

# Queensland Minimum Data Set for Needle and Syringe Programs

**January 2013 to December 2013**

## **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 standardized data collection system. This supports the ongoing development of the Needle and Syringe Program (NSP) in Queensland by providing core data about 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 injecting populations.

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 (Finger Prick Survey), collected since 1995, have been the 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 the participating sites have increased to 25 with Hervey Bay, Maryborough and Browns Plains NSPs being the most recent inclusions in 2012.

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 primary health care services like 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 Queensland minimum data set for NSPs 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 NSP data available.

## 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 and referrals are provided. The data represents occasions of service and does not reflect number of clients as most present on multiple occasions.

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)

- 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 made 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 between January and



December 2013. The inclusion of secondary programs at Hervey Bay and Maryborough in 2012 and Browns Plains in 2013 improves the statewide representation of the QMDS-NSP as there was no previous representation from the Wide Bay region.

These 25 sites accounted for 86% of the State-wide needle and syringe ordering during the 2012/13 financial year. Brisbane City, comprising Biala and Brisbane QulHN, has been analysed separately from the Southern Area due to their geographic variation and size, together they contribute to over 29 % of the service occasions across these 25 agencies. The Northern and Central Areas formed the other categories when data was grouped according to the geographical location of the NSPs. 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
- From January 2013, 19 primary programs and six secondary programs collected data in accordance with the QMDS-NSP guidelines.
- The needle and syringe provision of these 25 agencies comprised of 86% of State-wide ordering during the 2012/13 financial year.
- From January 2013 to December 2013 there were 200,386 occasions of service across the 25 participating NSPs.
- There was a three per cent growth in occasions of service among the participating sites from the previous reporting year.

## Drug Use Patterns

- The Opioids<sup>^</sup> continued to be the drugs most injected and were the primary drug type for 49% of the total occasions of service delivery; amphetamines and other stimulants made up of 32% of the service occasions.
- Heroin use constituted 43% and pharmaceutical opioids made up 37% of all opioid-related service occasions.
- Methadone continued to be the Opioid Replacement Therapy (ORT) drug most often reported by clients by a narrow margin with subutex coming a close second.
- Crystal methamphetamine has overtaken 'Base' methamphetamine for the type of amphetamine most often reported in 2013.

## Client demography and drug use

- The average age of clients was 36 years (SD = 9.5), with the 30-34 age group comprising the largest proportion of clients (20%).
- Of the 194,103 service occasions, 75% (n = 150,254) were male clients and 25% (n = 49,832) were female clients.
- In 2013 of the 200,386 service occasions, nine per cent (n = 17,125) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. This can be an under-representation due to missing data.
- Clients in the 30 to 34 year age group had the most service occasions at 20% and clients aged 35 years or more in age made up 55% of the occasions of service.

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<sup>^</sup> heroin, morphine, methadone, buprenorphine, suboxone and other opioid drugs

- Amphetamines were the primary drug of choice for clients younger than 25 years (31 %). Clients between 25 and 44 years age group had similar proportions of service occasions related to amphetamines and opioids.
- Heroin and morphine were the dominant drugs of choice for clients 40 years and older (48%).
- The majority of steroid use was limited to clients aged less than 35 years with them making up 79% of occasions of service related to steroids.
- Service occasions related to use of drugs used in Opioid Replacement Treatment (ORT), i.e. methadone, buprenorphine and suboxone, were more prevalent among clients in the 40 years and older age groups.

## Interventions and referrals

- There were 80,709 primary interventions recorded during the 12 month period. Staff provided at least one intervention in the form of information and education on topics such as blood-borne viruses, vein care, safe disposal of syringes, drug-related topics, sexual health, and antenatal and parenting information on 56% of service occasions.
- There were over 6936 referrals provided by NSP staff during the 12-month period; nine per cent of all primary interventions involved referrals.
- The top 3 referral destinations across the state were to hepatitis service, other NSPs and medical service.

## Regional trends

- There were similar patterns in gender and age distribution throughout the state with males outnumbering the females; however Central Area recorded the highest attendance of females, with almost 29 % of service occasions, compared with 25 % State-wide. Brisbane city recorded the lowest attendance of females with 20 % of service occasions.
- Service occasions associated with amphetamine, total opioids, heroin and morphine differed according to area. Total opioid use was more prevalent in Brisbane City when compared to State-wide prevalence (55% v 49%).
- Northern area displayed distinctively different drug use trends to other areas: morphine use comprised the majority of opioid-related service occasions (69%), while heroin accounted for five per cent of all service occasions.

# State-wide Data Profile

## Occasions of Service

There were 200,386 occasions of service for 2013 across the 25 participating NSPs; this was an increase over the 194,103 occasions of service observed for 2012 (Figure 1). The growth can be attributed to increases in service occasions among programs in the Central and Southern areas; larger programs in Brisbane city (Biala & QuIHN Brisbane) contributed little to this increase.

