

Queensland Minimum Data Set for Needle and Syringe Programs

2014

Queensland Minimum Data Set for Needle and Syringe Programs

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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). This supports the ongoing development of the Needle and Syringe Program (NSP) in Queensland by providing core data about client and program activities.

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 clients. This routine program data collection is integral to reducing the spread of HIV and hepatitis C among PWID.

Data sets of various forms 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), collected since 1995, have been key data sources. Service occasion data was also collected by NSPs in the past; however, shortcomings in regard to data uniformity and comparability had limited its value.

Collection of standardised data began in December 2006 with 13 programs sending in monthly data electronically; since then participating sites have increased to 25 with Hervey Bay, Maryborough and Browns Plains being the most recent additions.

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 and treatment services linked to sexual health, mental health and Blood Borne Viruses (BBVs), have become more prominent, as has the need to meaningfully record referrals to such services. Changing trends in the demographics, types of drugs injected and regional variations for these drugs underscore the importance of collecting basic drug information from clients.

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 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 are 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
- Indigenous status.

Equipment data (six elements):

- 1ml needles and syringes issued
- 3ml barrels issued
- 5ml barrels issued
- 10ml barrels issued
- 20ml barrels issued
- Butterflies issued.

Interventions data (five elements):

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

In addition, there are three optional data elements – ‘wheel filters issued’, ‘disposal method’, and ‘phone calls’ – that may be used by individual NSPs as required. Indigenous status which was a previously optional data element has been mandatory since January 2010.

Data collection and analysis

Collection of standardised data began in December 2006 with 13 primary programs. Since then the numbers have increased with 19 primary programs and six secondary programs sending data collected through the QMDS-NSPs in 2014. 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 and Sunshine Coast HHSs. Northern region comprises of Cairns, Townsville and Mackay 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% of state-wide NSP during the 2013/14 financial year. Brisbane City, comprising Biala and Brisbane QulHN, has been analysed separately due to their geographic variation and size, together they contribute to over 30% of the service occasions across these 25 agencies. Descriptive analysis of the data was carried out using STATA version 11.0.

For the purpose of this report, data is examined at a state-wide level to indicate trends in this 12-month period. Data is 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 2014, 19 primary programs and six secondary programs collected and submitted data in accordance with the QMDS-NSP guidelines.
- The needle and syringe provision at these 25 sites comprised 86% of state-wide ordering during the 2013/14 financial year.
- In 2014 there were 183,204 occasions of service across the 25 participating NSPs.
- There was a 9% decline in occasions of service among the participating sites from the previous reporting year.

Drug use patterns

- Opioids continued to be the drugs most injected and were the primary drug type for 48% of the total occasions of service delivery; amphetamines and other stimulants made up 34% of the service occasions.
- Heroin use and pharmaceutical opioids made up 76% of all opioid-related service occasions.
- Methadone continued to be the Opioid Substitution Therapy (OST) drug most often reported by clients with subutex® coming a close second.
- At 61%, crystal methamphetamine (ice) is the most reported amphetamine in 2014.
- Steroids (term used to describe a number of performance and image enhancing drugs) continued to increase and constituted 8% of all occasions of service in 2014.

Client demography and drug use

- Of the 183,204 service occasions, 75% (n = 136,536) were for males and 25% (n = 46,412) were for females, with less than 1% of service occasions missing this information.
- In 2014, of the 183,204 service occasions, 10% (n = 18,737) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. This may be an under-representation due to missing data.
- The average age of clients was 37 years (SD = 10.5), with the 35-39 age group comprising the largest proportion of clients (19%). and clients aged 35 years or more in age made up 58% of the occasions of service.
- Heroin and morphine (term used to describe a number of morphine type pharmaceutical opioids) together were the dominant drugs of choice for clients 40 years and older (43%).

- The majority of steroid use was among clients aged less than 35 years, comprising 77% 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 more prevalent among clients in the 40 years and older age groups.

Interventions and referrals

- There were 83,866 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, and antenatal/parenting. This occurred on 46% of service occasions.
- There were over 6,566 referrals provided by NSP staff during the 12-month period; 8% of all primary interventions involved referrals.
- The top three referral destinations across the state were to Medical service, hepatitis services and other NSPs.

Regional trends

- There were similar patterns of age distribution for both genders throughout the state with males outnumbering females. Central region recorded the highest attendance of females with 29% of service occasions, compared with 25% state-wide. Brisbane city recorded the lowest attendance of females with 21% 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 (53% v 46%) and steroid use was more prevalent in the Southern region compared to state-wide (13% v 8%)
- Northern region displayed distinctively different drug use trends to other regions: the majority (69%) of opioid-related service occasions were for morphine, while heroin accounted for only 10%.

State-wide Data Profile

Occasions of service

There were 183,204 occasions of service for 2014 across the 25 participating NSPs; this was a decrease over the 200,386 occasions of service observed for 2013 (Figure 1). This decline can be attributed in part to the pharmacy NSP enhancement initiative rolled out across Queensland since December 2013.

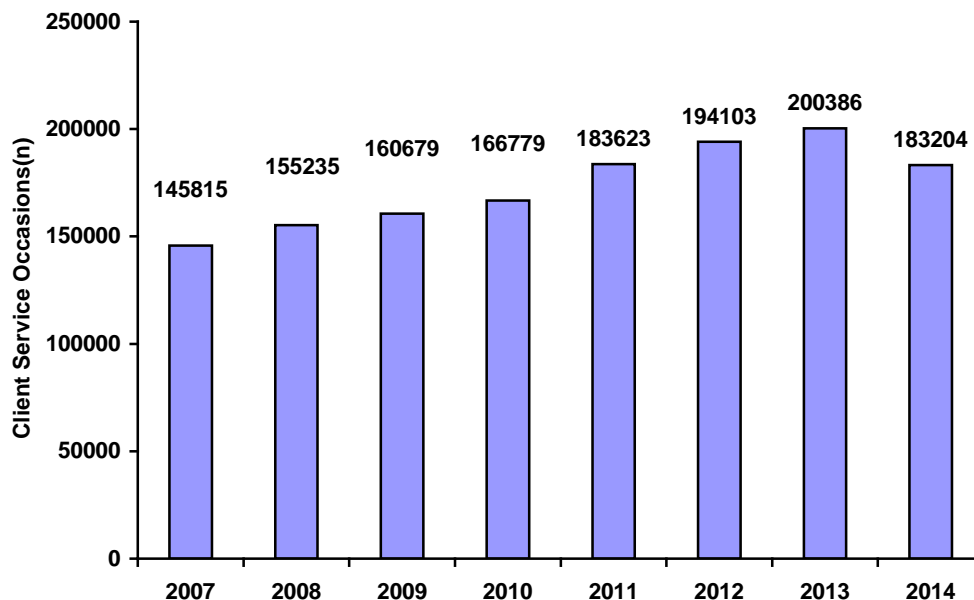


Figure 1 Total service occasions across participating NSPs, 2007-14

Client demographics

Client Age

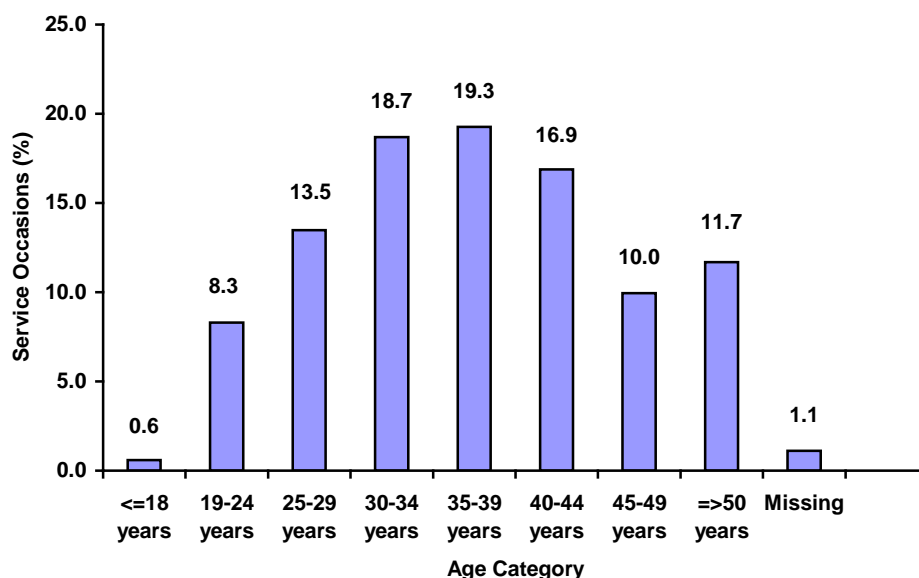


Figure 2 Total service occasions by age category, 2014, (N = 183,204)

The average age of clients was 37 years (SD = 10.5), with the 35-39 year age group comprising the largest proportion of clients (19%) (Figure 2). The 30-34 and the 40-44 age groups were the second and third largest groups respectively, followed by 25-29 year olds. Clients aged 35 years and over comprised 58% of all clients, while clients under the age of 25 comprised nine per cent. This continues the trend from previous years of an ageing population of people who inject drugs accessing the NSPs.

Table 1 Percentage of service occasions related to drug type, by age group (N=167,701)

Drug Type (%)	Total	<=18	19-24	25-29	30-34	35-39	40-44	45-49	=>50	Missing
Amphetamines	33.8	50.4	32.5	38	36.4	36.8	32.8	32.8	23.7	17.5
Heroin	18.2	6	8.9	13.8	19.6	20.7	19.5	20	21.5	7.4
Morphine	18	5.2	9.2	12	14.9	17.1	21.9	24.1	28.5	10.9
Methadone	4.7	0.9	1.9	3.3	4.6	4.6	6.3	5.6	5.6	2.6
Bup/Subutex®	2.1	2.8	2.2	1.8	2.9	3.3	1.8	1.3	0.6	0.3
Suboxone®	1.8	4.1	2.8	2.1	2.8	2.2	1.4	1	0.4	0.2
Other opioids	2.8	0.5	1.8	2	2.6	2.9	2.8	3.5	4	1.1
Steroids	8.3	13.7	29.6	17.6	7.6	4.3	3.7	2.3	1.7	4.8
All other categories*	6	10.9	7.5	5.9	5	4.6	5.6	5.3	9.7	8
Missing	4.3	5.5	3.6	3.5	3.6	3.5	4.2	4.1	4.3	47.2
Total in each age group (n)	183,204	1126	15218	24669	34248	35312	30940	18222	21413	2056

*Includes all other substance types (other stimulants, Human Growth Hormone (HGH), vitamin B, insulin, hallucinogens, ketamine, gamma-Hydroxybutyric acid (GHB) and other drugs)

Table 1 displays the proportion of service occasions by age group and drug type used. Comparing all drug types, amphetamines accounted for a majority of service occasions across all age groups except for those aged 50 years and over. Amphetamine was reported as being used in 50% of service occasions involving clients aged 18 years and under, with morphine/pharmaceutical opioid use accounting for the majority of service occasions (29%) for those aged 50 years and older. Steroid use was more prevalent in the younger age group with clients younger than 35 years making up 77% of the service occasions related to steroid/performance and image enhancing drugs use.

