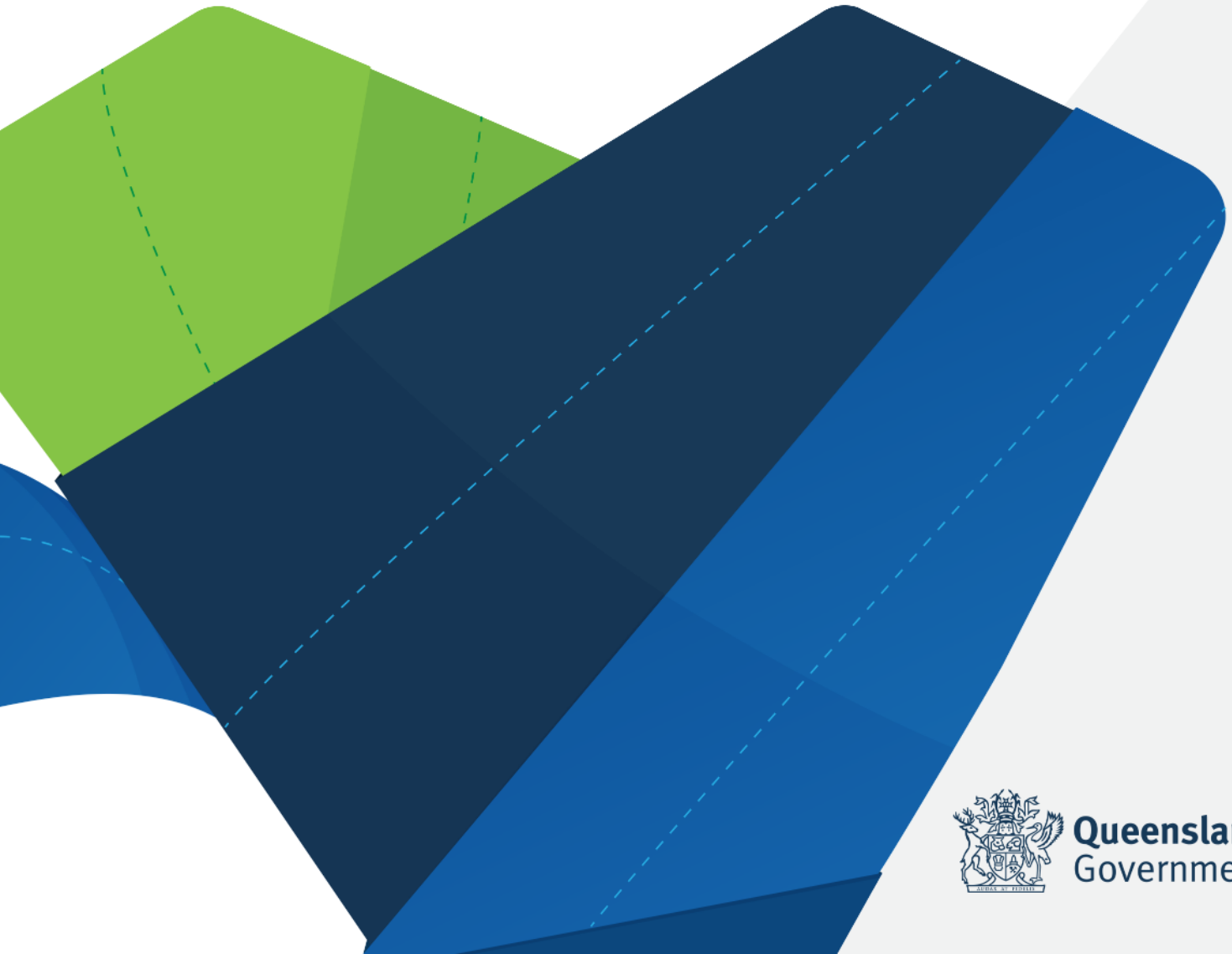
Queensland Minimum Data Set for Needle and Syringe Programs

2019



Queensland Government

Queensland Minimum Data Set for Needle and Syringe Programs – 2019

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Summary

Introduction

The purpose of the Queensland Minimum Data Set for Needle and Syringe Programs (QMDS-NSP) is to provide a state-wide standardised data collection system for people who inject drugs (PWID) accessing the Needle and Syringe Program (NSP). This supports the ongoing development of the NSP in Queensland by providing core data about client demographics and program activity.

In December 2015, the QMDS-NSP was approved as part of the Queensland Data Dictionary. Data collection details can be viewed at: http://oascrasprod.co.health.qld.gov.au:7900/pls/qhikrev_prd/qhik_data_collections.data_collection_details?pCommand=SHOW&pResultSetID=7834&pCol_seq_id=25584

Effective data collection among NSPs in Queensland is essential for planning and developing programs. Program development that is guided by valid, reliable data can ensure, for example, that access is adequate in different locations and that an optimal mix of services and resources are available to PWID. This routine program data collection is integral to reducing the spread of HIV and hepatitis C among PWID.

Data sets have been collected by NSPs in Queensland since their inception in the 1980s. The equipment ordering data and the Australian NSP Survey (Kirby Institute, UNSW), since 1995, have been other key data sources of information.

Collection of standardised data began in December 2006 with 13 programs sending in monthly data electronically; since then participating data collection sites have increased to 25 with Hervey Bay, Maryborough and Browns Plains being the most recent additions. In the 2017 calendar year, that number was reduced to 24 following the closure of the program at Logan which has now reopened in 2018, bringing the number of programs reporting data back to 25.

In addition, there has been significant growth in the number of programs and an increase in the diversity and complexity of the NSP sector in Queensland. Linkages with other services, including drug and alcohol treatment, welfare services, sexual health, mental health and Blood Borne Virus (BBVs) treatment services, have become more prominent, as has the need to meaningfully record referrals to such services. Changing trends in the demographics of people who inject drugs, types of drugs injected and regional variations for these drugs underscore the importance of collecting basic drug information from PWID.

The QMDS-NSP encompasses the following objectives:

- Establishing a core set of uniform definitions for activity data relating to the equipment and services provided by NSPs on each occasion of service.
- Promoting consistency, validity and reliability in NSP data.
- Providing up-to-date information for participating NSPs individually, on their program activities via the reporting tools of their data collection software.
- Providing regular analyses of available NSP data.

Content of the Queensland minimum data set for needle and syringe programs

There is a total of 17 data elements in the QMDS-NSP. Only a subset of these will be collected on most occasions of service, depending on the client's equipment requirements and whether any interventions or referrals are provided. The data represents occasions of service and does not reflect number of clients as most present on multiple occasions at the same NSP location.

The data elements can be divided into three groups, a) client data, b) equipment data, and c) interventions data. These groups are as follows:

Client data (six elements):

- Date of NSP occasion of service
- Gender
- Postcode
- Age
- Drug to be injected
- Aboriginal and Torres Strait Islander status

Equipment data (seven elements):

- 1*ml* fixed needle syringes issued
- 3*ml* barrels issued
- 5*ml* barrels issued
- 10*ml* barrels issued
- 20*ml* barrels issued
- Butterflies issued
- Disposal containers

Interventions data (five elements):

- NSP interventions provided
- Referral destination
- Referral location
- Referral type
- Time spent

In addition, there are 3 optional data elements – 'wheel filters issued', 'disposal method', and 'phone calls' – that may be used by individual NSPs as required.

Data collection and analysis

Collection of standardised data began in December 2006 with 13 primary programs. Since then the numbers have increased with 18 primary programs and 7 secondary programs sending data collected through the QMDS-NSPs in 2018. The primary site at Logan has re-opened and Browns Plains is again functioning as a secondary site. The NSP sites were geographically categorised for reporting purposes into four regions; Brisbane City, Southern Region, Central Region and Northern Region. The Brisbane City Region is located within the Metro North Hospital and Health Service (HHS). Southern Region comprises of Metro South, Gold Coast, Darling Downs and West Moreton HHSs. Central Region comprises of Central Queensland, Wide Bay, Metro North (excluding Brisbane City) and Sunshine Coast HHSs. Northern Region comprises of Cairns and Hinterland, Townsville and Mackay HHSs.

Data is not collected from any sites in Central West, North West, South West, or Torres and Cape HHSs.

The inclusion of secondary programs at Hervey Bay and Maryborough in 2012 improved the statewide representation of the QMDS-NSP as Bundaberg was the only previous representation from Wide Bay HHS. Browns Plains Community Centre replaced Palm Beach Community Centre in the Southern Region in 2013.

These 25 sites accounted for 86 per cent of state-wide NSP ordering/distribution during the 2017/18 financial year. Brisbane City, comprising Biala and Brisbane QuIHN, has been analysed separately due to their geographic variation and size; together they contribute just over 28 per cent of all service occasions across these 25 agencies. QNSP agencies provide Communicable Diseases Branch with spreadsheets of occasions of service data from individual provider sites. A script was developed to extract the data from each spreadsheet file using the Python programming language from the Python Software Foundation. Python Language Reference, version 3.5. (Available at http://www.python.org). The individual occasions of service data were stored in a Microsoft SQL Server 2012 instance.

Descriptive analysis of the occasions of service data was carried out using Microsoft Excel 2010.

For the purpose of this report, data is examined at a state-wide level to indicate trends in this 12-month period and further analysed at a regional level to observe any geographic variations among the participating NSPs.

Executive Summary

Scope of needle and syringe program activity

- The Queensland Minimum Data Set for Needle and Syringe Programs (QMDS-NSP) was implemented at the beginning of December 2006.
- In the 2019 calendar year, 18 primary programs and seven secondary programs collected and submitted data in accordance with the QMDS-NSP guidelines.
- The needle and syringe provision at these 25 sites comprised 86per cent of state-wide ordering during the 2018/19 financial year.
- In 2019 there were 165,601 occasions of service across the 25 participating NSPs.
- There was no decline in occasions of service among the participating sites from the previous reporting year.

Drug use patterns

- Opioids were the primary drug type for 39 per cent of the total occasions of service delivery; amphetamines and other stimulants made up 48 per cent of the service occasions.
- Heroin and pharmaceutical opioids made up 79 per cent of all opioid-related service occasions.
- Methadone continued to be the medically assisted treatment (MAT) drug most often reported by PWID.
- At 90 per cent, crystal methamphetamine was the most reported amphetamine subtype in 2019.
- Performance and image enhancing drugs (steroids) constituted 8 per cent of all occasions of service in 2019.
- Heroin and morphine (term used to describe a number of morphine type pharmaceutical opioids) together were the dominant drugs of choice for PWID 50 years and older (51 per cent).
- The majority of steroid use was among PWID aged less than 35 years, comprising 58 per cent of total occasions of service related to steroids.
- Service occasions related to use of drugs used in Opioid Substitution Treatment
- (OST), i.e. methadone, buprenorphine - Subutex® and buprenorphine-naloxone - Suboxone®, were slightly more prevalent among PWID in the 35 years and older age groups (51 per cent).

Client demography

- Of the 165,601 service occasions, 74 per cent (n = 122,843) were for males and 25 per cent (n = 41,636) were for females, with only 0. 7 per cent of service occasions for 'other gendered' or missing this information.
- In 2019, of the 165,601 service occasions, 16 per cent (n = 26,496) were for PWID who identified as an Aboriginal and/or Torres Strait Islander. This may be an under-representation due to missing data.
- The average age of PWID was 40 years with the 40–44 age group comprising the largest proportion of PWID (17.4 per cent). PWID aged 35 years or more made up 61 per cent of the occasions of service.

Interventions and referrals

- There were 62,855 primary interventions recorded during the 12-month period where staff provided information and education on topics such as blood-borne viruses, vein care, safe disposal of syringes, drug-related topics, sexual health, etc. This occurred on 38 per cent of service occasions.
- There were 7,808 referrals provided by NSP staff during the 12-month period; 12 per cent of all primary interventions involved referrals.
- The top 3 referral destinations across the state were to hepatitis services, medical services, and welfare organisations.

