

RESEARCH SUMMARY: Needle and Syringe Programs in Australia

December 2025



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This document summarises evidence on needle and syringe programs in Australia (1999 to 2025).

What are Needle and Syringe Programs?

Needle and syringe programs (NSPs) were formally implemented across Australian states and territories in 1987–1988 as part of the national response to the HIV epidemic.¹ Policy support for NSPs continues to be operationalised through Australia's national HIV and blood-borne virus (BBV) strategies² and commitment to World Health Organization targets to eliminate new HIV transmissions and eliminate hepatitis C as a public health threat by 2030.³

People who inject drugs (PWID) face an elevated risk of acquiring BBVs, including HIV, hepatitis B and C, as well as sexually transmitted infections (STIs).⁴ NSPs aim to prevent the transmission of BBVs amongst PWID and reduce the individual, social, and public harms associated with injecting drug use.^{5,6} NSPs provide a suite of strategies, including sterile injecting equipment, safe disposal of used injecting equipment, health and safer injecting resources, links to other health and welfare services, evidence-based information, education, and programs to facilitate access to take-home naloxone.⁶

There are four types of NSPs in Australia: primary, secondary, syringe dispensing machines, and pharmacy.⁶

NSPs in Australia

IN 2024, THERE WERE MORE THAN 4,000 NSPs IN AUSTRALIA:



**112 primary
NSPs⁶**



**918 secondary
NSPs⁶**



**3,220 pharmacy
NSPs⁶**



**458 syringe
dispensing
machines (SDMs)⁶**

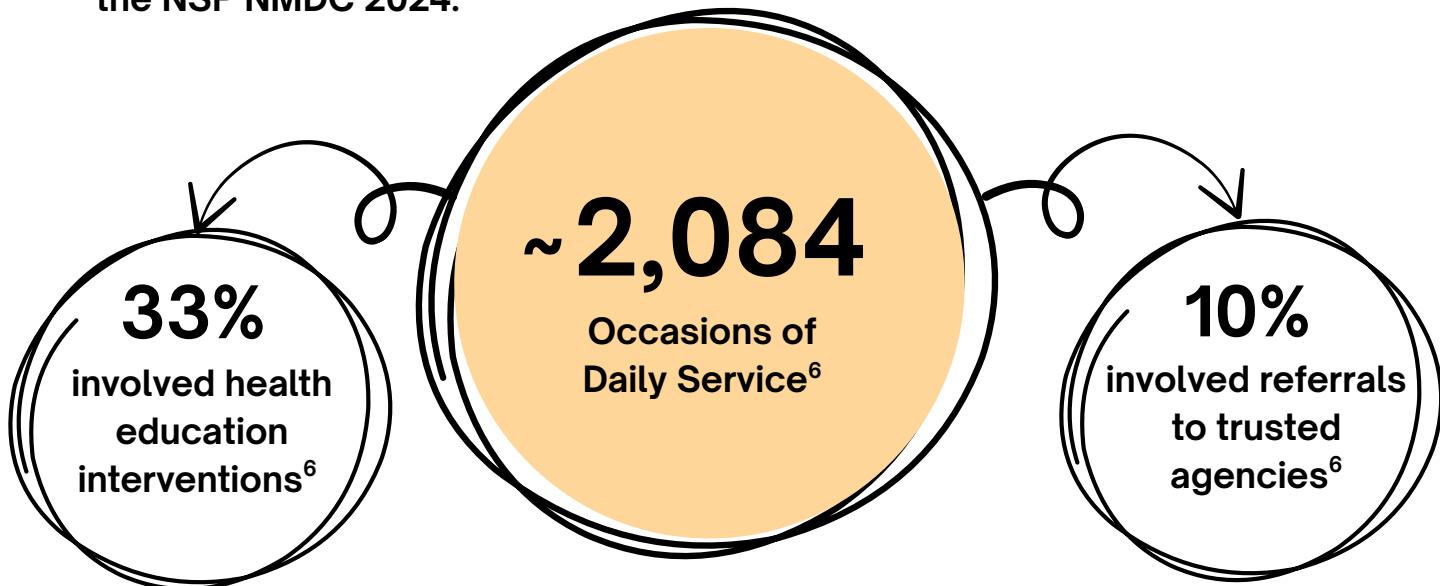
**These services distributed 54.6 million needles and syringes during 2023/24,
90% were distributed through primary and secondary NSPs and SDMs.⁶**



NSP National Minimum Data Collection 2024 (NSP NMDC)

In 2023/24, estimates suggested 72,984 people in Australia regularly injected drugs and received approximately two syringes per day (749 syringes annually).⁶ This exceeds the World Health Organization's 2030 target of providing more than 300 syringes per person annually.⁷

NSP service user demographics for public sector NSPs participating in the NSP NMDC 2024:

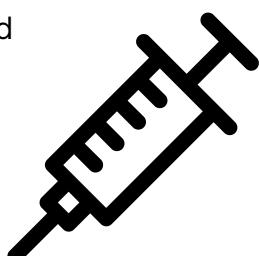


NSP SERVICE USER DEMOGRAPHICS FOR PUBLIC SECTOR NSPS PARTICIPATING IN THE NSP NMDC 2024:



Types of NSPs in Australia, and their Benefits and Barriers

All Australian states and territories operate NSPs, run by government and non-government organisations, and by pharmacies, which differ in services and delivery models and vary across jurisdictions. While NSPs offer many benefits, there are barriers that can limit the effectiveness of some delivery services.