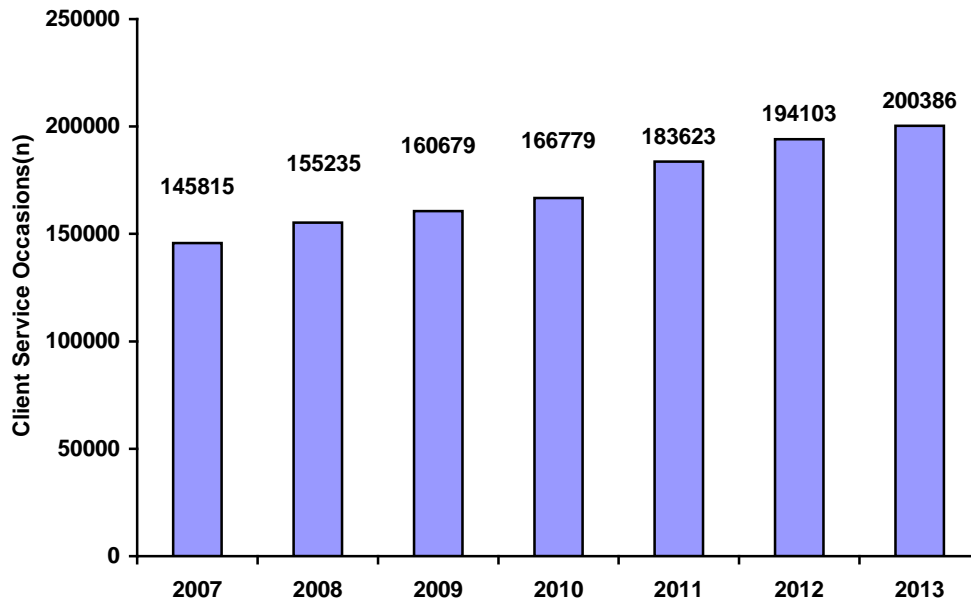
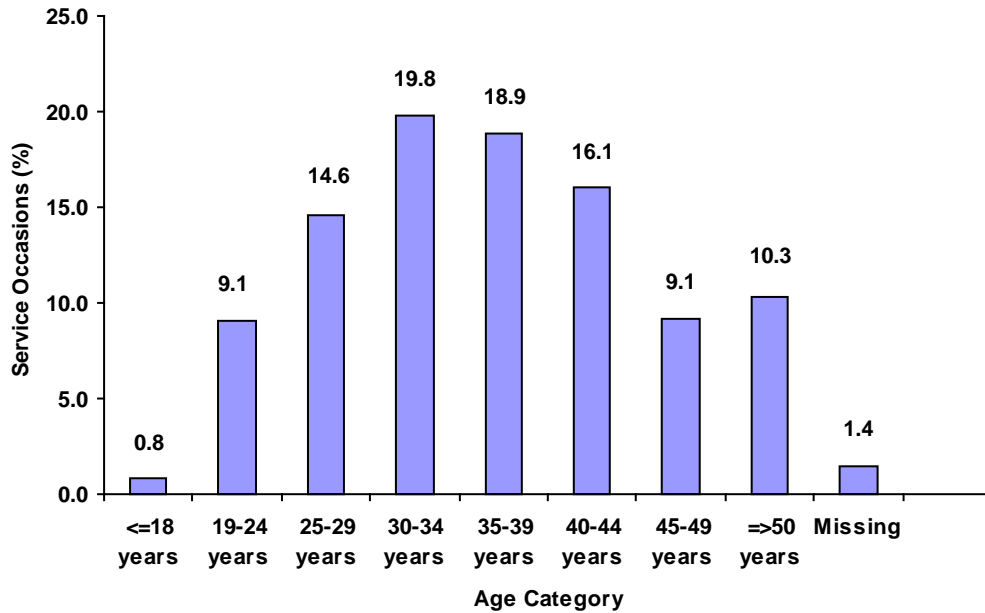


Figure 1 Total service occasions across participating NSPs, 2007-13

# Client Demographics

## Client Age



**Figure 2 Total service occasions by age category, 2013, (N=200,386)**

The average age of clients was 36 years (SD = 9.5), with the 30-34 year age group comprising the largest proportion of clients (20%) (Figure 2). The 35-39 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 54% of all clients, while clients under the age of 25 comprised 10 %.

**Table 1 Percentage of service occasions related to drug type, by age group (N=200,386)**

<b>Drug Type (%)</b>	<b>Total</b>	<b>&lt;=18</b>	<b>19-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35-39</b>	<b>40-44</b>	<b>45-49</b>	<b>=&gt;50</b>	<b>Missing</b>
Amphetamines	<b>32.3</b>	44.3	29.4	35.8	35.7	35.8	31.7	29.0	22.9	13.7
Heroin	<b>19.5</b>	10.4	11.0	16.9	20.5	21.7	20.1	22.9	23.6	5.3
Morphine	<b>19.1</b>	5.5	10.5	14.3	16.5	17.8	23.6	26.1	30.3	8.9
Methadone	<b>4.0</b>	1.2	1.9	2.9	3.9	4.6	5.4	3.9	4.5	1.0
Buprenorphine	<b>2.2</b>	1.5	2.0	1.7	3.3	2.7	2.1	1.4	0.8	0.2
Suboxone	<b>1.3</b>	1.1	1.1	1.4	15.6	1.9	1.3	0.8	0.5	0.6
Fentanyl	<b>0.2</b>	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1
Other opioids	<b>2.4</b>	1.0	1.1	2.0	1.9	2.5	2.7	3.1	3.9	0.6
Steroids	<b>8.1</b>	22.3	3.5	14.8	6.6	4.1	3.1	2.2	1.6	2.7
Benzodiazepines	<b>0.2</b>	0.3	0.4	0.1	0.2	0.1	0.2	0.2	0.3	0.6
Ecstasy	<b>0.1</b>	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Cocaine	<b>0.6</b>	0.2	0.2	0.3	0.6	0.8	1.0	0.6	0.8	0.2
All other categories*	<b>5.1</b>	5.9	7.7	5.7	4.5	3.8	3.9	5.0	6.4	15.2
Missing	<b>4.8</b>	6.2	4.0	3.7	4.3	4.0	4.5	4.6	4.2	50.7
Total in each age group (n)	<b>200,386</b>	1585	18224	29156	39670	37780	32172	18293	20653	2853