Regional trends

- There were similar patterns of age distribution for both genders throughout the state with males outnumbering females three to one. Central Region recorded the highest attendance of females with 28 per cent of service occasions, compared with 25 per cent state-wide. Brisbane City recorded the lowest attendance of females with 20 per cent of service occasions.
- Service occasions associated with amphetamines and opioids (heroin, morphine, and Opioid Substitution Therapy drugs) differed according to region. Opioid use was more prevalent in Brisbane City when compared to state-wide prevalence (43 per cent v 39 per cent) and steroid use was more prevalent in the Southern Region compared to state-wide (11 per cent v 8 per cent)
- Northern Region displayed distinctively different drug use trends to other regions: the majority (60 per cent) of opioid-related service occasions were for morphine, while heroin accounted for only 4 per cent.

State-wide Data Profile

Occasions of service

There were 165,601 occasions of service for 2019 across the 25 participating NSPs; a decline since the 200,386 occasions of service in 2013. This decline can be attributed to the pharmacy NSP enhancement initiative that was implemented across Queensland in December 2013.

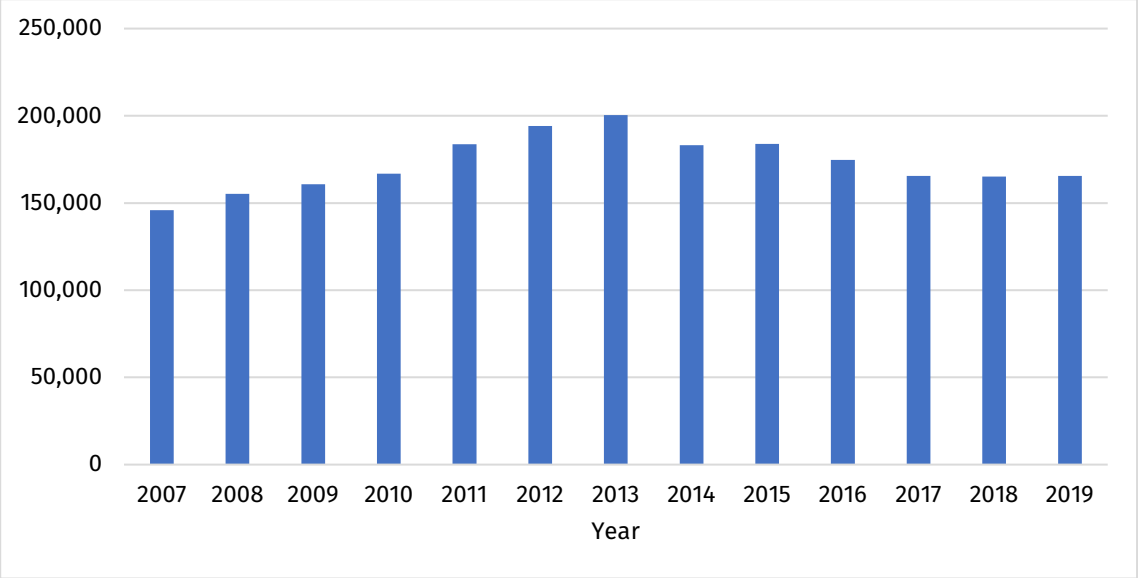

Figure 1. Total service occasions across participating NSPs, 2007-19

Client demographics

Client Age

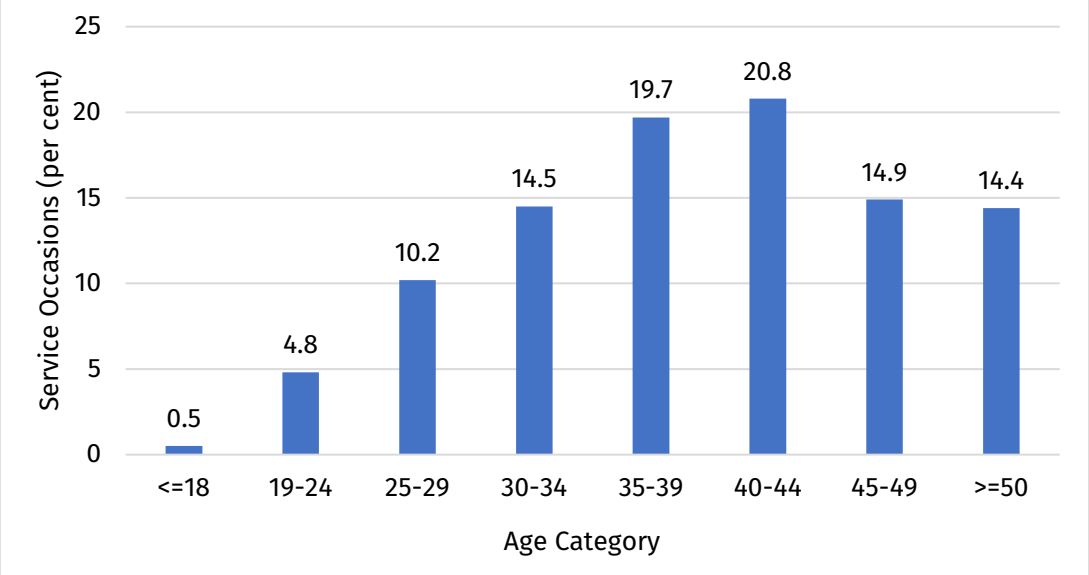

Figure 2. Total service occasions by age category, 2019 (N=165,601)

The average age of PWID was 35 years, with the 40–44 year age group comprising the largest proportion of PWID (20.8per cent) (Figure 2). The 35–39 and the 45–49 age groups were the second and third largest groups respectively, followed by the 30–34 year age group. PWID aged 35 years and over comprised 70 per cent of all clients, while clients under the age of 25 comprised 5 per cent. This continues the trend from previous years of an ageing population of people who inject drugs accessing the NSPs with over 80 per cent of occasions of service being clients aged 30 years or above.

Table 1. Percentage of service occasions related to drug type, by age group (N=165,601)

	Total	<=18	19-24	25-29	30-34	35-39	40-44	45-49	>=50
Amphetamines	**47.6**	61.48	50.09	47.88	51.54	51.54	50.79	49.23	37.85
Heroin	**14.2**	6.59	7.92	9.80	11.22	13.94	16.53	14.81	20.13
Morphine	**11.9**	5.77	7.32	7.85	9.20	10.67	12.32	14.83	18.36
Methadone	**4.6**	2.24	2.48	3.44	3.39	5.21	4.74	5.71	5.87
Bup/Subutex®	**2.2**	2.36	2.07	1.70	2.34	3.60	2.71	1.64	0.86
Suboxone®	**2.5**	6.12	4.54	3.26	3.82	2.99	2.45	1.82	0.46
Other opioids	**3.4**	2.71	2.27	2.51	3.01	3.10	2.90	3.86	5.73
Steroids	**8.3**	5.06	20.03	20.79	12.56	6.51	4.57	4.19	3.79
All other categories*	**3.6**	7.66	3.28	2.76	2.92	2.44	2.97	3.90	6.95
Missing	**1.8**								
Total in each age group (n)	165,601	922	8,901	16,548	23,169	314,07	32,283	22,746	26,644

**Includes all other substance types (human growth hormone, vitamin B, insulin, hallucinogens, ketamine, gamma-hydroxybutyric acid and other drugs)*

Table 1 displays the proportion of service occasions by age group and drug type. Comparing all drug types, amphetamines accounted for the majority of service occasions among those aged under 50 with opioids accounting for most service occasions for those aged 50 and over. Steroid use was more prevalent in the younger age group with PWID younger than 40 years making up 78 per cent of the service occasions related to steroid/performance and image enhancing drugs use.

Client gender

Of the 164,986 service occasions, 74 per cent (n = 121,957) were male and 26 per cent (n = 42,501) were female. In less than a quarter of a per cent (n = 506) of service occasions this

information was missing or not stated. There were significant differences observed for male and female clients across all age categories (Figure 3).

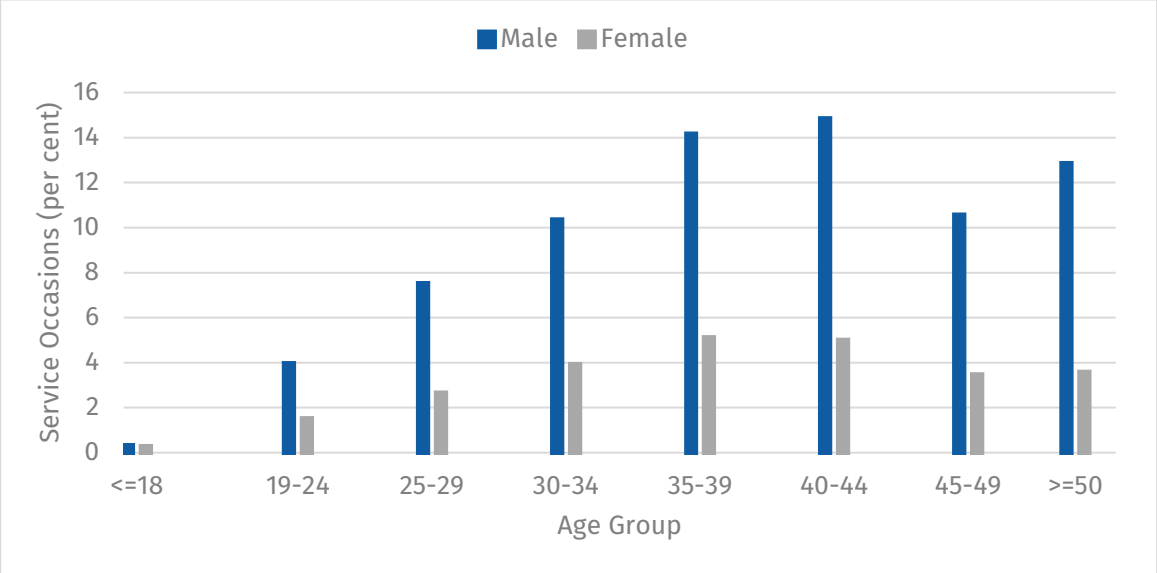

Figure 3. Service occasions by age category & gender, 2019 (N=165,601)

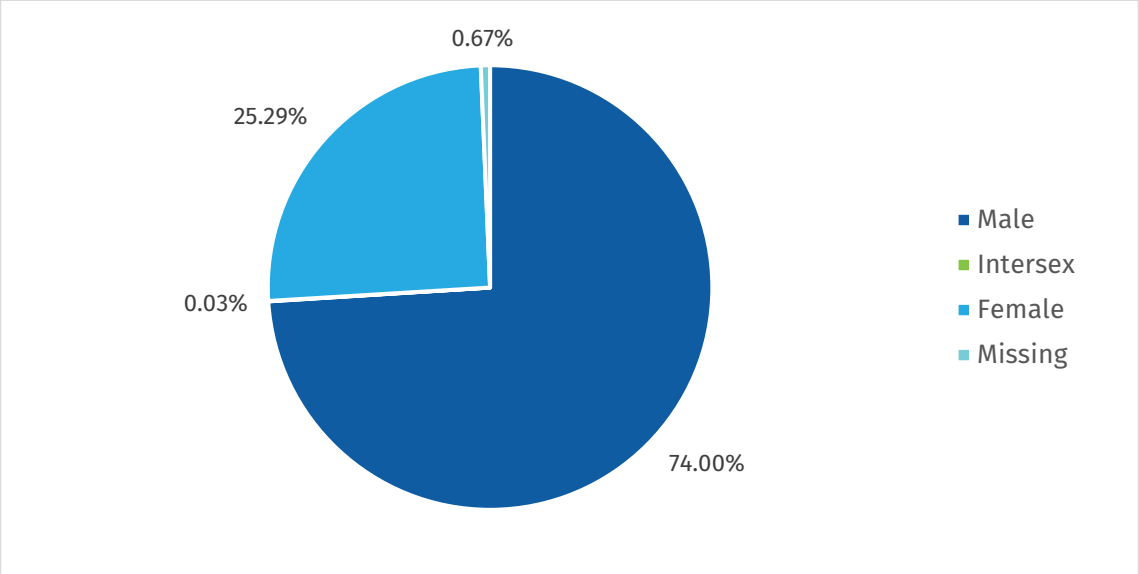

Figure 4. Service occasions by gender, 2019 (N=165,601)

Aboriginal and Torres Strait Islander profile

Aboriginal and Torres Strait Islander status was collected as a mandatory data element of the QMDS-NSP for the first time in 2010. In 2019, of the 165,601 service occasions, 16 per cent (n = 26,496) were for PWID who identified as an Aboriginal and/or Torres Strait Islander. This may be an under-representation due to missing data (5.8 per cent). PWID identifying as an Aboriginal and/or Torres Strait Islander had a mean age of 37 years compared to 35 years for the non-Aboriginal and Torres Strait Islander group (Figure 6).