Primary NSPs

Services are typically located and delivered at a fixed site (permanent location).⁸ They provide services including sterile injecting equipment, disposal services, information and education and referral.^{6,8} Some may also provide counselling⁸ and outreach or postal services.⁶

Benefits

- Usually have trained and permanent staff^{9,10,11}
- Provide education about safe injecting.^{6,12}
- Variety of equipment available.^{12,13}
- Access can be free of charge.^{12,13}
- May provide community-based point of care testing, where NSP staff conduct the testing.¹⁴

Barriers

- Geographical factors (e.g. travel time and cost) and a range of other determinants can limit client access.^{8,14}
- Inadequately trained staff can impact client engagement.⁹
- May have restricted operating hours.^{15,16}

Secondary NSPs

Secondary NSPs are situated within hospitals, or other health services or community health centres and are commonly located in regional/rural areas of Australia.⁸ Limited capacity is available to deliver specialist services other than sterile injecting equipment.⁶

Benefits

- Referral may be more efficient and effective due to the co-location in hospital and health care settings.¹⁶

Barriers

- Experiences of stigma.^{16,17}
- Privacy and confidentiality concerns.^{8,16}
- Staff turnover and resources may limit service provision.¹⁶

Syringe Dispensing Machines (SDMs)

A fixed location NSP, utilised as a regular vending machine dispensing sterile injecting equipment, usually in pre-packaged kits with a disposal receptacle.^{6,18} SDMs are typically free/charged a small fee and operate in locations/times when other NSPs are unavailable.⁶

Benefits

- Greater accessibility due to 24/7 operation.^{13,18}
- Opportunity for the safe disposal of injecting equipment while PWID remain anonymous.^{18,19}
- Provides pathways to gain access to sub-populations of PWID such as young people.^{8,18,20}
- SDMs with health information displayed increase treatment inquiries to health staff.¹⁸

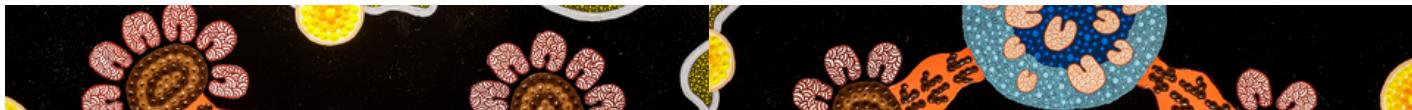
Barriers

- Reduced opportunity for education.¹⁸
- Potential public disapproval.²¹
- Concerns about maintenance costs, operability, vandalism, and security.^{13,18}
- Limited range of equipment available.¹³
- Stock replenishment constraints.¹⁹
- Cost of sale of sterile injecting equipment if payment is required.^{18,19}
- Reduces face to face education opportunities.¹⁵
- Location of machine may limit accessibility (eg. near a police station).²²

Pharmacy NSPs

Provide sterile injecting equipment with disposal receptacle, information, and referral.⁸

Benefits	Barriers
<ul style="list-style-type: none"> • Pharmacies are commonly available, located in accessible areas, can be easily accessed and used anonymously, with some offering the convenience of longer opening hours.²³ • Opportunity to provide services to a wider demographic of PWID, including Aboriginal and Torres Strait Islander peoples and younger people.²⁴ 	<ul style="list-style-type: none"> • Lack of training and education among pharmacy staff can lead to ineffective interventions for PWID, where relationships and trust are not developed, and referrals to other treatment services are not provided.²³ • The higher cost of sterile injecting equipment at pharmacies can be a barrier to access and is associated with increased sharing and re-use of injecting equipment among PWID who can only access this equipment from pharmacies.²³ • Lack of privacy¹⁸ and experiences of stigma and discrimination can deter people from accessing pharmacy NSPs.^{21,27}



Modes of delivery of NSPs in Australia and their Benefits and Barriers

NSPs may be delivered through different modalities, including Supervised Injection Facilities (SIFs) and mobile delivery.