Client gender

Of the 183,204 service occasions, 75% (n = 136,536) were male and 25% (n = 46,412) were female. In less than one per cent (n = 256) of service occasions this information was missing or not stated. There were minimal differences observed for males and females clients across all age categories (Figure 3).

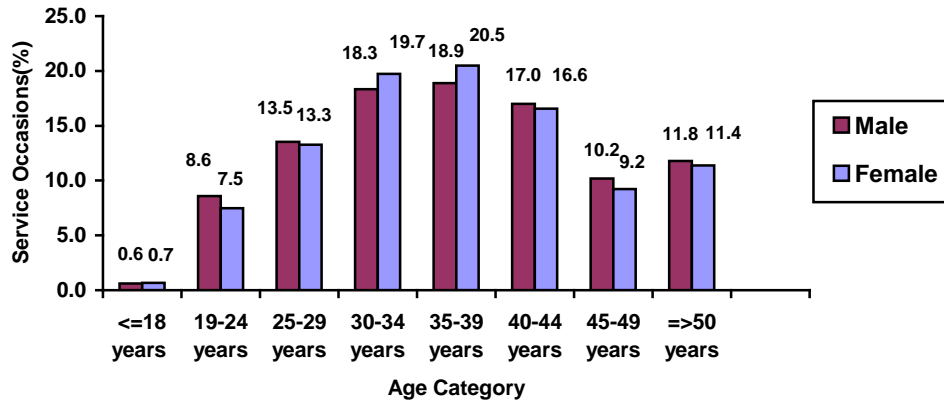


Figure 3 Service occasions by age category & gender, 2014, (N = 183,204)

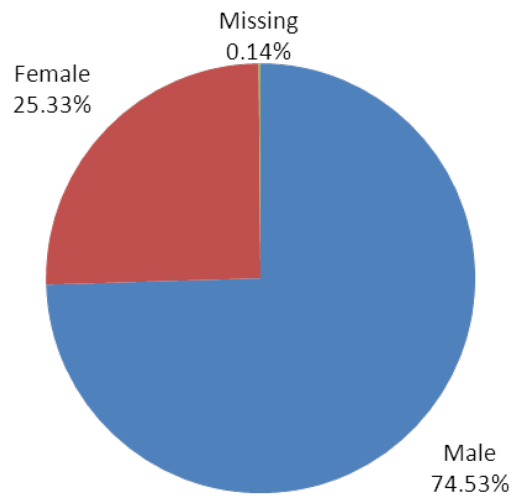


Figure 4 Service occasions by gender, 2014, (N = 183,204)

Aboriginal and Torres Strait Islander profile

Indigenous status was collected as a mandatory data element of the QMDS-NSP for the first time in 2010. In 2014, of the 183,204 service occasions, 10% (n = 18,737) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. This may be an under-representation due to missing data. Clients identifying as an Aboriginal and/or Torres Strait Islander person were younger with a mean age of 34.7 years compared to 37.2 years in the non-Aboriginal and Torres Strait Islander group (Figure 6).

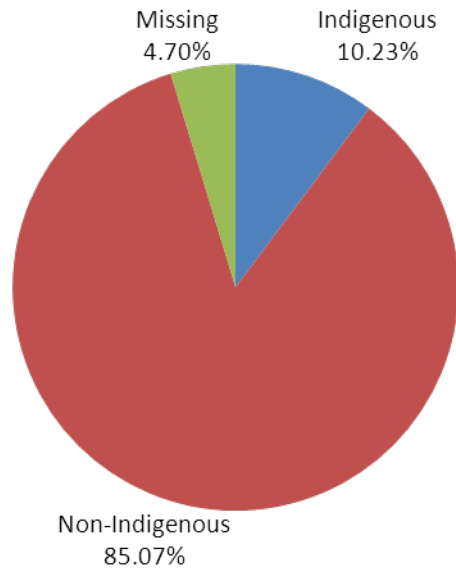


Figure 5 Service occasions by Aboriginal and Torres Strait Islander status, 2014, (N = 183,204)

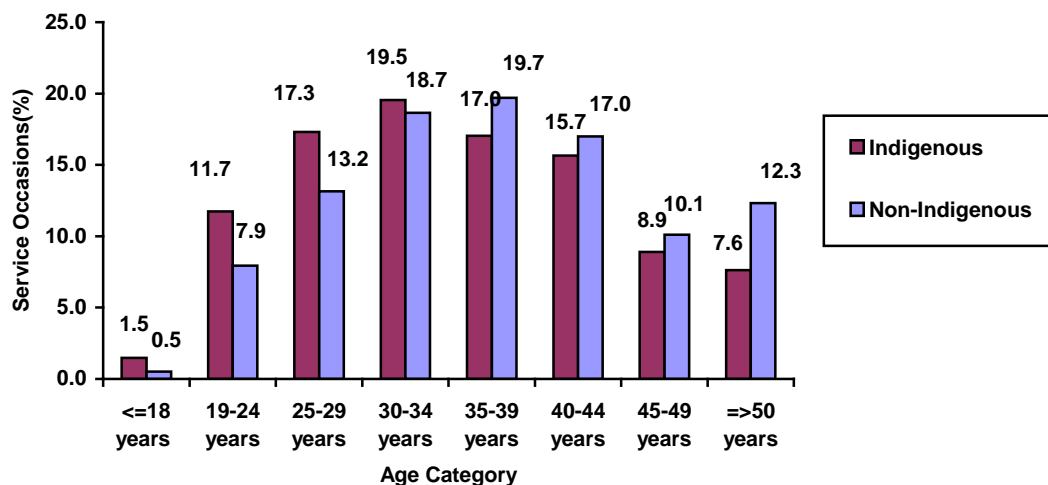


Figure 6 Service occasions by Aboriginal and Torres Strait Islander status and age, 2014, (N = 183,204)

Drug trends

Service Occasions by Drug Use and Gender

Figure 7 displays service occasions by drug type and gender. The three most commonly used drug types were the same for males and females. Amphetamines accounted for 32% of male and 38% of female occasions of service. Heroin use was similar in both males and females at 18% and 20% of service occasions respectively; morphine use was also similar for both males and females at 19% and 17% respectively. A key difference between male and female drug use was steroid use; which was largely confined to males; 10.7% male v 1.3% female.

The 'All Other' category in this figure encompasses all other drug types (other stimulants, Human Growth Hormone (HGH), Vitamin B, insulin, hallucinogens, ketamine, GHB (gamma-hydroxybutyric acid (GHB), benzodiazepines, fentanyl, cocaine and ecstasy). The missing and not applicable categories comprised ten per cent of all service occasions.

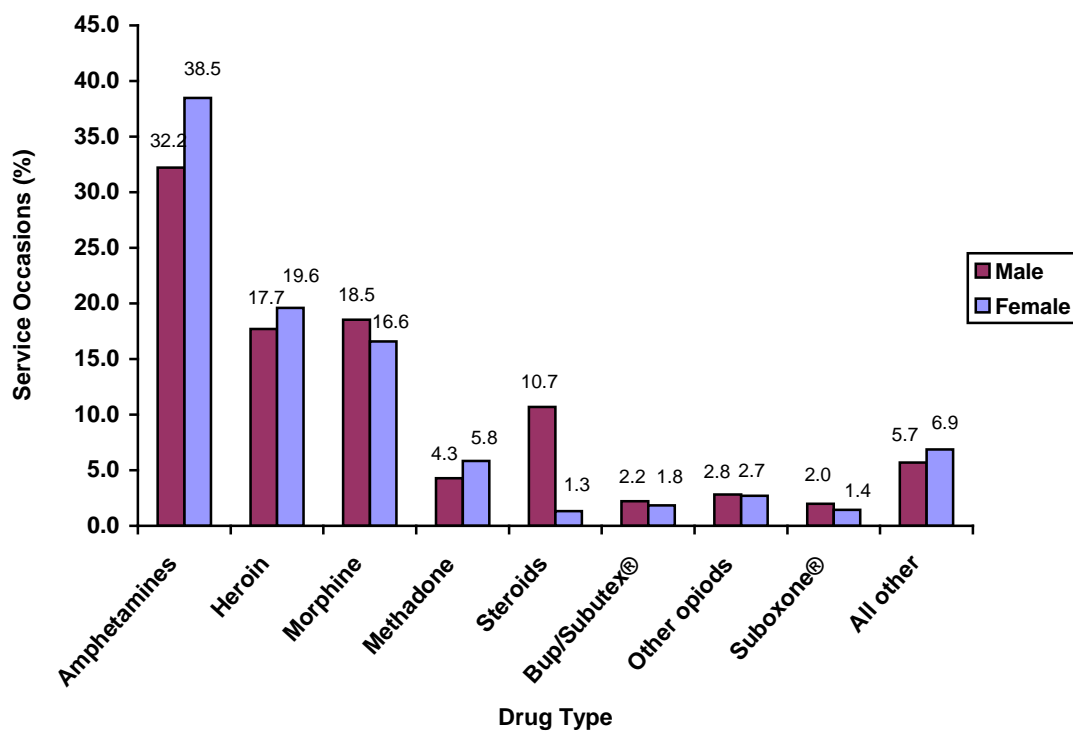


Figure 7 Service occasions related to drug use and gender, 2014, (N = 183,204)

Amphetamine subtypes

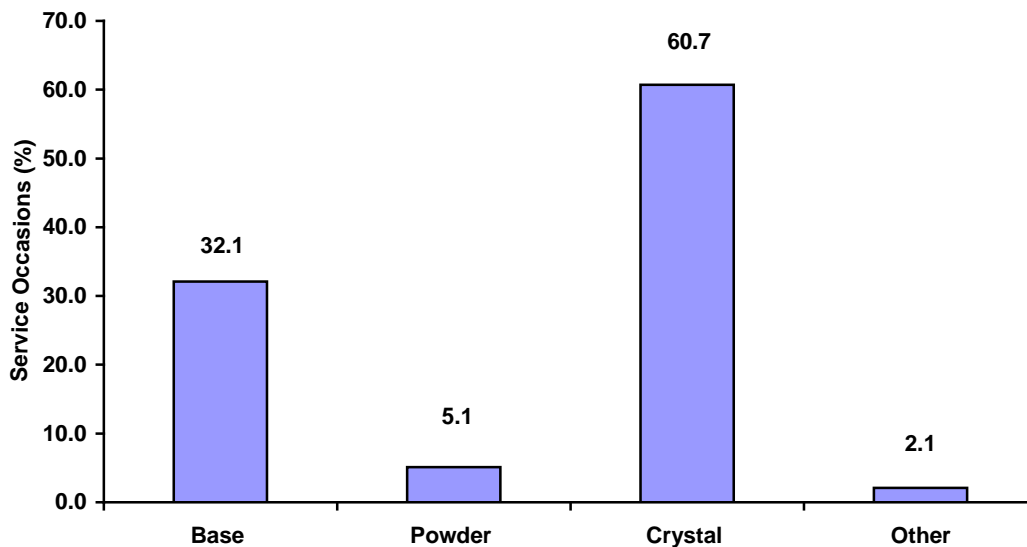


Figure 8 Per cent of service occasions for each amphetamine subtype (where specified), 2014, (N = 30,914)

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 four 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 61,907 occasions of service related to all amphetamine use, 50% were recorded as specific amphetamine types. Figure 8 displays the breakdown of amphetamine; crystal methamphetamine (61%) and base methamphetamine (32%) were the most common forms. An increase in the reporting of crystal methamphetamine observed in 2013 has continued into 2014, however overall use of amphetamines remained stable.