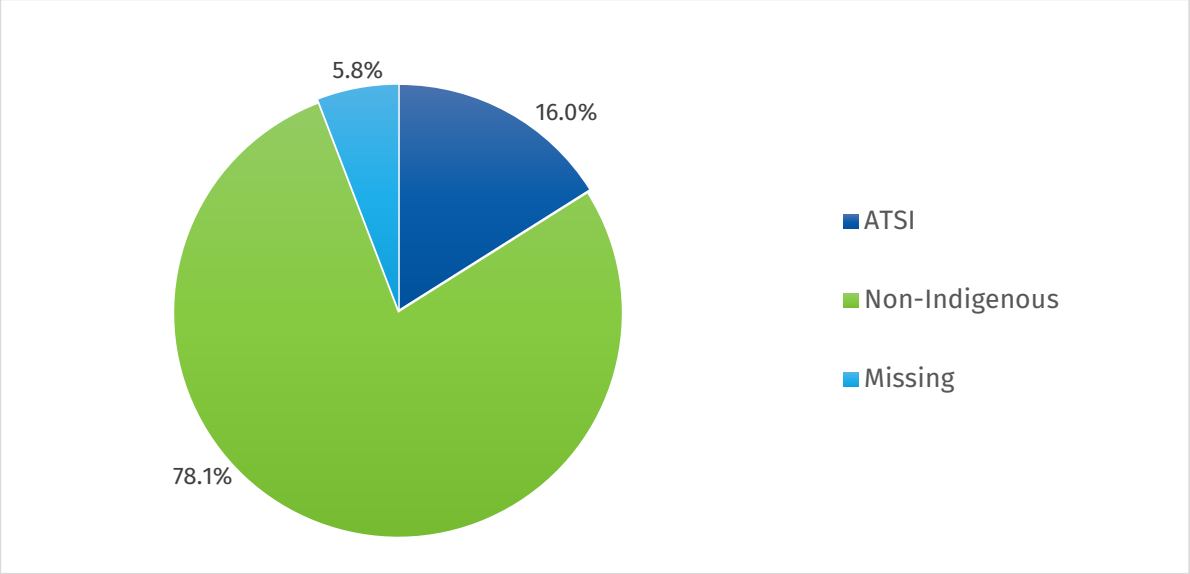

Figure 5. Service occasions by Aboriginal and Torres Strait Islander status, 2019 (N=165,601)

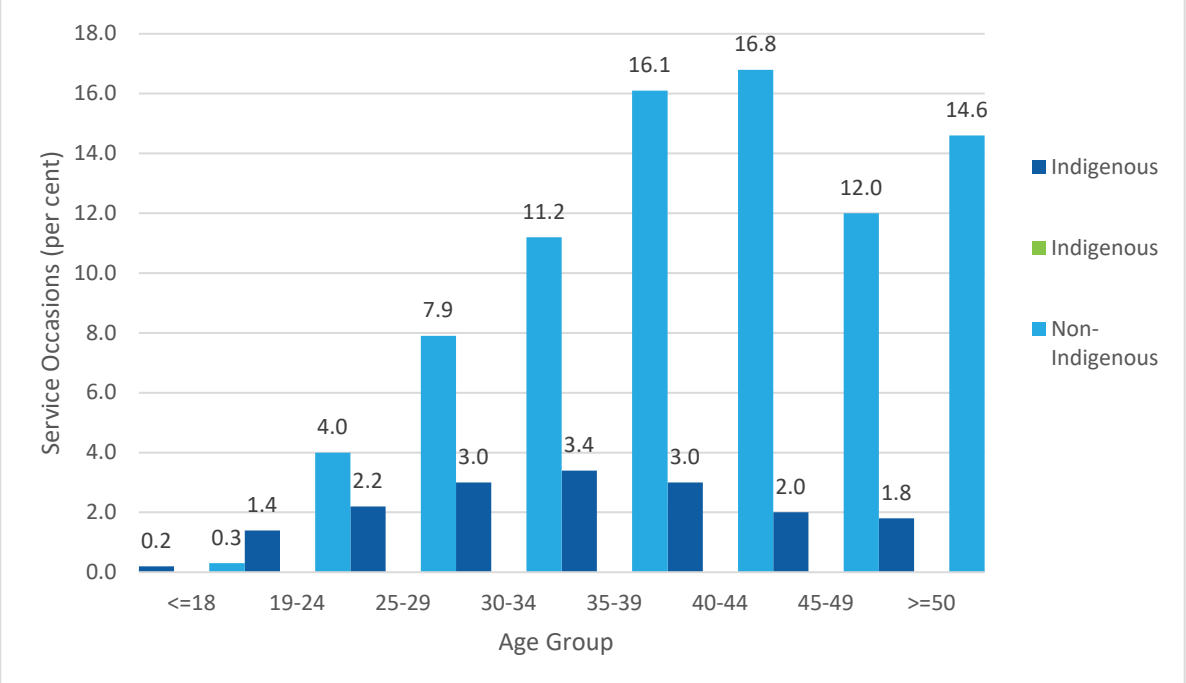

Figure 6. Service occasions by Aboriginal and Torres Strait Islander status and age, 2019 (N=155,963)

Drug trends

Service Occasions by Drug Type and Gender

Figure 7 displays service occasions by drug type and gender. The 3 most commonly used drug types were the same for males and females. Amphetamines accounted for 45 per cent of male and 53 per cent of female occasions of service. Heroin use was the same in both males and females at 14 per cent and 13 per cent of service occasions; morphine use was the same for both males and females at 12 per cent. A key difference between male and female drug use was steroid use which was largely confined to males; 10 per cent male compared with 2 per cent female.

The 'All Other' category in this figure encompasses all other drug types (human growth hormone, Vitamin B, insulin, hallucinogens, ketamine, gamma-hydroxybutyric acid, benzodiazepines, fentanyl, cocaine, and ecstasy). Service occasions that did not specify a drug type were 2 per cent.

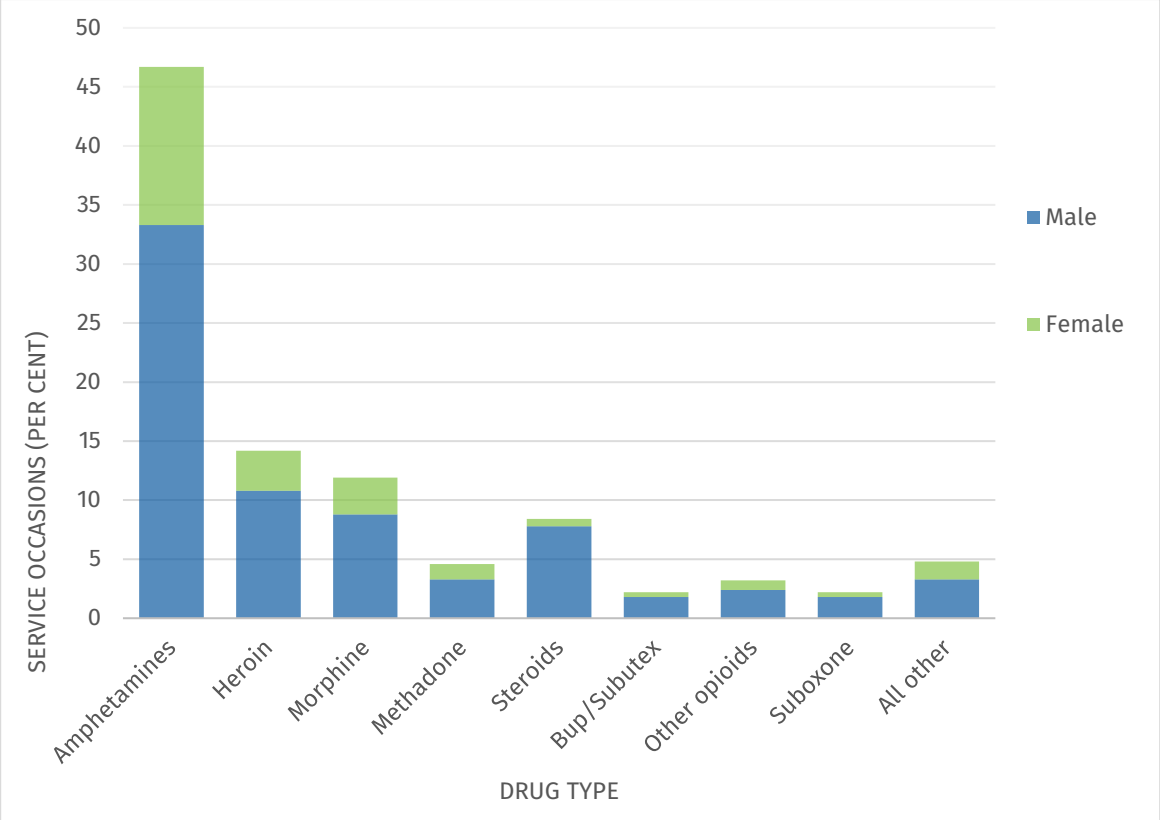

Figure 7. Service occasions related to drug type and gender, 2019 (N=154,988)

Amphetamine subtypes

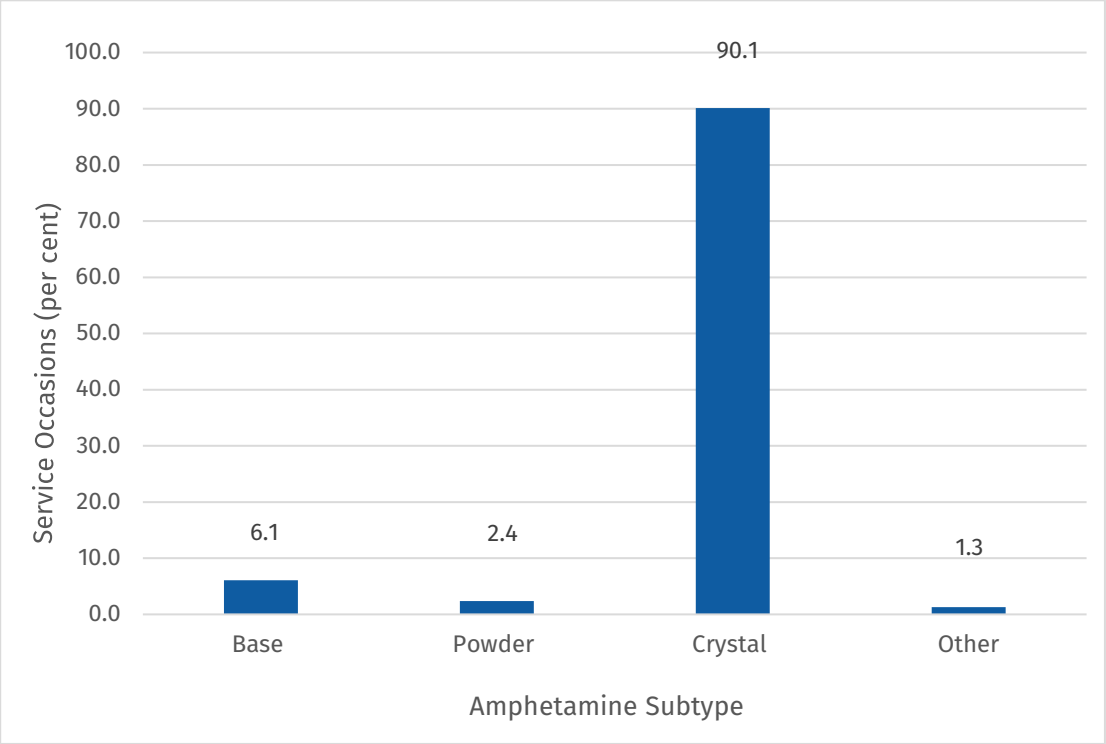

Figure 8. Per cent of service occasions for each amphetamine subtype - where specified, 2019 (N=50,088)

The QMDS-NSP has five categories for recording amphetamine use. A broad amphetamines code is entered when clients are unsure of the exact type of amphetamine they will be using. The 4 other amphetamine categories (base, powder, crystal, and other) are used when clients are aware of and report the type of amphetamine they will be using. The 'Other' amphetamine code is used for liquid and pill forms as well as amphetamine sulphate.

