injecting drug use in Oceania is above the global average, and there are an estimated 113,000 people who inject drugs in the region (based on data from Australia and New Zealand).<sup>[1,7,10]</sup>

As a result, harm reduction for injecting drug use forms a significant proportion of the region's harm reduction services. While opioids have historically been the dominant substances used by people who inject drugs in the region, methamphetamine injection has seen a considerable rise since 2010 in both Australia and New Zealand, to the point where methamphetamines are now the most common category of drugs last injected in Australia (though methadone injection remains most common in New Zealand).<sup>[8,11]</sup> This is, in part, the result of a significant shift in usage patterns of methamphetamines from powder to more commonly injected crystal forms.<sup>[5,10]</sup> This has coincided with a reduction in the prevalence of heroin use from 2000-2015 across the region.<sup>[10]</sup> However, heroin remains a commonly used drug among people who inject drugs in the region.<sup>[5]</sup>

A key limitation in collating an overall picture of the state of harm reduction in Oceania is the highly variable availability and quality of data across the region. Few of the Pacific Island countries and territories report any drug use at all (with the exception of cannabis use). However some, such as Fiji, acknowledge that this may be due to a lack of investigation rather than prevalence.<sup>[12,13]</sup> Conversely, the data collection systems in place in Australia are of very high quality. Through the Australian Needle and Syringe Program Survey, the National Opioid Pharmacotherapy Statistics, and other regular surveillance and monitoring publications, government, academic and non-governmental organisations collect detailed information on patterns of drug use and service utilisation in the country.<sup>[2,5]</sup>

While the provision of harm reduction services is relatively extensive in Australia and New Zealand, no new evidence has been found for any such services anywhere else in the region since the *Global State of Harm Reduction 2016*. There is a noted trend in the Pacific Island countries and territories for people to be sent to New Zealand or Australia for general health treatment.<sup>[14]</sup> Needle and syringe programmes (NSPs) and opioid substitution therapy (OST) are available in both Australia and New Zealand, with services largely stable since 2016 and no major expansions or contractions. With regard to OST, a significant trend is the expansion in the prescription of buprenorphine-naloxone combinations, with the

aim of reducing administration through injection (in non-medical contexts) and diversion to the black market.<sup>[5,9]</sup> A notable advance in the region is the opening of Australia's second drug consumption room (DCR)<sup>h</sup> in Melbourne in 2018, joining the facility established in Sydney in 2001.<sup>[6,15]</sup> These DCRs both only serve people who inject drugs, including people who inject crystal methamphetamines, and do not permit consumption by other routes of administration (such as inhalation).<sup>[15,16]</sup>

Amphetamine-type stimulants increasingly figure in harm reduction services in Australia and New Zealand. In addition to people who access NSPs and DCRs, services also respond to the wider use of stimulants at festivals and parties. Instances of multiple overdoses at festivals involving high-purity MDMA and new psychoactive substances (NPSs) in Australia, and up to 45 deaths from NPS use in New Zealand, from 2017 to 2018 have drawn a new focus to harm reduction services aimed at this population.<sup>[8,17,18]</sup> Australia's first trial of a pill-checking service was held at one festival in April 2018, and KnowYourStuffNZ has operated pill-testing services at festivals in New Zealand since 2014 in conjunction with the New Zealand Drug Foundation.<sup>[15,19]</sup> However, in both countries legal barriers, such as limitations on programmes operating in public spaces like city centres, prevent these projects from being rolled out further.<sup>[17]</sup>

While harm reduction services in Australia and New Zealand are relatively extensive and widely available, concern has been shown that some vulnerable sub-populations may have difficulty accessing these services. Women, indigenous people and the LGBTQIA+ community all face greater stigma added to that already experienced by people who use drugs, and suffer from a lack of services focused on their specific needs.<sup>[20-23]</sup> Indigenous people and gay and bisexual men in particular are more likely than the general population to report high-risk drug use practices, such as syringe sharing and frequent injection.<sup>[3,24,25]</sup> Where services exist for specific populations, such as those operated for LGBTQIA+ people by the AIDS Council of New South Wales, evidence shows that they can be effective in improving access and health outcomes.<sup>[22,26]</sup> These often involve the use of peer workers and campaigns targeted at practices prevalent among specific groups.<sup>[26-28]</sup>

The prevalence of HIV in the general population and among people who inject drugs is observed to be very low in the region, and anti-retroviral therapy (ART) and pre-exposure prophylaxis (PrEP) are widely

<sup>h</sup> Known as medically supervised injection facilities in Australia.

available in Australia and New Zealand.<sup>[6,29]</sup> The early and effective implementation of NSP has been identified as a key factor in the successful prevention of an HIV epidemic among people who inject drugs.<sup>[30]</sup> However in both countries, prevalence of exposure to hepatitis C among prisoners and people who inject drugs is high and is a concern for public health.<sup>[3,7,31,32]</sup> To respond to this, in 2015 Australia became the first country in the world to provide free (or heavily subsidised) access to direct-acting antivirals without restrictions on disease stage, provider type or ongoing drug use, including for prisoners and people who use drugs, with the aim of eliminating hepatitis C.<sup>[6,23]</sup> This has seen a large increase in the number of people receiving treatment for hepatitis C, including people who inject drugs.<sup>[15,33]</sup>

## Developments in harm reduction implementation

### Needle and syringe exchange programmes (NSPs)

NSPs are widespread in both Australia and New Zealand, where there are significant numbers of people who inject drugs, but are largely absent in the rest of the region. According to national reports submitted by the respective ministries of health to the Joint United Nations Programme on HIV/AIDS, (UNAIDS) there is no evidence of injecting drug use in Fiji, Marshall Islands, Nauru, Samoa, Solomon Islands, Tonga or Tuvalu.<sup>[12,13,34-38]</sup>