Opioid related service occasions

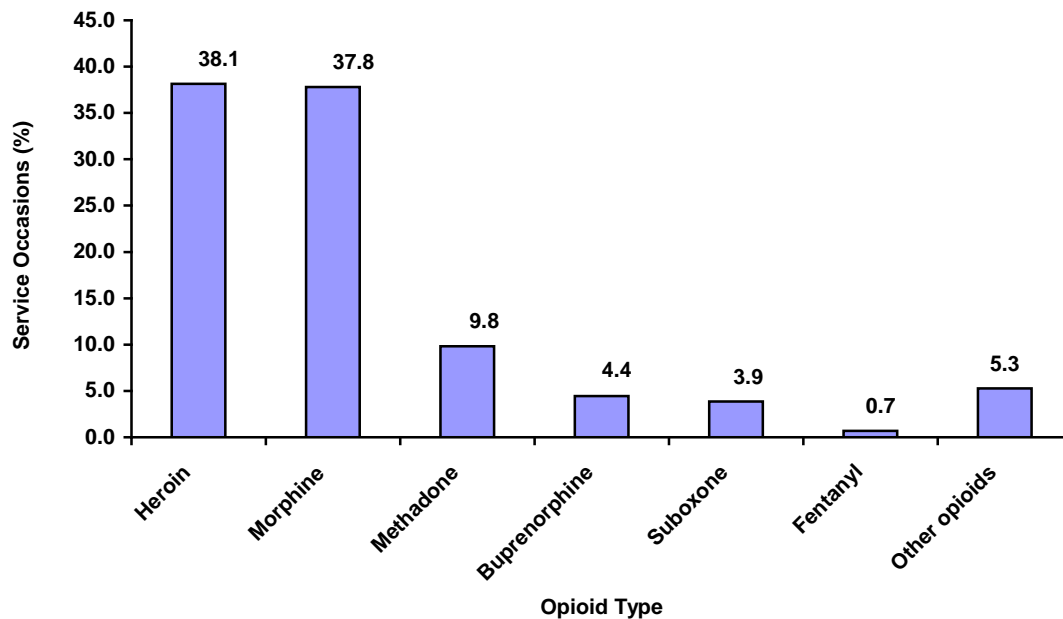


Figure 9 Percentage breakdown of opioid related service occasions, 2014, (N = 87,250)

Figure 9 displays the percentage breakdown of service occasions related to all opioid use. Heroin and morphine, comprising 76% of opioid related service occasions were the most commonly used opioids throughout this period.

Equipment ordering and distribution

Equipment ordering

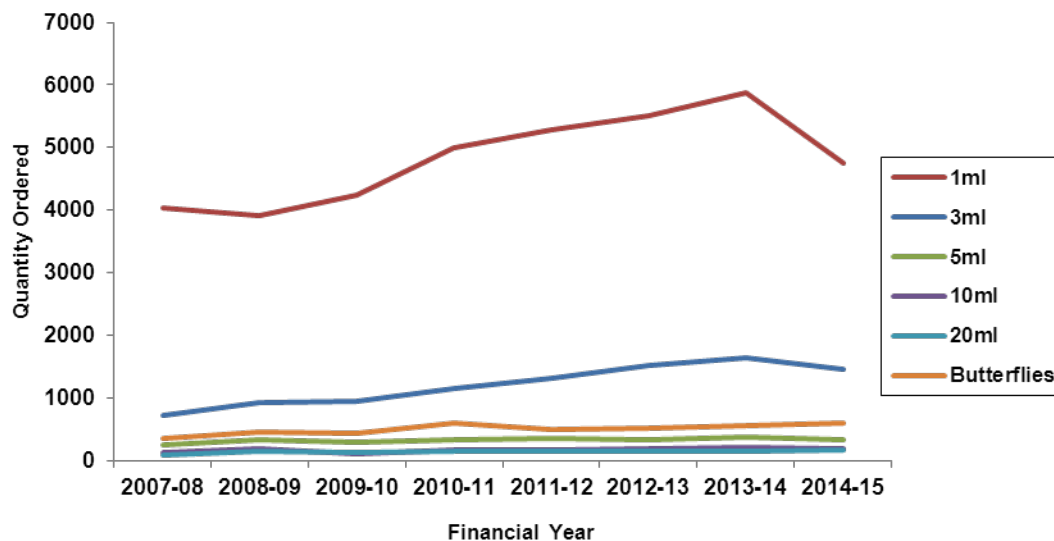


Figure 10 Total equipment ordered, Financial Year 2007-08 to 2014-15, (in thousands of units)

The total for each equipment type ordered by all primary and secondary NSP sites in Queensland for financial years 2007-08 to 2014-15 is displayed in Figure 10. 1ml syringes were the most commonly ordered item among syringes followed by 3ml syringes. The ordering data for 1ml and 3ml syringes also includes those that were ordered as Needle Dispensing Machine (NDM) kits; the total of 1ml and 3ml syringes dispensed as NDM kits can be observed in Figure 11.

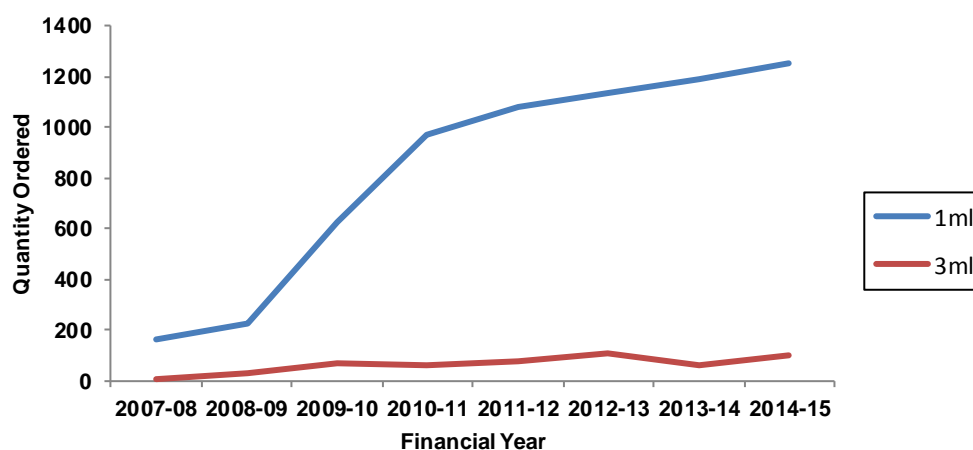


Figure 11 Total equipment ordered as NDM kits, Financial Year 2007-08 to 2014-15, (in hundreds of units)

Equipment distributed

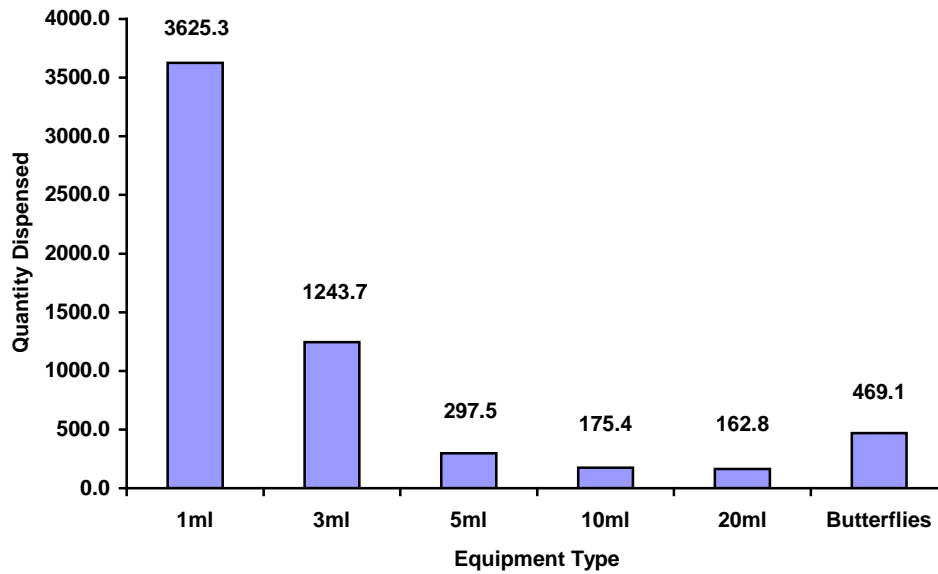


Figure 12 Total equipment distributed, 2014, (in thousands of units)