Of the 71,257 occasions of service related to all amphetamine use, 70 per cent were recorded as specific amphetamine types. Figure 8 displays the breakdown of amphetamine; crystal methamphetamine (90 per cent) and base methamphetamine (6 per cent) were the most common forms. An increase in the reporting of crystal methamphetamine observed in 2013, 2014, 2015, 2016, 2017 and 2018 has continued into 2019. The overall use of amphetamines has increased.

Opioid related service occasions

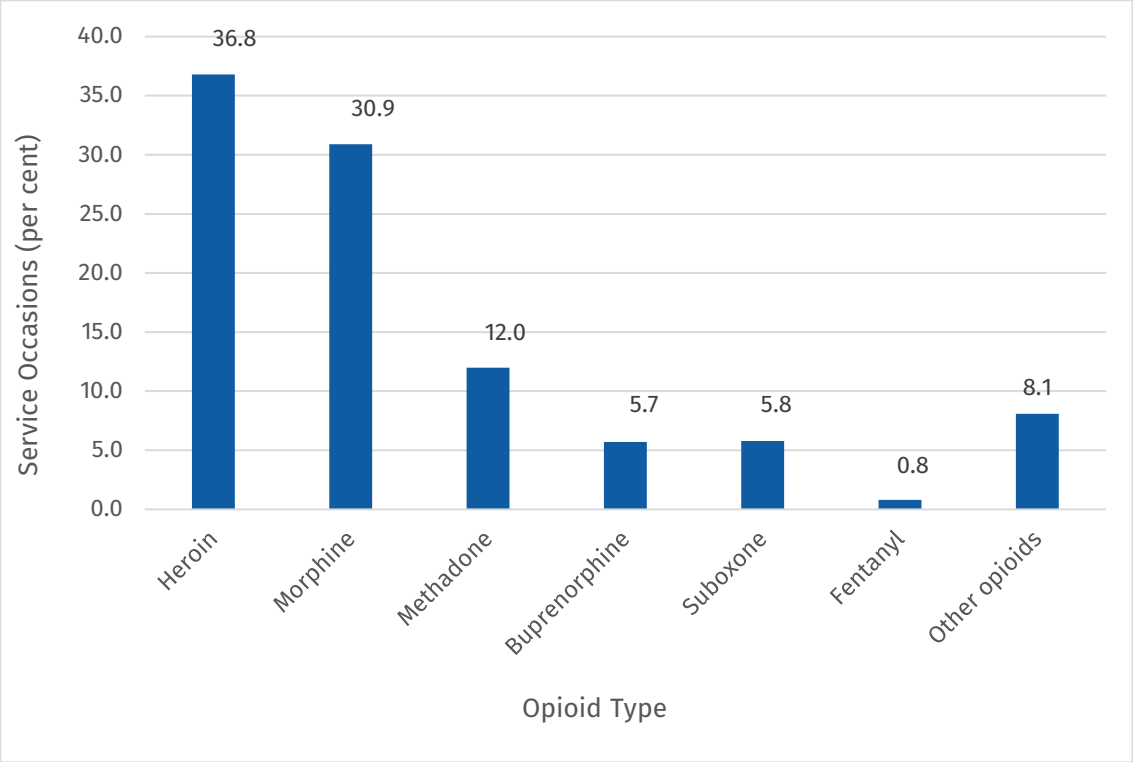

Figure 9. Percentage breakdown of opioid related service occasions, 2019 (N=58,876)

Figure 9 displays the percentage breakdown of service occasions related to all opioid use. Heroin and morphine, comprising 68 per cent of opioid related service occasions were the most commonly used opioids throughout this period.

Equipment ordering and distribution

Equipment ordering

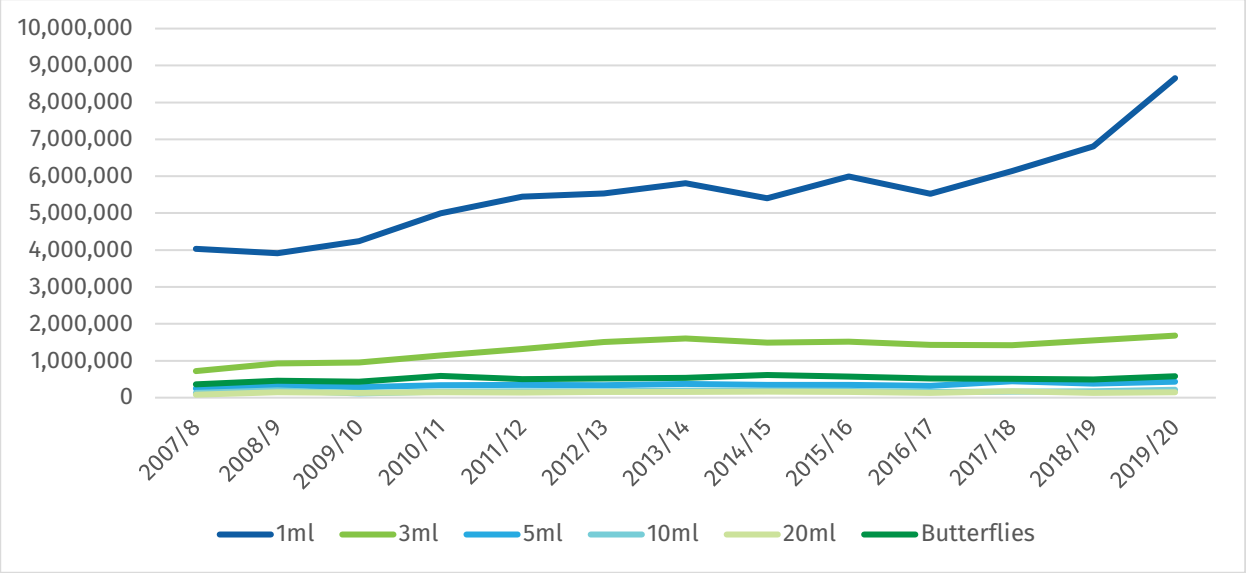

Figure 10. Total equipment ordered, Financial Year 2007-08 to 2019-20

The total for each equipment type ordered by all primary and secondary NSP sites in Queensland for financial years 2007–08 to 2019–20 is displayed in Figure 10. 1*ml* syringes were the most common syringe followed by 3*ml* syringes. The ordering data for 1*ml* syringes and 3*ml* syringes also includes Needle Dispensing Machine (NDM) kits as detailed in Figure 11.

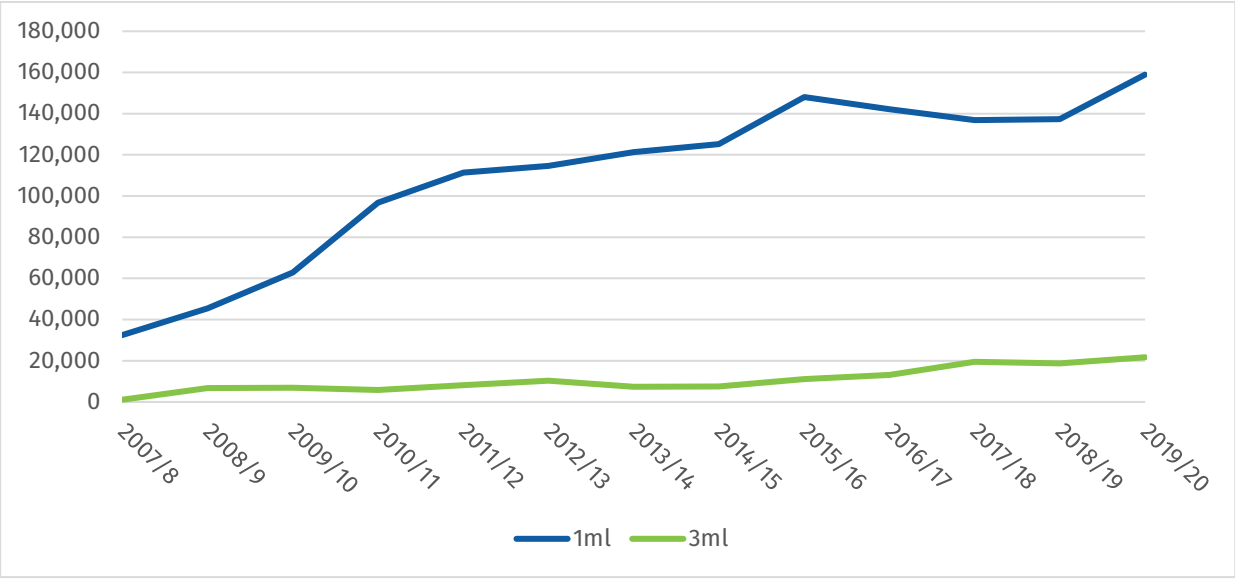

Figure 11. Total equipment ordered as NDM kits, Financial Year 2007-08 to 2019-20

Equipment distributed

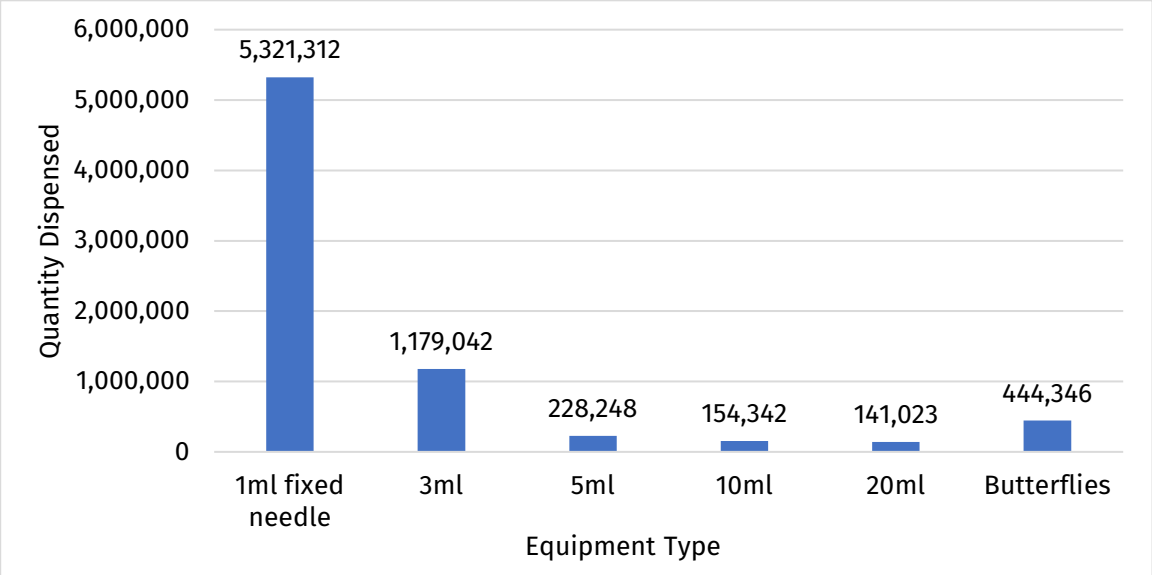

Figure 12. Total equipment distributed, 2019

Total distribution through occasions of service for each equipment type is displayed in Figure 12. 1*ml* fixed needle syringes were the most commonly distributed item, comprising 71 per cent of all equipment dispensed without charge followed by 3*ml* syringes which accounted for 16 per cent.

Interventions provided

NSP interventions comprise information and education on topics such as HIV, hepatitis C and other blood-borne viruses (BBVs), vein care and safe injecting practices, safe disposal of equipment, drug information and treatment related information and sexual health information. The intervention 'client-focused discussion' has been replaced with a set of new interventions; 'NSP policy information', 'opioid substitution program information', 'drug treatment information' and a category for client complaints.