\*Includes all other substance types (other stimulants, HGH, vitamin B, insulin, hallucinogens, ketamine, GHB and other drugs)

Table 1 displays the number of service occasions by age group for common drugs 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 44% of service occasions involving clients aged 18 years and under, with pharmaceutical opioid use accounting for the majority of service occasions (30%) for 50 years and older age group. Steroid use was more prevalent in the younger age group with clients younger than 35 years making up 79% of the service occasions related to steroid use.

### Client Gender

Of the 200,386 service occasions, 75% (n = 150,254) were male clients and 25% (n = 49,832) were female clients. In less than one per cent (n = 300) of service occasions this information was missing or not stated. There were minimal differences observed for male and female clients across all age categories (Figure 3).

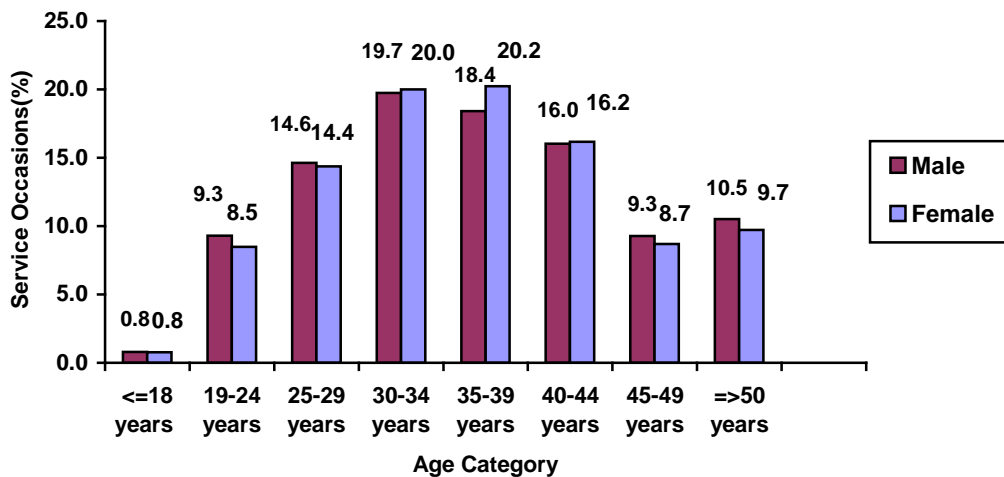


Figure 3 Service occasions by age category & gender, 2013, (N=200,386)

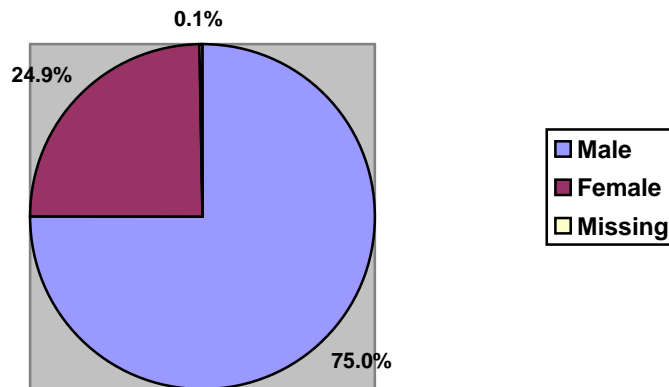


Figure 4 Service occasions by gender, 2013, (N=200,386)

### Indigenous Profile

Indigenous status was collected as a mandatory data element of the QMDS-NSP for the first time in 2010. In 2013, of the 200,386 service occasions, nine per cent (n = 17,125) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. This can be an under-representation due to missing data. Indigenous clients were younger with a mean age of 34.3 years and had a greater representation in the younger age groups compared to their non-Indigenous counterparts (Figure 6).

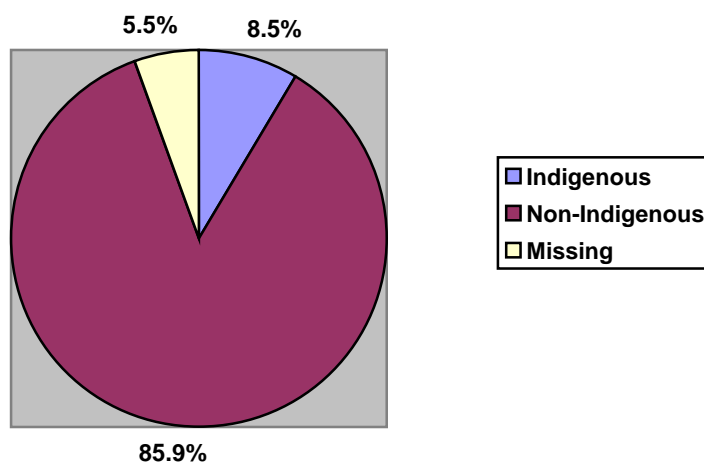


Figure 5 Service occasions by Indigenous status, 2013, (N=200,386)