A total of 3,627 NSP sites operate in Australia, 2,422 (67%) of which are based in pharmacies.<sup>[4]</sup> In 2016/2017, Australian NSPs distributed 49 million needles at an average of 631 needles per person who regularly injects drugs, a small decrease from 638 needles per person who regularly injected drugs in 2015/2016.<sup>[4]</sup> Syringe-dispensing machines (vending machines that dispense needles and syringes for free or at a nominal cost) are widespread in Australia, with 323 operational across the country.<sup>[4,15]</sup> Their number tripled from 2008-2017, and the majority (64%) are located outside major cities, where access to NSPs in primary care facilities or pharmacies can be more difficult.<sup>[4]</sup> Since 2016, Australian Capital Territory, Northern Territory and Tasmania have all passed legislation to decriminalise peer distribution of sterile injecting equipment, to increase access and coverage among the most hard-to-reach populations.<sup>[15,17]</sup> While peer-distribution remains criminalised in other states, a recent state parliamentary committee report in Victoria recommended removing the ban in the interests of preventing the transmission of blood-borne viruses.<sup>[17]</sup>

New Zealand was the first country in the world to have a national state-sponsored needle and syringe programme, which now operates from 190 pharmacies and 23 peer-based services.<sup>[8,39]</sup> Together, these services distribute more than 3.5 million pieces of equipment annually (approximately 233 per person who injects drugs), and are permitted by law to facilitate secondary distribution by distributing needles and syringes to key contacts.<sup>[8]</sup> The peer-based services include mobile units and are staffed by paid workers with life experience of injecting drug use, who are able to offer advice on safe injecting and refer people to health services as appropriate.<sup>[28]</sup> As such, they provide not only harm reduction for blood-borne viruses, but a broader psychosocial peer-led outreach programme. Evidence suggests that these types of programme have a greater ability to reach marginalised groups, as well as providing enhanced acceptance, self-esteem, community inclusion and empowerment among these populations.<sup>[28]</sup> The New Zealand Needle Exchange Programme is currently in discussions with the Ministry of Health to scale up the programme, with a particular objective of hepatitis C elimination.<sup>[8]</sup>

According to data collected in Australian NSPs, methamphetamines (41%) are now the most commonly reported category of last drugs injected in the country, followed by heroin (30%).<sup>[2]</sup> In contrast, the proportion of people reporting heroin as their last injected drug remained stable (29% in 2013 and 30% in 2017).<sup>[2]</sup> For methamphetamines, the proportion rose from 29% in 2013 to 41% in 2017.<sup>[2]</sup> Similar changes have been noted in New Zealand NSPs, where an increase in the injection of methamphetamines has also been observed, though methadone remains the most reported injected drug.<sup>[8]</sup> Other drugs injected in the region include pharmaceutical opioids such as morphine and anabolic steroids.<sup>[4,8,11]</sup> An emerging trend in Australia (though not yet in New Zealand) is the prevalence of pharmaceutical fentanyl injection, a highly potent opioid that 8% of Australian people who inject drugs reported using in a 2018 study using data from 2014.<sup>[40]</sup> Compared with participants who injected pharmaceutical opioids other than fentanyl, this group were significantly more likely to identify as indigenous Australian, inject daily or more frequently, inject in public and to have overdosed in the past year.<sup>[40]</sup>

In New Zealand, a common barrier to people who inject drugs accessing NSPs is geography, with low coverage in some rural and isolated areas of the country.<sup>[8]</sup> In order to address this, the New Zealand Needle Exchange Programme is in the process of launching an online NSP.<sup>[8]</sup> This platform will offer people who inject drugs the opportunity to

purchase injecting equipment anonymously online alongside additional features, such as a pop-up offering an instant messaging conversation with a harm reduction worker, aimed at replicating the experience of visiting a harm reduction service in person.<sup>[8]</sup> Economic barriers are also a consideration in increasing coverage, as the government only covers 85% of the cost of syringe distribution, leaving clients to pay the remaining 15% themselves.<sup>[8]</sup> The New Zealand Needle Exchange Programme reports that addressing this barrier is a key priority, as it contributes to the re-use and sharing of injecting equipment.<sup>[8]</sup>

An ongoing concern in Australia is the existence of barriers to accessing NSP services for certain subpopulations. The proportion of people who inject drugs in the country who identify as Aboriginal and Torres Strait Islander is thought to have increased from 12% in 2012 to 18% in 2017,<sup>[2,11]</sup> but there is a dearth of services specifically adapted to this population (see box).<sup>[6,17]</sup> Among women and LGBTQIA+ people who inject drugs, there has been noted a perception of stigma and discrimination, resulting in a reluctance to access NSPs.<sup>[21,27]</sup> Peer outreach programmes have had some success in reaching women who inject drugs and supporting them to access NSPs, however these projects are not widespread.<sup>[21]</sup> There are also NSP services specifically serving LGBTQIA+ people who inject drugs, such as those operated by the AIDS Council of New South Wales.<sup>[26]</sup> There is evidence that such targeted services can address fears of discrimination and stigma, and lead to greater improvements in wellbeing and health outcomes.<sup>[27]</sup>

The clear need for widespread and accessible NSPs in Australia is indicated by a small reported increase in the proportion of people attending NSPs reporting receptive syringe sharing in the last month, from 15% in 2013 to 18% in 2017.<sup>[2,3]</sup> Among certain subpopulations the rate is higher, with syringe sharing in the last year reported by 28% of Aboriginal and Torres Strait Islander people attending NSPs in 2016.<sup>[3]</sup> Among a small sample of men who have sex with men receiving treatment for methamphetamine dependence, 41% reported syringe sharing in the last six months.<sup>[22]</sup> Key reasons given by people who inject drugs for sharing injecting equipment are a lack of transport and the inconvenience of attending an NSP, a fear of identification as a person who uses drugs and language barriers.<sup>[15,41]</sup> For NSP programmes to achieve their potential, these issues must be addressed and services must be provided to ensure the inclusion of marginalised populations.