Up to 3 different interventions can be recorded for each service occasion, but for the purpose of analysis only the primary intervention is included. Figure 13 displays the primary interventions provided across all sites for 2018.

Staff provided a primary intervention on 31 per cent of service occasions. The top 5 interventions provided were BBV information, safe disposal information, drug information, safe injecting information and education and NSP policy information. The prominence of these interventions reflects the health needs and concerns of PWID. The 'Other info' category encompasses site-specific interventions not covered by the minimum dataset codes.

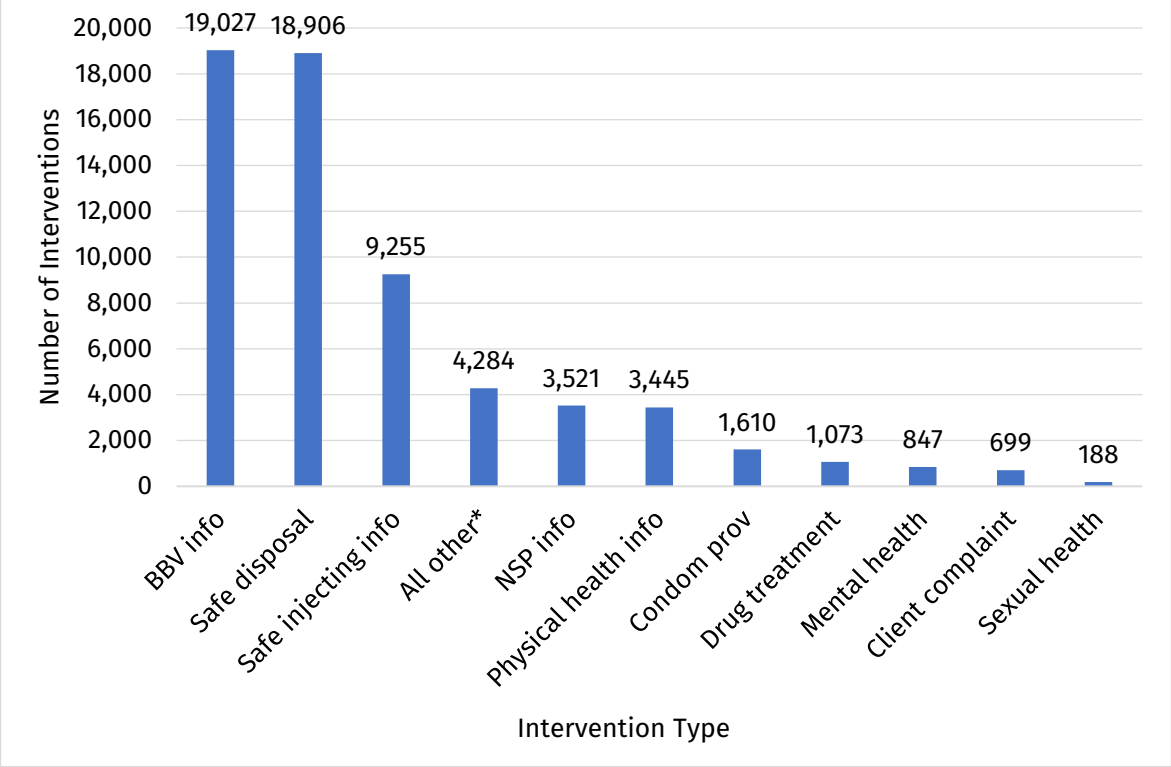

Figure 13. Type of primary interventions provided, 2019 (N=62,855)

**Includes antenatal education and welfare*

Referrals to services

As part of an NSP occasion of service a client may be referred to another service. There were 5,871 referrals provided by NSP staff during 2017; 3 per cent of all occasions of service involved referrals. Figure 14 displays the total number of referrals made to each destination. 'Other' referrals include site-specific referrals not covered by the minimum dataset codes.

The top 4 referral destinations were referrals to hepatitis services, medical services, welfare services and drug and alcohol treatment services. Medical services include treatment (by nurses or medical practitioners) for bacterial infections and vascular disease, in addition to any other medical services not elsewhere classified.

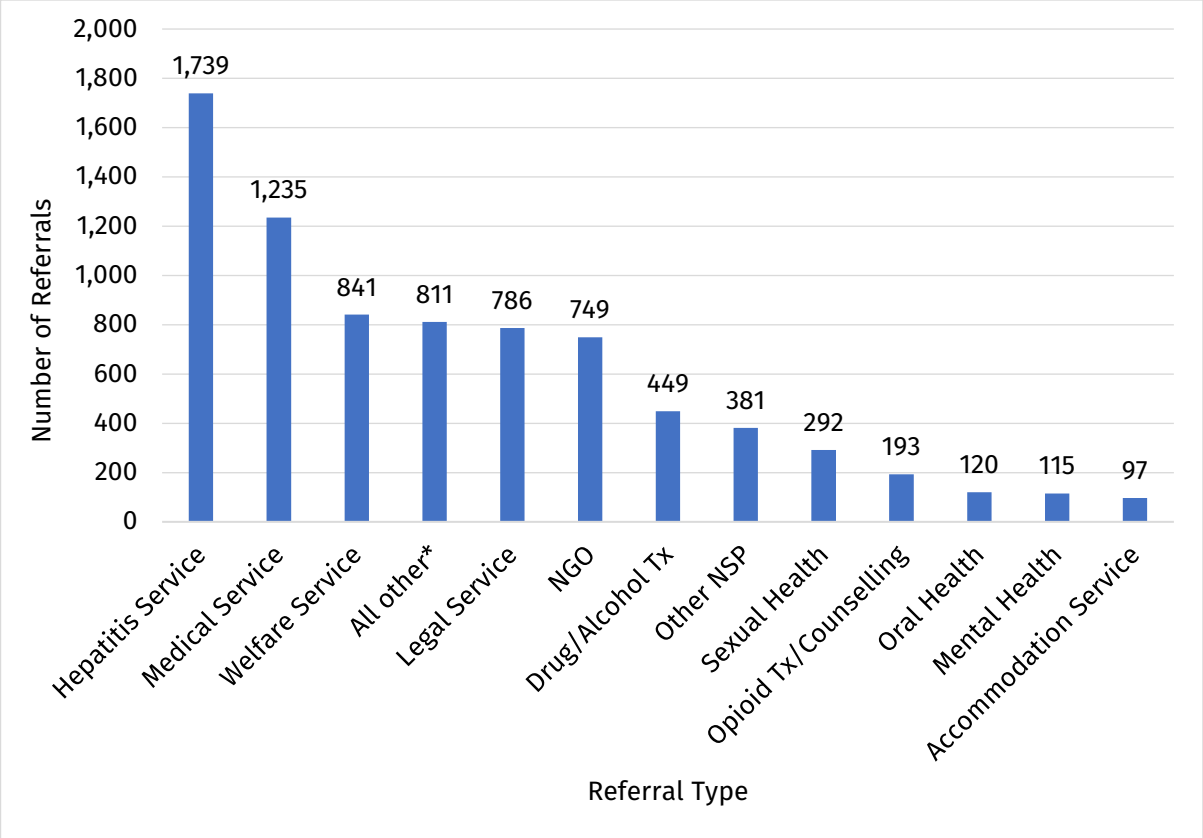

Figure 14. Type of referrals provided, 2019 (N=7,808)

**Includes antenatal or parenting service, hospital and HIV/AIDS service*

Referrals are characterised according to referral type (internal/external and active/passive). Internal referrals are referrals made to services within the premises where the NSP is located, while external referrals are those that are external to these premises. Referrals are also recorded as active or passive. An active referral occurs when an NSP staff member arranges a referral by writing a letter, phoning for an appointment, or having face-to-face contact with the staff member to whom the client is being referred. A referral is considered passive when the client is provided with agency information but is not assisted to make an appointment with the agency.

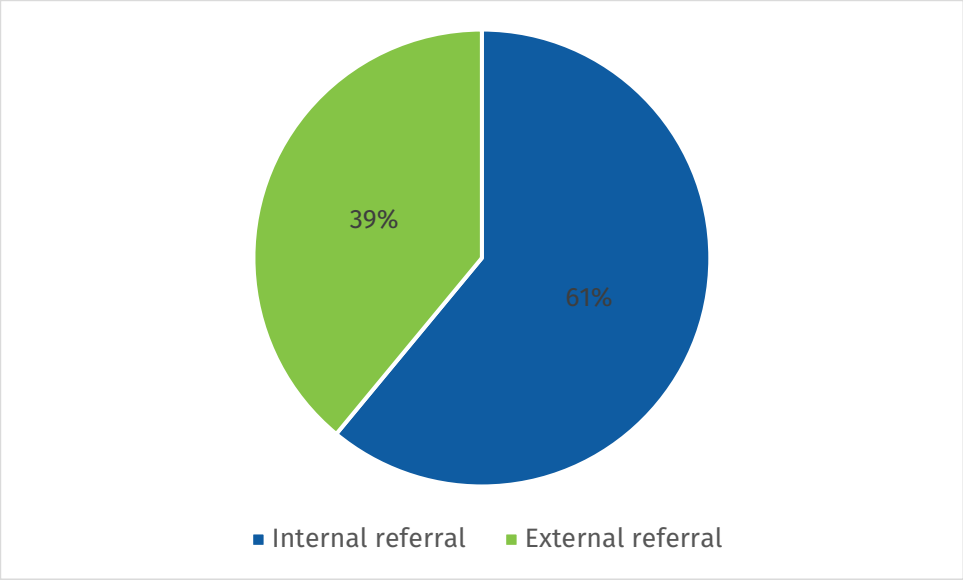

Figure 15. Percent of internal and external referrals, 2019 (N=7,398)

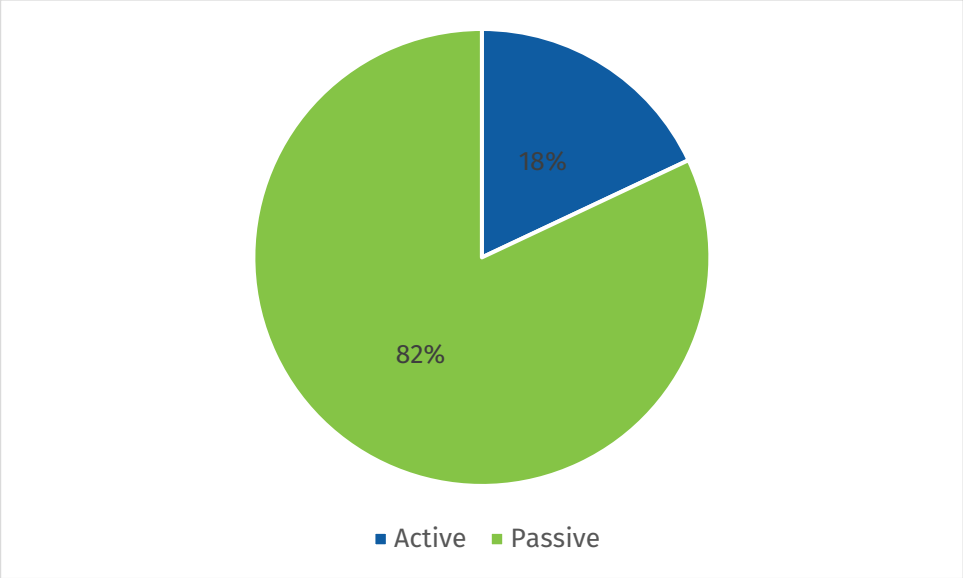

Figure 16. Percent of active and passive referrals, 2019 (N=7,390)

Figures 15 and 16, display the breakdown of internal and external referrals, and active and passive referrals respectively. Less than half of the referral sites were external. Passive referrals, where no formal introduction or appointment to the referral site occurred, were the most commonly provided referral type. An active referral to an internal referral site would be considered best practice where feasible.

Regional profiles

Brisbane City

- In 2019 there were 46,634 occasions of service (28 per cent of total) provided in the Brisbane City region.

Client gender

- Male attendance (80 per cent) was higher than state-wide male attendance (74 per cent).
- 20 per cent of clients were female; less than overall service occasions related to females (25 per cent).
- Aboriginal and Torres Strait Islander clients made up 12 per cent of occasions of service in Brisbane City which was lower than the 16 per cent state-wide representation.