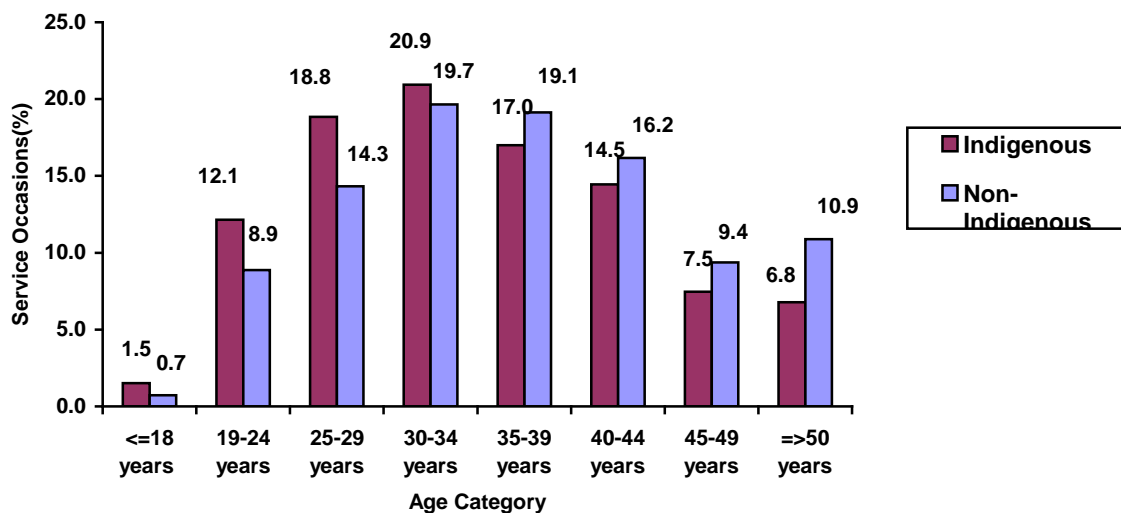


Figure 6 Service occasions by Indigenous status, 2013, (N=200,386)

## Drug Trends

### Service Occasions Related to Male and Female Drug Use

Figure 7 displays service occasions related to male and female clients, by drug type. State-wide, the three most commonly used drug types were the same for males and females. Amphetamines accounted for 31% of male and 36% of female occasions of service. Heroin use was quite similar in both males and females with 19 % and 20 % of service occasions respectively; morphine use was similar for both males and females (at 19 %). A key difference between male and female drug use was the occurrence of steroid use, use of this substance was mostly among male clients (10.4 % of male vs. 1.1%) of female service occasions.

The 'All Other' category in this figure encompasses all other drug types (other stimulants, HGH, Vitamin B, insulin, hallucinogens, ketamine, GHB). The missing and not applicable categories comprised less than five per cent of all service occasions.

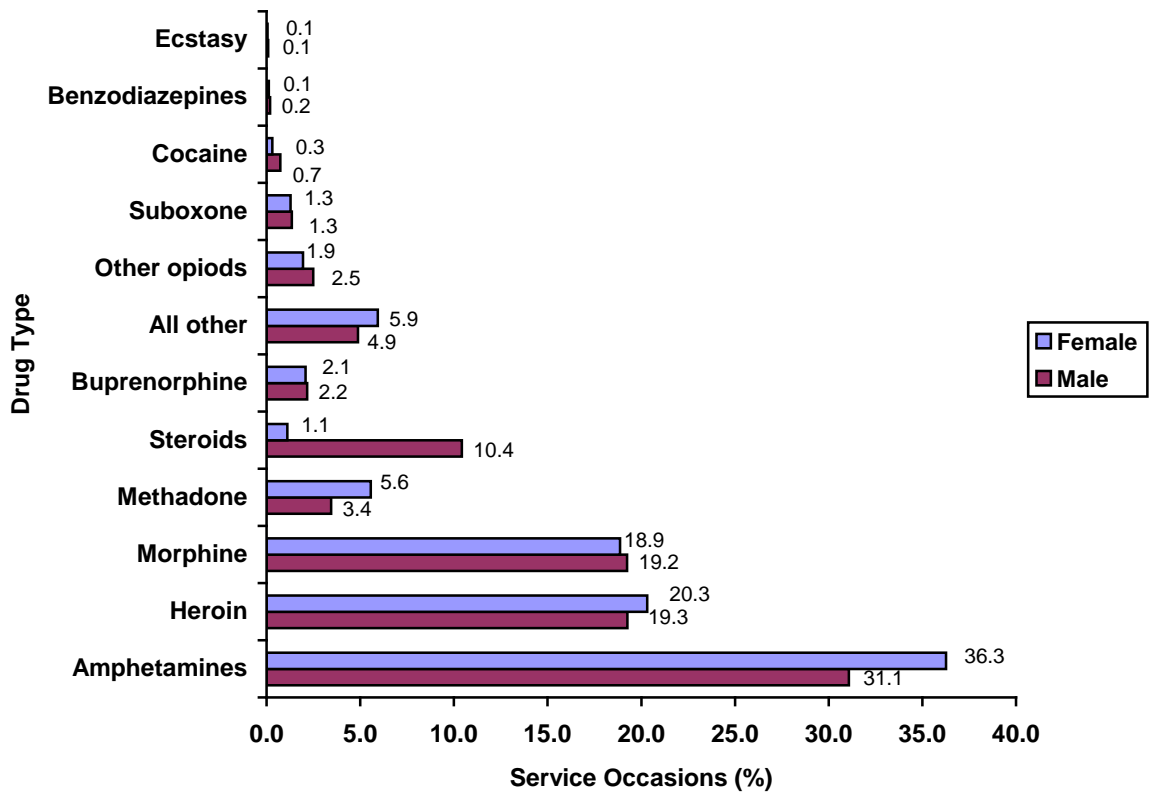
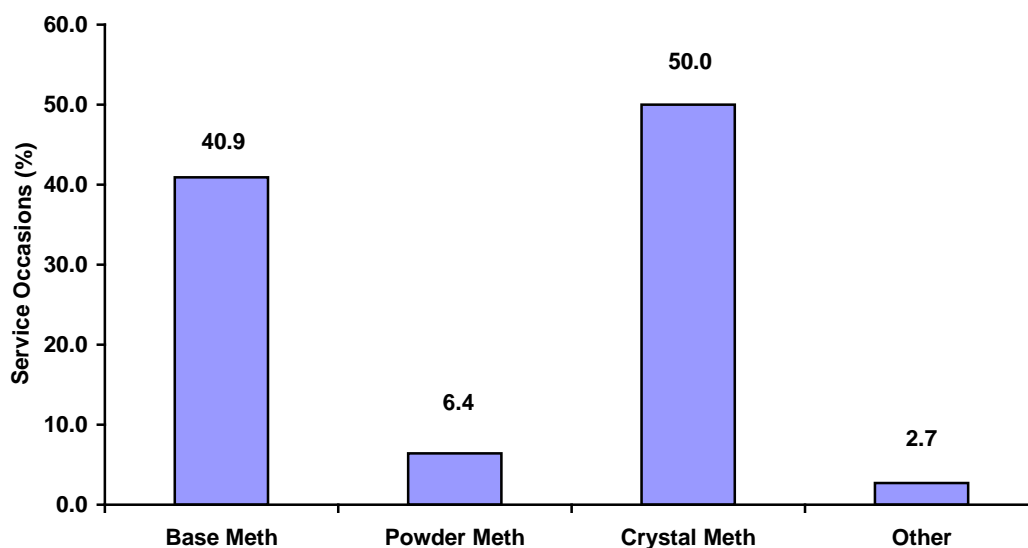


