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Kirby Institute

# **New South Wales Needle and Syringe Program Enhanced Data Collection**

## **2017**

**Prepared by**

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# Acronyms

<b>LHD</b>	Local Health District
<b>NGO</b>	Non-Government organisation
<b>NNEDC</b>	New South Wales Needle and Syringe Program Enhanced Data Collection
<b>NSP</b>	Needle and syringe program
<b>NSW</b>	New South Wales
<b>OOS</b>	Occasions of service
<b>OST</b>	Opioid substitution therapy
<b>PIEDs</b>	Performance and image enhancing drugs
<b>PWID</b>	People who inject drugs
<b>RSS</b>	Receptive syringe sharing

# Key points

## **Occasions of service:**

- A total of 5,378 NSP OOS were recorded over the two-week period, equating to approximately 2,700 OOS per week.
- 90% of NSP attendees agreed to participate in the NNEDC.

## **Gender, age and sexual identity:**

- 75% of NNEDC respondents in 2017 were men, 25% were women and 1% identified as transgender.
- The median age of NNEDC respondents in 2017 was 40 years.
- Between 2014 and 2017, a significant increase was observed in the proportion of respondents who identified as bisexual (from 7% in 2014 to 9% in 2017, p-trend=0.019) and homosexual (from 6% in 2014 to 9% in 2017, p-trend=0.001).
- Over the five-year period a significant increase in the proportion of respondents who reported an Aboriginal background was observed, from 14% in 2013 to 19% in 2017 (p-trend<0.001).

## **Social, legal and health in the previous 12 months:**

- 25% (n=695) reported they had experienced homelessness.
- 58% (n=1,677) had received Centrelink benefits.
- 23% (n=652) had engaged in a sexual relationship with someone who injected drugs.
- 21% (n=593) reported living with, or being diagnosed with, a mental health issue.
- 17% (n=473) reported being arrested.
- 11% (n=311) reported being imprisoned
  - a significant increase from 9% in 2016 (p=0.009).
- 24% (n=681) were prescribed OST.
- 5% (n=131) reported being revived using naloxone in 2017, a significant increase from 3% in 2016 (p=0.028).
- 9% (n=255) reported being present when someone was revived using naloxone.

### **Drug last injected:**

- Opioids were the most commonly reported class of drug last injected in 2017 (47%, n=1,606).
- Heroin was the most commonly reported drug last injected in 2017 (34%, n=1,150).
  - A significant increase in the proportion of respondents who reported last injecting heroin was observed over the five-year period, from 29% in 2013 to 34% in 2017 (p-trend<0.001).
- Methamphetamine was the most commonly reported stimulant last injected in 2017, reported by 31% (n=1,049) of respondents.
  - A significant increase in the proportion of respondents who reported last injecting methamphetamine over the five-year period was observed, from 26% in 2013 to 31% in 2017 (p-trend=0.001).
- One in seven respondents (15%) reported last injecting PIEDs.
  - PIEDs were the most commonly reported drug last injected among younger people (61%, n=113).
  - Respondents aged less than 25 were significantly more likely to report last injecting PIEDs compared to respondents aged 25 years or older (61% vs 21% respectively, p<0.001).

### **Injecting behaviour**

- The median number of years since first injection was 18 years.
- One in two respondents (49%, n=1,360) reported injecting daily or more frequently.
- One in ten respondents (12%, n=322) reported injecting for less than three years.

### **Receptive syringe sharing**

- One in five respondents (20%, n=500) who reported injecting in the month prior to data collection reported at least one occasion of receptive syringe sharing (RSS) during this period.
- RSS was stable over the five-year period (p-trend=0.665).
- Three quarters of respondents who reported RSS (74%, n=401) reported more than one occasion of RSS in the previous month
- Factors associated with an increased risk of reporting RSS included identifying as bisexual, daily or more frequent injection in the previous month and homelessness or imprisonment in the previous 12 months.
- Factors associated with a decreased risk of reporting RSS included reporting a mental health issue, receipt of Centrelink benefits and being prescribed OST in the previous 12 months.

# Background

The New South Wales (NSW) Needle and Syringe Program (NSP) is a public health initiative that aims to reduce the transmission of blood borne viruses and other harms related to injecting drug use through the provision of sterile injecting equipment and health related information and support. The NSP operates within the principles of harm minimisation embedded in both the National and the NSW HIV and Hepatitis C Strategies. The NSW public sector program is delivered through a mix of primary and secondary NSP outlets in health, welfare and pharmacy settings, augmented by mobile and outreach services and syringe dispensing machines and chutes.

The NSW Ministry of Health established the NSW NSP Enhanced Data Collection (NNEDC) as a mechanism to provide a systematic snapshot of the NSW NSP client population in 2004. The NNEDC was subsequently repeated in 2008 and in a revised format annually in all years since 2013. The 2017 NNEDC was conducted at 50 NSPs over a two week period (20<sup>th</sup> February to 5<sup>th</sup> March) and was the fifth consecutive data collection in the new format. This report presents data from all of the previous years, 2013 to 2017. Details on the study methodology, data collection instrument and participating sites are included at Appendices A, B and C respectively.

# Respondents and OOS

In 2017, all 15 Local Health Districts (LHDs) participated in the NNEDC. The number of participating sites varied by LHD, and ranged from seven in South Eastern Sydney and Northern NSW LHDs to one in Far West LHD. Due to the small number of respondents from Far West LHD who participated in previous years, the NNEDC was conducted for an additional week.

In 2017, all clients were encouraged to complete a minimum of four questions of the data collection instrument. This report includes data collected from both NSP clients who completed all questions on the data collection instrument and those who elected to respond to the first four questions only. As a result, the proportion of respondents who did not respond to subsequent questions (from question 5) varies. In order to examine trends over time in a consistent manner, missing data is excluded when calculating proportions for all variables, including data collected in previous years.

A total of 5,378 NSP occasions of service (OOS) were recorded over the two-week period, equating to approximately 2,700 NSP OOS per week. The number of OOS recorded over the two week period in 2017 was similar to that recorded in 2016 (n=5,363), however this was lower than the number of OOS recorded in previous years (range 5,439-6,257 in 2013 to 2015). Nevertheless, the state-wide decline in OOS observed over the five-year period was not observed in all LHDs, with increases recorded in some LHDs (Hunter New

England, Southern NSW, Sydney and Western NSW, Figure 1). Furthermore, several LHDs (Nepean Blue Mountains, South Western Sydney and Southern NSW) recorded an increase in OOS in 2017 compared to 2016.

In 2017, efforts were made by LHDs and NSP services to increase the number of clients who completed the NNEDC. Of the 5,378 OOS recorded in 2017, 3,607 NSP attendees agreed to participate in the NNEDC, equating to a response rate of 90%. Of the 3,607 NSP attendees who participated in the NNEDC, 79% (n=2,842) completed all questions included in the data collection instrument, while the remaining one fifth (21%, n=765) attempted completion of only the first four questions.

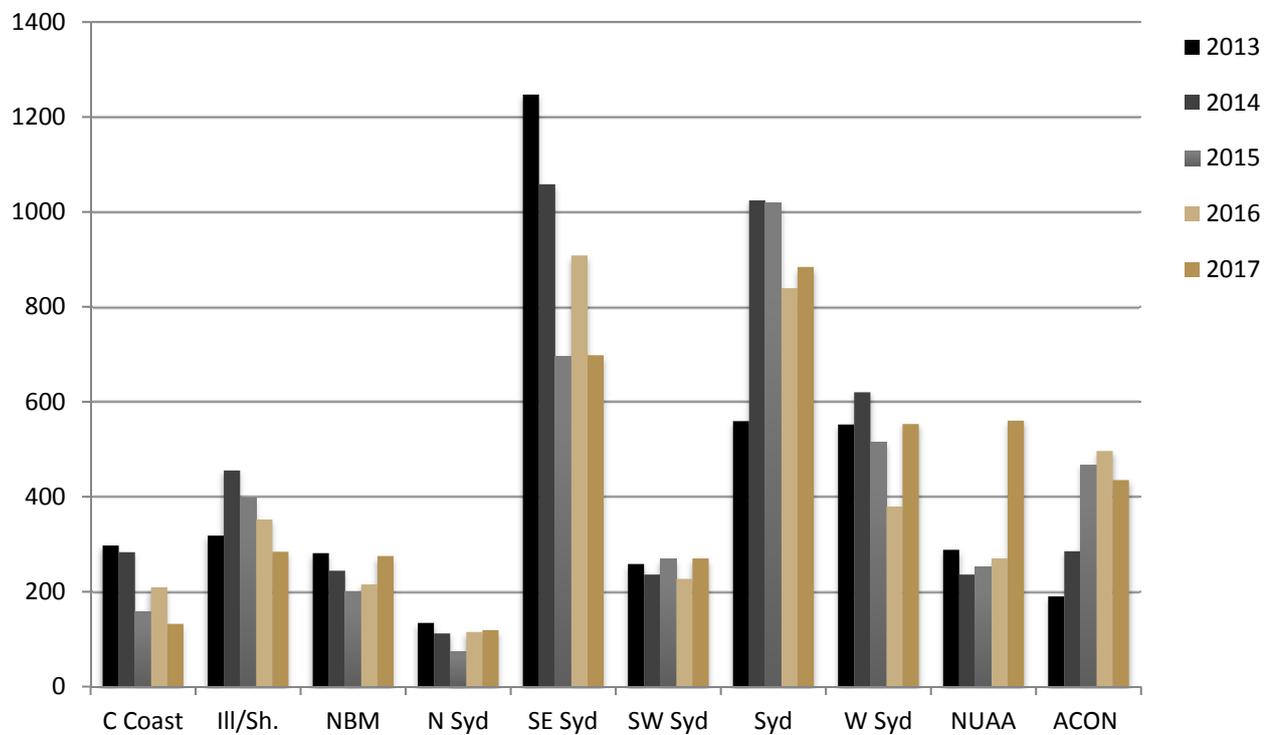
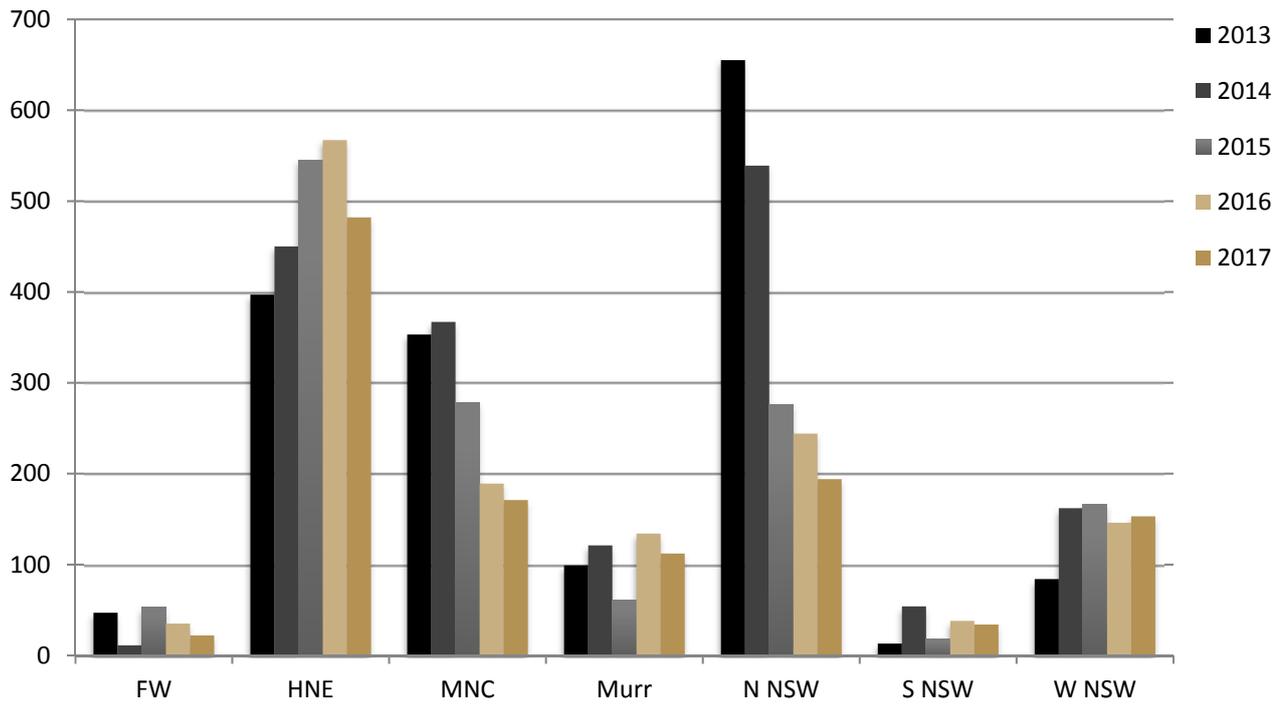
NSP attendees who had completed the NNEDC at a previous attendance were recorded as a repeat attendance, and were ineligible to repeat the NNEDC in order to reduce bias towards frequent NSP attendees. In 2017, one quarter (25%, n=1,355) of all OOS were repeat attendances and this was consistent with previous years (p-trend=0.803). As expected, the proportion of repeat attendances was higher in the second week of data collection (36%, n=892) compared to the first week (16%, n=463).