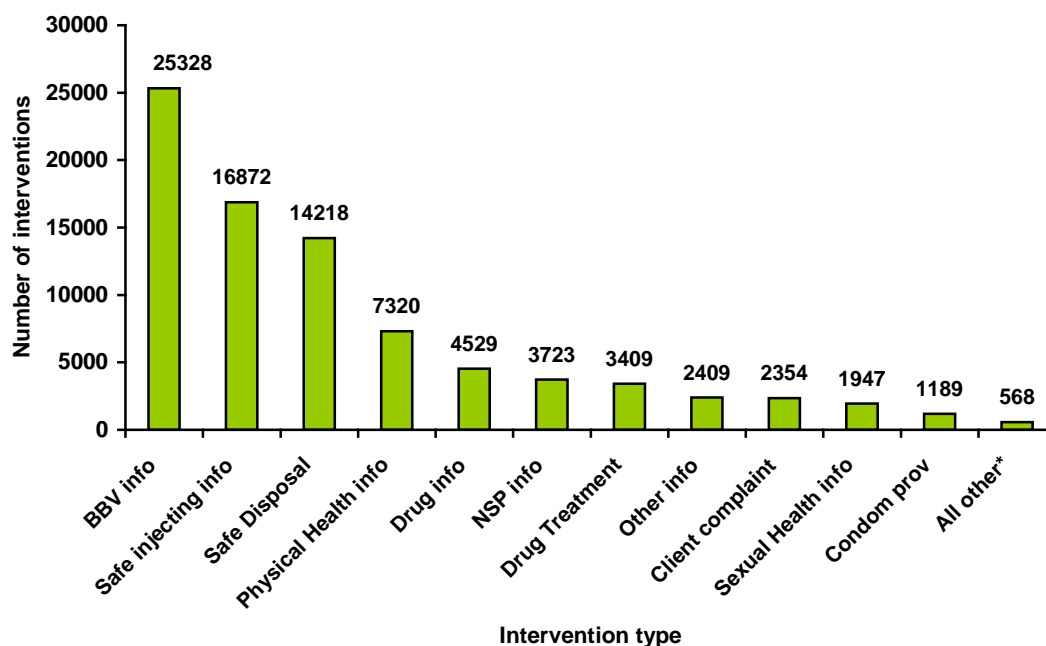
Total distribution through occasions of service for each equipment type is displayed in Figure 12. 1ml syringes were the most commonly dispensed item, comprising 58% of all equipment dispensed without charge followed by 3ml syringes which accounted for 22%.

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 topics, sexual health and antenatal information. The intervention 'client-focussed 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 complaint.

Up to three 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 2014.

Staff provided a primary intervention on 41% of service occasions. The top five interventions provided were BBV information, safe injecting information and education, safe disposal information, physical health information and drug related information. The prominence of these interventions reflects the health needs and concerns of clients. The 'Other info' category encompasses site-specific interventions not covered by the minimum dataset codes.



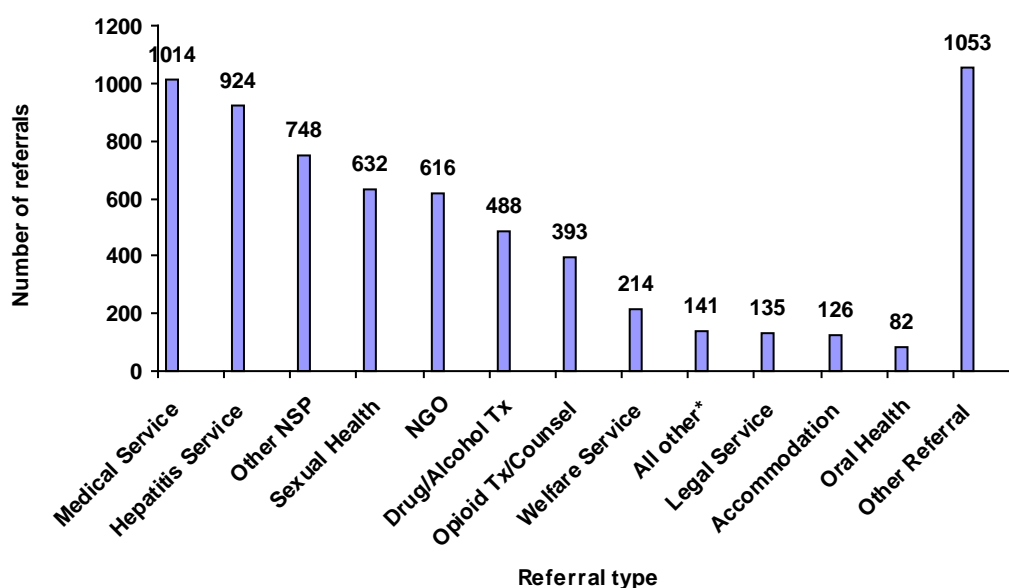
*Includes antenatal education, OST information and education and Mental Health information and education

Figure 13 Type of interventions provided, 2014, (N = 83,866)

Referrals to services

As part of an NSP occasion of service a client may be referred to another service. There were 5,156 referrals provided by NSP staff during 2014; three 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 four referral destinations (excluding the 'Other' category) were referrals to medical service, hepatitis service, other NSPs and sexual health 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.



*Includes accommodation services, antenatal or parenting service, mental health treatment/counselling, hospital and HIV/AIDS service

Figure 14 Type of referrals provided, 2014, (N = 6,566)

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 a 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.

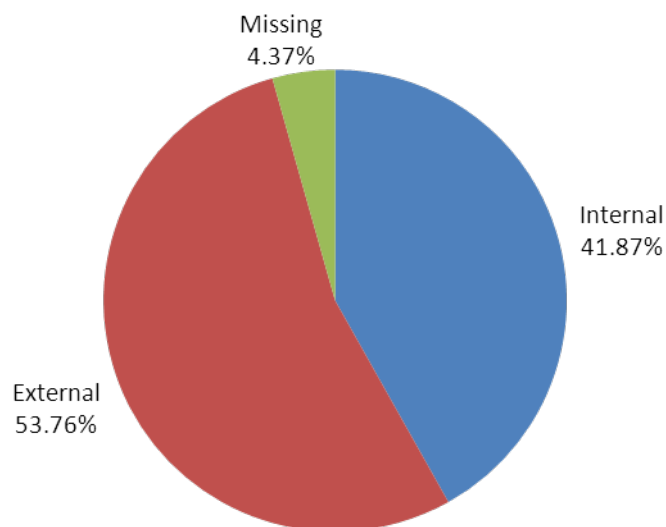


Figure 15 Per cent of internal and external referrals, 2014, (N = 6,566)

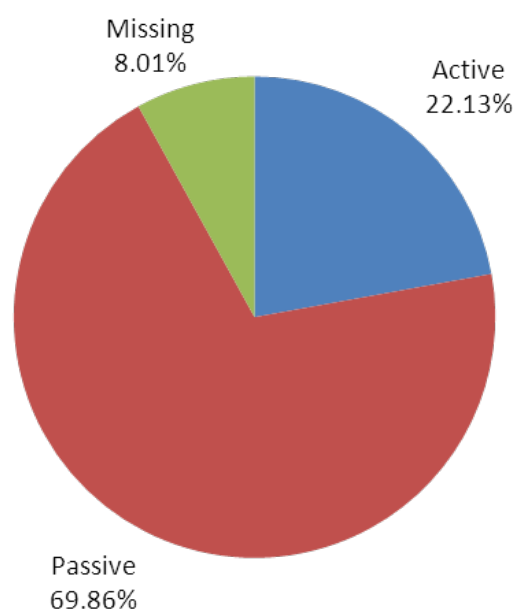


Figure 16 Per cent of active and passive referrals, 2014, (N = 6,566)

Figures 15 and 16, display the breakdown of internal and external referrals, and active and passive referrals respectively. More 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 2014 there were 50,977 occasions of service (30% of total) provided in the Brisbane city region (comprising Biala and QuIHN Brisbane).

Client gender

- Male attendance (79%) was higher than state-wide male attendance (75%).
- 21% of clients attending were female; less than overall service occasions related to females (25%).
- Indigenous clients made up 5% of occasions of service in Brisbane city which was lower than the 9% state-wide representation.

Client age

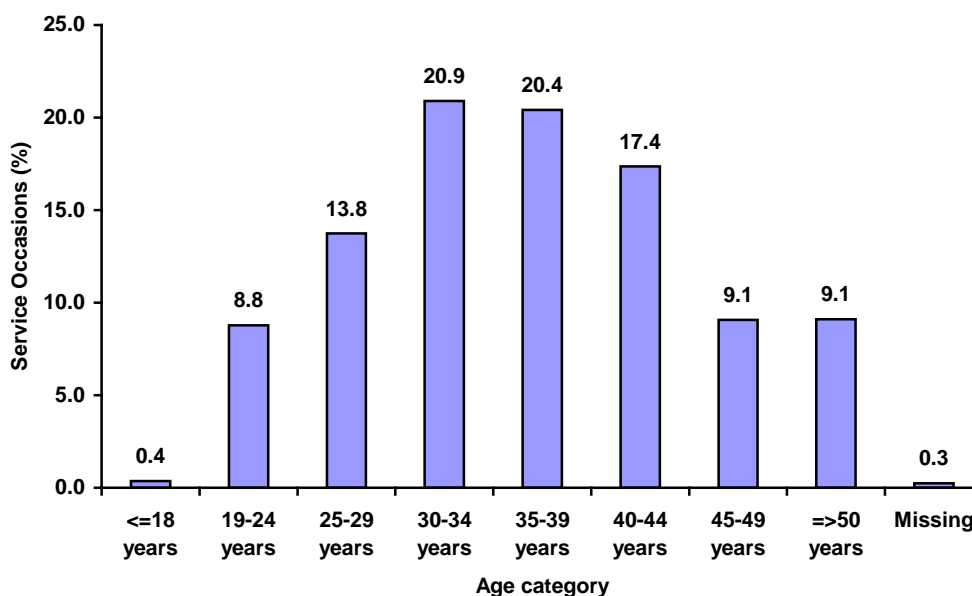


Figure 17 Brisbane City: Age distribution, 2014, (N = 50,977)

- The average age of clients attending was 36.3 years (SD = 9), similar to the state-wide mean (36.9 years). Consistent with state-wide patterns, the 35-39 and 30-34 year age groups comprised the largest proportion of clients attending Brisbane city NSPs.