## Opioid substitution therapy (OST)

OST coverage in Australia has remained stable since the *Global State of Harm Reduction 2016*, with only a small 3% increase in the number of prescribers from 2015/2016 to 2016/2017 and no major changes in implementation.<sup>[6,15]</sup> In 2016/2017, there were 3,074 prescribers and 2,732 dosing points, with 89% of these being pharmacies.<sup>[5]</sup> Each dosing point serves an average of 17 clients, with 70% serving fewer than 20 and only 7% serving more than 50 clients.<sup>[5]</sup> The dosing points with the highest number of clients tend to be in correctional facilities and private clinics.<sup>[5]</sup> The number of people accessing OST has remained stable since 2010, and in 2017 was estimated at 49,792 people.<sup>[5,15]</sup> Two-thirds of these were male and 10% identified as Aboriginal or Torres Strait Islander.<sup>[5]</sup> The median age of people receiving OST was 42 years, an increase of two years since 2016 and reflecting an increasing number of people over 60 and a decreasing number of people under 30 accessing the therapy.<sup>[5]</sup>

Heroin is the primary drug of dependence reported by 38% of people receiving OST in 2017.<sup>[5,11]</sup> Oxycodone, morphine, codeine and methadone were each reported as the primary drug of use in around 5% of people (38% of people declined to report their primary drug of dependence).<sup>[5]</sup> In Australia over the last two decades, a move has been noted from prescribing “weak” opioids to “strong”, longer-acting opioids for chronic pain conditions.<sup>[42]</sup> Research has linked this to an increase in hospital admissions for overdose and treatment for opioid use.<sup>[42]</sup> In Samoa, non-injecting opiate use is the main form of illicit drug use.<sup>[13]</sup> However, no OST is available in Samoa or any other Pacific Island country.

In New Zealand and Australia, both methadone and buprenorphine are widely available.<sup>[5,9,15]</sup> Since 2016, doctors are increasingly prescribing combined buprenorphine-naloxone for OST with the intention of deterring injecting use and diversion.<sup>[5,9]</sup> Naloxone is poorly absorbed in pill form, but can lead to an unpleasant withdrawal when injected.<sup>[5,9]</sup> In Australia, methadone still accounts for 60% of all OST, though in 2017 buprenorphine-naloxone was prescribed more than buprenorphine alone for the first time.<sup>[5]</sup> Currently in Australia, buprenorphine-naloxone and methadone are generally only available as a take-home, unsupervised medication after at least three months of therapy, and often longer.<sup>[43]</sup> This represents a barrier for people in remote areas and increases costs (for example travel). Research has indicated that take-home unsupervised buprenorphine-naloxone is effective in maintaining people in OST, and poses less of a risk of diversion or unsafe use than methadone.<sup>[44]</sup>

Access to OST in New Zealand and Australia is generally good, but civil society organisations report that substantive barriers remain.<sup>[8,15,20,21]</sup> While medication for OST is provided for free in Australia, clients enrolled in private programmes (which represent the bulk of OST providers) still have to pay a minimum of AU\$35 per week in prescription costs, which may deter enrolment and retention among people on low incomes.<sup>[45,46]</sup> In New Zealand, OST is also provided for free, but service users risk losing access to the therapy if they continue to use other drugs (including alcohol) in a way deemed unsafe by service providers.<sup>[47]</sup> Women also face particular barriers to accessing OST: for example, greater stigma; fear of inter-partner violence or abandonment; and fear of loss of child custody.<sup>[21]</sup> While a few specialised maternal health services for women on OST exist in Australia, harm reduction services are generally seen to target men who inject drugs, despite women being a significant minority of people who inject drugs.<sup>[20,21]</sup> Civil society organisations report that women are less likely than men to enrol in OST, although studies have shown they are more likely to access OST at an earlier age and to adhere to therapy once enrolled.<sup>[21,48]</sup>

The effectiveness of OST in preventing viral hepatitis and HIV infection among people who inject drugs is well documented.<sup>[49,50]</sup> OST has also been shown to be highly cost-effective: for every dollar spent on OST in Australia, it is estimated that AU\$4-7 are saved in reductions on healthcare and crime spending.<sup>[45]</sup> Trials in the use of peer workers in OST clinics (people with experience of illicit opioid use and/or currently receiving OST) have shown that they can create a safer and more caring environment for both clients and regular staff, improving both retention and enrolment in OST among vulnerable populations.<sup>[51]</sup>

### Amphetamine-type stimulants (ATS) and new psychoactive substances (NPS)

In the Pacific Island countries and territories, amphetamine use was reported to be rising in 2009, but little research has been undertaken since then.<sup>[14]</sup> In order for an effective harm reduction effort to be mounted in the Pacific Islands, further research into drug use in the region is vital. From 2013-2016, Australia saw a significant overall decline in amphetamine and methamphetamine use, driven mainly by a decline in use among people in their 20s.<sup>[52]</sup> However, there has been an increase in the use of crystal methamphetamine (also known as “ice” in Australia or “P” in New Zealand), which has replaced powder as the main form of use of the drug.<sup>[10,52]</sup> From 2010-2016, the proportion of people who use methamphetamines/ amphetamines reporting crystal methamphetamine

as their main form rose from 22% to 57%, with the proportion using powder amphetamine as their main form falling from 51% in 2010 to 22% in 2016.<sup>[52]</sup> This is also reflected in trends in the method of administration, with smoking (more common in crystal methamphetamine use) accounting for 42% of use and snorting only 16%.<sup>[52]</sup> Among people who use crystal methamphetamine, the portion injecting rose from 9.4% in 2013 to 19.2% in 2016.<sup>[52]</sup>

Use of the crystal form of methamphetamine is associated with a higher likelihood of progressing to heavy use and injection than other forms.<sup>[53]</sup> Civil society organisations are disseminating harm reduction information to target populations, but some civil society actors report concern that the national strategy is focused more on abstinence than on harm reduction.<sup>[6]</sup> There is also concern that the purity of methamphetamine has increased significantly since 2009.<sup>[54]</sup>