Figure 7 Service occasions related to male and female drug use, 2013, (N=200,386)

## Amphetamine Subtypes

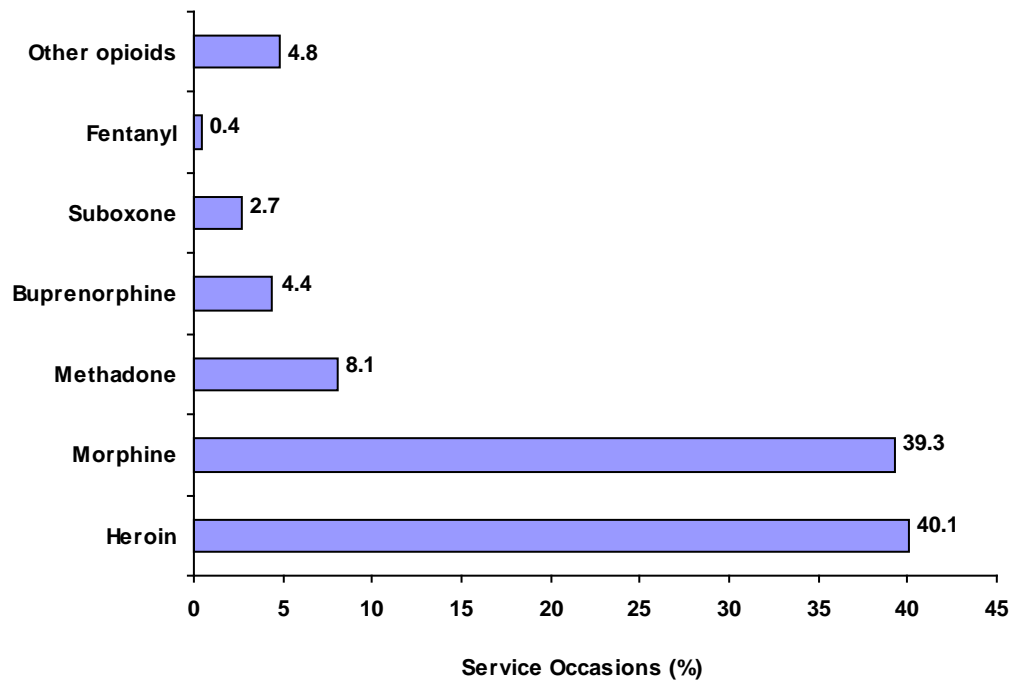


**Figure 8** Per cent of service occasions for each amphetamine subtype (where specified), 2013, (N=29,990)

The Queensland minimum data set 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 categories used when clients are aware of and report the type of amphetamine they will be using. The 'Other' amphetamine code may be used for liquid and pill forms as well as amphetamine sulphate.

Of the 64,832 occasions of service related to all amphetamine use, 46% were recorded as specific amphetamine types. Figure 8 displays the breakdown of amphetamine; crystal methamphetamine (50%) (41%) and base methamphetamine (41%) ( were the most common forms. An increase in the reporting of crystal methamphetamine has been observed since 2013.