During the 2017 data collection period, approximately one in ten (8%, n=416) NSP attendees declined to participate in the NNEDC, and did not provide any data regarding their demographic characteristics and drug use.

Approximately one in four (22%, n=1,168) OOS recorded during the data collection period were recorded in rural and regional LHDs, with a significant decline in OOS in rural and regional LHDs observed over the five-year period, from 29% (n=1,648) of all OOS in 2013 to 22% (n=1,168) in 2017 (p-trend<0.001). The number of OOS recorded in rural and regional LHDs in 2017 ranged from 22 recorded in Far West LHD to 482 recorded in Hunter New England LHD, while the number of respondents ranged from 11 in Far West LHD to 343 in Hunter New England. Among metropolitan LHDs, South Eastern Sydney LHD recorded the highest number of OOS (n=1,133, excluding OOS recorded at the state-wide non-Government

organisation [NGO] NUAA), while Northern Sydney LHD recorded the lowest number of OOS (n=119). South Eastern Sydney LHD also recorded the highest number of respondents (n=790) among metropolitan LHDs, while the lowest number of respondents was recorded at Northern Sydney LHD (n=78). Differences in service delivery modalities can account for the variation in the number of OOS recorded at metropolitan and rural/regional LHDs. Generally, rural and remote LHDs are more reliant on secondary NSPs and syringe dispensing machines (vending machines and chutes), in order to provide access to injecting equipment over large geographic areas.

**Figure 1 Occasions of service by LHD, NUAA & ACON Sydney, 2013-2017**



# Demographic characteristics

## **Gender**

As in previous years, in 2017 three quarters of respondents (75%, n=2,666) were men, while women accounted for the remaining quarter of respondents (25%, n=882). A minority of respondents (1%, n=19) identified as other. Men comprised the majority of respondents in all LHDs, and the proportion of men ranged from 61% in Mid North Coast LHD to 82% in South Western Sydney and Murrumbidgee LHDs. There were no significant changes in the gender distribution of NSP attendees over the five-year period, 2013 to 2017.

## **Age**

The median age of respondents in 2017 was 40 years (range 18-74), an increase of one year from the median age of 39 years in 2016. There was no significant difference in the median age of men and women (both 40 years, p=0.094). Respondents who last injected a psychoactive drug (all drugs excluding performance and image enhancing drugs [PIEDs]) had a significantly higher median age compared to respondents who last injected PIEDs (42 years vs 30 years respectively, p<0.001). Among respondents who last injected a psychoactive drug, men were significantly older than women (43 years vs 41 years respectively, p<0.001). Respondents from Northern NSW had the highest median age in 2017 (44 years), while the lowest median age was recorded in Far West LHD (32 years).

People aged less than 25 years (young people) accounted for 6% (n=196) of all respondents in 2017. The proportion of respondents aged less than 25 years declined significantly over the five-year period, from 9% in 2013 to 6% in 2017 (p-trend<0.001).

## **Sexual identity**

Three quarters (74%, n=2,666) of respondents identified as heterosexual in 2017. Data collection regarding sexual identity commenced in 2014 and the proportion of respondents who identified as heterosexual has remained stable (p-trend=0.213). Respondents who identified as homosexual or bisexual accounted for almost one in five (18%) respondents in 2017 (9%, n=219 and 9%, n=214 respectively). Between 2014 and 2017, significant increases were observed in the proportions of respondents who identified as homosexual (from 6% in 2014 to 9% in 2017, p-trend=0.001) and bisexual (from 7% in 2014 to 9% in 2017, p-trend=0.019).

As in previous years, in 2017 women were significantly more likely to identify as bisexual, compared to men (19% vs 5% respectively, p<0.001). In contrast, men were significantly more likely to identify as homosexual compared to women in 2017 (10% vs 5% respectively, p=0.001), a finding observed in 2016, but not in any previous year. The median age of respondents who identified as heterosexual

was 40 years in 2017, an increase of one year from 2016. The median age of respondents who identified as homosexual or bisexual was unchanged from 2016 (41 years and 40 years respectively). There was no significant difference in the median age of respondents who identified as homosexual or bisexual compared to respondents who identified as heterosexual in 2017 ( $p=0.696$  and  $p=0.604$  respectively). The proportion of bisexual or homosexual respondents ranged from 3% in Western NSW to 31% in South Eastern Sydney.

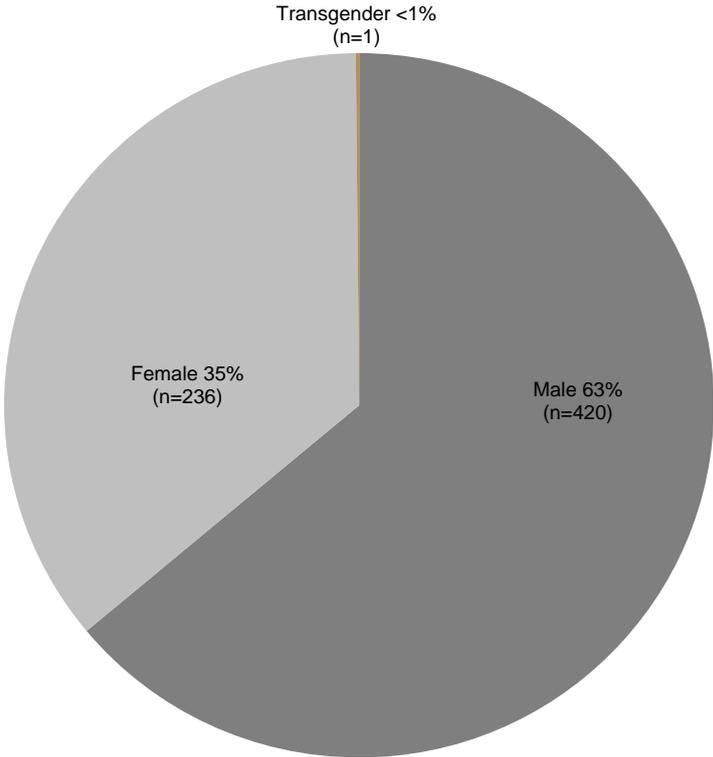
### ***Cultural and linguistic diversity***

In 2017, one in five respondents (19%,  $n=645$ ) reported an Aboriginal background, while a further 1% ( $n=24$ ) reported both an Aboriginal and Torres Strait Islander background and less than 1% ( $n=23$ ) reported a Torres Strait Islander background. Over the five-year period a significant increase in the proportion of respondents who reported an Aboriginal background was observed, from 14% in 2013 to 19% in 2017 ( $p\text{-trend}<0.001$ ). In 2017, women were significantly more likely to report an Aboriginal background compared to men (28%,  $n=236$  vs. 17%,  $n=421$ ,  $p<0.001$ , Figure 3). Western NSW LHD recorded the highest proportion of Aboriginal respondents in 2017 (55%), while Northern Sydney LHD recorded the lowest (6%).

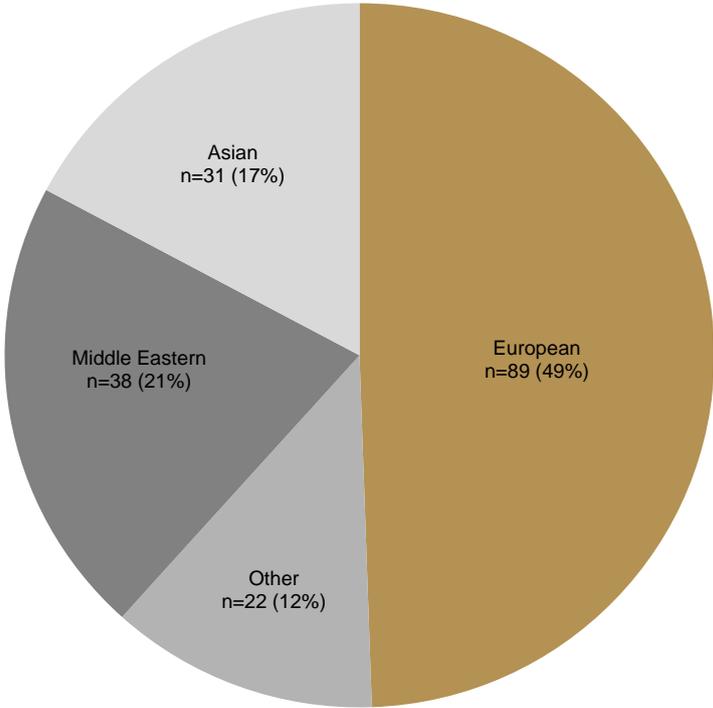
In 2017, 6% ( $n=180$ ) of respondents reported a language other than English as the main language spoken at home by their parents, with a significant increase observed over the five-year period, from 5% in 2013 to 6% in 2017 ( $p=0.003$ ). Arabic was the most commonly reported language other than English spoken at home by respondents' parents in 2017, reported by 16% of respondents ( $n=28$ , Figure 4), followed by Greek (11%,  $n=19$ ) and Vietnamese (6%,  $n=10$ ). As in previous years, compared to women, men were significantly more likely to report that their parents spoke a language other than English (4% vs 7% respectively,  $p<0.001$ ). South Western Sydney LHD recorded the highest proportion of respondents that reported a language other than English spoken at home (18%), while four LHDs did not record any respondents from this sub-population (Central Coast, Far West, Mid North Coast and Northern NSW LHDs).

**The proportion of respondents who reported an Aboriginal background increased significantly, from 14% in 2013 to 19% in 2017**

**Figure 2 Aboriginal respondents by gender in 2017**



**Figure 3 Languages other than English spoken at home by parents in 2017**



# Social, legal and health

## *Homelessness*

In 2017, one in four respondents (25%, n=695) had experienced homelessness in the previous 12 months, and this was comparable to 2016 (25% vs 24% respectively,  $p=0.992$ ). Compared to respondents who reported last injecting a psychoactive drug, respondents who reported last injecting PIEDs were significantly less likely to report homelessness in 2017, (27% vs 2% respectively,  $p<0.001$ ), and this sub-population were excluded from further analysis.

Among respondents who last injected a psychoactive drug, those who identified as bisexual were significantly more likely to report homelessness compared to respondents who identified as heterosexual ( $p<0.001$ ). This association was also observed in 2016. Additionally, respondents who reported English as the main language spoken by their parents were significantly more likely to report homelessness, compared to respondents who reported a language other than English as the main language spoken by their parents ( $p=0.045$ ). This observation was not observed in 2016. Older respondents (aged 46 years and over) were significantly less likely to report homelessness compared to respondents aged under 35 years ( $p<0.001$ ).

No associations were observed between homelessness and gender, geographic location of NNEDC completion (metropolitan or rural/regional) or the number of years since injection initiation.

Compared to respondents who were stably housed, respondents who reported homelessness in the preceding 12 months were significantly more likely to have received Centrelink benefits, to have reported a mental health issue, to have engaged in a sexual relationship with someone who injected drugs and to have been arrested (all p-values  $p<0.001$ ). Additionally, respondents who reported homelessness were significantly more likely to have been in prison in the last 12 months, to have been revived from an overdose using naloxone in the 12 months and to have been present when someone else was revived from an overdose (all p-values  $p<0.001$ ). Respondents who reported homelessness were as likely as those with stable housing to have been prescribed OST in the 12 months prior to data collection.

Further, respondents who reported homelessness were significantly more likely to report last injecting a stimulant, daily or more frequent injection, RSS and to report providing their used injecting equipment to someone else, compared to respondents who did not report homelessness (all p-values  $p<0.001$ ).