In a 2013 Australian household survey, last-year prevalence of methamphetamine use was significantly higher among gay and bisexual men (9.7%) than among heterosexual men (2.5%), associated with use in sexual contexts.<sup>[22,25]</sup> In these contexts, methamphetamine use is linked with an increased likelihood of engaging in high-risk sexual and drug-taking practices associated with HIV and viral hepatitis transmission (for example condomless sex, multiple sexual partners and injecting drug use).<sup>[22]</sup> Among Australian gay and bisexual men who inject drugs, 86% report injecting crystal methamphetamine and 41% report sharing injecting equipment.<sup>[22,55]</sup> There is a need for harm reduction services tailored specifically to gay and bisexual men to address barriers to access, such as stigma and a perception that health workers have inadequate specific knowledge of substance use among this population.<sup>[22]</sup>

The AIDS Council of New South Wales is an example of one of the few LGBTQIA+-specific organisations offering harm reduction services. These include acceptance therapy, cognitive behavioural therapy and motivational interviewing, with the understanding that the goal of interventions is not necessarily abstinence from drug use.<sup>[22,26]</sup> These services are available in person in three cities (Sydney, Lismore and Newcastle) and over Skype or telephone anywhere in New South Wales.<sup>[26]</sup>

Overall amphetamine and methamphetamine use has been stable in New Zealand since 2011, with total population prevalence of use at around 0.8%, equal to around 31,000 adults.<sup>[56]</sup> In 2018, the Ardern government and Housing New Zealand, the state housing agency, abandoned its policy of testing state-owned houses for traces of methamphetamine.<sup>[57]</sup>

This policy was based on a misinterpretation of scientific evidence and a belief that living in a house contaminated by methamphetamine use was harmful to health. It led to over 400 houses being falsely declared unfit for habitation and an unconfirmed number of people who use methamphetamines being evicted from social housing and charged for decontamination.<sup>[58,59]</sup>

Use of ecstasy has remained relatively stable in Australia since 2013, but remains well below the peak of use in 2007.<sup>[52]</sup> However, Students for Sensible Drug Policy report that Australia still has the highest per capita use of ecstasy in the world.<sup>[17]</sup> Several mass overdose incidents associated with high-purity MDMA and NPSs such as GHB (a stimulant that has particularly high risks when combined with alcohol) have occurred over the past two years at public events and festivals.<sup>[17]</sup> For example in 2017, 25 people were hospitalised during the Electric Parade festival in Melbourne after taking what is believed to have been GHB.<sup>[60]</sup>

These events, and reports in Australia of ecstasy pills containing large amounts of methamphetamine and toxic substances such as rat poison,<sup>[61]</sup> demonstrate the need for people who use these drugs to know the strength and contents of what they are taking. With 70% of ecstasy pills taken at clubs, bars, live music events or raves,<sup>[62]</sup> there is a clear advantage in taking harm reduction measures at these venues. KnowYourStuffNZ has operated a free pill-testing service at festivals since 2014, and has seen the proportion of samples that test negative for what the consumer expected fall from 80% in 2014/2015 to 30% in 2016/2017.<sup>[19,63]</sup> Common adulterants for MDMA included cathinones (60%) and n-ethylpentylone (16%), an NPS associated with frequent re-dosing, sleeping problems and paranoia.<sup>[63,64]</sup> During the testing process, staff provided tailored harm reduction advice, and more than half of clients intended not to take a substance that had tested negative.<sup>[63]</sup>

Australia's first pill-testing service at a dance music festival took place in April 2018, with the support of the Australian Capital Territory (ACT) government, local health and police authorities, festival organisers and the venue at the University of Canberra.<sup>[15]</sup> The trial screened two potentially lethal samples of n-ethylpentylone, the first time the drug had been detected in Australia, and found that more than half of samples tested contained no psychoactive substances at all.<sup>[65]</sup> The trial will continue at other events in the ACT.<sup>[65,66]</sup> Surveys have indicated high demand for these services in Australia, with 90% of people who use stimulants at public events saying they would use such a service.<sup>[67]</sup> Notably, 90% said

they would not use the service if there was a risk of arrest, and 93% were willing to pay up to AU\$5 for this potentially lifesaving service.<sup>[67]</sup>

Outside the Australian Capital Territory, pill-testing services still face legal barriers. In New Zealand, KnowYourStuffNZ and the New Zealand Drug Foundation acknowledge that they operate in a legal grey area which restricts the expansion of their pill-testing project into city centres and nightclubs.<sup>[17]</sup> For this reason, other harm reduction interventions for drug use at parties remain the predominant forms in Australia and New Zealand. Dancewize began its activities in 2012 in Melbourne, Australia, offering peer education to reduce harm from drug use at dance parties, festivals and night clubs, and since 2016 has expanded to new territories.<sup>[6,68]</sup> The AIDS Council of New South Wales offer harm reduction services at LGBTQIA+ events, such as peer education and break areas,<sup>[26]</sup> and the Victorian government recently recommended interventions at dance parties and festivals, such as cool-down areas, messages about spiking and peer-based education.<sup>[17]</sup> While these services are certainly valuable, the greatest opportunity for reducing harm from adulterated and high-strength substances lies in the large-scale roll out of pill-checking projects.<sup>[69]</sup>

A further emerging issue in New Zealand is the use of NPSs, which has increased in the country since 2016.<sup>[8]</sup> Since July 2017, up to 45 deaths have been attributed to the synthetic cannabinoid category of NPS.<sup>[70]</sup> Synthetic cannabinoid use is mostly prevalent among already marginalised groups, and therefore requires a tailored harm reduction response which so far has been mostly absent from New Zealand.<sup>[71]</sup>

The regional prevalence of cocaine use in Oceania is 1.5%, primarily in Australia and New Zealand.<sup>[10]</sup> In Australia alone, prevalence is 2.1% (five times the global average) and there are thought to be around 500,000 individuals who have used cocaine at least once in the last 12 months.<sup>[10,52]</sup> The availability of cocaine appears to be increasing in some parts of New Zealand.<sup>[8]</sup> Despite the large number of people who use cocaine in the region, the quantity consumed and frequency of consumption by individuals is thought to be low and civil society organisations report that the harm related to cocaine use is not a primary concern.<sup>[6,10]</sup>