Client age

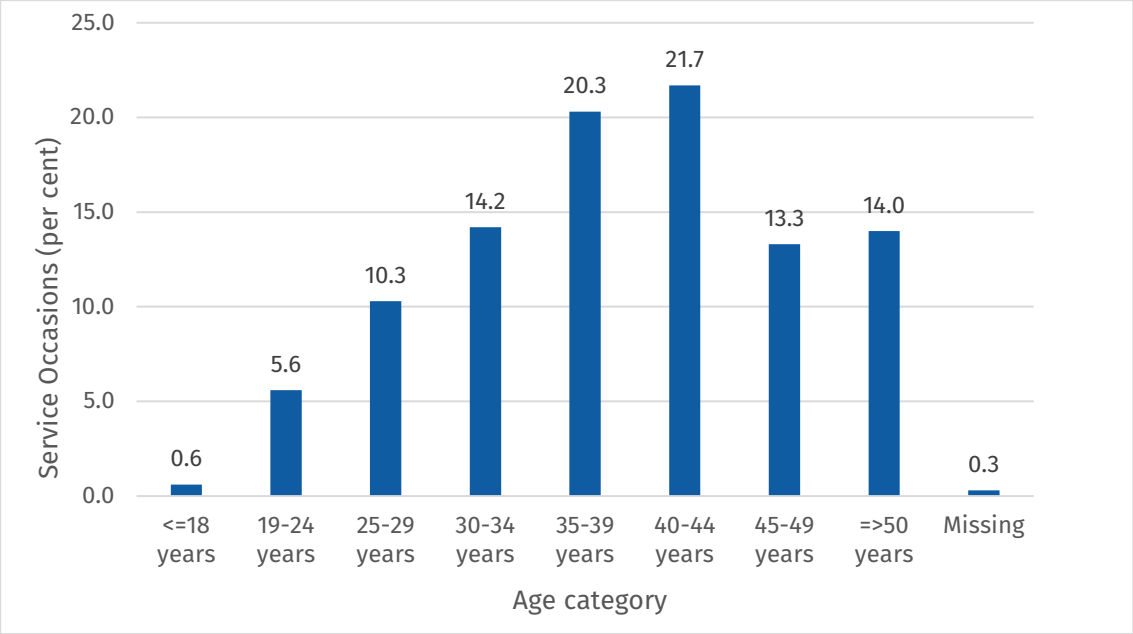

Figure 17. Brisbane City: Age distribution, 2019 (N=46,634)

- The average age of clients attending was 39 years, higher than the state-wide mean (35 years). Consistent with state-wide patterns, the 40–44 age group comprised the largest proportion of clients attending Brisbane City NSPs.

Drug trends

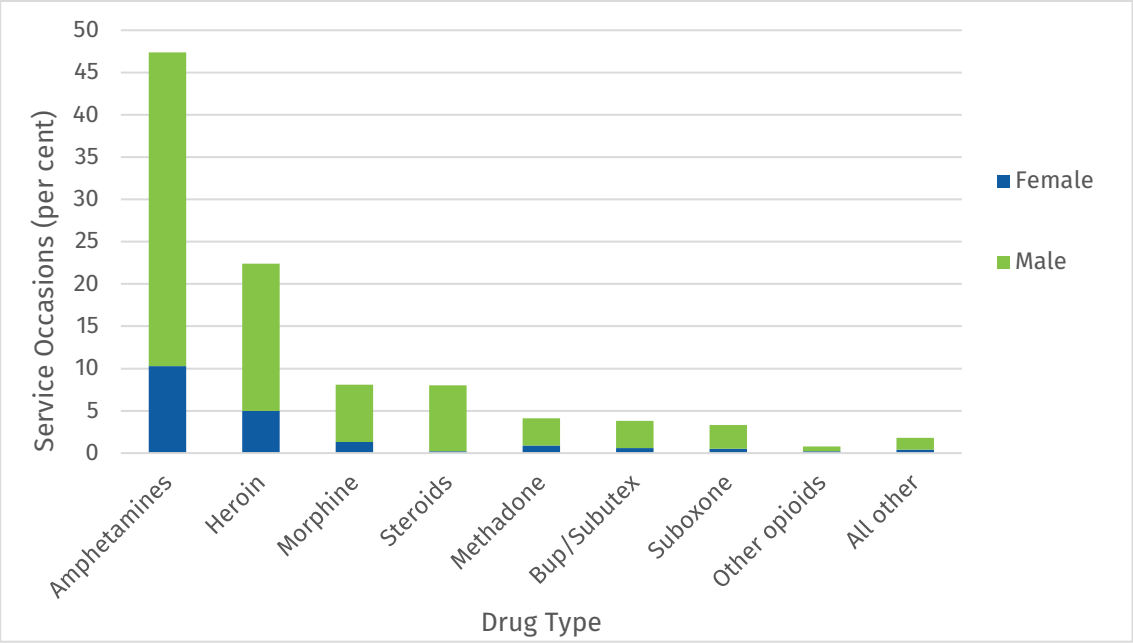

Figure 18. Brisbane City: Service occasions by drug use and gender, 2019 (N=46,634)

- Consistent with state-wide trends, service occasions related to amphetamine, heroin, and morphine use were more prevalent than for any other drug types.
- Amphetamine use was slightly lower for females (10 per cent) but higher for males (37 per cent), in comparison to state-wide levels. Heroin was reported by a greater number of males (17 per cent) when compared to the females (5 per cent) and was also higher than state-wide levels.

Central Region

- In 2019, Central Region conducted 34,552 occasions of service (21 per cent of total).

Client gender

- Female attendance in this region was higher than state-wide attendance (28 per cent v 25 per cent) and all other regions.
- Male clients comprised 71 per cent of service occasions.
- Aboriginal and Torres Strait Islander clients made up 12 per cent of occasions of service in Central Region which was lower than the state-wide representation (16 per cent).

Client age

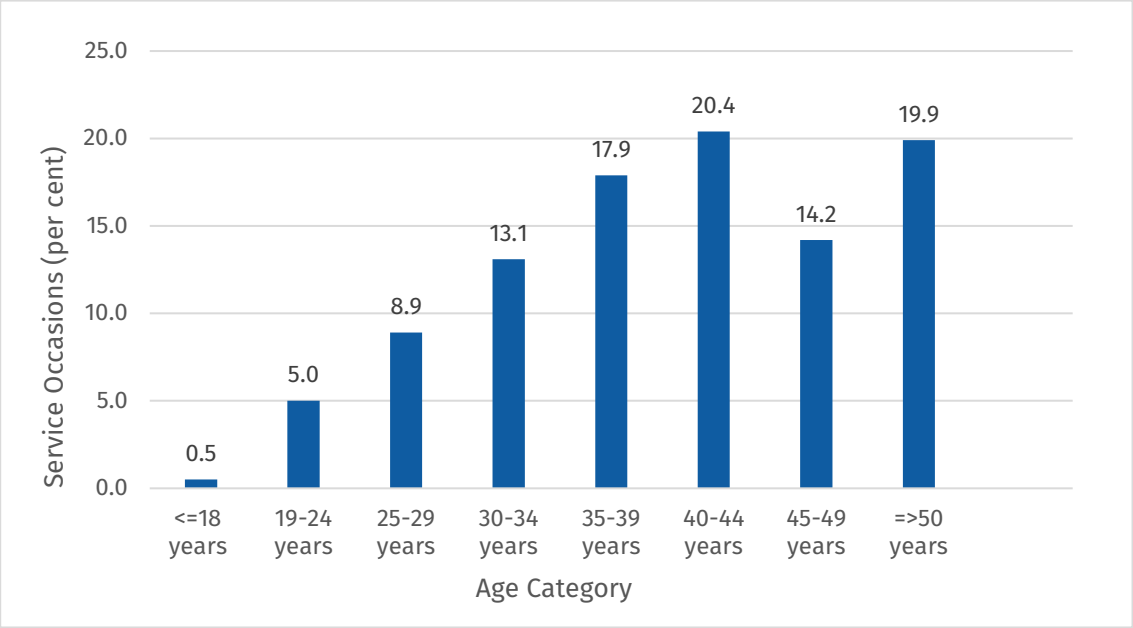

Figure 19. Central Region: Age distribution, 2019 (N=34,028)

- The average age of clients was 41 years, older than the state-wide average.
- As with state-wide data, the 40–44 years age group made up the largest proportion of client presentations.

Drug trends

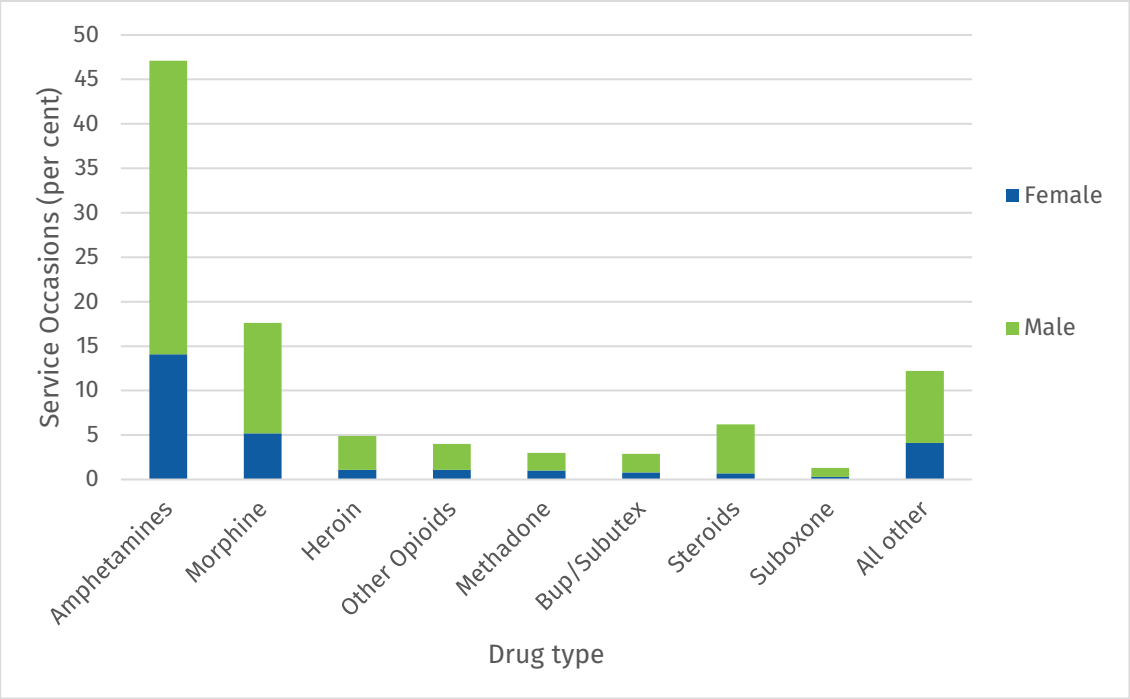

Figure 20. Central Region: Service occasions related to male and female drug use, 2019 (N=33,128)

- Amphetamine use was similar to state-wide patterns of use for male and for female service occasions.
- The use of heroin was significantly lower for males and females when compared to state-wide data (3.8 per cent v 10.8 per cent and 1.1 per cent v 3.4 per cent respectively); also service occasions related to morphine were higher for both males (12.4 per cent v 8.8 per cent) and females (5.2 per cent v 3.1 per cent) in comparison to state-wide data.

Northern Region

- In 2019, the Northern Region conducted 20,366 occasions of service (12 per cent of total).

Client gender

- Male and female attendance was similar to state-wide attendance; with 74 per cent of service occasions being males and 26 per cent females.
- Aboriginal and Torres Strait Islander clients made up 17 per cent of occasions of service in Northern Region, similar to the state-wide figure.