## Opioid related service occasions

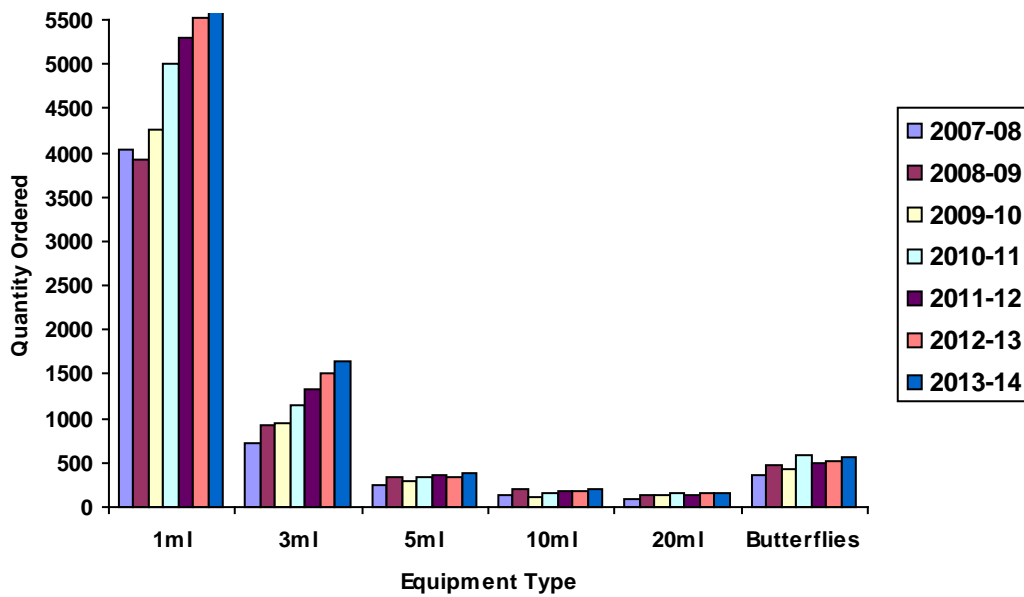


**Figure 9** Percentage breakdown of opioid related service occasions, 2013, (N=97,455)

Figure 9 displays the percentage breakdown of service occasions related to all opioid use. Heroin and morphine, comprising over 79 % of opioid-related service occasions were the most commonly used opioids throughout this period.

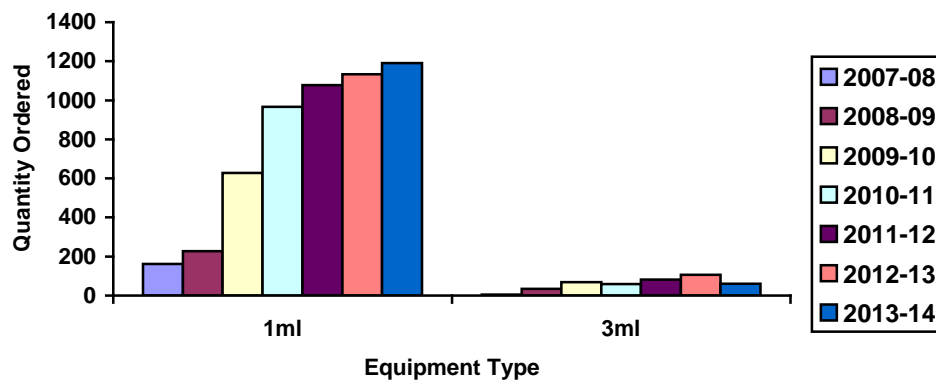
# Equipment Ordering and Distribution

## Equipment Ordering



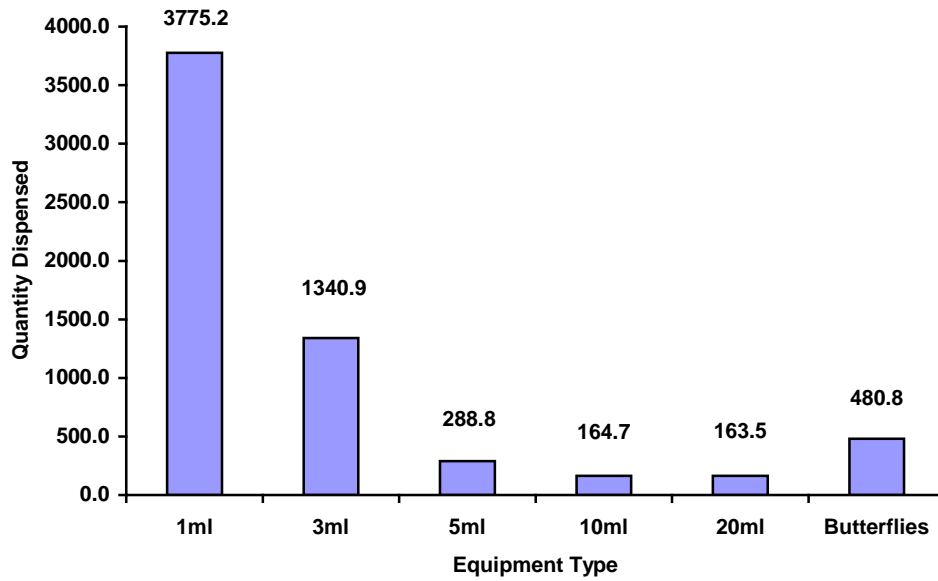
**Figure 10 Total equipment ordered, Financial Year 2007-08 to 2013-14, (in thousands of units)**

The total for each equipment type ordered by all primary and secondary NSP sites in Queensland for financial years 2007-08 to 2013-14 is displayed in Figure 10. One *ml* syringes were the most commonly ordered item among syringes followed by 3 *ml* syringes. The ordering data for 1 *ml* and 3 *ml* syringes also include those that were ordered as vending machine kits; the total of 1 *ml* and 3 *ml* syringes dispensed as vending machine kits can be observed in Figure 11.