**One in four (25%) respondents reported homelessness in the previous 12 months, comparable to 2016 (24%)**

### *Receipt of Centrelink benefits*

In 2017, approximately three in five respondents (59%, n=1,677) reported that they had received Centrelink benefits in the 12 months prior to data collection. The proportion of respondents who reported receiving Centrelink benefits was significantly higher in 2017 compared to 2016 (59% vs 56% respectively,  $p=0.033$ ). However, the question included in the 2017 NNEDC was amended to incorporate all forms of Centrelink benefits, rather than only including unemployment or disability benefit and this could explain the difference in proportions observed in 2016 and 2017. Respondents who reported last injecting PIEDs were significantly less likely to report receiving Centrelink benefits compared to respondents who reported last injecting a psychoactive drug (7% vs 69% respectively,  $p<0.001$ ) and this group was excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, respondents who completed the NNEDC at a rural/regional NSP were significantly more likely to report receiving Centrelink benefits compared to respondents who completed the NNEDC at a metropolitan NSP ( $p<0.001$ ). Women were also significantly more likely to have received Centrelink benefits compared to men ( $p<0.001$ ). Respondents who reported injecting for three or more years were also significantly more likely to report receiving Centrelink benefits, compared to respondents who had injected for less than three years ( $p<0.001$ ). Consistent with findings reported in 2016, in 2017 respondents who identified as homosexual were significantly less likely to have received Centrelink benefits compared

to respondents who identified as heterosexual ( $p<0.001$ ). There was no association observed between receipt of Centrelink benefits and age or main language spoken at home by parents.

Respondents who received Centrelink benefits were significantly more likely to have been prescribed OST, to report a sexual relationship with someone who injected drugs, to have been arrested, been imprisoned, to have been revived from an overdose and to have been present when someone else was revived from an overdose compared to respondents who were not in receipt of Centrelink benefits (all  $p$ -values  $p<0.001$ ). Respondents who received Centrelink benefits were also significantly more likely to report a mental health issue ( $p<0.001$ ). This finding was not unexpected as living with, or being diagnosed with a mental health issue may result in eligibility for some types of Centrelink benefits. As reported previously, respondents who had received Centrelink benefits in the previous 12 months were also more likely to have experienced homelessness during this period, compared to respondents who did not receive Centrelink benefits ( $p<0.001$ ).

No association was observed between the drug last injected and receipt of Centrelink benefits, however respondents who reported receiving Centrelink benefits were more likely to report injecting daily or more frequently ( $p=0.005$ ) and to report giving their used injecting equipment to someone else ( $p<0.001$ ), but were significantly less likely to report RSS ( $p<0.001$ ).

### ***Sexual relationships with someone who injects drugs***

An additional question was added to the NNEDC in 2017 to capture whether respondents had engaged in a sexual relationship with someone who injected drugs in the previous 12 months. Approximately one quarter of respondents (23%, n=652) reported that they had engaged in a sexual relationship with someone who injected drugs. Compared to respondents who reported injecting a psychoactive drug, people who last injected PIEDs were significantly less likely report a sexual relationship with someone who injected drugs (27% vs 2% respectively,  $p<0.001$ ) and this group were excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, women and respondents who identified as other were significantly more likely to report a sexual relationship with someone who injected drugs compared to men (both  $p<0.001$ ). Compared to respondents who identified as heterosexual, respondents who identified as bisexual and homosexual were also significantly more likely to report a sexual relationship with someone who injected drugs (both  $p<0.001$ ). Respondents who reported English as the main language spoken by their parents at home were also more likely to report a sexual relationship with someone who injected drugs, compared to respondents who reported a language other than English as the main

language spoken by their parent's ( $p<0.001$ ). Conversely, older respondents (46 years and over) were significantly less likely to report a sexual relationship with someone who injected drugs compared to respondents aged less than 35 years ( $p<0.001$ ). There were no associations observed between years since injection initiation, geographic location of NNEDC completion and having a sexual relationship with a person who injected drugs.

Respondents who reported a sexual relationship with someone who injected drugs in the 12 months prior to data collection were significantly more likely to report a mental health issue, to have been arrested, to have been imprisoned, to have been prescribed OST, to have been revived from an overdose and to be present when someone else was revived from an overdose, compared to respondents who did not report a sexual relationship with someone who injected drugs (all p-values  $p<0.001$ ). As previously reported, respondents who reported a sexual relationship with someone who injected drugs were significantly more likely to report homelessness and to receive Centrelink benefits (both p-values  $p<0.001$ ), compared to respondents who did not report a sexual relationship with someone who injected drugs.

**One in four (23%) respondents reported a sexual relationship with someone who injects drugs in the previous 12 months**

Finally, respondents who reported a sexual relationship with someone who injected drugs were significantly more likely to report a stimulant as the last drug injected, to report injecting daily or more frequently and to report giving their used injecting

equipment to someone else, compared to respondents who did not report a sexual relationship with someone who injected drugs (all p-values  $p < 0.001$ ). No association was observed in regard to RSS and engaging in a sexual relationship with someone who injected drugs.

### **Mental health**

One in five respondents (21%, n=593) reported living with, or being diagnosed with a mental health issue in the preceding 12 months. The proportion of respondents who reported a mental health issue in 2017 was consistent with the proportion of respondents who reported a mental health issue in 2016 (21% vs 20% respectively,  $p=0.565$ ). A minority of respondents who reported last injecting PIEDs reported a mental health issue in the previous 12 months (2%, n=8), and this was significantly lower than the proportion of respondents who reported last injecting a psychoactive drug (25%, n=579,  $p<0.001$ ). Respondents who reported last injecting PIEDs were excluded from further analysis.

As in 2016, women were significantly more likely than men to report a mental health issue in the previous 12 months in 2017 ( $p<0.001$ ). Additionally, respondents who identified as bisexual were significantly more likely to report a mental health issue compared to respondents who identified as heterosexual ( $p<0.001$ ). Conversely, respondents aged 46 years and over were significantly less likely to report a mental health issue compared to respondents under the age of 35 ( $p=0.015$ ). No associations were observed between mental health status and geographic location of NNEDC completion, main language spoken at home by respondents' parents or years since injection initiation.

Compared to respondents who did not report a mental health issue, respondents who reported a mental health issue were significantly more likely to report being arrested and imprisoned (both  $p$ -values  $p<0.001$ ) in the previous 12 months. Furthermore, respondents who reported a mental health issue were significantly more likely to have been prescribed OST, to have been revived from an overdose and to have been present when someone else was revived from an overdose, compared to respondents who did not report a mental health issue (all  $p$ -values  $p<0.001$ ).

As previously reported, respondents who reported a mental health issue were more likely to have reported homelessness, to have received Centrelink benefits and to report engaging in a sexual relationship with someone who injects drugs (all  $p$ -values  $p<0.001$ ), compared to respondents who did not report a mental health issue.

Respondents who reported a mental health issue were significantly more likely to report last injecting a stimulant ( $p=0.020$ ) and to report that they had given their used injecting equipment to someone else in the previous 12 months ( $p<0.001$ ). However, this group were significantly less likely to report RSS ( $p=0.037$ ) compared to respondents who did not report a mental health issue. No association was observed between injection frequency and mental health status.

**One in five (21%) respondents reported a mental health issue in 2017, comparable to 2016 (20%)**

## Arrest

Approximately one in five respondents (17%, n=473) reported that they had been arrested in the previous 12 months, and this was comparable to 2016 (17%, n=430,  $p=0.906$ ). Compared to respondents who reported last injecting a psychoactive drug, respondents who reported last injecting PIEDs were significantly less likely to have been arrested (20% vs 2% respectively,  $p<0.001$ ) and this group were excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, respondents under the age of 36 were significantly more likely to report being arrested, compared to respondents aged 46 years and older ( $p<0.001$ ). Respondents who identified as homosexual were significantly less likely to report being arrested ( $p<0.001$ ) compared to respondents who identified as heterosexual. No association was observed between gender, geographic location of NNEDC completion, main language spoken at home by respondents' parents, years since injection initiation and arrest in the previous 12 months.

Respondents who reported being arrested were significantly more likely to report being prescribed OST in the previous 12 months, compared to respondents who did not report being arrested ( $p<0.001$ ).

Furthermore, respondents who reported being arrested were significantly more likely to have been revived from an overdose using naloxone and to have been present when someone else was revived from an overdose, compared to respondents who did not report being arrested (both  $p$ -values  $p<0.001$ ). As previously reported, respondents who reported being arrested were significantly more likely to report homelessness, to have received Centrelink benefits, engaged in a sexual relationship with someone who injected drugs and to report a mental health issue, compared to respondents who did not report being arrested.

Respondents who reported being arrested were significantly more likely to have last injected a stimulant ( $p<0.001$ ) and to report injecting daily or more frequently compared to respondents who did not report arrest ( $p<0.001$ ). Finally, respondents who reported being arrested in the previous 12 months were significantly more likely to have reported giving their used injecting equipment to someone else in the previous 12 months ( $p<0.001$ ), however, no association was observed between RSS and arrest.

**One in five (17%) respondents reported being arrested in 2017, comparable to 2016 (17%)**

## *Imprisonment*

Approximately one in ten respondents (11%, n=311) reported that they had been imprisoned in the 12 months preceding data collection, a significant increase from the proportion who reported recent imprisonment in 2016 (9%, n=226, p=0.009). Compared to respondents who reported last injecting a psychoactive drug, respondents who reported last injecting PIEDs were significantly less likely to report being imprisoned in the previous 12 months (13% vs 3% respectively, p<0.001) and this group were excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, men and women were equally likely to report an arrest in the previous 12 months, however men were significantly more likely than women to report being imprisoned (p=0.027). Compared to respondents aged 46 years and over, respondents aged less than 36 years were significantly more likely to report an arrest in the previous 12 months and were significantly more likely to have been imprisoned (p<0.001). No association was observed between the location where the NNEDC was completed, main language spoken by respondents' parents, number of years since injection initiation and recent imprisonment.

Compared to respondents who did not report recent imprisonment, respondents who were imprisoned were significantly more likely to have been prescribed OST, to have been revived from an overdose and to have been present when someone was revived from an overdose (all p-values p<0.001). As reported previously respondents who reported being imprisoned were more likely to have received Centrelink benefits, to have engaged in a sexual relationship with someone who injected drugs, to report a mental health issue and have been homeless in the previous 12 months compared to respondents who did not report recent imprisonment (all p-values p<0.001).

Respondents who reported recent imprisonment were also significantly more likely to report injecting daily or more frequently, RSS and providing their used injecting equipment to someone else, compared to respondents who did not report imprisonment (all p-values p<0.001).

**One in ten respondents (11%) reported being imprisoned in the last 12 months in 2017, a significant increase from 2016 (9%)**

### *Opioid substitution therapy*

In 2017, one in four respondents (24%, n=681) reported that they were prescribed OST in the previous 12 months. This was comparable to the proportion reporting OST in 2016 (25%, n=644, p=0.329). Approximately two in five respondents (38%, n=474) who reported an opioid as the last drug injected were prescribed OST in the previous 12 months. A minority of respondents who reported last injecting PIEDs reported being prescribed OST (1%, n=5) and this group were excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, women were significantly more likely to report OST compared to men (p=0.004). Additionally, respondents who reported injecting for three or more years were significantly more likely to report OST than respondents with injection histories of less than three years (p<0.001). Respondents who completed the NNEDC at a metropolitan NSP were significantly more likely to be prescribed OST than respondents who completed the NNEDC at a rural/regional NSP (p<0.001). Conversely, respondents who identified as homosexual were significantly less likely to report being prescribed OST in the previous 12 months compared to respondents who identified as heterosexual (p<0.001). No associations were observed between age or main language spoken at home by parents and prescription of OST in the previous 12 months.

Respondents prescribed OST were significantly more likely to report being revived from an overdose using naloxone (p<0.001) and being present when someone else was revived from an overdose (p<0.001) compared to respondents not prescribed OST. As previously reported, respondents prescribed OST were significantly more likely to have received Centrelink benefits, to report a sexual relationship with someone who injects drugs, to report a mental health issue, to have been arrested and to have been imprisoned than respondents not prescribed OST.

Respondents who were prescribed OST were significantly more likely to report last injecting opioids compared to stimulants (p<0.001). No association was observed between frequency of injection and prescription of OST. Respondents who were prescribed OST were significantly more likely to report providing their used equipment to someone else (p<0.001); however, they were significantly less likely to report RSS (p<0.001), compared to respondents who were not prescribed OST.