Client age

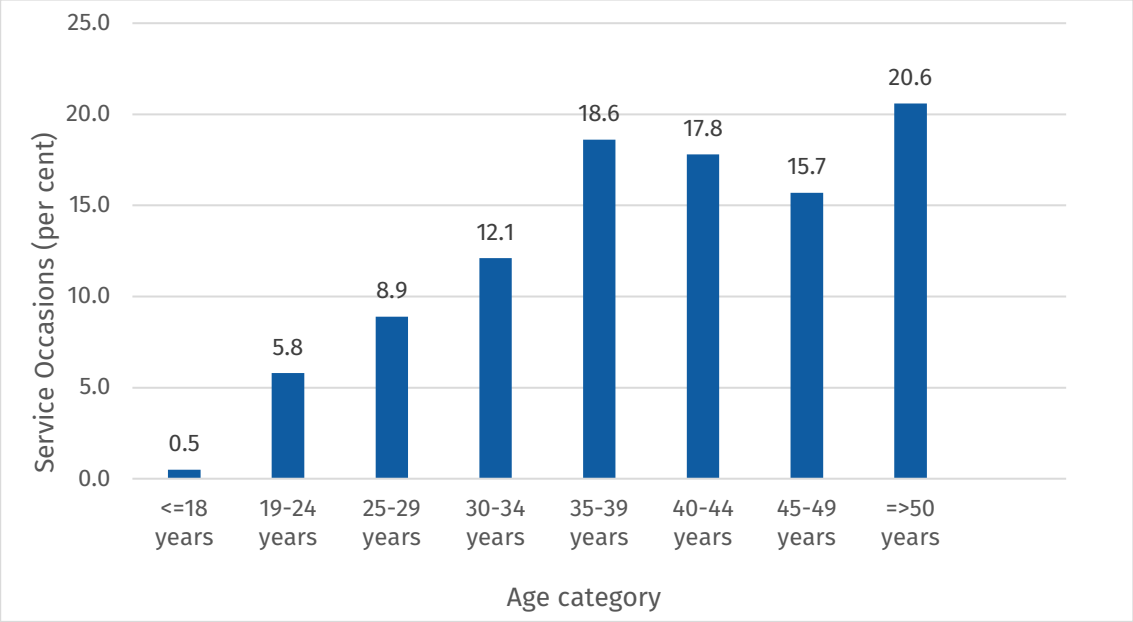

Figure 21. Northern Region: Age distribution, 2019 (N=20,306)

- The average age of clients was 40.8 years, the highest in the state. The age distribution for this region was different to the state-wide distribution, there were lower proportions of clients aged less than 35 years and higher attendance of clients aged over 44 years.

Drug trends

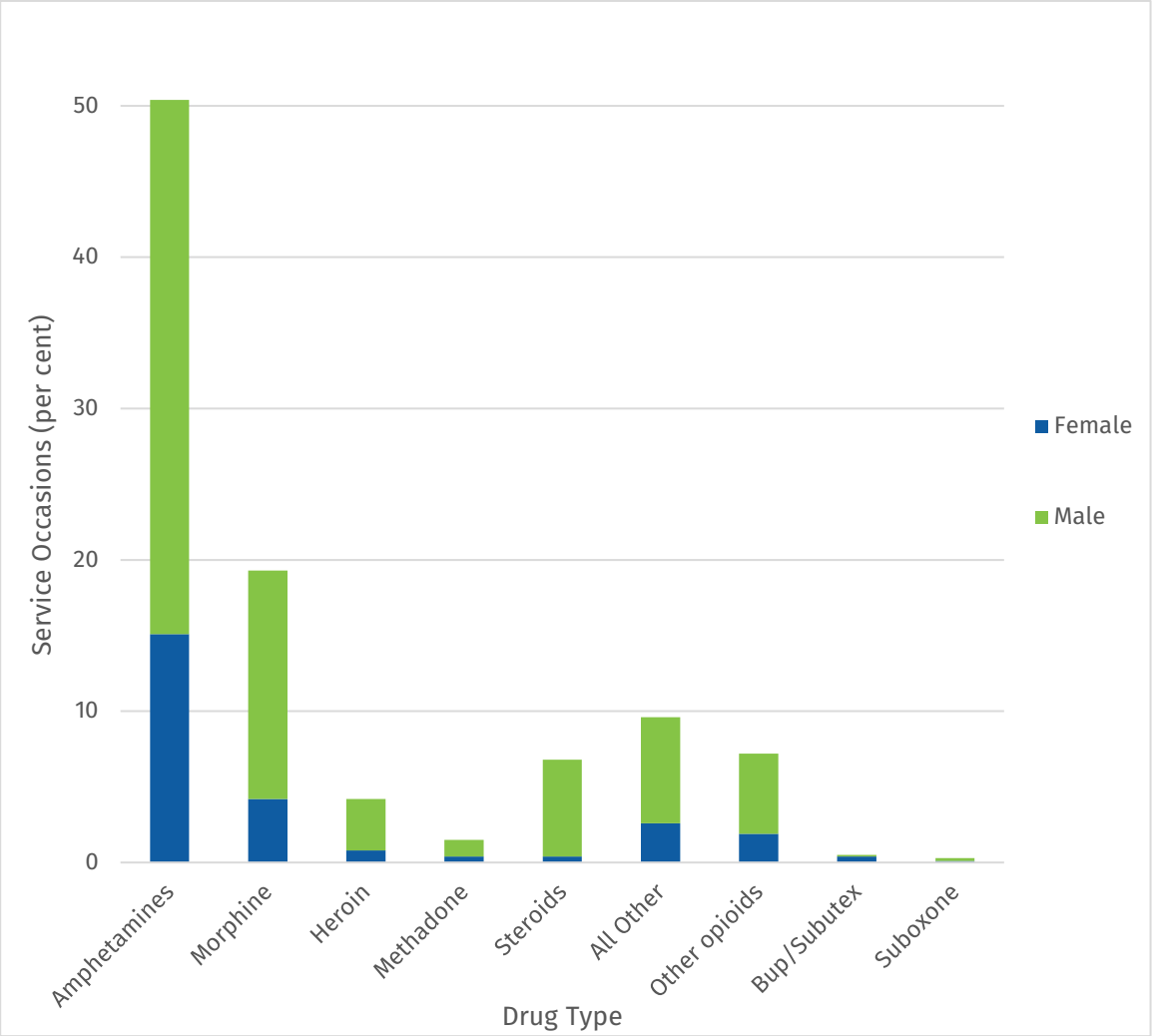

Figure 22. Northern Region: Service occasions related to male and female drug use, 2019 (N=20,355)

- Amphetamine and morphine-related service occasions were more common than service occasions for any other drug type for both males and females in the Northern region (Figure 22).
- Heroin use in the Northern region is substantially lower than state-wide; it accounts for 3.4 per cent of male and 0.8 per cent of female service occasions, compared to approximately 14 per cent of male and female service occasions state-wide.

Southern Region

- There was a total of 64,015 occasions of service (39 per cent of total) conducted in this region in 2019.

Client gender

- Male and female attendance was similar to state-wide attendance; with 73 per cent of service occasions being for males and 27 per cent for females.
- Aboriginal and Torres Strait Islander clients made up 20 per cent of occasions of service in Southern Region which was higher than the 16 per cent state-wide representation and the highest of the four regions.

Client age

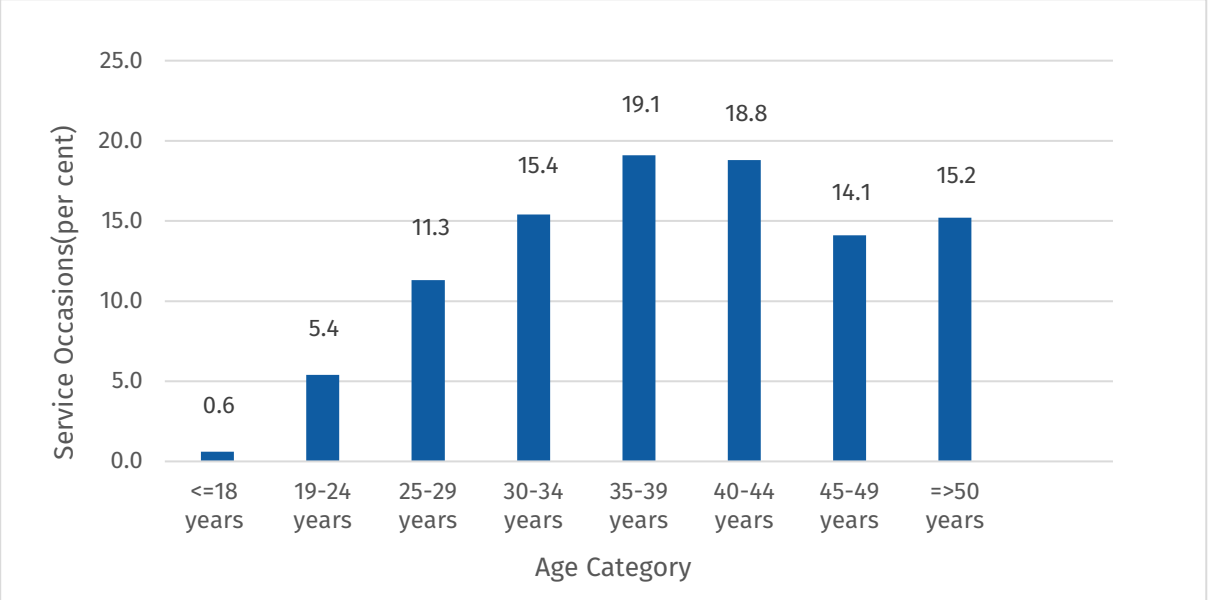

Figure 23. Southern Region: Age distribution, 2019 (N=62,749)

- The average age of clients was 39.3 years, similar to the state-wide average.
- The age distribution for this region was similar to the state-wide distribution.

Drug trends

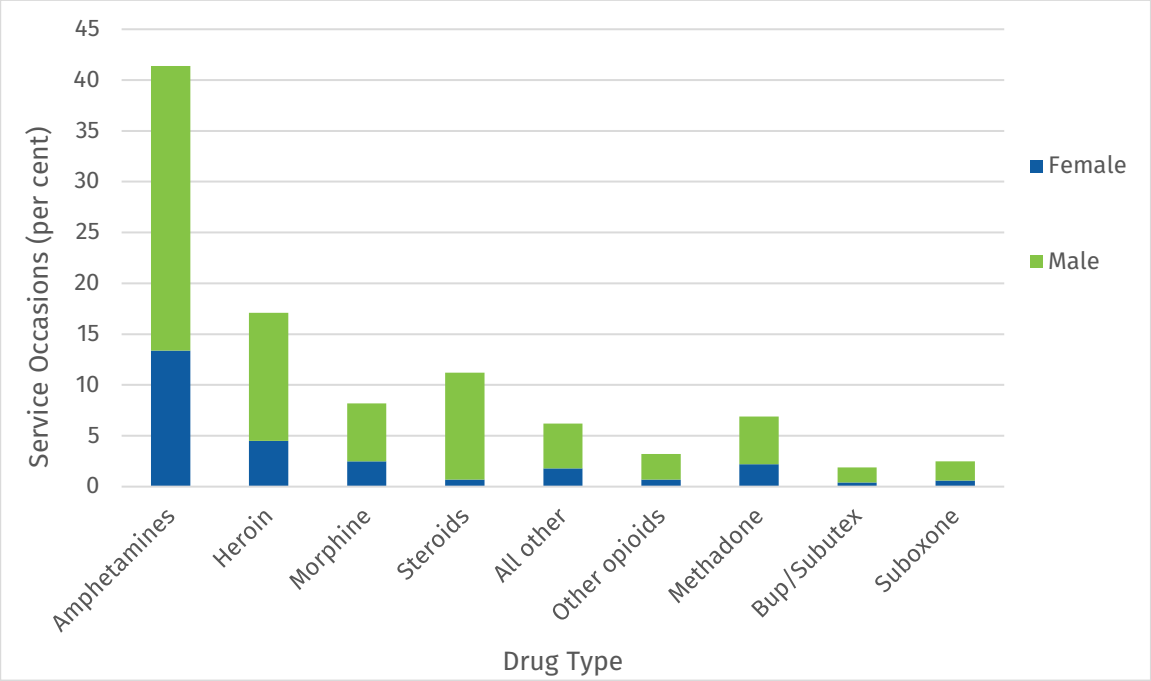

Figure 24. Southern Region: Service occasions related to male and female drug use, 2019, (N=62,045)

- For Southern region, the most commonly used drug types for males and females were amphetamines and heroin, consistent with state-wide data.
- Male and female service occasions for amphetamine use were lower than the state-wide average at 41.4 per cent, while at 8.2 per cent morphine related service occasions were lower than state-wide trend.
- At 11.2 per cent steroid use was greater than the 8.4 per cent state-wide figure and higher than in all other regions.