**Figure 11 Total equipment ordered as vending kits, Financial Year 2007-08 to 2013-14, (in hundreds of units)**

## Equipment Distributed



**Figure 12 Total equipment distributed, 2013, (in thousands of units)**

Total distribution through occasions of service for each equipment type is displayed in Figure 12. One *ml* syringes were the most commonly dispensed item, comprising 61 % of all equipment dispensed without charge followed by 3 *ml* syringes which accounted for 22 %.

## Interventions Provided

NSP interventions comprise information and education on topics such as blood-borne viruses (BBV), 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 'client complaint' and a set of new interventions ; 'NSP policy information', 'Opioid treatment program information' and 'Drug treatment information' have been added .

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, from January 2013 to December 2013.

Staff provided a primary intervention on 40 % of service occasions. The top five interventions provided were Blood Borne Virus information, safe injecting information, safe disposal information and education, physical health information and Needle and Syringe Program information. The prominence of these interventions reflects the health needs and concerns of clients and their communities. The 'Other info' category encompasses site-specific interventions not covered by the minimum dataset codes.

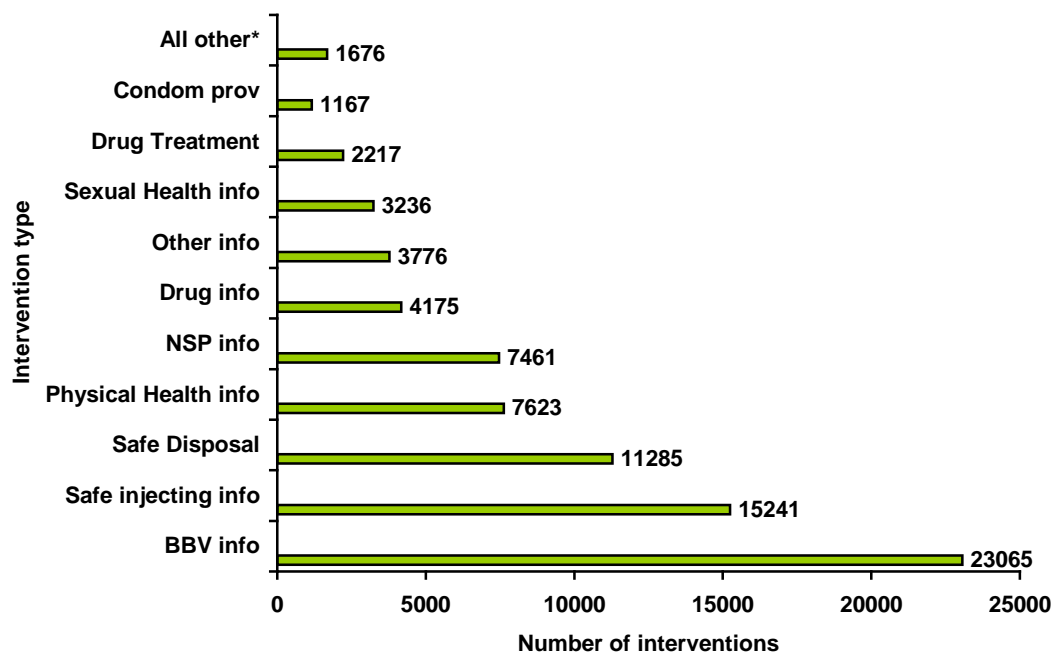


Figure 13 Type of interventions provided, 2013, (N=80,710)

\*Includes antenatal education, Drug treatment information, OTP information and education and Mental Health information and education

## Referrals to Services

As part of an NSP occasion of service a client may be referred to another service. There were 6,936 referrals provided by NSP staff during 2013; 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 Hepatitis services, Other NSPs, Medical services, Non-Government Organisations, Sexual Health 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.

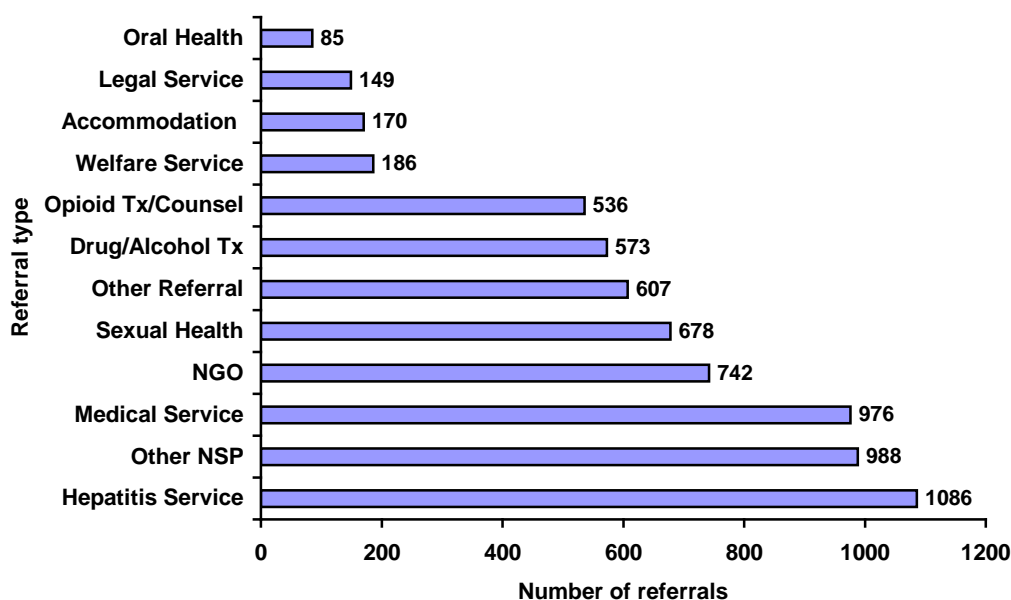
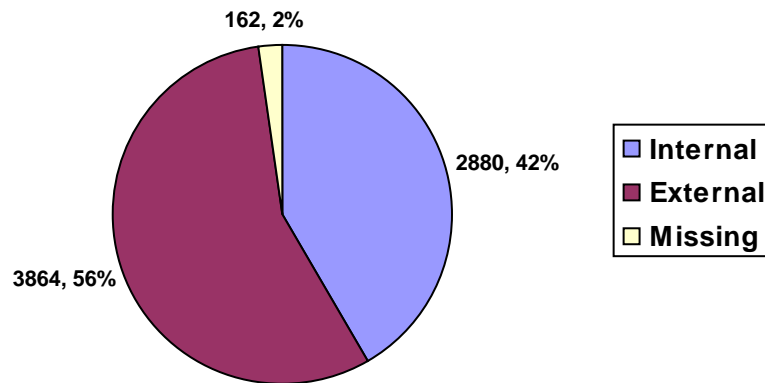