**One in four (24%) respondents reported being prescribed OST in 2017, comparable with 2016 (25%)**

### ***Treatment for overdose with naloxone***

In 2017, 5% (n=131) of respondents reported that they had been revived from an overdose using naloxone, a significant increase from 3% in 2016 (p=0.028). Compared to respondents who last injected a psychoactive drug, respondents who last injected PIEDs were significantly less likely to report being revived from an overdose (6% vs <1% respectively, p<0.001) and this sub-population was excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, respondents who completed the NNEDC at a metropolitan NSP were significantly more likely to report being revived from an overdose, compared to respondents who completed the NNEDC at a rural/regional NSP (p=0.002). Respondents aged less than 36 years were also significantly more likely to report being revived from an overdose, compared to respondents aged 46 years and over (p=0.010). Conversely, respondents who identified as homosexual were significantly less likely to report being revived from an overdose, compared to those who identified as heterosexual (p=0.024). No association was observed

between age, gender, main language spoken at home by the respondent's parents, number of years since injection initiation and reports of being revived from an overdose.

Respondents who reported being revived from an overdose were significantly more likely to report being present when someone else was revived from an overdose. As previously reported, respondents who reported being revived from an overdose were significantly more likely to have experienced homelessness in the previous 12 months, to report receiving Centrelink benefits, to have engaged in a sexual activity with someone who injected drugs, to report a mental health issue, to have been prescribed OST, to have been arrested and to have been imprisoned in the previous 12 months, compared to respondents who did not report being revived from an overdose.

Respondents who reported being revived from an overdose were significantly more likely to have last injected an opioid (p=0.001), to report injecting daily or more frequently (p=0,022) and to have given their used injecting equipment to someone else (p<0.001). No association was observed between being revived from an overdose and RSS.

**5% of respondents reported being revived from an overdose using naloxone in 2017, a significant increase from 3% in 2016**

### ***Present at an overdose when naloxone was administered***

Approximately one in ten respondents (9%, n=255) reported that they were present when someone else was revived from an overdose using naloxone in the previous 12 months, and this was consistent with 2016 (8%, n=217, p=0.505). Compared to respondents who reported last injecting a psychoactive drug, respondents who reported last injecting PIEDs were significantly less likely to report being present when someone else was revived from an overdose (11% vs 0% respectively, p<0.001) and this sub-population was excluded from further analysis.

Among respondents who reported last injecting a psychoactive drug, respondents who completed the NNEDC at a metropolitan NSP were significantly more likely to have been present when someone else was revived from an overdose compared to respondents who completed the NNEDC at a rural/regional NSP (p<0.001). Women, were also more likely to report being present when someone else was revived from an overdose (p=0.001), compared to men. Compared to respondents who identified as homosexual, respondents who identified as heterosexual and bisexual were also significantly more likely to report being present when someone else was revived from an overdose (p=0.009 and p<0.001 respectively).

Respondents who reported injecting for three or more years were significantly more likely to report being present when someone else was revived from an overdose, compared to respondents who reported injecting for less than three years (p=0.033). No association was observed between age or main language spoken at home by respondents' parents and being present when someone else was revived from an overdose.

As reported previously, respondents who were present when someone else was revived from an overdose were significantly more likely to report homelessness, to have received Centrelink benefits, to have engaged in a sexual relationship with someone who injected drugs, to report a mental health issue, to have been prescribed OST, to have been arrested and to have been imprisoned (all p-values p<0.001), compared to those who did not report being present when someone was revived from an overdose.

Respondents who reported being present when someone else was revived from an overdose were significantly more likely to report last injecting an opioid (p=0.001), to report injecting daily or more frequently (p=0.004) and to have given their used injecting equipment to someone else (p<0.001).

**One in ten (9%) respondents reported being present when someone else was revived using naloxone in 2017, comparable with 2016 (8%)**

# Drug last injected

## Opioids

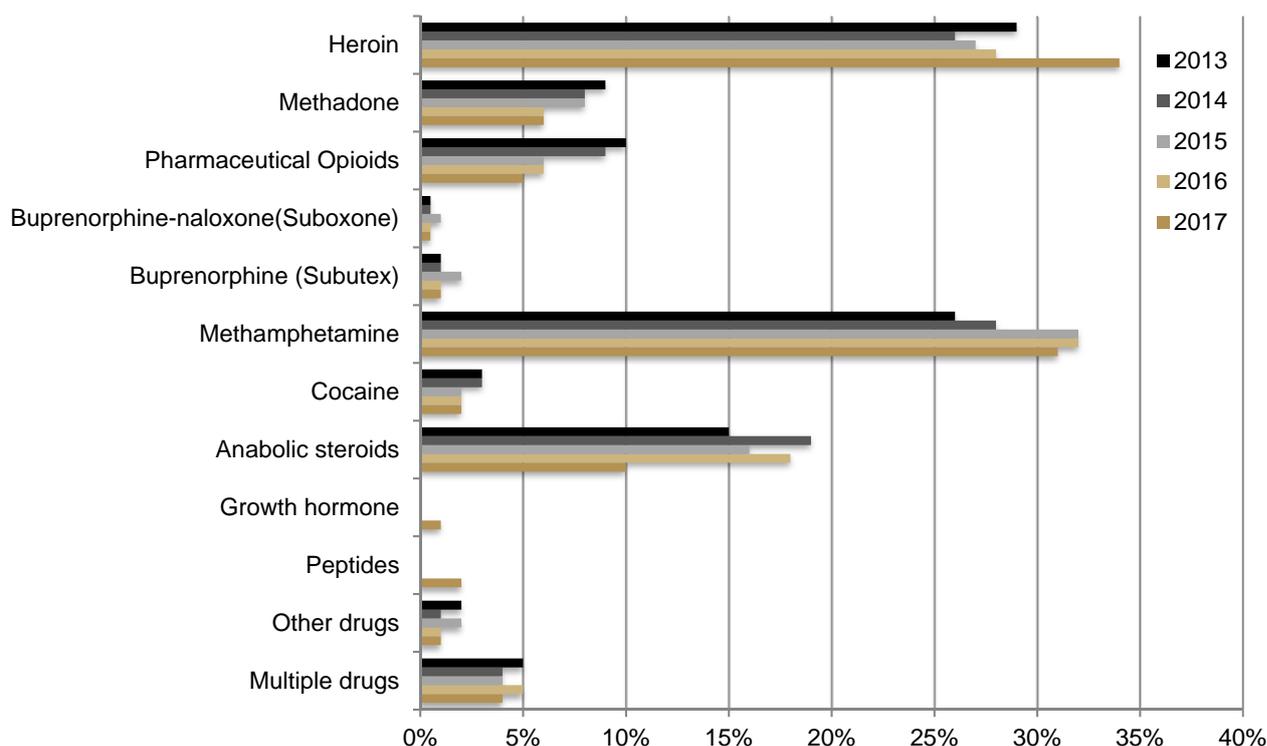
In 2017, approximately one in two respondents (47%, n=1,606) reported last injecting an opioid (heroin, opioid pharmacotherapies or pharmaceutical opioids), and as in previous years, opioids were the most common class of drug last injected. The proportion of respondents who reported last injecting an opioid remained stable over the five-year period (p-trend=0.362, Figure 5). The proportion of respondents who reported injection of an opioid was highest in Northern NSW (67%, Figure 6) and lowest in Far West (20%).

One third of respondents (34%, n=1,150) reported heroin as last drug injected, and heroin was the most commonly reported drug last injected in 2017. Methadone (6%, n=202) was the second most commonly reported opioid last injected, followed by

pharmaceutical opioids (5%, n=186). Buprenorphine and buprenorphine-naloxone were both reported by a minority of respondents (1%, n=25 and <1%, n=10 respectively). Seventeen respondents reported fentanyl as the last drug injected in 2017 (n=15 in 2016).

Over the five-year period, a significant increase in the proportion of respondents who reported last injecting heroin was observed, from 29% in 2013 to 34% in 2017 (p<0.001). Conversely, significant declines were observed in the proportion of respondents who reported last injecting pharmaceutical opioids (from 10% in 2013 to 5% in 2017, p<0.001) and methadone (from 9% in 2013 to 6% in 2017, p<0.001).

Figure 5 Last drug injected among NNEDC respondents, 2013-2017



### Stimulants

One in three (33%, n=1,122) respondents reported last injecting a stimulant in 2017. There was a significant increase in the proportion of respondents who reported last injecting a stimulant over the five-year period, from 29% in 2013 to 33% in 2017 (p=0.012). The proportion of respondents who reported injection of a stimulant was highest in Far West LHD (60%) and lowest Northern Sydney LHD (17%).

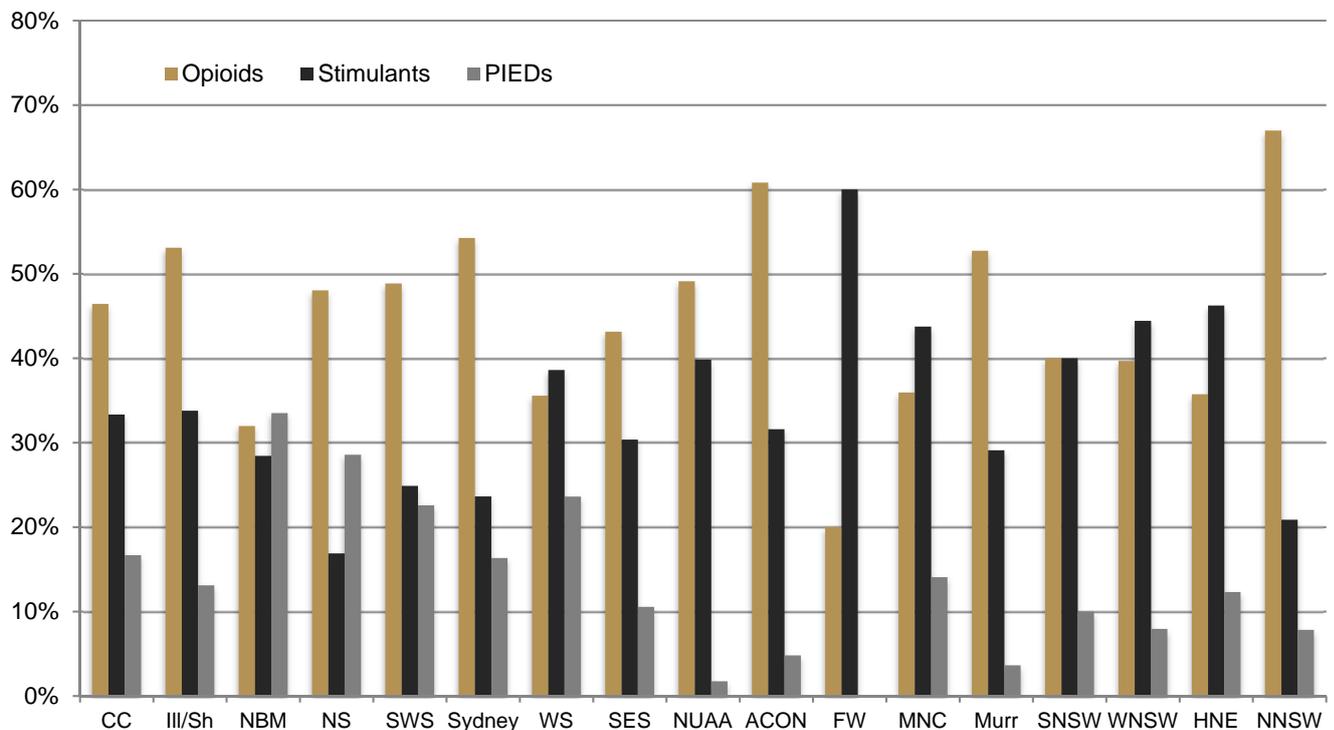
Methamphetamine was the most commonly reported stimulant last injected in 2017, reported by 31% (n=1,049) of respondents. A minority of respondents reported last injecting cocaine (2%, n=69).

Between 2013 and 2017, there was a significant increase in the proportion of respondents who reported last injecting methamphetamine, from 26% in 2013 to 31% in 2017 (p=0.001). Conversely, there was a significant decline in the proportion of respondents who reported last injecting cocaine, from 3% in 2013 to 2% in 2017 (p=0.001).

### Performance and image-enhancing drugs

In 2017, 15% (n=494) of respondents reported last injecting PIEDs. The proportion of respondents who reported PIEDs as the drug last injected remained stable over the five-year period, 2013 to 2017 (p-trend=0.255).

**Figure 6 Opioids, stimulants and PIEDs as last drug injected by LHD in 2017**



In 2017, one in ten respondents (10%, n=350) reported last injecting anabolic steroids. In 2017, the response options for the drug last injected was expanded to include growth hormones and peptides. As a result, data reported in previous years is not directly comparable to that collected in 2017. A minority of respondents reported last injecting peptides and growth hormones in 2017 (2%, n=55 and 1% n=42 respectively).