## Overdose, overdose response and drug consumption rooms (DCRs)

Australia is now home to two DCRs, known in the country as medically supervised injection facilities. The DCR in Sydney, in operation since 2001, was joined in July 2018 by a second DCR in Melbourne (currently under a two-year trial).<sup>[6,15]</sup> The Sydney DCR has registered 1.1 million injections since its inception, sees approximately 600 individuals per month (155 per day) and is open 80 hours per week.<sup>[15]</sup> The centre in Melbourne is expected to be used by up to 300 people per day.<sup>[72]</sup> Civil society organisations have raised concerns that the Australian DCRs offer no specific times or services for women.<sup>[20,21]</sup>

The DCR in Sydney allows the injection of crystal methamphetamine as well as heroin, and methamphetamines currently represent an estimated 20% of injections in the facility.<sup>[15]</sup> The Melbourne DCR is also expected to permit the injection of both crystal methamphetamine and heroin.<sup>[16]</sup> While methamphetamines are far less associated with overdose than opioids, these centres allow methamphetamine injection in order to combat the transmission of blood-borne viruses among all people who inject drugs.<sup>[17]</sup> Political opposition is a cause for concern for the Melbourne DCR, as representatives of the main opposition parties in Victoria have said that they would shut down the facility if they were to gain power in the state.<sup>[16]</sup> Despite permitting methamphetamine injection, these DCRs remain unable to serve people who smoke methamphetamines. A campaign was launched by civil society actors in 2016 to introduce drug consumption rooms serving this population, but no such facility has yet been opened in Australia.<sup>[73]</sup>

In Australia, take-home naloxone is now available in all states, though with varying coverage. Peer distribution networks for naloxone operate in some states, but not all.<sup>[6]</sup> In 2016, naloxone was rescheduled to allow over-the-counter purchase in pharmacies.<sup>[15]</sup> However, at AU\$70 per dose, it is inaccessible to the majority who need it, and most still rely on the lower-cost alternative of receiving a prescription from a medical practitioner.<sup>[17]</sup> Australian civil society organisations have raised concerns that the reach of naloxone programmes is insufficient and that they suffer from a lack of funding.<sup>[17]</sup> In New Zealand, civil society organisations are working with the Ministry of Health to make naloxone available in NSPs and OST services, but take-home naloxone is not currently widely available.<sup>[8]</sup>

## Viral hepatitis

Hepatitis C prevalence among people who inject drugs attending Australian NSPs has declined from 57% in 2015 to 49% in 2017.<sup>[3]</sup> In New Zealand, prevalence among people with lifetime prevalence of injecting drug use is estimated to be 57%.<sup>[7]</sup> Injecting drug use is the primary driver for hepatitis C infection across the region; for example, 83% of people living with hepatitis C in New Zealand report a history of injecting drug use.<sup>[3,31]</sup>

In 2015, Australia became the first country in the world to provide free or heavily-subsidised direct-acting antivirals for hepatitis C to the whole population, including people who use drugs and prisoners, at any stage of the disease.<sup>[6]</sup> This has led to record numbers of Australians being treated for hepatitis C, with 43,360 individuals initiating treatment from March 2016 to June 2017, compared with around 2,500 per year before the reforms.<sup>[15,33]</sup> The impact of integrated viral hepatitis services in harm reduction projects has been positive in both Australia and New Zealand. NSPs have been shown to reduce hepatitis C infection among people who inject drugs by 25% since their introduction in New Zealand, and by between 15% and 43% between 2000 and 2010 in Australia (averting up to 77,000 cases).<sup>[74,75]</sup> Enrolment in OST in Australia has been shown to reduce injecting behaviours that increase the risk of blood-borne virus infection and to increase detection of hepatitis C among people who use the service.<sup>[49,76]</sup>

While access to hepatitis C treatment in Australia is officially universal, certain groups experience barriers to participation. Perceived stigma from health workers, a lack of information on direct-acting antivirals and bad experiences with previous interferon-based medication all deter people who use drugs from accessing services.<sup>[6]</sup> Studies in New South Wales have found that the use of peer workers in OST services can contribute to the more effective treatment of marginalised populations, by preparing clients for hepatitis C treatment and testing.<sup>[51]</sup> The rate of hepatitis C prevalence among young Aboriginal and Torres Strait Islander people is estimated to be 6.3 times higher than among young non-indigenous Australians, and increased by 50% from 2012-2016 while the rate among young non-indigenous Australians decreased by 14%.<sup>[3]</sup> The development of culturally appropriate harm reduction interventions for this population has been identified as a possible means of addressing this gap, which is associated with higher rates of receptive syringe sharing and incarceration among Aboriginal and Torres Strait Islander people.<sup>[3,77]</sup>

With the introduction of universal access to new direct-acting antivirals, Australia is now targeting the elimination of hepatitis C as a public health concern in the country.<sup>[17,78]</sup> It is a realistic target that will require the continued implementation of extensive harm reduction services, such as NSPs and OST, as well as a concerted effort to ensure they are accessible to all sectors of the population.<sup>[78]</sup>

In New Zealand, significant moves have been made towards reducing barriers to hepatitis treatment and testing for people who inject drugs and integrating these services with OST. Hepatitis C clinics, operating as partnerships between hospitals and NSPs, exist in Auckland, Christchurch and Dunedin, and all NSPs are now visited by specialist hepatitis nurses on a fortnightly or monthly basis.<sup>[8]</sup> A number of new hepatitis clinics for people who inject drugs were opened in 2017 and 2018, and rapid hepatitis C testing has been piloted in NSPs with results showing that this integration is an effective way of engaging with people who inject drugs.<sup>[8]</sup>

### Tuberculosis (TB)

In the general population, TB incidence remains low and stable in most of the region. Compared with the global incidence rate of 140 cases per 100,000 people, Australia (6.1), New Zealand (7.3), Samoa (7.7) and Tonga (8.6) have exceptionally low rates, according to 2017 figures.<sup>[79]</sup> These countries also have approximately 90% treatment coverage.<sup>[79]</sup> However, there are elevated TB incidence rates in Kiribati (566), Timor Leste (498) and Papua New Guinea (432), where treatment coverage is below 80%.<sup>[79]</sup> Data for TB incidence or prevalence among people who inject drugs is unavailable.