Drug trends

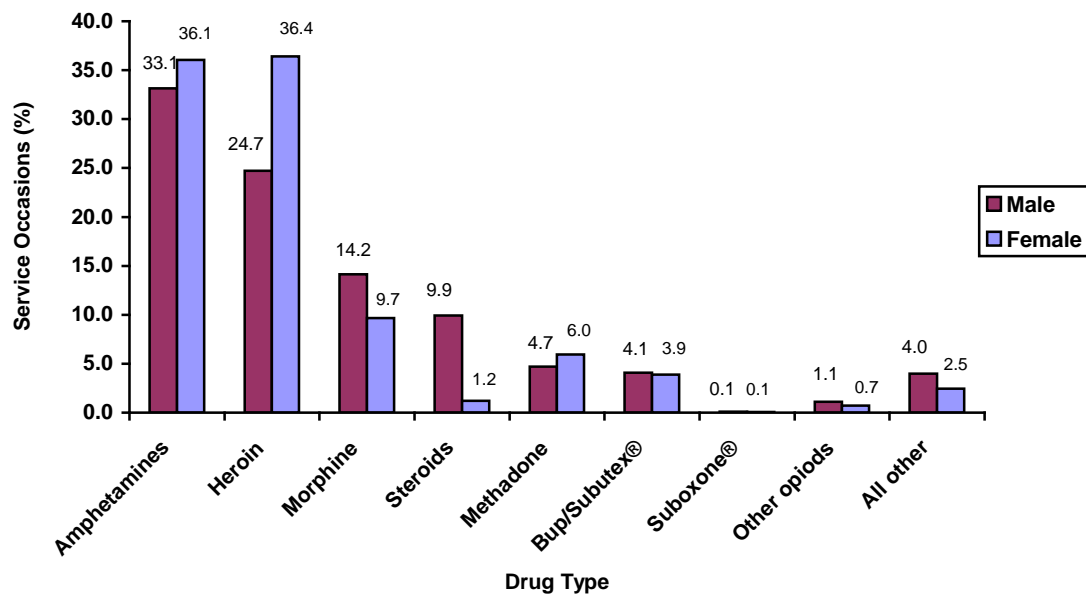


Figure 18 Brisbane City: Service occasions by drug use and gender, 2014, (N = 50,977)

- 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 higher for both females (36%) and males (33%), in comparison to state-wide levels. Heroin was reported by a greater number of females (36%) when compared to the males (25%) and was also higher than state-wide levels.

Interventions provided

Table 2 Brisbane City: Interventions provided, 2014

Information/Education	Interventions
Safe Injecting Information	2159
NSP Policy Information	1392
Drug Information	927
BBV Information	840
Safe Disposal	361
Other Information	222
Physical Health	128
Sexual Health Information	61
Mental Health Information	35
Client Complaint	15
All Other*	104
Total interventions	6244

*All Other includes OST program information, condom provision, drug treatment information and antenatal information.

- On 12% of service occasions, at least one intervention was provided to clients attending Brisbane city NSPs.
- Information on safe injecting was provided most often, followed by NSP policy information, drug information, BBV information, safe disposal and physical health information.

Referrals to services

Table 3 Brisbane City: Referrals provided, 2014

Services	Referrals
Other Referral	752
OST	112
Other NSP	108
Drug & Alcohol Treatment	102
Medical Service	73
Hepatitis Service	71
Mental Health	13
Sexual Health Service	7
Accommodation	4
All Other*	25
Total Referrals	1267

*All Other includes HIV services, oral health, hospital, legal service, NGO, welfare services, antenatal and client complaint.

Central region

- In 2014, Central region (comprising Rockhampton ATODS, Bundaberg ATODS, Caboolture Community Health, Redcliffe Community Health, Sunshine Coast ATODS, QulHN Sunshine Coast, Hervey Bay ATODS, Maryborough Hospital and Gladstone ATODS) conducted 40,027 occasions of service (24% of total).

Client gender

- Female attendance in this region was higher than state-wide attendance (29.2% v 25.0%) and all other regions.
- Male clients comprised 70% of service occasions.
- Indigenous clients made up five per cent of occasions of service in Central region which was lower than state-wide representation.

Client age

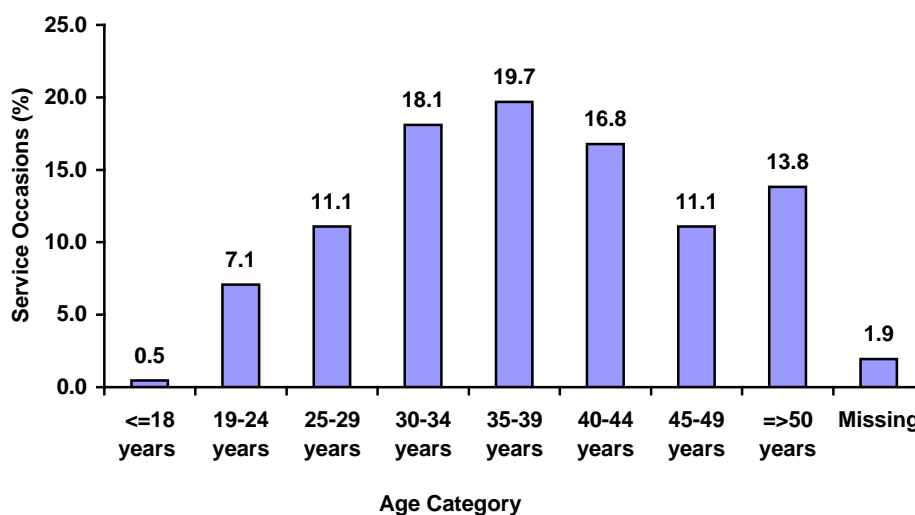


Figure 19 Central Region: Age distribution, 2014, (N = 40,027)

- The average age of clients was 38 years (SD = 11.2), higher than the state-wide average.
- Consistent with state-wide data, the 35-39 age group made up the largest proportion of client presentations.

Drug trends

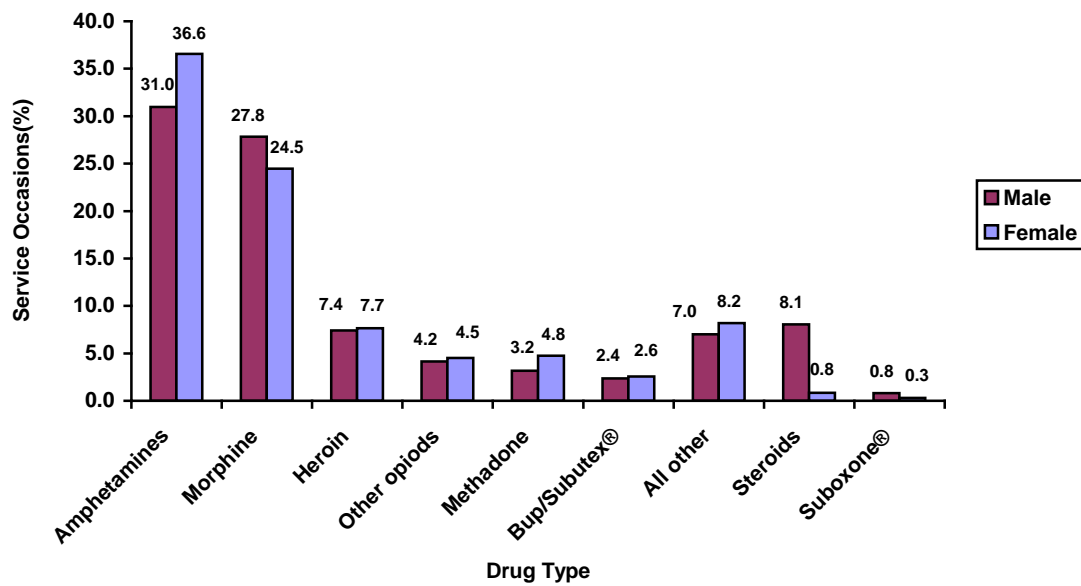


Figure 20 Central Region: Service occasions related to male and female drug use, 2014, (N = 40,027)

- Amphetamine use was similar to state-wide patterns of use for male and female service occasions.
- The use of heroin was lower for males and females when compared to state-wide data (7.4% v 17.4% and 7.7% v 19.2% respectively); also service occasions related to morphine was higher for both males (27.8%) and females (24.5%) in comparison to state-wide data.

Interventions provided

Table 4 Central Region: Interventions provided, 2014

Information/Education	Interventions
BBV Information	3452
Safe Injecting Information	3013
Drug Information	2552
Client Complaint	2307
NSP Policy Information	1290
Other Information	977
Safe Disposal	974
Condom Provision	887
Physical Health	744
Sexual Health	266
All Other*	291
Total interventions	16753

*All Other includes OST program information, drug treatment information, mental health information and antenatal information.

- Information and education was provided to clients on 42% of service occasions, particularly education related to safe disposal of equipment, safe injecting, BBV information, drug information, NSP policy information, physical health, and condom provision.

Referrals to services

Table 5 Central Region: Referrals provided, 2014

Services	Referrals
Drug & Alcohol Treatment	118
NGO	108
OST	61
Other NSP	59
Medical Service	57
Hepatitis Service	34
Sexual Health Service	27
Other Referral	20
Mental Health	17
Accommodation	12
All Other*	54
Total Referrals	567

*All Other includes HIV services, oral health, hospital, legal service, antenatal and client complaint.

- Referrals to drug and alcohol treatment, NGO, OST and other NSPs were more prevalent than to any other referral type.

Northern region

- In 2014, the Northern region (comprising Cairns ATODS, Mackay ATODS, North Ward Community Health (Townsville), Innisfail Community Health and Cairns Youth Link) conducted 29,153 occasions of service (17% of total).

Client gender

- Male and female attendance was similar to state-wide attendance; with 71% of service occasions being for males and 29% for females.
- Aboriginal and Torres Strait Islander clients made up six per cent of occasions of service in Northern region which was lower than the nine per cent state-wide representation.

Client age

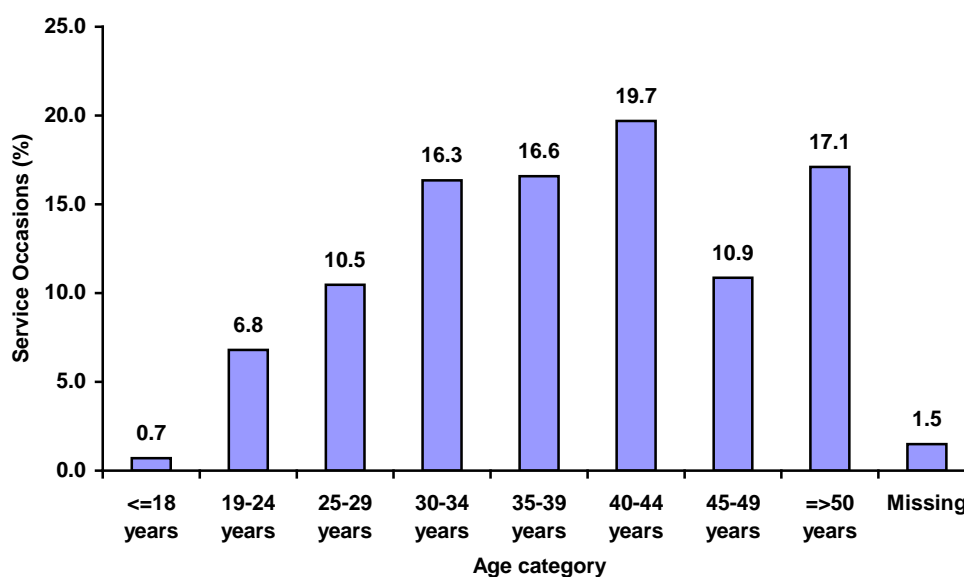


Figure 21 Northern Region: Age distribution, 2014, (N = 23, 728)

- The average age of clients attending was 38.3 years (SD = 11.1), 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 30 years and higher attendance of clients aged over 40 years.