### ***Drugs last injected by gender***

In 2017 and consistent with previous years, men were significantly more likely to report injection of PIEDs compared to women (19% vs 2%,  $p<0.001$ ). A total of 18 women reported PIEDs as last drug injected in 2017, and this was comparable to previous years (range 8 in 2013 to 13 in 2014 and 2015).

Among respondents who reported last injecting a psychoactive drug in 2017, women were significantly more likely than men to report last injecting methadone (9% vs 6% respectively,  $p=0.013$ ). No other gender differences in last drug injected were observed in 2017.

### ***Drugs last injected among young people***

Among respondents aged less than 25 years, PIEDs were the most commonly reported drugs last injected, reported by 61% (n=113) of young people. The second most commonly reported class of drugs last injected among young people was opioids (18%, n=34) followed by stimulants (16%, n=29). Of the 156 young men who completed the NNEDC, PIEDs were the most commonly reported drug last injected, reported by 71% (n=107) of young men, followed by opioids (13%, n=20) and stimulants (10%, n=16). Among young women, opioids were the most commonly reported drug last injected (42%, n=13), followed by stimulants (35%, n=11) and PIEDs (16%, n=5).

Compared to respondents aged 25 years or more, respondents under the age of 25 years were significantly more likely to report PIEDs as the drug last injected (12% vs 61% respectively,  $p<0.001$ ). Among respondents who reported last injecting psychoactive drugs, there were no significant age differences in drugs last injected.

# Injecting behaviour

## *Time since first injection*

In 2017, the median number of years since first injection was 18 years (range 0-53 years) and the median age at first injection was 22 years (range 10-67). Compared to respondents who reported PIEDs as the last drug injected, respondents who reported last injecting a psychoactive drug were significantly younger at first injection (25 years vs 19 years respectively,  $p < 0.001$ ) and had significantly longer injecting histories (20 years vs 3 years respectively,  $p < 0.001$ ). The median age of men at first injection was 20 years, while the median number of years since first injection was 18 years. Similarly, among women, the median age at first injection was 19 years, and the median numbers of years since first injection was 19 years.

New initiates (injection initiated within the previous three years) accounted for 12% ( $n=322$ ) of respondents in 2017, and this was consistent with previous years ( $p\text{-trend}=0.793$ ). The majority of new initiates in 2017 were aged 25 or older (70%,  $n=226$ ) and PIEDs were the most commonly reported drug last injected among this sub-population (61%,  $n=198$ ).

## *Frequency of injection*

Approximately one in two respondents (49%,  $n=1,360$ ) reported injecting daily or more frequently in 2017. This was followed by one in four (25%,  $n=689$ ) who reported injecting more than weekly, but not on a daily basis. Respondents who reported injecting less than weekly accounted for 17% ( $n=481$ ) of all respondents, and 8% of respondents reported no injection in the month prior to data collection. Between 2013 and 2017, the frequency of injection of NNEDC respondents was stable, except among respondents who reported no injection in the month prior to data collection, where a decline was observed from 11% in 2013 to 8% in 2017 ( $p\text{-trend}=0.001$ ).

As in previous years, compared to men, women were significantly more likely to report injecting daily or more frequently (47% vs 55% respectively,  $p < 0.001$ ) and respondents who reported last injecting an opioid were significantly more likely to report daily injection compared to respondents who reported last injecting a stimulant (62% vs 45% respectively,  $p < 0.001$ ).

**Approximately half of NSP attendees injected daily or more frequently in 2017, consistent with previous years**

# Receptive syringe sharing

In 2017, a total of 2,530 respondents reported at least one injection episode in the month prior to data collection. Of these, one in five (20%, n=500) reported at least one occasion of receptive syringe sharing (RSS) in the previous month.

Among respondents who reported RSS in 2017, the majority (74%, n=401) reported engaging in RSS more than once in the previous month, including 34% (n=186) who engaged in RSS on five or more occasions. Over the five-year period there were no significant changes in the frequency of RSS reported (Figure 7).

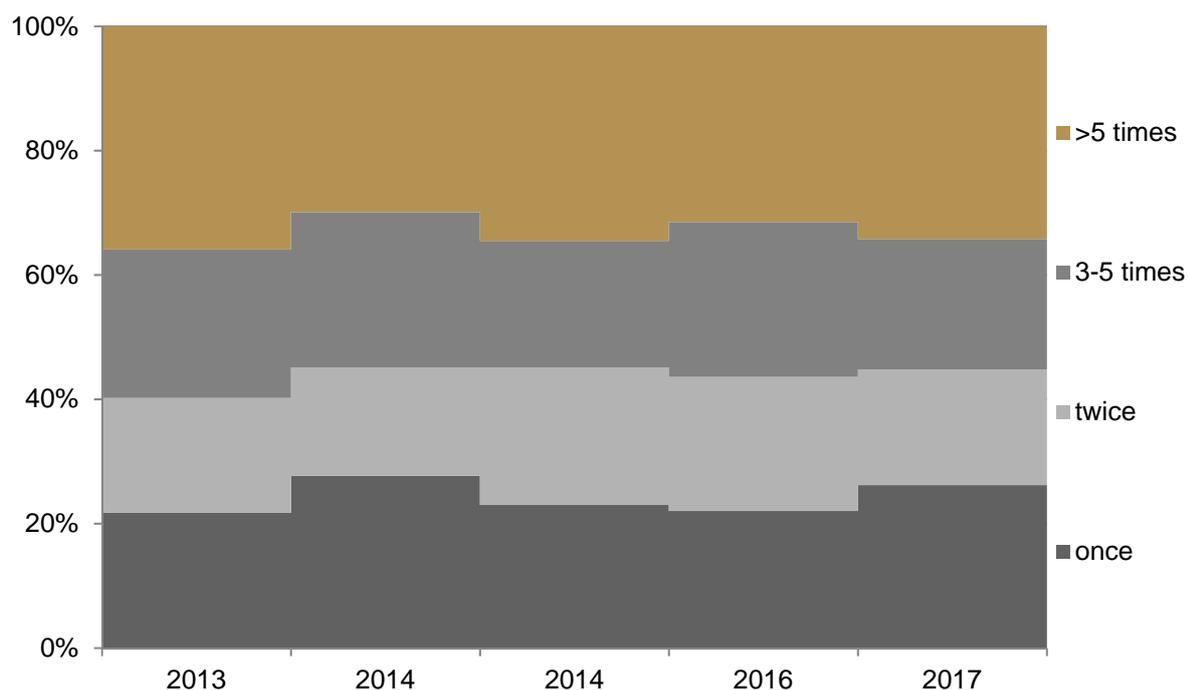
## Factors associated with RSS

In 2017, several factors were associated with RSS. As in previous years, respondents who identified as bisexual were significantly more likely to report RSS compared to their heterosexual

counterparts (29% vs 17% respectively,  $p<0.001$ ). Similarly, respondents who reported injecting daily or more frequently, were more likely to report RSS compared to respondents who reported injecting less than daily (23% vs 16% respectively,  $p<0.001$ ).

Respondents who reported imprisonment in the previous 12 months were also significantly more likely to report RSS compared with respondents who did not report imprisonment (27% vs 19% respectively,  $p=0.001$ , Figure 8). While this finding is consistent with previous studies (Wood et. al. 2005), the responses include different time periods (imprisonment in the previous 12 months and RSS in the previous month) and we are unable to determine whether occasion/s of RSS occurred during imprisonment.

Figure 7 Frequency of RSS among NNEDC respondents who reported RSS (2013-2017)



In 2017, respondents who experienced homelessness in the previous 12 months were significantly more likely to report RSS compared to respondents who did not experience homelessness (27% vs 18% respectively,  $p < 0.001$ ). This finding was also observed in the 2016 NNEDC, and is consistent with findings reported from Topp et. al. (2013). Higher RSS among respondents who reported homelessness may be due to difficulties managing and storing sufficient supplies of injecting equipment during periods of housing instability.

For the first time in 2017, respondents were also asked about the provision of used injecting equipment to another person. Although a minority of respondents reported providing used injecting equipment to someone else (8%,  $n=219$ ), respondents who reported this were significantly more likely to report RSS compared to respondents who did not provide used equipment to others (37% vs 18% respectively,  $p < 0.001$ ). This finding suggests a relationship between RSS and the provision of used injecting equipment.

Conversely, respondents who reported a mental health issue in the previous 12 months were significantly less likely to report RSS compared to those who did not (17% vs 21% respectively,  $p = 0.040$ ).

People who received Centrelink benefits in the previous 12 months were significantly less likely to report RSS compared to those who did not report receiving Centrelink benefits (18% vs 23% respectively,  $p = 0.002$ ). Finally, respondents who were prescribed OST in the previous 12 months were significantly less likely to report RSS compared to those who were not prescribed OST (14% vs 22% respectively,  $p < 0.001$ ).

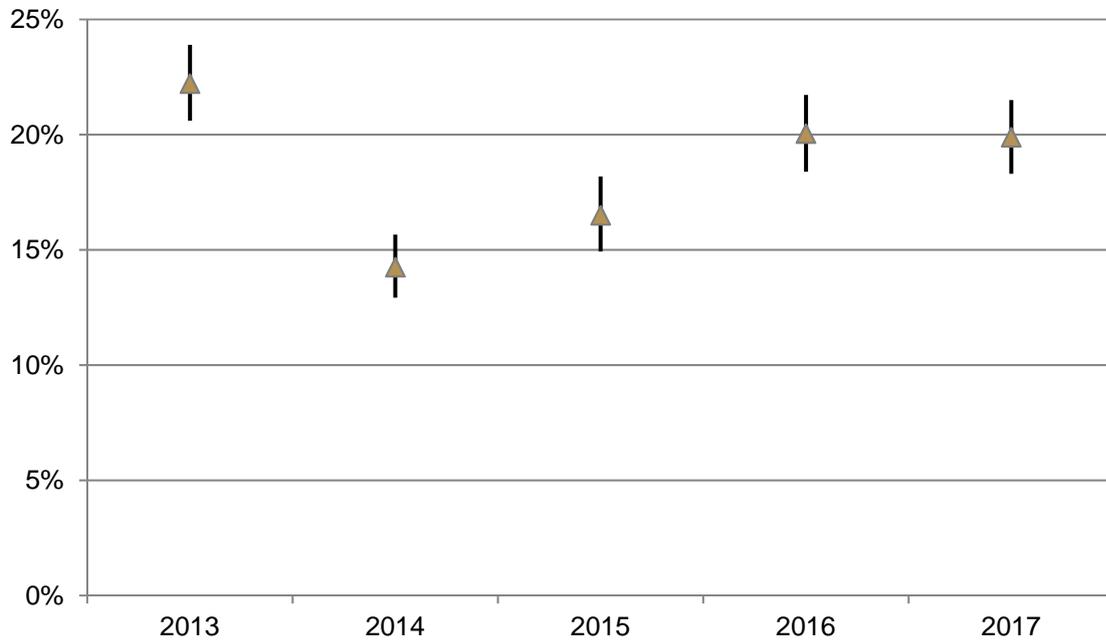
No associations were observed between last drugs injected and RSS. Among respondents who reported last injecting a psychoactive drug, 20% reported RSS. This was comparable to the proportion of respondents who last injected PIEDs and reported RSS (18%,  $p = 0.401$ ).