In Australia, TB diagnosis and treatment is available to people who inject drugs and people in detention. However, civil society organisations report that perceived stigma from health care workers towards people who inject drugs acts as a barrier to these people accessing treatment.<sup>[6]</sup>

### HIV and antiretroviral therapy (ART)

Prevalence of HIV among the general population and people who inject drugs in Oceania is low, and ART and pre-exposure prophylaxis<sup>i</sup> are widely available in both Australia and New Zealand.<sup>[6,29]</sup> In Australia, prevalence of HIV among people who inject drugs attending NSPs was low and stable from 2012 to 2017, ranging from 1.4% to 2.1% over this period, and injecting drug use was responsible for just 1% (14

cases) of new diagnoses in 2016.<sup>[2,3]</sup> In New Zealand, just one case of HIV transmission through injecting drug use was recorded in 2016, though the overall incidence rate saw a small increase from 2015.<sup>[29]</sup>

Civil society and academic institutions attribute the very low rates of HIV prevalence among people who inject drugs in Oceania to the success of NSPs.<sup>[29,30]</sup> In particular, they credit the early implementation of NSPs at a time when the prevalence of HIV was low and NSPs were therefore effective in preventing, rather than responding to, an HIV epidemic among people who inject drugs.<sup>[30]</sup> The leadership at the New Zealand Needle Exchange Programme reports that there are no significant barriers to access to HIV testing and treatment for people who inject drugs in New Zealand.<sup>[8]</sup>

In Australia, increases in HIV prevalence have been noted over the past decade among the Aboriginal and Torres Strait Islander population, though rates remain low.<sup>[3]</sup> According to surveys carried out in Australian NSPs from 2012 to 2016, injecting drug use is the source of a higher proportion of HIV infections among Aboriginal and Torres Strait Islander people (14%) than non-indigenous Australians (3%), and from 2013 to 2017 HIV prevalence among Aboriginal and Torres Strait Islander people attending NSPs rose from 1.3% to 3.6%.<sup>[2,3]</sup> There are calls for the development of culturally appropriate clinical management and support for Aboriginal and Torres Strait Islander people living with HIV to prevent further increases.<sup>[3]</sup>

### Harm reduction in prisons

The overall prison population in Oceania was 54,726 in 2016, and with the majority in Australia (35,949) and New Zealand (8,906).<sup>[80]</sup> The rate of incarceration was 140 per 100,000 people, comparable to the global average of 144.<sup>[80]</sup> Palau is notable for having the highest incarceration rate in the region, with 343 of every 100,000 people imprisoned, while the Solomon Islands have the region's lowest figure at just 56 per 100,000.<sup>[81]</sup> Since 2000, the prison population in Oceania has grown proportionately more than any other region in the world, with a 59.1% increase compared with a 25.2% increase in the general population of the region.<sup>[80]</sup> Of even greater concern, the female prison population has doubled over the same period.<sup>[80]</sup>

In Fiji, Palau, Marshall Islands, Papua New Guinea, Timor-Leste and Samoa, serious concerns have been raised about overcrowding, a lack of sanitation and a lack of distinction between pre-trial detention and

i A course of medication that can reduce the chances of HIV infection before exposure to the virus.

the detention of those convicted of crimes.<sup>[82,83,83-87]</sup> For example, prisons in Timor-Leste were found to operate at more than 200% capacity and there was no separation between pre-trial and post-trial detainees.<sup>[87]</sup> Prisons in Australia and New Zealand generally meet international standards on these metrics.<sup>[81]</sup>

The number of people imprisoned for drug offences rose 18% from June 2016 to June 2017, and this population makes up 15% of those incarcerated in Australia.<sup>[88]</sup> An estimated 45% of adult detainees report that alcohol or other drug use contributed to their detention and 67% report using an illicit drug in the 12 months prior to their entry into the detention system.<sup>[23]</sup> More than half of those in detention are thought to have a history of injecting drug use.<sup>[89]</sup> For these reasons, prisoners are considered a priority population under the Australian National Drug Strategy 2017-2026.<sup>[23]</sup> In New Zealand, a 2016 study from the New Zealand Department of Corrections found that 87% of prisoners in the country have a lifetime diagnosis of a substance use disorder.<sup>[90]</sup>

A primary concern in Australian prisons is an epidemic of hepatitis C. Overall prevalence of hepatitis C in Australian prisons is estimated to be 31%, rising to 56% among prisoners who inject drugs. Further, more than two-thirds of female prisoners who inject drugs are thought to be living with hepatitis C.<sup>[23,32]</sup> These rates represent an overall increase in hepatitis C prevalence among prisoners since 2013.<sup>[23]</sup> Because of this, prisoners were also considered a priority population in the National Hepatitis C Strategy 2014-2017, and hepatitis C treatment, including direct-acting antivirals, is available and federally funded in prisons.<sup>[91]</sup> However, the strategy was poorly implemented and unevenly applied between states and territories.<sup>[91]</sup> Unsafe injecting practices, such as syringe sharing, have been noted to increase upon entry to Australian prisons,<sup>[92]</sup> demonstrating the need for access to safe injecting equipment in order to prevent the transmission of viral hepatitis. Lotus Glen prison in Queensland was declared Australia's first hepatitis C-free prison in May 2017, an indication of the efficacy of direct-acting antiviral treatment in prisons.<sup>[93,94]</sup>