Discussion

Trends in service access

There were 165,601 occasions of service in 2019. This was similar to the 164,986 occasions of service across the 25 participating NSPs reported in 2018, arresting the 8 per cent decline in client activity among participating NSPs between 2013 and 2015. That decline can be largely attributed to the pharmacy NSP enhancement initiative. Northern region (31,000 to 20,858), Brisbane City (59,673 to 47,152) and Southern region (72,900 to 61,189) have seen the biggest decrease in occasions of service between 2013 and 2017 respectively. The impact of the pharmacy initiative had been anticipated.

Enhanced pharmacy NSP

The Enhanced Pharmacy NSP commenced on 1 December 2013. It is an initiative of the Department of Health and the Pharmacy Guild of Australia, Queensland Branch ("the Guild") and consists of the Department of Health supplying pre-packaged needles and syringes to pharmacies free of charge. The packs include a wider range of equipment, similar to that provided through public secondary NSP sites. In return pharmacists agree to charge a set handling fee of $3 to dispense the pre-packaged needles and syringes while the Guild provides increased staff training and ensures pharmacies provide safe disposal facilities. The key difference between pharmacy and public secondary NSPs is the set handling fee, paid by the client to the pharmacy. This program was implemented following a decline in pharmacy sector needle and syringe distribution from 1,625,785 syringes in 2009/2010 to 417,781 syringes in 2012/2013 (Figure 25).

As of 30 June 2021, 861 community pharmacies had signed up to become an enhanced pharmacy NSP; providing a range of sterile injecting equipment to clients and facilitating safe disposal of used injecting equipment. Over 12,900,000 syringes have been ordered by pharmacy NSPs since the initiative began in December 2013. This has decreased pressure on the public NSPs; demand for sterile injecting equipment decreased by 7 per cent for primary public NSPs and 3 per cent for secondary public NSP's between 2013/14 and 2017/18 financial years (Figure 25).

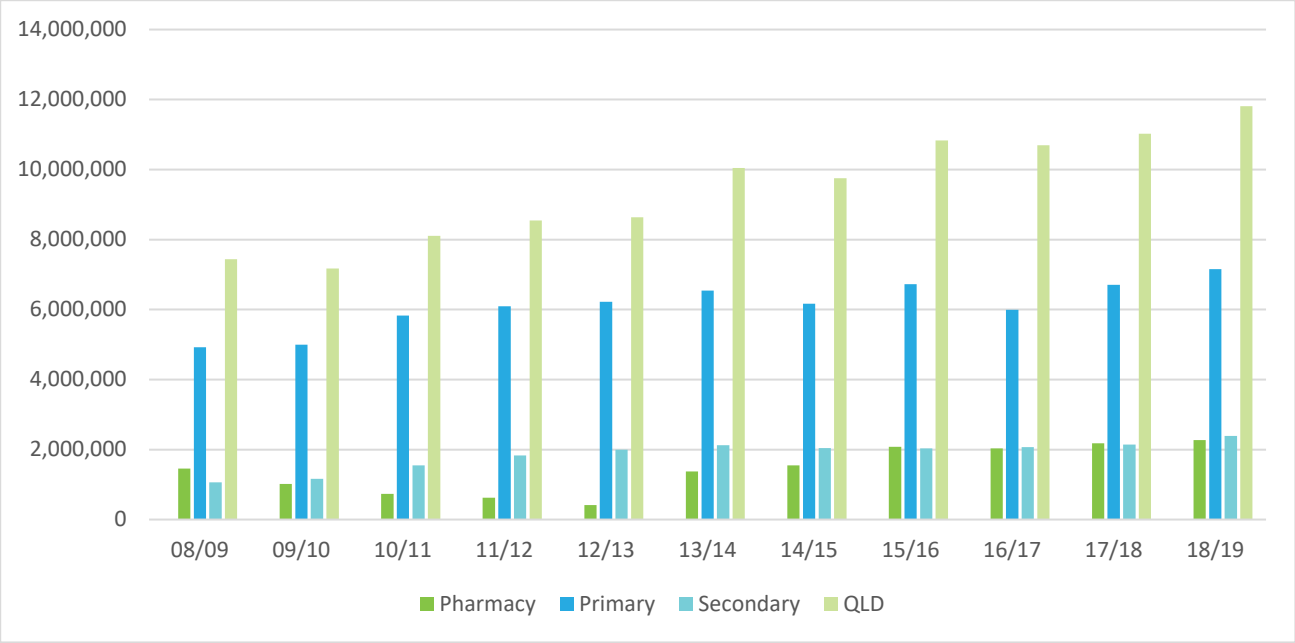

Figure 25. NSP ordering activity in QLD by sector, 2008/09 to 2018/19

Drug use patterns and trends

There are a number of key findings in terms of drug use patterns. The use of stimulants continues to be greater than opioid use and makes up 47.6 per cent of all service occasions.

Of all opioid related occasions of service, heroin (37 per cent) and pharmaceutical opioids (42 per cent) made up 79 per cent of opioid related occasions of service. Methadone is the OST drug most often reported by clients.

In 2013, crystal methamphetamine overtook base methamphetamine to become the most reported amphetamine type. This trend has continued with crystal methamphetamine being reported on 90 per cent of occasions of service where amphetamine type was reported in 2019. On 70 per cent of amphetamine-related service occasions the client reported a specific type of amphetamine.

Service occasions for steroid use remained stable at 8 per cent with males continuing to be more likely than females to report steroid use (10 per cent v 32 per cent).

Age, gender and Aboriginal and Torres Strait Islander status

The average age of injectors in Queensland for 2019 continues to increase each year. The average age of clients was 40 years, with the 40–44 age group comprising the largest proportion of clients (17 per cent). Only 5 per cent of occasions of service were under 25 years of age while 84 per cent were aged 30 years or more.

The majority of NSP clients are male, which is consistent with established patterns of program utilisation. Of the 165,601 service occasions 74 per cent were male and 25 per cent were female.

In 2019, of 165,601 service occasions, 16 per cent were for clients who identified as an Aboriginal and/or Torres Strait Islander person. Aboriginal and Torres Strait Islander clients had a mean age of 37 years and were similarly represented in the age groups.

Injecting equipment and drug use

The QMDS-NSP shows the state-wide distribution trends for different types of injecting equipment. Amphetamine-related service occasions were associated with the highest distribution of 1*ml* fixed needle syringes. Morphine related service occasions were associated with the highest distribution of 5 and 10*ml* syringes, as well as butterflies. 20*ml* syringes were mostly distributed for methadone use. Steroid-related service occasions have increased to 8 per cent in 2019 from 3.6 per cent in 2009, and the related 3 ml syringe distribution was higher than for morphine use.

Amphetamine and steroid use were more prevalent in the younger age group. In 53 per cent of service occasions involving clients less than 25 years, amphetamine was reported as the drug they intended to use. Heroin and morphine were the dominant drugs of choice for clients 50 years and older (38.5 per cent). Steroid use was largely limited to clients aged less than 35 years, who accounted for 58 per cent of the occasions of service related to steroids.

Interventions

The intervention data indicate that primary NSPs perform a major role in delivering information and education to clients to reduce HIV, hepatitis C, other BBVs, injection-related harm, and build trust and rapport with PWID, the target population.

NSP interventions comprise information and education on topics such as BBVs, safe injecting practices, safe disposal, drug-related topics, physical, mental and sexual health, provision of condoms and dams, and antenatal and parenting information. Interventions also include recording complaints of clients and informing them about NSP policies and directing them to other more convenient to access NSPs.

Staff provided a primary intervention on 38 per cent of service occasions. The top 5 interventions provided were BBV information, safe disposal information, safe injecting information, NSP policy information and physical health information. The prominence of these interventions reflects the health needs and concerns of clients.

Referral activity

As part of an NSP occasion of service a client may be referred to another service. There were 7,808 referrals provided by NSP staff during 201 or 4.7 per cent of all occasions of service involved referrals.

The top 4 referral destinations (excluding the 'Other' category) were referrals to hepatitis services, medical services, welfare services and legal services. Medical services include treatment (by nurses or medical practitioners) for bacterial infections and vascular disease, in addition to any other medical services not classified elsewhere.

It is important to note that there is under reporting of referral activity across the programs. This is being addressed through ongoing data collection training and simplification of

referral reporting, while retaining the capacity to comprehensively report on the referrals provided.

Intervention data indicate that primary NSPs perform a major role in delivering information and education to clients to reduce injection-related harm, demonstrating the unique and sentinel position of NSPs in the healthcare system.

Australian NSP survey

The Australian NSP survey, conducted by The Kirby Institute, University of NSW monitors Human Immunodeficiency Virus (HIV) and hepatitis C virus (HCV) antibody prevalence among PWID in Australia. The information gathered annually through the survey is used to guide policy and planning for treatment, prevention and harm reduction services in Australia. In 2019, a total of 2,609 participants were recruited through 54 NSP sites including 574 participants at nine sites in Queensland.

https://kirby.unsw.edu.au/report-type/australian-nsp-survey-national-data-report

Glossary

Cohort	A group of people with shared characteristics.
Butterflies	Winged infusion sets.
Data elements	A unit of data for which the definition, identification, representation, and permissible values are specified by means of a set of attributes.
Descriptive analysis	Analysis of data that helps describe, show or summarise data in a meaningful way to identify emerging patterns.
Drug to be injected	The drug that the client intends to inject following the occasion of service, using the equipment obtained from that occasion of service.
Aboriginal and Torres Strait Islander status	A measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin or both.
Interventions	Any education, provided to a client by needle and syringe program staff on a single occasion of service.
Needle dispensing machines	Self-contained units that store and dispense sterile injecting equipment.
Occasion of service	Contact between a needle and syringe program staff member and client for the purpose of dispensing injecting equipment and/or providing another service.
Opioid Substitution Therapy	A medical treatment that involves substituting an illegal opioid, such as heroin, with a longer acting but less euphoric opioid; methadone and buprenorphine are typically used and administered/taken under medical supervision.
Primary programs	A program that employs staff whose primary role is the provision of needle and syringe program services and catering to the needs of people who inject drugs.
Referral	Referring a needle and syringe program client to a service or agency during a needle and syringe program occasion of service.
Secondary programs	A program that provides needle and syringe program services as an adjunct to other health and community services. Secondary program staff provide limited needle and syringe program services as part of their general duties.

References

1. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle & Syringe Programs, The first 12 months of data collection, December 2006 to November 2007*, June 2008
2. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle & Syringe Programs, January 2008 to December 2008*, June 2010
3. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle & Syringe Programs, January 2009 to December 2009*, September 2010
4. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle & Syringe Programs, January 2010 to December 2010*, August 2011
5. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle & Syringe Programs, January 2011 to December 2011*, August 2012
6. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle and Syringe Programs, January 2012 to December 2012*, August 2013
7. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle and Syringe Programs, January 2013 to December 2013*, June 2014
8. Queensland Health, QNSP. *Queensland Minimum Data Set for Needle and Syringe Programs, January 2014 to December 2014*, October 2015
9. Queensland Health, QNSP. Queensland Minimum Data Set for Needle and Syringe Programs, January 2015 to December 2015, October 2016
10. Queensland Health, QNSP. Queensland Minimum Data Set for Needle and Syringe Programs, January 2016 to December 2016, November 2017
11. Queensland Health, QNSP. Queensland Minimum Data Set for Needle and Syringe Programs, January 2017 to December 2017, October 2018
12. Queensland Health, QNSP. Queensland Minimum Data Set for Needle and Syringe Programs, January 2018 to December 2018, December 2019
13. The Kirby Institute. Australian Needle and Syringe Program National Data Report, 2016-2020, Prevalence of HIV, HCV, and injecting and sexual behaviour among NSP attendees, July 2021