### **Temporal trends in RSS**

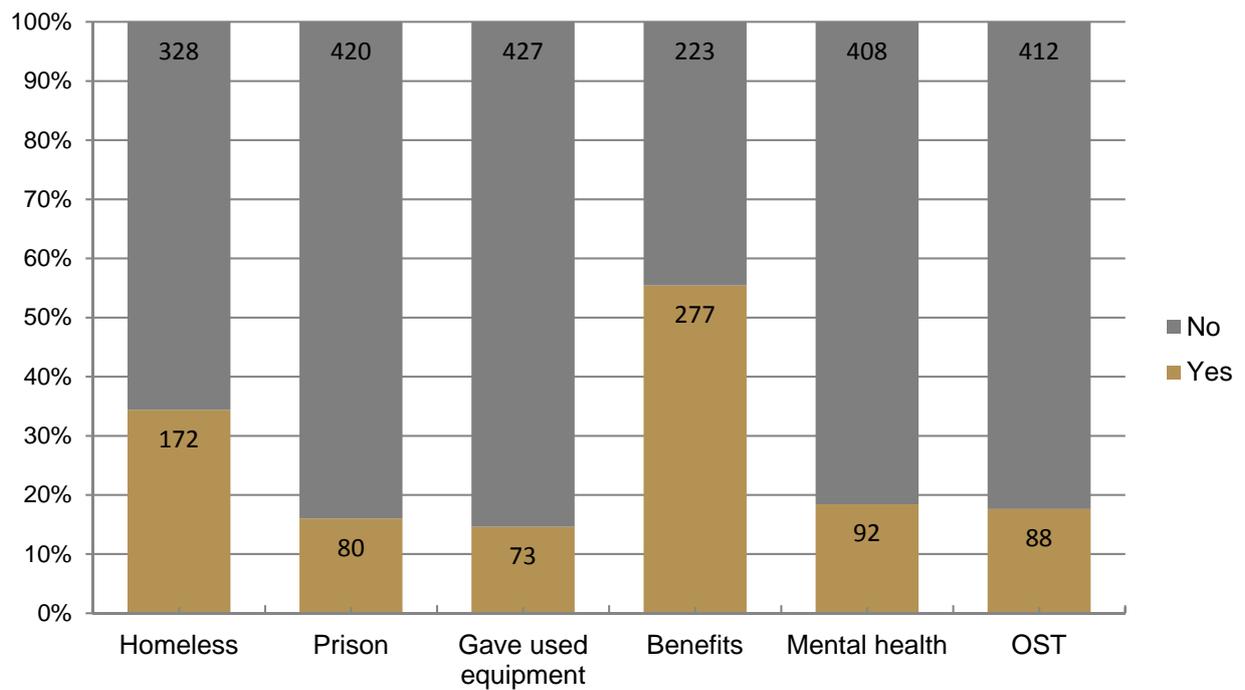
Over the five-year period, 2013 to 2017, the proportion of respondents who reported RSS remained stable ( $p\text{-trend} = 0.665$ , Figure 8).

Bisexual identity and daily or more frequent injection were associated with RSS in all years. While the proportion of respondents who reported injecting daily or more frequently was stable over the five-year period ( $p = 0.773$ ), the proportion of respondents who identified as bisexual increased significantly from 7% in 2014 (when this data item was first collected) to 9% in 2017 ( $p\text{-trend} = 0.019$ ).

**Figure 8** Proportion of NNEDC respondents who reported RSS (2013-2017)



**Figure 9** Characteristics of NNEDC respondents (n=500) who reported RSS in 2017



### ***Provision of used injecting equipment to others***

In 2017 the NNEDC included an additional question designed to assess the provision of used injecting equipment to others among NSP attendees. A minority of respondents (8%, n=219) reported that they had given their used injecting equipment to someone else. Compared to respondents who reported last injecting a psychoactive drug, respondents who reported last injecting PIEDs were significantly less likely to report giving their used injecting equipment to another person (9% vs 2% respectively,  $p<0.001$ ), and this group were excluded from further analysis.

Among respondents who last injected psychoactive drugs, women were significantly more likely than men to report giving their used injecting equipment to someone else ( $p<0.001$ ). Compared to respondents who were aged 46 years and older, respondents under the age of 36 were significantly more likely to report giving their used equipment to someone else ( $p<0.001$ ), as were respondents aged between 36 and 45 years ( $p=0.013$ ). Compared to respondents who identified as heterosexual, respondents who identified as bisexual were significantly more likely to report providing their used injecting equipment to another person ( $p=0.001$ ). No associations were observed between geographic location of NNEDC completion, main language spoken

at home by parents, years since injection initiation and provision of used injecting equipment to another person.

As reported previously, provision of used injecting equipment was significantly more likely to be reported by respondents who reported homelessness, received Centrelink benefits, engaged in a sexual relationship with a person who injected drugs or had been arrested or imprisoned (all  $p$ -values  $p<0.001$ ). Furthermore, provision of used injecting equipment was significantly more likely to be reported by respondents who reported a mental health issue, were prescribed OST, were revived from an overdose or were present when someone else was revived from an overdose (all  $p$ -values  $p<0.001$ ).

No association was observed between the drug last injected and the provision of used injecting equipment, however respondents who provided their used equipment to someone else were significantly more likely to report injecting daily or more frequently, compared to respondents who did not provide their used equipment to others ( $p<0.001$ ). As reported previously, respondents who provided their used equipment to others were significantly more likely to report RSS ( $p<0.001$ ) than respondents who did not provide used injecting equipment to others.

**8% of respondents reported providing used injecting equipment to someone else in the previous 12 months**

# New South Wales

**Table 1: Demographics characteristics, by year**

	2013	2014	2015	2016	2017	5 year p-trend
<b>Number of sites</b>	51	55	49	52	50	--
<b>Number surveyed (OOS)</b>	5,772 (%)	6,257 (%)	5,439 (%)	5,363 (%)	5,378 (%)	--
Completed survey	3,101 (54)	3,029 (48)	2,453 (45)	2,584 (48)	3,607 (67)	<0.001
Previously completed (repeat NSP attendee)	1,433 (25)	1,258 (20)	955 (18)	1,004 (19)	1,355 (25)	0.803
Declined to participate	1,238 (21)	1,970 (31)	2,031 (37)	1,775 (33)	416 (8)	<0.001
<b>N° surveyed (individuals)</b>	<b>2,938</b>	<b>3,029</b>	<b>2,453</b>	<b>2,584</b>	<b>3,607</b>	
<b>Gender</b>						
Male	2069 (71)	2,193 (74)	1,744 (73)	1,851 (73)	2,666 (74)	0.794
Female	811 (28)	733 (25)	641 (27)	673 (27)	882 (24)	0.112
Other	16 (<1)	30 (1)	11 (<1)	23 (1)	19 (1)	0.614
Not reported	42 --	73 --	57 --	37 --	40 --	--
<b>Sexual identity*</b>						
Heterosexual	-- --	2,495 (87)	1,955 (86)	2,091 (85)	2,077 (83)	0.213
Bisexual	-- --	193 (7)	178 (8)	202 (8)	214 (9)	0.019
Homosexual	-- --	184 (6)	144 (6)	179 (7)	219 (9)	0.001
Not reported	-- --	157 --	176 --	112 --	1,097 --	--
<b>Age (years)</b>						
Median age (range)	38 (17-77)	38 (15-72)	39 (14-85)	39 (18-73)	40 (18-74)	--
Less than 25 years	241 (9)	295 (10)	201 (9)	200 (8)	196 (6)	<0.001
25 years or more	2,594 (92)	2,656 (90)	2,078 (91)	2,276 (91)	3,234 (94)	0.295
Not reported	103 --	78 --	174 --	108 --	177 --	--
<b>Aboriginal and/or Torres Strait Islander</b>						
Yes, Aboriginal	402 (14)	449 (15)	389 (17)	436 (17)	645 (19)	<0.001
Yes, Torres Strait Islander	14 (<1)	14 (<1)	8 (<1)	13 (1)	23 (<1)	0.290
Yes, both Aboriginal and Torres Strait Islander	15 (1)	20 (1)	17 (1)	23 (1)	24 (1)	0.281
No	2,433 (85)	2,458 (84)	1,920 (83)	2,085 (82)	2,732 (80)	0.076
Not reported	74 --	88 --	119 --	27 --	183 --	--
<b>Main language spoken at home by parents</b>						
English	2,729 (95)	2,804 (95)	2,198 (94)	2,411 (94)	2,621 (94)	0.591
Other	137 (5)	147 (5)	146 (6)	154 (6)	180 (6)	0.003
Not reported	72 --	78 --	109 --	19 --	806 --	--

NB: Percent excludes not reported

\* Data not collected in all years

**Table 2: Last drug injected and injecting behaviours, by year**

	2013	2014	2015	2016	2017	5 year p-trend
<b>Number surveyed (individuals)</b>	<b>2,938 (%)</b>	<b>3,029 (%)</b>	<b>2,453 (%)</b>	<b>2,584 (%)</b>	<b>3,607 (%)</b>	--
<b>Last drug injected</b>						
<b>Opioids</b>	<b>1,390 (49)</b>	<b>1,321 (45)</b>	<b>1,030 (44)</b>	<b>1,101 (43)</b>	<b>1,606 (47)</b>	0.362
Heroin	810 (29)	761 (26)	630 (27)	708 (28)	1,150 (34)	<0.001
Pharmaceutical opioids	275 (10)	259 (9)	151 (6)	162 (6)	186 (5)	<0.001
Methadone	254 (9)	240 (8)	182 (8)	162 (6)	202 (6)	<0.001
Buprenorphine (Subutex)	38 (1)	26 (1)	35 (2)	37 (1)	25 (1)	0.209
Buprenorphine-naloxone (Suboxone)	12 (<1)	11 (<1)	14 (1)	12 (<1)	10 (<1)	0.588
Other opioids/more than 1 opioid	1 (<1)	24 (1)	18 (1)	20 (1)	33 (1)	<0.001
<b>Stimulants</b>	<b>836 (29)</b>	<b>899 (31)</b>	<b>803 (34)</b>	<b>852 (34)</b>	<b>1,122 (33)</b>	<b>0.012</b>
Methamphetamine	746 (26)	817 (28)	748 (32)	803 (32)	1,049 (31)	<b>0.001</b>
Cocaine	87 (3)	76 (3)	51 (2)	40 (2)	69 (2)	<b>0.001</b>
Other stimulants/ more than 1 stimulant	3 (<1)	6 (<1)	4 (<1)	11 (<1)	4 (<1)	0.479
<b>Performance image-enhancing drugs</b>	<b>427 (15)</b>	<b>547 (19)</b>	<b>382 (16)</b>	<b>449 (18)</b>	<b>494 (15)</b>	0.255
Anabolic steroids	423 (15)	544 (19)	381 (16)	448 (18)	350 (10)	<0.001
Growth hormone*	-- --	-- --	-- --	-- --	42 (1)	--
Peptides*	-- --	-- --	-- --	-- --	55 (2)	--
Others PIEDs/ more than 1 PIED	4 (<1)	3 (<1)	1 (<1)	1 (<1)	47 (1)	<0.001
<b>Other drugs</b>	<b>50 (2)</b>	<b>34 (1)</b>	<b>36 (2)</b>	<b>26 (1)</b>	<b>39 (1)</b>	<b>0.048</b>
<b>More than one category</b>	<b>134 (5)</b>	<b>105 (4)</b>	<b>82 (4)</b>	<b>115 (5)</b>	<b>130 (4)</b>	0.432
<b>Not reported</b>	<b>101 --</b>	<b>123 --</b>	<b>120 --</b>	<b>41 --</b>	<b>216 --</b>	--
<b>Frequency of injection last month</b>						
Not last month	311 (11)	286 (10)	210 (9)	228 (9)	223 (8)	<b>0.001</b>
Less than weekly	449 (16)	487 (17)	362 (16)	475 (19)	481 (17)	0.064
More than weekly, not daily	677 (24)	757 (26)	556 (24)	616 (24)	689 (25)	0.932
Daily or more	1,382 (49)	1,361 (47)	1,155 (51)	1,201 (48)	1,360 (49)	0.773
Not reported	119 --	138 --	170 --	64 --	854 --	--
<b>Age at first injection</b>						
Median (range)	19 (10-60)	20 (10-65)	20 (10-75)	20 (10-59)	22 (10-67)	--
Not reported	209 --	169 --	191 --	147 --	845 --	--
<b>Years since first injection</b>						
Median (range)	16 (0-59)	16 (0-53)	17 (0-67)	18 (0-56)	18 (0-53)	--
Less than 3 years since first injection	296 (11)	382 (14)	267 (12)	280 (12)	322 (12)	0.793
3 or more years since first injection	2,372 (89)	2,415 (86)	1,930 (88)	2,087 (88)	2,420 (88)	0.940
Not reported	270 --	232 --	256 --	217 --	865 --	--