Drug trends

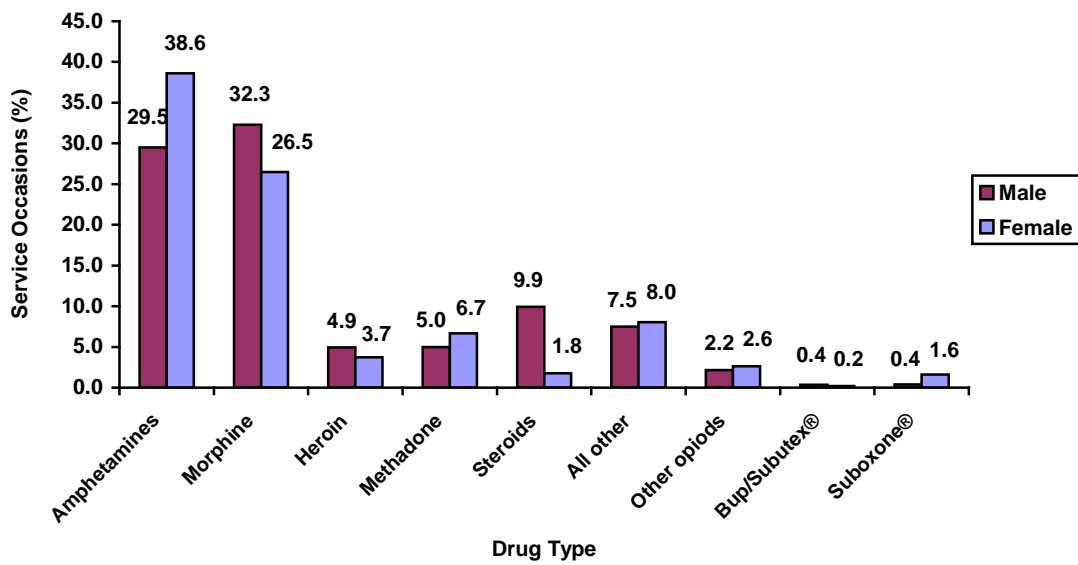


Figure 22 Northern Region: Service occasions related to male and female drug use, 2014, (N = 23,728)

- 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 data; it accounts for 5% of male and 4% of female service occasions, compared to approximately 18% of male and 20% of female service occasions state-wide.

Interventions provided

Table 6 Northern Region: Interventions provided, 2014

Information/Education	Interventions
BBV Information	5088
Safe Injecting Information	3057
Safe Disposal	2052
NSP Policy Information	997
Other Information	882
Drug Information	697
Physical Health	649
Condom Provision	262
Client Complaint	29
Drug Treatment	23
All Other*	786
Total interventions	14522

*All Other includes OST program information, mental health information, sexual health information and antenatal information.

- At least one intervention was provided on 61% of service occasions.
- BBV information, safe injecting and safe disposal were the most common interventions provided.

Referrals to services

Table 7 Northern Region: Referrals provided, 2014

Services	Referrals
Other NSP	554
NGO	463
Hepatitis Service	410
Medical Service	243
Welfare Service	190
Sexual Health Service	147
Other Referral	147
Drug & Alcohol Treatment	118
OST	112
All Other*	343
Total Referrals	2727

* All Other includes HIV services, oral health, hospital, legal service, accommodation, mental health, antenatal and client complaint.

- Referrals to other NSPs, NGOs, hepatitis and medical services were the most frequently provided referrals in the Northern region.
- Referrals to NGOs made up 17% of the referrals provided across Northern region.

Southern region

- There were a total of 68,472 occasions of service (37% of total) conducted in this region (comprising Beenleigh Community Health, Gold Coast ATODS, Logan Central Community Health, Toowoomba Sexual Health, Ipswich Sexual Health, Inala ATODS, Browns Plains ATODS, Redland Community Health and QuIHN Gold Coast) for 2014. The NSP service at Palm Beach Community Health ceased in 2013 and was therefore excluded from the QMDS-NSP report and replaced by Browns Plains Community Health.

Client gender

- Male and female attendance was similar to state-wide attendance; with 74% of service occasions being for males and 26% for females.
- Indigenous clients made up 17% of occasions of service in Southern region which was higher than the 10% state-wide representation and the highest of the four regions.

Client age

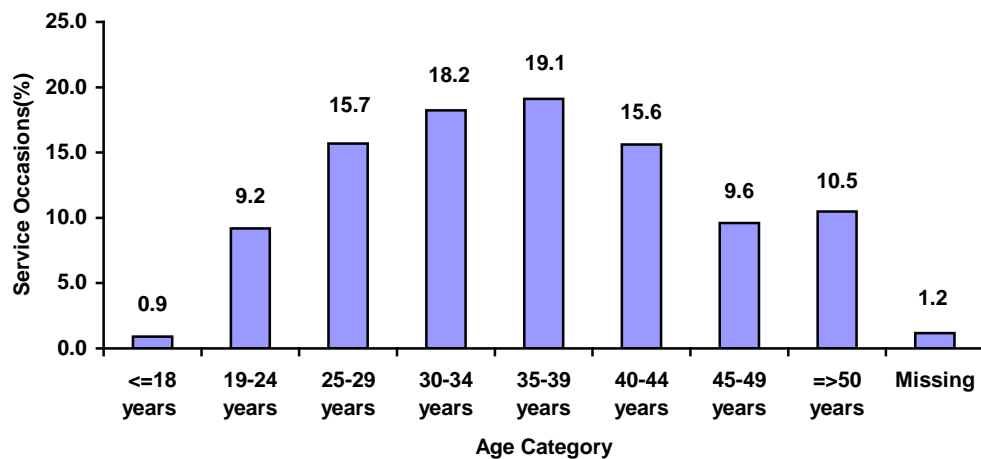


Figure 23 Southern Region: Age distribution, 2014, (N = 68,472)

- The average age of clients attending was 36.1 years (SD = 10.4), similar to the state-wide average.
- The age distribution for this region was in contrast to the state-wide distribution; there was a higher proportion of clients aged 30 years and under.

Drug trends

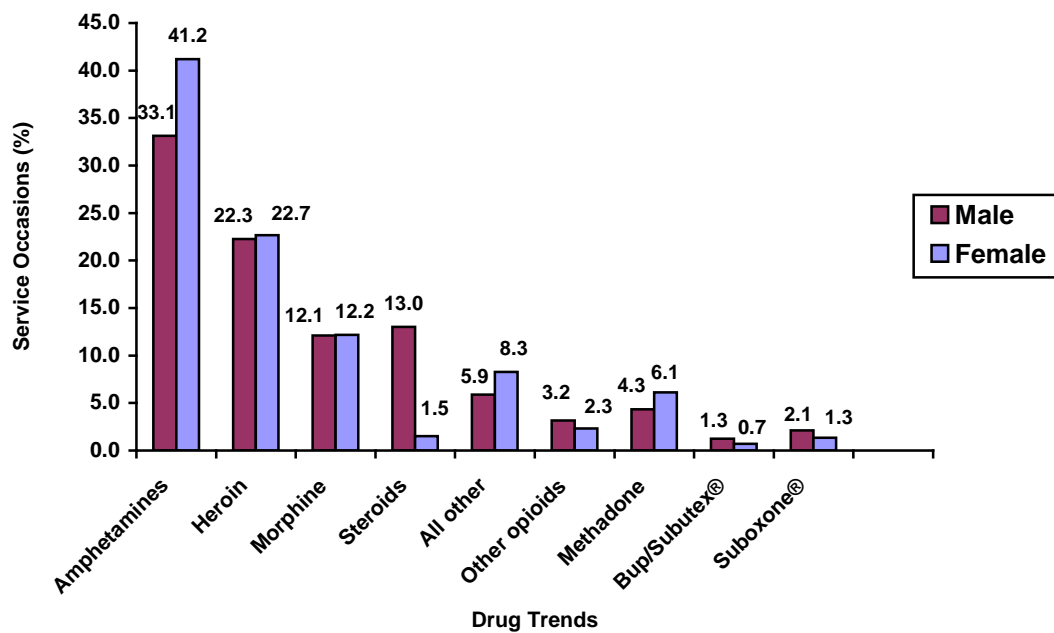


Figure 24 Southern Region: Service occasions related to male and female drug use, 2014, (N = 68,472)

- For Southern region, the most commonly used drug types for males and females were amphetamines, heroin and morphine, consistent with state-wide data.
- Female service occasions for amphetamine use were higher than for males and state-wide average at 41%, while morphine occasions were lower than state-wide trend for females at 10%; steroid use among males was highest in the southern region at 13% in comparison to other regions.
- Steroid use was similar to state-wide trends for females and higher (13.1% v 10.7%) and higher than other regions.

Interventions provided

Table 8 Southern Region: Interventions provided, 2014

Information/Education	Interventions
BBV Info	15948
Safe Disposal	10829
Safe Injecting Information	8643
Physical Health Information	5799
Drug Treatment	2755
Sexual Health	1503
Drug Information	353
Other Information	328
NSP Policy Information	44
Client Complaint	3
All Other*	143
Total interventions	46348

*All Other includes OST program information, mental health information, condom provision and antenatal information.

- On 68% of service occasions, at least one intervention was provided. BBV information was the most frequently provided information followed by safe disposal education, physical health information, safe disposal, sexual health, NSP policy and drug treatment services.

Referrals to services

Table 9 Southern Region: Referrals provided, 2014

Services	Referrals
Medical Service	641
Sexual Health Service	451
Hepatitis Service	409
Drug & Alcohol Treatment	150
Other Referral	134
OST	108
All Other*	44
NGO	42
Other NSP	15
Total Referrals	1594

*All Other includes HIV services, welfare services, oral health, hospital, legal service, accommodation, mental health and client complaint.

- Medical service was the most common referral destination that was specified, followed by sexual health service, hepatitis service and drug and alcohol treatment services.

Discussion

Trends in service access

There were 183,204 occasions of service in 2014. This was a decrease from the 200,386 occasions of service across the 25 participating NSPs reported in 2013. The 9% decline in client activity among participating NSPs between 2013 and 2014 can be largely attributed to the pharmacy NSP enhancement initiative, although unexpected disruption; issues such as the G20 forum, building damage and relocation to service delivery at some larger NSPs, will have contributed to the decline. Northern region (31,000 to 23,728), Brisbane City (59,673 to 50,977) and Southern region (72,900 to 68,472) have seen the biggest decrease in occasions of service between 2013 and 2014 respectively. The impact of the pharmacy initiative had been anticipated and planned for.