There are no NSPs in Australian prisons,<sup>[6,15]</sup> despite the inclusion of prisoners as a key population in the national drug plan. This has been identified as a significant obstacle to controlling the hepatitis C epidemic.<sup>[91]</sup> In the *Global State of Harm Reduction 2016*, it was reported that the government of Australian Capital Territory had approved the country's first prison NSP in Canberra, only for the proposal to be blocked by the prison officers'

union.<sup>[95]</sup> While the territory's government remains supportive, no further progress has been made.<sup>[6,96]</sup> In the absence of NSPs, Fincol, a hospital-grade disinfectant that can be used to clean syringes, is the only means of sterilising injecting equipment available to those incarcerated in Australia.<sup>[97]</sup> However, the use of Fincol is not sufficient to control the hepatitis C epidemic and cannot be considered a replacement for NSPs. There is limited data on the efficacy of Fincol in reducing the transmission of blood-borne viruses in practice, and people who inject drugs report that the need to avoid being caught by prison officers while injecting means that in practice syringes often go unwashed between uses.<sup>[97]</sup> Furthermore, people who inject drugs in prisons report deprioritising washing, with hepatitis C becoming a normalised condition in most Australian prisons.<sup>[97]</sup>

OST is available in prisons in both Australia and New Zealand; however, access is more limited than in the general population.<sup>[6,8,47]</sup> In New Zealand, OST is only available to prisoners who had initiated OST prior to incarceration (except in one prison where OST can be initiated).<sup>[8]</sup> In Australia, the availability of OST can vary considerably between prisons in different states and territories, but where it is available it is on the same basis as in the general population; in 2017 there were 33 dosing points and 3,248 clients undergoing OST in Australian prisons.<sup>[5,6,15]</sup> Since 2016, prisons in Queensland have begun providing OST.<sup>[15]</sup> In both countries, OST initiated outside prison can be continued while the person is detained.<sup>[6,47]</sup>

Studies from around the world indicate that the period immediately following release from prison is associated with the highest risk of death due to opioid use, largely due to the risk of overdose; this is especially true in the first month after release.<sup>[98]</sup> Australian studies have found that OST provision in prison and, importantly, immediately following release contribute to significantly lower mortality risk.<sup>[99]</sup> Therefore, the availability of OST in prisons should be maximised to the fullest extent possible.

Naloxone availability in prisons in Oceania is limited. In Australia, it is only available to health staff.<sup>[6]</sup> It is not made directly available to prisoners in Australia or New Zealand, either while incarcerated or on release, though civil society organisations in Western Australia have advocated for this.<sup>[8,15]</sup> The introduction of naloxone that is directly available to prisoners in Oceania, while in detention and on release, would play a significant role in lowering overdose deaths among these populations.

## Indigenous peoples and harm reduction

Indigenous peoples in Oceania, specifically the Aboriginal and Torres Strait Islander population in Australia and the Māori population in New Zealand, consistently show worse health outcomes than other ethnic groups in the region.<sup>[100,101]</sup> This inequality has persisted since the arrival of European settlers in the 19th century, and has been shown to exist controlling for socio-economic factors.<sup>[101]</sup>

Indigenous groups are over-represented among people who inject drugs. In Australia, 18% of people who injected drugs attending NSPs in 2017 identified as Aboriginal and Torres Strait Islander people, up from 12% in 2016.<sup>[11]</sup> Aboriginal and Torres Strait Islander people were also more likely to report receptive syringe sharing (28%) than non-indigenous Australians (17%),<sup>[3]</sup> and in 2017 accounted for 10% of all people receiving OST in Australia.<sup>[5]</sup> Māori people in New Zealand have previously been shown to be 3.4 times more likely to use amphetamines than non-Māori people, and to be significantly more likely to use crystal methamphetamines than other groups.<sup>[102,103]</sup>

The higher prevalence of injecting drug use and high-risk drug-taking practices are reflected in a range of data sources. From 2012 to 2016, the prevalence of hepatitis C increased by 50% among young Aboriginal and Torres Strait Islander people while the prevalence among young non-indigenous people fell by 14%.<sup>[3]</sup> This leaves Aboriginal and Torres Strait Islander youth with a prevalence 6.3 times higher than young non-Aboriginal and Torres Strait Islander people.<sup>[3]</sup> Though HIV prevalence is low among all groups in Australia, it has increased among the Aboriginal and Torres Strait Islander populations over the past decade.<sup>[3]</sup> Among Aboriginal and Torres Strait Islander people who inject drugs attending Australian NSPs, HIV prevalence was estimated at 3.6% in 2017, up from 1.3% in 2013, compared with 1.9% prevalence in 2017 among non-Aboriginal and Torres Strait Islander people who injected drugs.<sup>[2]</sup> From 2012-2016, injecting drug use accounted for 14% of new HIV diagnoses among Aboriginal and Torres Strait Islander people, but only 3% for non-indigenous Australians.<sup>[3]</sup> In New Zealand, Māori people are known to have a particularly high prevalence of hepatitis B.<sup>[104]</sup>

These patterns are compounded by other socio-economic inequities, notably disproportionate incarceration of indigenous people. Despite forming

only 16% of the New Zealand population, Māori people accounted for 58% of those incarcerated in New Zealand in 2016/2017.<sup>[105]</sup> Aboriginal and Torres Strait Islander people in Australia are even more over-represented in prisons, accounting for 2% of the general population and 28% of those incarcerated in March 2018.<sup>[106]</sup>

These stark statistics have led to calls from government and civil society for health and harm reduction services specifically tailored to the indigenous populations of Oceania.<sup>[6,17,107]</sup> Such services could mitigate the impacts of discrimination and distrust of Western health practices, and provide culturally appropriate services for indigenous conceptualisations of health.<sup>[101,107,108]</sup>

In both New Zealand and Australia, health services specifically serving these populations do exist, and have been established by national policy documents.<sup>[107,109]</sup> However, harm reduction interventions tailored to indigenous peoples are limited. Though substance use facilities exist for Aboriginal and Torres Strait Islander people in Australia, they tend to focus on alcohol use, and only a minority of the treatments offered (31%) use a harm reduction approach, with most focused on abstinence or controlling substance use.<sup>[109]</sup> The introduction of harm reduction services, especially NSPs, which incorporate Aboriginal and Torres Strait Islander and Māori practices and conceptualisations of health, could have a significant impact on the prevalence of blood-borne diseases and drug-related harm among these populations.