NB: Percent excludes not reported

\* Data not collected in all years

**Table 3: Receptive syringe sharing and social, legal and health issues in the previous 12 months**

	2013	2014	2015	2016	2017	5 year p-trend
<b>Number who injected last month</b>	<b>2,508 (%)</b>	<b>2,605 (%)</b>	<b>2,073 (%)</b>	<b>2,292 (%)</b>	<b>2,530 (%)</b>	--
<b>Receptive syringe sharing last month (RSS)<sup>^</sup></b>						
No	1,945 (78)	2,212 (86)	1,720 (84)	1,814 (80)	2,014 (80)	0.867
Yes	554 (22)	366 (14)	339 (16)	454 (20)	500 (20)	0.665
Not reported	9 --	27 --	14 --	24 --	16 --	--
<b>Ocassions of RSS last month among respondents who reported RSS</b>						
Once	121 (22)	102 (28)	78 (23)	100 (22)	131 (26)	0.556
Twice	103 (19)	63 (17)	75 (22)	98 (22)	93 (19)	0.580
3-5 times	131 (24)	91 (25)	69 (20)	113 (25)	105 (21)	0.501
More than 5 times	199 (36)	110 (30)	117 (35)	143 (32)	171 (34)	0.732
<b>Number surveyed (individuals)<sup>#</sup></b>						
	-- --	-- --	-- --	<b>2,557 (%)</b>	<b>2,833 (%)</b>	--
<b>Distributive syringe sharing (DSS)</b>						
Gave used injecting equipment to someone else in previous 12 months*	-- --	-- --	-- --	-- --	219 (8)	--
<b>Psychosocial factors in previous 12 months</b>						
Homelessness*	-- --	-- --	-- --	627 (25)	695 (25)	0.992
Received centrelink benefits*	-- --	-- --	-- --	1,440 (56)	1,677 (59)	<b>0.033</b>
In a sexual relationship with someone who injects drugs*	-- --	-- --	-- --	-- --	652 (23)	--
Living with, or diagnosed with, a mental health issue*	-- --	-- --	-- --	519 (20)	593 (21)	0.565
<b>Legal factors in previous 12 months</b>						
Arrested*	-- --	-- --	-- --	430 (17)	473 (17)	0.906
Imprisoned*	-- --	-- --	-- --	226 (9)	311 (11)	<b>0.009</b>
<b>OST and overdose in previous 12 months</b>						
Prescribed OST*	-- --	-- --	-- --	644 (25)	681 (24)	0.329
Revived from an overdose with naloxone/narcan*	-- --	-- --	-- --	88 (3)	131 (5)	<b>0.028</b>
Present when someone else was revived with narcan/naloxone*	-- --	-- --	-- --	217 (8)	255 (9)	0.505

NB: Percent excludes not reported

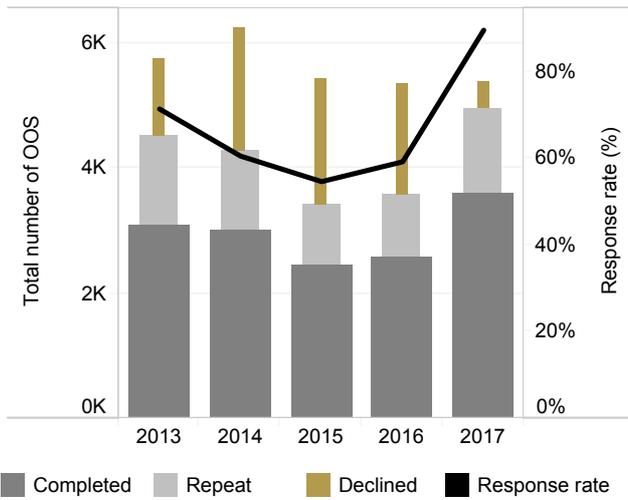
<sup>^</sup> Among respondents who injected last month and excluding RSS not reported

<sup>#</sup> Excludes respondents who did not complete entire survey

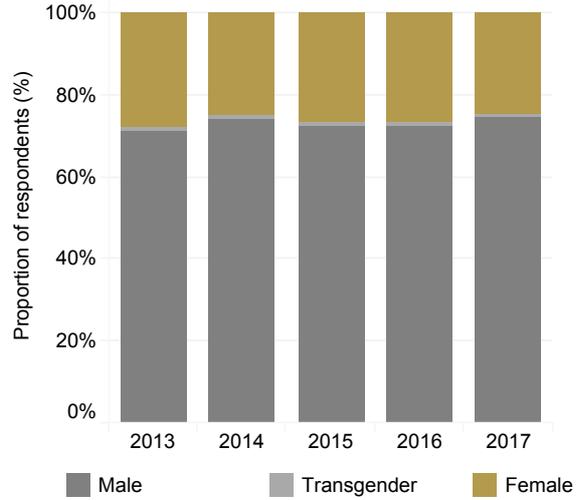
\* Data not collected in all years

# Graphs: New South Wales

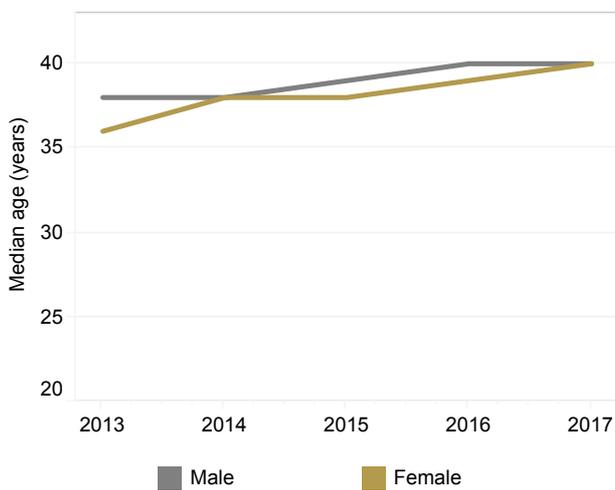
### Occasions of service, 2013-2017



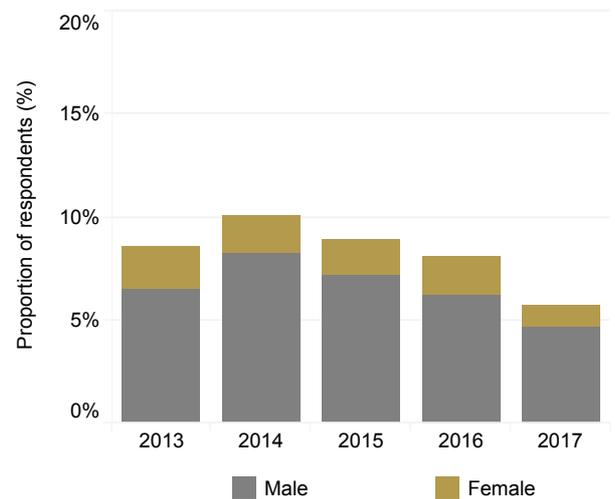
### Gender distribution, 2013-2017



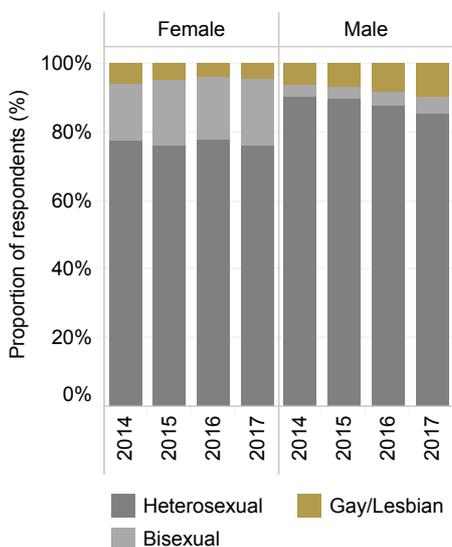
### Median age of respondents by gender, 2013-2017



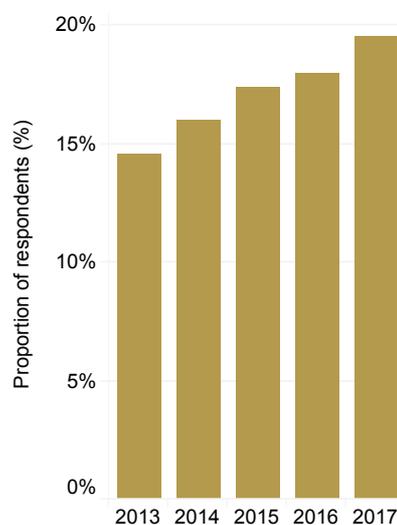
### Proportion of respondents under 25 years, 2013-2017



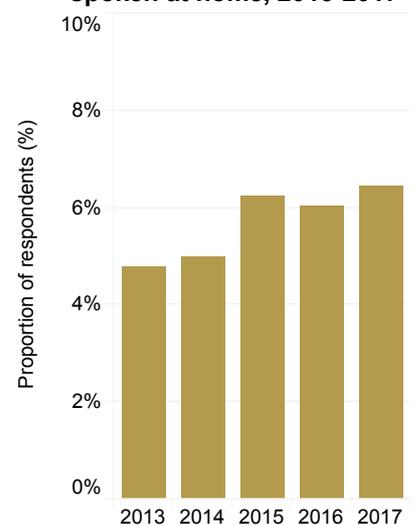
### Sexual identity by gender, 2014-2017



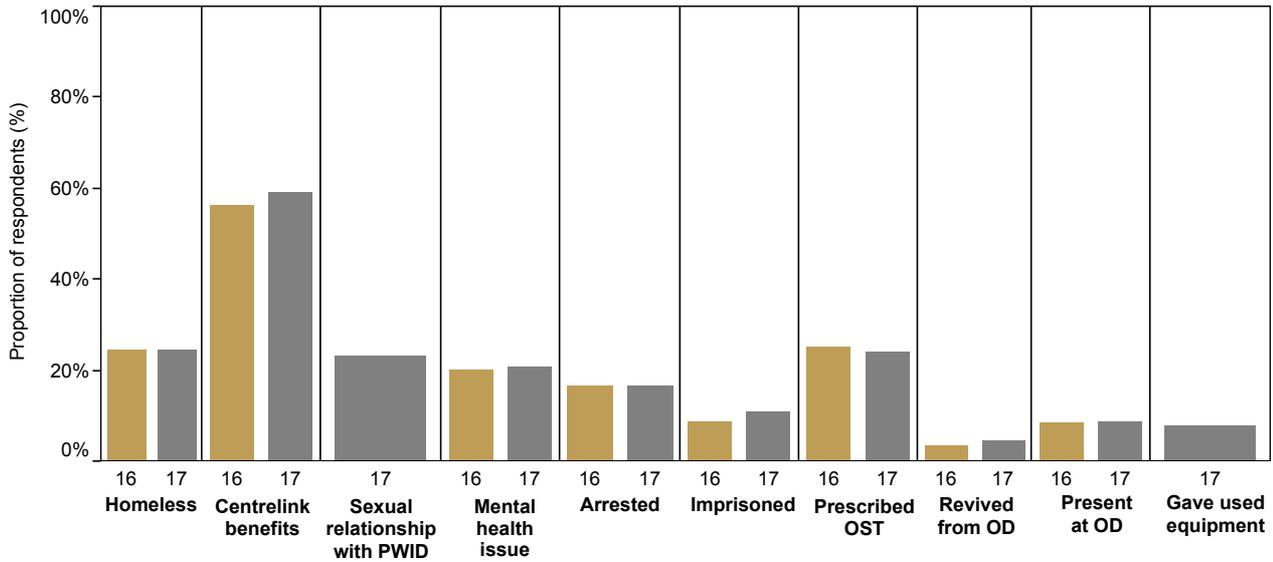
### Indigenous background, 2013-2017



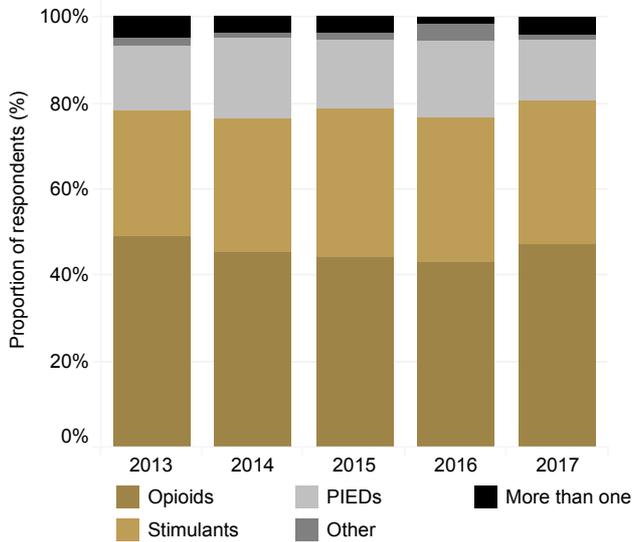
### Language other than English spoken at home, 2013-2017



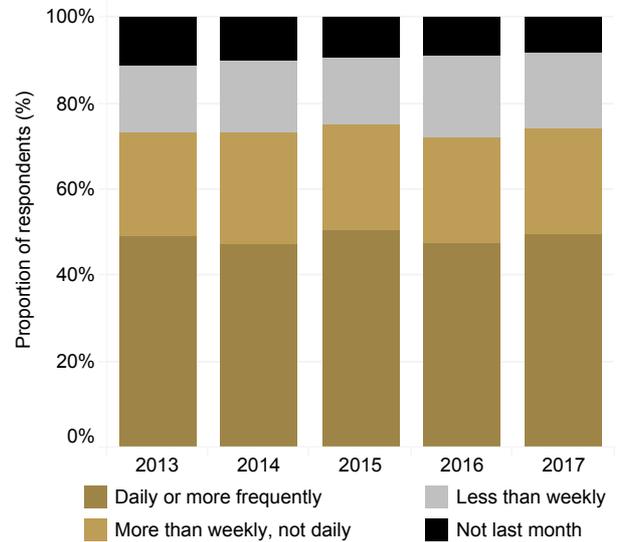
## Social, legal and health characteristics in the previous 12 months, 2016 & 2017