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 1,021,506 syringes in 2009/2010 to 417,781 syringes in 2012/2013 (Figure 25).

As of May 2015, 631 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. A total of 1,919,220 syringes have been ordered by these pharmacy NSPs since the initiative began in December 2013. This has decreased pressure on the public NSPs; demand for sterile injecting equipment decreased by six per cent and two per cent for secondary and primary public NSPs respectively between 2013/14 and 2014/15 financial years (Figure 25).

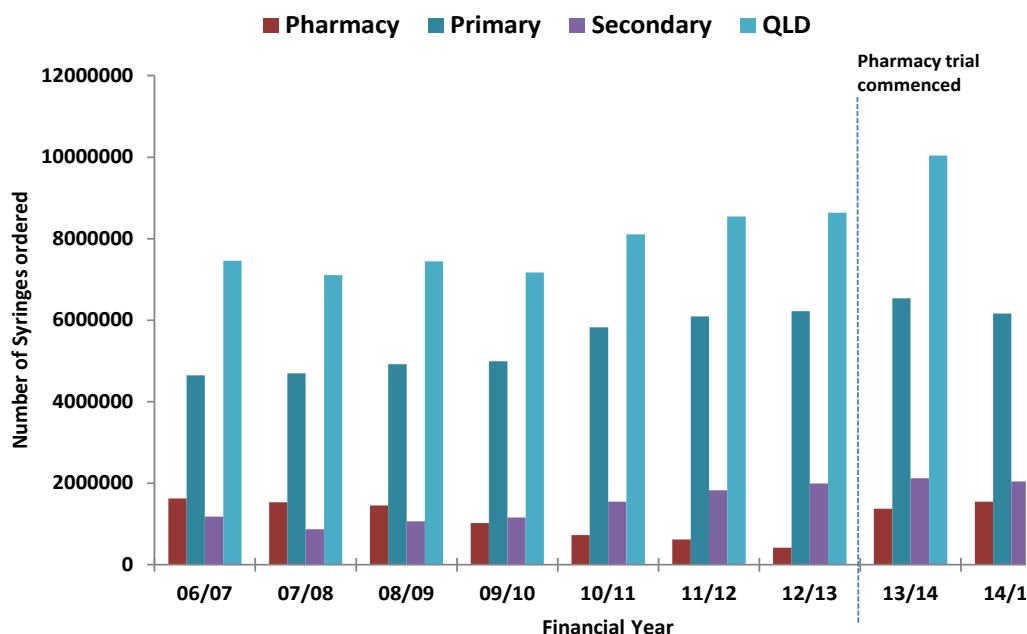


Figure 25 NSP ordering activity in QLD by sector, 2006/07 to 2014/15

Drug use patterns and trends

There are a number of key findings in terms of drug use patterns. The use of all opioids continues to be greater than amphetamine use, and makes up 48% of all service occasions.

Of all opioid related occasions of service, Heroin (38%) and pharmaceutical opioids (38%) made up 76% of opioid related occasions of service. Methadone was the OST drug most often reported by clients.

In 2013, crystal methamphetamine overtook base methamphetamine to become the most reported amphetamine type. This trend continued in 2014 with crystal methamphetamine being reported on 61% occasions of service where amphetamine type was reported. Although clients were frequently unsure of what type they used; on 50% of amphetamine-related service occasions the client reported a specific type of amphetamine.

Service occasions for steroid use remained at 8% with males continuing to be ten times more likely than females to report steroid use.

Age, gender and Aboriginal and Torres Strait Islander status

The average age of injectors in Queensland for 2014 remained relatively similar to 2013. The average age of clients was 37 years (SD = 10.5), with the 35-39 age group comprising the largest proportion of clients (19%).

The majority of NSP clients are male, which is consistent with established patterns of program utilisation. Of the 183,204 service occasions, approximately 75% (n = 136,536) were male and 25% (n = 46,412) were female.

In 2014, of 183,204 service occasions, 10% (n = 18,737) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. These clients were younger with a mean age of 35 years (SD = 8.97) years and had a higher representation of females in the younger 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 1ml needles and syringes. Morphine related service occasions were associated with the highest distribution of 3, 5 and 10 ml syringes, as well as butterflies. 20ml syringes were mostly distributed for methadone use. Steroid-related service occasions have increased to 8.3% in 2014 from 3.6% in 2009, and the related 3 ml syringe distribution was second only to morphine.

Amphetamine and steroid use were more prevalent in the younger age group. In 36% 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 40 years and older (40%). Steroid use was largely limited to clients aged less than 35 years, who accounted for 77% 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 PWIDs, 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 on NSP policies including directing them to other more convenient to access NSPs.

Staff provided a primary intervention on 56% of service occasions. The top five interventions provided were BBV information, safe injecting information and education, safe disposal information, physical health information and drug related 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 6,566 referrals provided by NSP staff during 2014; 4% of all occasions of service involved referrals. Figure 14 on page 22 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 four referral destinations (excluding the 'Other' category) were referrals to medical service, hepatitis service, other NSPs and sexual health 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.

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

referral reporting, while retaining the capacity to comprehensively report on the referrals provided. Data workshops were conducted in 2011 across all programs submitting data and those sites identified as potentially capable to collect the QMDS-NSP, to emphasise the value of providing interventions and referrals to a population whose only point of access, in most cases, is the NSP. 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 monitors Human Immunodeficiency Virus (HIV) and hepatitis C virus (HCV) antibody prevalence among PWIDs 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 2014, a total of 2,378 people were recruited through 51 NSP sites participating in the survey; of these 490 people at seven sites were in Queensland.

Data collected from the survey shows that prevalence of HIV antibody has remained relatively stable among survey participants in Australia and Queensland (Figure 26), any increase in HIV antibody prevalence was limited to the males and a greater proportion was among Men who have Sex with Men (MSM).

The average HCV antibody prevalence for Queensland has been lower than the National data since 1995 and declined further in 2011 to 43%, a further decrease to 37% can be observed for 2014 (Figure 27). The National HCV antibody prevalence had been stable at 62% from 2006 to 2008, but declined in 2009 to 50%; this decline has sustained and remained steady with 54% of respondents tested testing positive for HCV antibody in 2014.

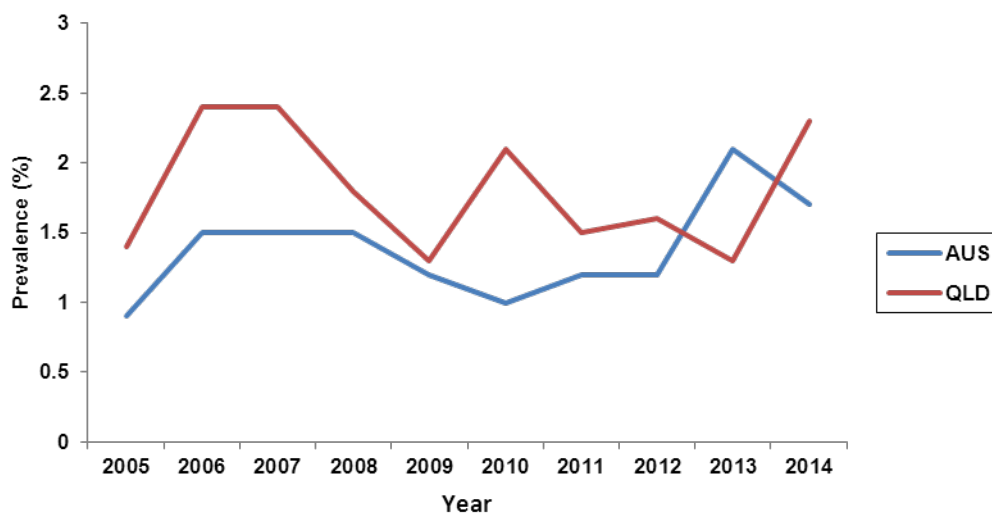


Figure 26 HIV antibody prevalence by year of survey, Australia & Queensland, 2005-2014

The average HCV antibody prevalence for Queensland has been lower than the prevalence in National data since 1995 and declined further in 2011 to 43%, a further decrease to 37% can be observed for 2014 (Figure 27). The National HCV antibody prevalence had been stable at 62% from 2006 to 2008, but declined in 2009 to 50%;

this decline has sustained and remained steady with 54% of respondents tested testing positive for HCV antibody in 2014.

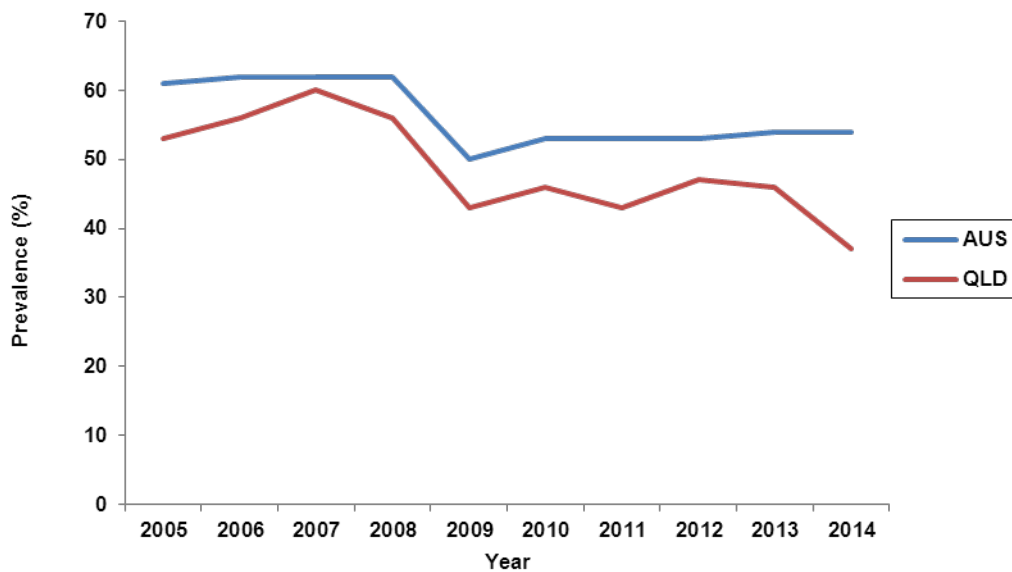


Figure 27 HCV antibody prevalence by year of survey, Australia & Queensland, 2005-2014

The median age of the participants across Australia was 39 years for 2014 and shows a steady increase over the years. The largest proportion of NSP survey participants were aged 35+ years followed by the 25-34 years age group (Figure 27). The proportion of participants aged less than 25 years has declined annually from 14% in 2005 to six per cent in 2014 (Figure 28). A corresponding increase can be observed for participants aged 35 years and above with 69% of participants in 2014 compared to 46% in 2005. Similar data trends across the age categories can be observed for survey participants from Queensland which points towards a cohort of ageing PWIDs.