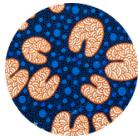
SIFs are operated by trained staff who provide a safe and supervised environment to inject pre-obtained drugs.²⁸ Other services may include access to sterile injecting equipment, harm reduction advice, overdose and BBVs intervention and treatment, and referrals.²⁸

- **Benefits** of SIFs include reducing the strain on other health services, such as emergency services,²⁹ as SIFs provide a sterile injecting environment in a fixed space where hygiene, privacy, and safety standards are upheld.³⁰ This environment can provide on-site education,³⁰ intervention, and testing.³¹ PWID have reported feeling safe due to the reduced fear of police presence when accessing SIFs.³⁰
- **Barriers** to implementing SIFs include that they are highly reliant on funding, resources, and staffing.³⁰ There is potential public disapproval of implementing SIFs due to concern that these services support and endorse illicit substance use, attract PWID and those selling drugs, and increase discarded syringes in the area.²⁸

Note. Currently, there is one SIF in Kings Cross, New South Wales, and one in North Richmond, Victoria in Australia.³²

Mobile Delivered NSPs operate on a scheduled route, travelling with trained staff who may provide support services, including referrals to services for PWID, BBV testing services, free or low-cost sterile injecting equipment, and disposal of used injecting equipment.²⁵

- **Benefits** of mobile-delivered NSPs include providing referrals and specialised point-of-care testing for BBVs,³³ delivered by trained staff,²⁵ which can reduce access, stigma, transportation, health costs, and health literacy barriers.³⁵ Additionally, they can adapt to location priorities³⁴ and be highly targeted to populations, groups, and communities.³⁵
- **Barriers** to mobile-delivered NSPs include that they are expensive to operate,²⁵ have limited operating hours,³³ and due to being in an open environment, may reduce privacy and service interactions.³³

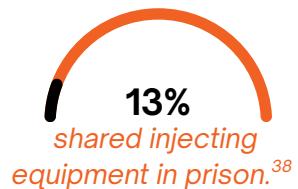
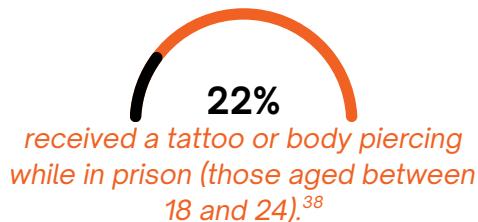
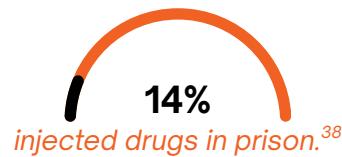


Evidence Gaps in Australian NSPs

1. Prison Settings

- NSPs have not been trialled or extended to Australian prison environments^{33,37} yet prison populations remain at significant risk for hepatitis C infection.³⁸
- In 2022, **8.1%** of people discharged from prison reported testing positive for hepatitis C in prison, despite only **68%** reporting undergoing testing in prison.³⁸
- A high proportion of people discharged from Australian prisons also report a history of injecting drug use and risky behaviours.³⁸

In 2022 approximately:



2. Priority Populations

- Greater efforts should be directed at enhancing access to NSPs for Aboriginal and Torres Strait Islander peoples, with the highest rate of hepatitis C notifications.³⁹
- There is also limited research reporting on the needs of other priority or underserved populations who inject drugs, including people from culturally and linguistically diverse backgrounds⁴⁰ and younger populations who are less likely to access NSPs.^{8,18,41}

3. Peer Distribution

- Peer distribution (or secondary distribution) of sterile injecting equipment occurs⁴² and involves individuals giving or receiving sterile injecting equipment originally obtained from a legal source.⁴³
- Peer distribution can also include sharing knowledge and peer-led interventions about safe injecting and how to reduce BBV infections.^{43,44} For Aboriginal kinship and family relationships, peer distribution could be a viable path to eliminate accessibility issues for Aboriginal peoples.⁸
- Peer distribution of injecting equipment is a criminal offence except in Tasmania, the Australian Capital Territory, and the Northern Territory.⁴⁴
- Ethical concerns include individuals distributing unsterile injecting equipment to other PWID or for profit.⁴⁴
- There is limited literature on peer distribution in the Australian context.⁴⁴



Opportunities to Enhance NSP Service Accessibility

- Improve cross-collaboration and communication between NSP staff, healthcare providers, and services to allow effective referral and interventions.¹⁶
- Research and review current legislation and enforcement protocol around the possession and use of needles to ensure best practices are employed.⁴⁵
- Evaluate, monitor, and compare NSP services to identify potential barriers and benefits of different services and approaches.¹¹
- Provide training for pharmacy staff who provide NSPs to address stigma from providers.²³
- Combat stigma through public education campaigns,⁴⁷ and provide education, especially to underserved populations, including Aboriginal and Torres Strait Islander PWID, and younger people.⁴⁰
- Pilot prison-based NSPs and regulate their access in prisons to increase the application of safer injection and disposal practices both in and outside prisons to improve health outcomes.³⁶
- Improve engagement with Aboriginal and Torres Strait Islander peoples by collaborating with Aboriginal and Torres Strait Islander communities, including Elders, on the design and delivery of NSP services.⁴⁸



This summary was produced as part of the Healthy Blood Healthy Body project. Healthway funded this research project to improve access to NSPs for Aboriginal peoples who inject drugs in Boorloo (Perth, Western Australia). This evidence summary did not evaluate the quality of studies. Studies were limited to Australian publications. A systematic search strategy was used; however, some publications may not have been identified due to the search parameters.

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