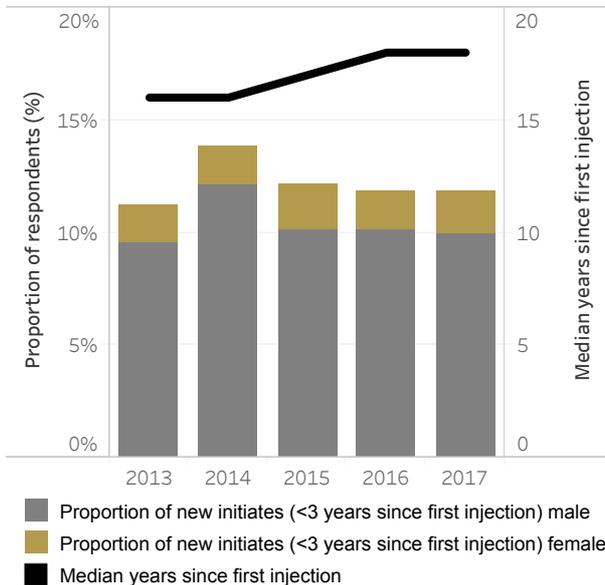
## Class of drug last injected, 2013-2017



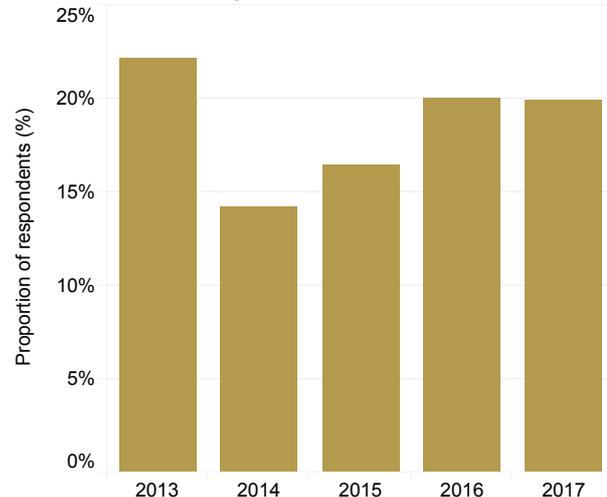
## Frequency of injection, 2013-2017



## Years since first injection, 2013-2017



## Proportion of respondents who reported RSS, 2013-2017



# References

Topp, L., Iversen, J., Baldry, E., Maher, L., & Collaboration of Australian NSPs. (2013). Housing instability among people who inject drugs: results from the Australian needle and syringe program survey. *Journal of Urban Health*, 90(4), 699-716.

White B, Day C & Maher L (2007). Self-reported risk behaviour among injecting drug users: self-versus assisted questionnaire completion. *AIDS Care* 19(3): 441-447.

Wood E, Li K, Small W, Montaner M, Schechter & Kerr T. (2005). Recent incarceration independently associated with syringe sharing by injection drug users. *Public health reports* 120(2): 150-156.

# Appendix A: Study methodology

## **Data collection**

The NNEDC was conducted over a two-week period in late February/early March over the past five years, 2013 to 2017. A minority of low volume NSPs in rural/regional areas extended the data collection period for an additional week to increase sample size and facilitate data analysis. All primary and some secondary NSP services in NSW were involved in the collection of demographic and drug use information from all NSP attendees. Appendix B provides detail on participating services by year.

The data collection instrument was one page, designed to be self-completed (see Appendix C). To provide an estimate of the proportion of the broader NSP population, NSP staff submitted a blank NNEDC form on each occasion of service when a client elected not to participate in the NNEDC. NSP attendees who had previously contributed to the data collection (repeat attendees) were recorded as an OOS, but were excluded from re-contributing to the data collection to avoid skewing the data collection towards frequent NSP attendees.

To assess the representativeness of the data collected in 2017, all clients were encouraged to complete a minimum of four questions of the data collection instrument (age, gender, Indigenous status and drug last injected).

## **Data analysis**

The data presented in this report were electronically scanned and validated. Stata, Version 12 (Stata Corporation, College Station TX) was used to analyse data. Percentage values exclude the proportion of respondents who didn't answer the question and may not add to 100 because of rounding. The methodology for presenting RSS was changed in 2015 to exclude respondents who did not inject in the previous month.

Ethical approvals for the data collection were obtained from Sydney LHD Ethics Review Committee (RPAH Zone) and the Aboriginal Health and Medical Research Council (AH&MRC). Site Specific Assessment Forms were completed for all Local Health Districts.

## **Limitations**

In some LHDs, NSP services are predominantly or entirely delivered through secondary NSPs and some LHDs distribute a larger proportion of injecting equipment via vending/dispensing machines. The opportunity for staff to engage NSP attendees to participate in the data collection is impacted by these and other factors in some services and LHDs. The number of NSP attendees who participated in the NNEDC is not an indicator of needle and syringe distribution or NSP coverage. It should also be noted that changes to staffing levels and changes to services delivery may impact on NNEDC participation.

# Appendix B: participating NSPs by LHD

<b>Metropolitan</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Central Coast LHD					
Gosford Needle and Syringe Program	✓	✓	✓	✓	✓
Long Jetty Needle and Syringe Program	✓	✓	✓	✓	✓
Woy Woy Needle and Syringe Program	✓	✓	✓	✓	✓
Wyong Hospital Needle and Syringe Program	✓			✓	✓
Illawarra Shoalhaven LHD					
First Step: Port Kembla	✓	✓	✓	✓	✓
First Step: Wollongong	✓	✓	✓	✓	✓
Nepean Blue Mountains LHD					
Barnardos Cranebrook				✓	✓
South Court Primary Care	✓	✓	✓	✓	✓
Northern Sydney					
Manly RUSH	✓	✓	✓	✓	✓
RUSH Royal North Shore Hospital	✓	✓	✓	✓	✓
South Eastern Sydney LHD					
ACON Sydney	✓	✓	✓	✓	✓
Albion Centre	✓	✓	✓	✓	
Clinic 180	✓	✓	✓	✓	✓
Haymarket Foundation	✓	✓	✓	✓	
Kirketon Road Centre	✓	✓	✓	✓	✓
Kirketon Road Centre Outreach Bus	✓	✓		✓	✓
KRC South	✓	✓	✓	✓	✓
Medically Supervised Injecting Centre				✓	✓
New South Wales Users and AIDS Association (NUAA)	✓	✓	✓	✓	✓
St George NSP: Central Access Service	✓	✓	✓		
South Western Sydney					
Bankstown Harm Minimisation Program	✓	✓	✓	✓	✓
Liverpool Harm Minimisation Program	✓	✓	✓	✓	✓
Sydney LHD					
Canterbury Harm Minimisation Program	✓	✓	✓	✓	✓
Marrickville Harm Minimisation Program	✓	✓	✓	✓	✓
Redfern Harm Minimisation Program	✓	✓	✓	✓	✓
The Gender Centre		✓			
Western Sydney LHD					
Blacktown Needle and Syringe Program	✓	✓	✓	✓	✓
Kelly Close Needle and Syringe Program	✓	✓	✓	✓	✓
Parramatta Needle and Syringe Program	✓	✓	✓	✓	✓

<b>Rural and Regional</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Far West					
Broken Hill Sexual Health Service	✓	✓	✓	✓	✓
Dareton Primary Health Centre		✓	✓	✓	
Hunter New England					
ACON Hunter	✓	✓	✓	✓	✓
Coledale Community Centre		✓	✓	✓	✓
Eastlakes Community Health Centre		✓	✓	✓	✓
Maitland Neighbourhood Centre	✓	✓	✓	✓	✓
Muswellbrook Neighbourhood Centre		✓			
Newcastle Community Health Centre	✓	✓	✓	✓	✓
Raymond Terrace Neighbourhood Centre		✓			
Cessnock Drug and Alcohol Unit	✓				
Jesmond Neighbourhood Centre	✓				
Tamworth Sexual Health Clinic	✓				
Mid North Coast LHD					
Coffs Harbour Needle and Syringe Program	✓	✓	✓	✓	✓
Grafton Needle and Syringe Program	✓	✓	✓		✓
Kempsey Needle and Syringe Program					✓
Port Macquarie Population Health	✓	✓	✓	✓	
Murrumbidgee					
Albury Community Health Centre	✓	✓	✓	✓	✓
Barnham Hospital				✓	
Cootamundra Community Health Centre			✓		
Cootamundra Hospital			✓		
Temora & District Hospital		✓			
Griffith Needle and Syringe Program					✓
Wagga Wagga Community Health Centre	✓	✓		✓	✓
Northern NSW					
ACON Lismore	✓	✓	✓	✓	✓
Ballina Needle and Syringe Program	✓	✓	✓	✓	✓
Byron Bay Needle and Syringe Program	✓	✓	✓	✓	✓
Lismore Needle and Syringe Program	✓	✓	✓	✓	✓
Lismore Sexual Health Service (SHAIDS)	✓	✓	✓	✓	✓
Murwillumbah Needle and Syringe Program	✓	✓			
Nimbin Hospital Needle and Syringe Program	✓	✓	✓	✓	✓
Tweed Needle and Syringe Program	✓	✓	✓	✓	✓
Southern NSW					
Goulburn Community Health Centre		✓	✓		
Batemans Bay Community Health Centre				✓	✓
Moruya Community Health Centre				✓	✓
Narooma Community Health Centre				✓	✓
Queanbeyan Community Health Service	✓				
Western NSW					
Bathurst Sexual Health Clinic		✓	✓	✓	✓
Bourke Primary Centre		✓			
Dubbo Sexual Health Centre	✓	✓	✓	✓	✓
Dubbo Community Health Centre		✓	✓		
Kelso Community Centre (Orange SHS Outreach)	✓				
Orange Sexual Health Clinic	✓	✓	✓	✓	✓

# Appendix C: Data collection instrument

## NSW NSP ENHANCED DATA COLLECTION 2017

Please MARK LIKE THIS:

To be completed for every client attending the NSP during the designated data collection period.

If the client has already completed the data collection at this or another NSP, mark this circle:  Already completed

If questionnaire was completed with the assistance of staff, mark this circle:  Assisted

Today's date:   /   /2017

1. Are you?

- Male
- Female
- Other
- Prefer not to answer

2. How old are you?

3. Are you?

- Aboriginal
- Torres Strait Islander
- Both Aboriginal & Torres Strait Islander
- Neither

4. What was the last drug you injected?

*Mark only one. If more than one drug was injected at your last injection, mark "other" and specify the drugs injected.*

- Heroin
- Morphine
- Oxycodone
- Methadone
- Subutex/Buprenorphine
- Suboxone
- Methamphetamine (Speed, ice, base)
- Cocaine
- Anabolic steroids
- Growth hormone
- Peptides
- Other, please specify \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. How old were you when you first injected drugs?

6. How often did you inject in the last month?

- More than 3 times most days
- 2 to 3 times most days
- Once a day
- More than weekly, not daily
- Less than weekly (on 1 to 5 days)
- Did not inject in the last month *Go to Q8*

7. How many times in the last month have you used a needle/syringe after someone else had already used it?

- None
- Once
- Twice
- 3-5 times
- More than 5 times

8. At any time in the last 12 months were you?

*Mark all that apply*

- Homeless
- On Centrelink benefit
- Living with or diagnosed with a mental health issue
- Arrested
- In prison
- Prescribed methadone or bupe
- Revived from an overdose with naloxone/Narcan
- Present when someone else was revived from an overdose with naloxone/Narcan
- In a sexual relationship with someone who injects drugs
- In a situation where you gave your used injecting equipment to someone else

9. Do you identify as?

- Heterosexual
- Bisexual
- Gay/Lesbian
- Prefer not to answer

10. What was the main language spoken at home by your parents?

- English
- Other, please specify \_\_\_\_\_

Thanks for taking the time to answer these questions.

This information is being collected by the Kirby Institute for the NSW Ministry of Health.  
If you have any questions or concerns please contact Professor Lisa Maher, Kirby Institute on phone (02) 9385 0900.