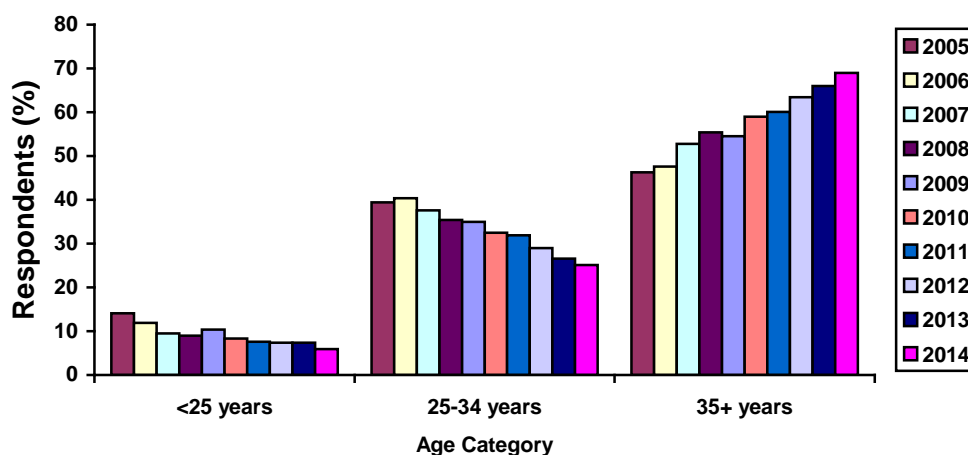


Figure 28 Age profile of respondents by year of survey, Australia, 2005-2014

The survey reported that respondents were predominantly males in the age group of 30+ years; the male to female ratio was approximately 1:2 over all reported years.

The gender differences among the respondents to the Australian NSP survey over a five year period can be observed in Figure 29.

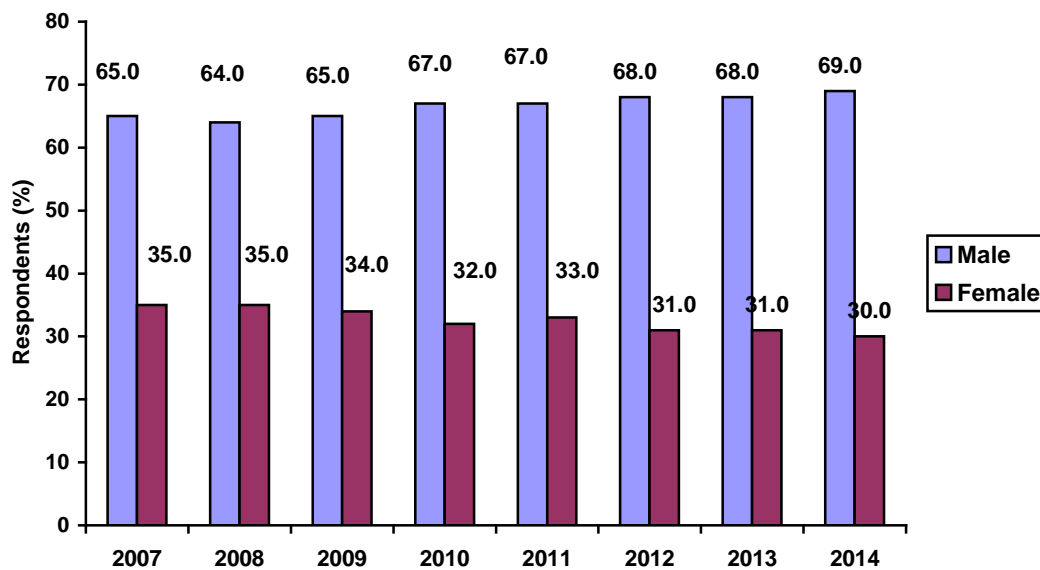


Figure 29 Gender profile of respondents by year of survey, Australia, 2007-2014

There was no marked increase in the proportion of survey respondents identifying as Aboriginal and/or Torres Strait Islander people over the ten year period nationally. In comparison Queensland observed fluctuations in proportion of respondents identifying as Aboriginal and/or Torres Strait Islander people in the same period.

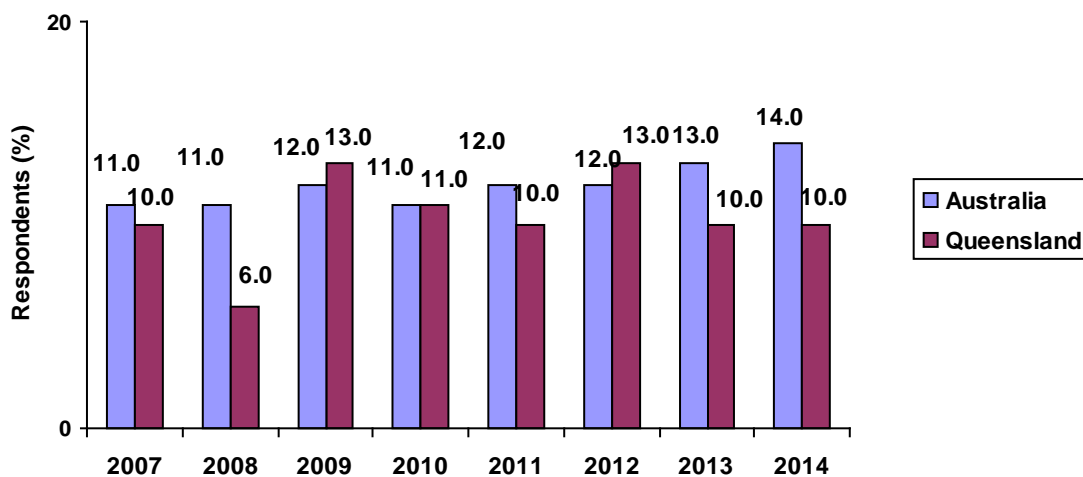


Figure 30 Aboriginal and Torres Strait Islander status of respondents by year of survey, Australia, 2007-2014

According to the Australian NSP survey there were changes in the last drug injected in Australia since 2005 with initial increases and later plateauing in reporting of pharmaceutical opioids and decreases for amphetamines; heroin reporting has remained stable. Performance and image enhancing drugs (steroids) have seen a major increase since 2006. Similarly in Queensland, heroin has declined with higher

levels of pharmaceutical opioid reporting by the survey respondents along with an increase in steroid reporting (Table 10). A similar trend can be observed in Table 1 for clients accessing NSP services in QLD and submitting data for the QMDS-NSP. Opioid drugs made up the greater proportion among the drugs reported with an increase observed for amphetamines.

Table 10 Drug last injected by respondents by year of survey, QLD, 2007- 2014

Drug Last Injected (%)	2007	2008	2009	2010	2011	2012	2013	2014
	N = 417	N = 508	N = 801	N = 550	N = 571	N = 624	N = 565	N = 490
Amphetamines	145 (35)	171 (34)	232 (29)	149 (27)	170 (30)	165 (26)	162 (29)	155 (31)
Heroin	106 (25)	124 (24)	218 (27)	123 (22)	114 (20)	129 (21)	91 (16)	75 (15)
Rx Opioids	96 (23)	120 (24)	177 (22)	141 (26)	132 (23)	124 (20)	117 (21)	94 (19)
Methadone	19 (5)	32 (6)	38 (5)	36 (7)	27 (5)	45 (7)	36 (6)	22 (4)
Performance/Image Enhancers	5 (1)	11 (2)	9 (1)	24 (4)	41 (7)	70 (11)	71 (13)	71 (14)
Bup/Subutex®	28 (7)	26 (5)	53 (7)	32 (6)	39 (7)	41 (7)	32 (6)	20 (4)
Cocaine	1 (<1)	2 (<1)	7 (<1)	2 (<1)	6 (1)	3 (<1)	3 (<1)	3 (<1)
Other	6 (1)	6 (1)	20 (2)	22 (4)	6 (1)	8 (1)	1 (<1)	16 (3)

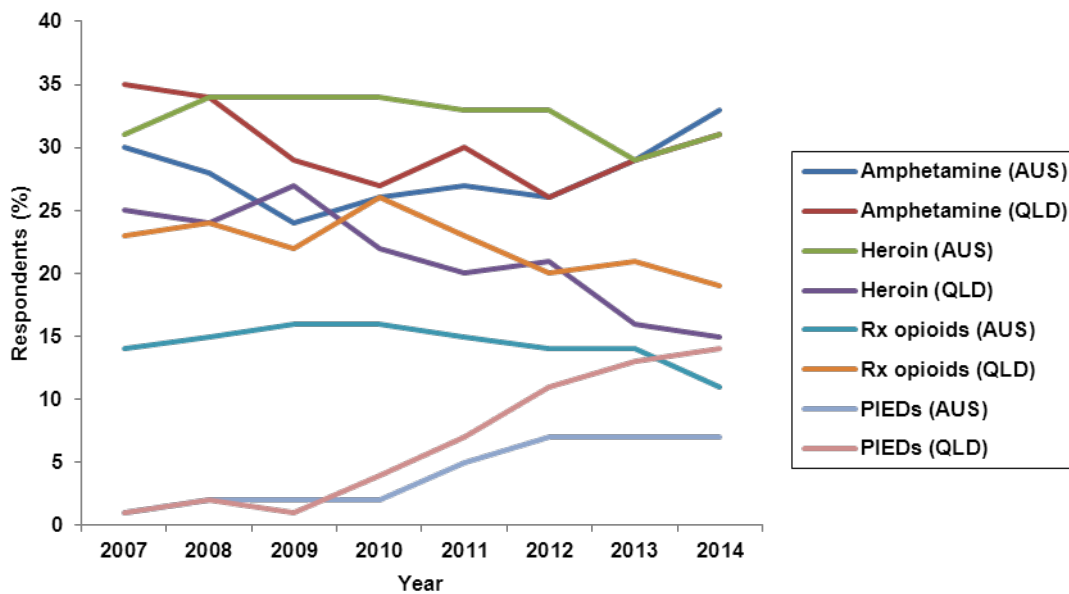


Figure 31 Drug last injected by respondents by year of survey, Australia, 2007-2014

Glossary

Cohort	A group of people with a shared characteristic.
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.
Indigenous status	A measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin.
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.

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