## Policy developments for harm reduction

The Australian and New Zealand governments remain supportive of harm reduction interventions both within the countries and externally, for example through vocal support for harm reduction at the UN Commission on Narcotic Drugs.<sup>[6,8]</sup> Harm reduction forms one of the three pillars of Australia's National Drug Strategy 2017-2026 (alongside demand reduction and supply reduction), while New Zealand's National Drug Policy 2015-2020 also explicitly supports harm reduction and a people-centred system of interventions.<sup>[6,23,74]</sup> Harm reduction is also mentioned in Australia's national HIV and hepatitis C strategies.<sup>[15]</sup> No evidence has been found of policy documents declaring explicit support for harm reduction in the region outside these two countries.

With the passage of the Narcotic Drugs Amendment Act in October 2016, Australia legalised the cultivation of cannabis for medical and scientific purposes, though licenses will be restricted to people with business experience and no criminal convictions in the past five years.<sup>[15]</sup> A bill for the legalisation of medicinal cannabis is currently in front of the New Zealand Parliament, and part of the coalition agreement between the current ruling parties committed them to a referendum on cannabis legalisation before the next parliamentary election.<sup>[8]</sup>

An inquiry into drug law reform by the Parliament of Victoria was published in 2018. It made several recommendations for the reform of drug policy, including treating personal drug use as a health issue rather than a criminal one; removing laws prohibiting the distribution of sterile injecting equipment and non-injecting drug paraphernalia; government-facilitated pill-testing at music festivals; and a review of threshold quantities for distinguishing between trafficking and personal possession.<sup>[15,17]</sup>

## Civil society and advocacy developments for harm reduction

There is a strong civil society movement for harm reduction in Australia, with both a national harm reduction network (Harm Reduction Australia) and a national network of people who use drugs (Australian Injecting and Illicit Drug Users Leagues, AIVL). AIVL has secured renewed government funding since 2016, is affiliated to regional equivalent organisations in each state and territory, and is considered a key partner by the national government in the development of drug policy.<sup>[6,15]</sup>

Students for Sensible Drug Policy was established in Australia in 2016.<sup>[15]</sup> The organisation operates through university-affiliated chapters, of which there are currently four with a further nine seeking affiliation with their university.<sup>[110]</sup> SSDP forms part of the consortium that delivered the pill-testing trial in April 2018 at the University of Canberra.<sup>[15]</sup>

Several significant advocacy campaigns have been launched in Oceania since 2016. The Just One Life campaign by the Ted Noffs Foundation and the Time to Test campaign by Unharm have both advocated for the implementation of pill-testing at music festivals.<sup>[15]</sup> The Sniff Off campaign, led by David Shoebridge of the New South Wales Green Party,

has pushed for an end to the use of sniffer dogs for drug detection, claiming that it is an ineffective drug control mechanism and a violation of civil liberties.<sup>[111]</sup> This claim is supported by evidence of the ineffectiveness of the use of sniffer dogs as both a deterrent and a harm reducing measure.<sup>[112]</sup> In June 2018, security at a Sydney music festival refused entry to anyone drawing the attention of sniffer dogs, regardless of whether they were found to be in possession of illicit drugs, drawing criticisms from Shoebridge and other civil society actors that this was a serious abuse of police power.<sup>[113]</sup>

Civil society organisations in Oceania have participated in movements that have been successful in reversing harmful government policy on drugs. In 2017, an Australian government proposal to subject welfare recipients to drug tests was delayed due to legislative and civil society opposition.<sup>[114]</sup> Civil society organisations condemned the policy as ineffective, costly and having unintended consequences including driving criminality, and demonising welfare recipients and people who use drugs.<sup>[115]</sup> It was also criticised for the disproportionate effect it would have on indigenous people and women.<sup>[21]</sup> In New Zealand, civil society, particularly the New Zealand Drug Foundation, led opposition to the eviction of tenants from methamphetamine-contaminated housing, a policy which has now been reversed by the new administration.<sup>[8]</sup>

In addition to these campaigns, the first New Zealand Harm Reduction Conference was held in October 2018, organised by the New Zealand Needle Exchange Programme, and all of the major conferences on drugs in Australia have significant streams on harm reduction.<sup>[6,8]</sup>

## Funding developments for harm reduction

In both New Zealand and Australia, all investment in harm reduction services and advocacy comes from the national and state governments.<sup>[6,8]</sup> In Australia, a commitment to harm reduction investment is included in the National Drug Strategy. The federal government and all nine states and territories provide funding; however, the precise volume is unknown as no updates have been made available since 2015.<sup>[6]</sup> As reported in the *Global State of Harm Reduction 2016*, these figures showed that harm reduction accounts for only 2.1% of Australian government spending on drugs, compared with 66%

on law enforcement and 21.3% on treatment.<sup>[95,116]</sup> Research shows that law enforcement is ineffective in addressing drug use.<sup>[117,118]</sup> Redirecting a small proportion of ineffective law enforcement spending towards harm reduction would enable evidence-based harm reduction services to be expanded to meet need.<sup>[6]</sup>

Similarly, New Zealand has seen little change in funding for harm reduction since 2016, and despite campaigns by civil society organisations, spending on drug policy remains predominantly focused on law enforcement.<sup>[8]</sup> Data on harm reduction investment as a whole remains unavailable, but it is estimated that NSPs in New Zealand were funded to the value of NZ\$4.5m in the 2017/2018 financial year.<sup>[8]</sup> Drug checking projects in New Zealand receive no government funding and are entirely financed by public donations.<sup>[119]</sup>

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j It should be noted that 12% of government spending on treatment was for OST. However, it is impossible to disaggregate spending on OST for harm reduction from spending on OST for treatment.

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