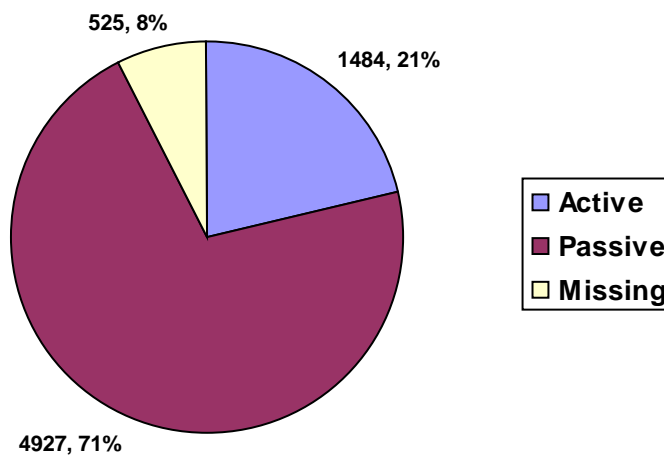
Figure 14 Type of referrals provided, 2013, (N=6,936)

Referrals are characterized according to referral type (internal/external and active/passive). Internal referrals include any 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 Percent of internal and external referrals, 2013, (N=6,774)**



**Figure 16 Percent of active and passive referrals, 2013, (N=6,411)**

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 located external to the partnership health service supporting the NSP program; passive referrals, where no formal introduction or appointment to the referral site was facilitated for the client, were the most commonly provided referral type. An active referral to an internal referral site would be considered ideal to improve client outcomes.

## Regional Profiles

### Brisbane City

- From January 2013 to December 2013 there were 59,673 occasions of service provided in the Brisbane City region (comprising Biala and QuIHN Brisbane).

#### Client Gender

- Brisbane City's male attendance (80%) was higher than state-wide attendance (74 %).
- 20 % of clients attending were female; this was lesser than overall service occasions related to females (25%).
- Indigenous clients made up five per cent of occasions of service in Brisbane city which was lower than the eight percent State-wide representation.

#### Client Age

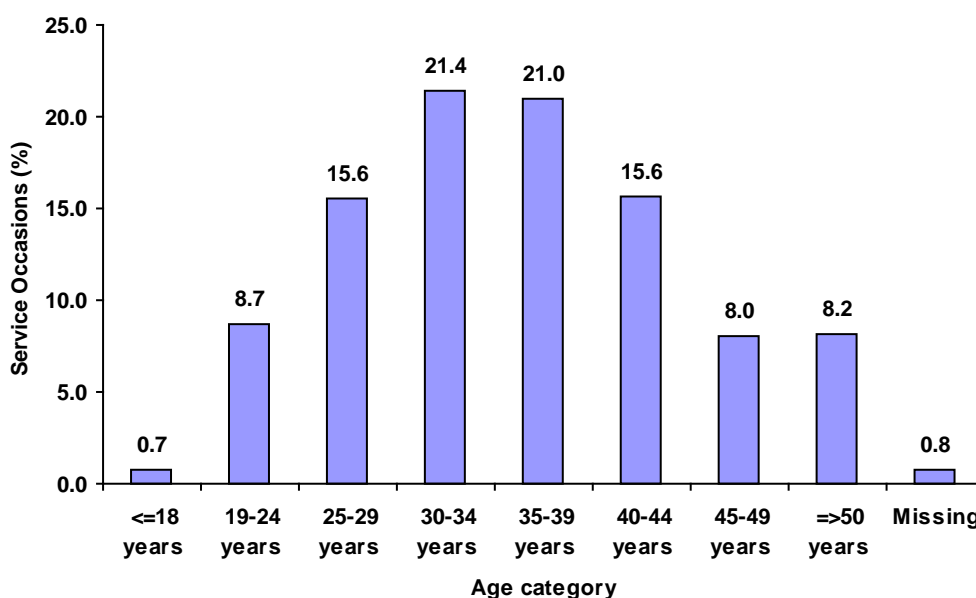
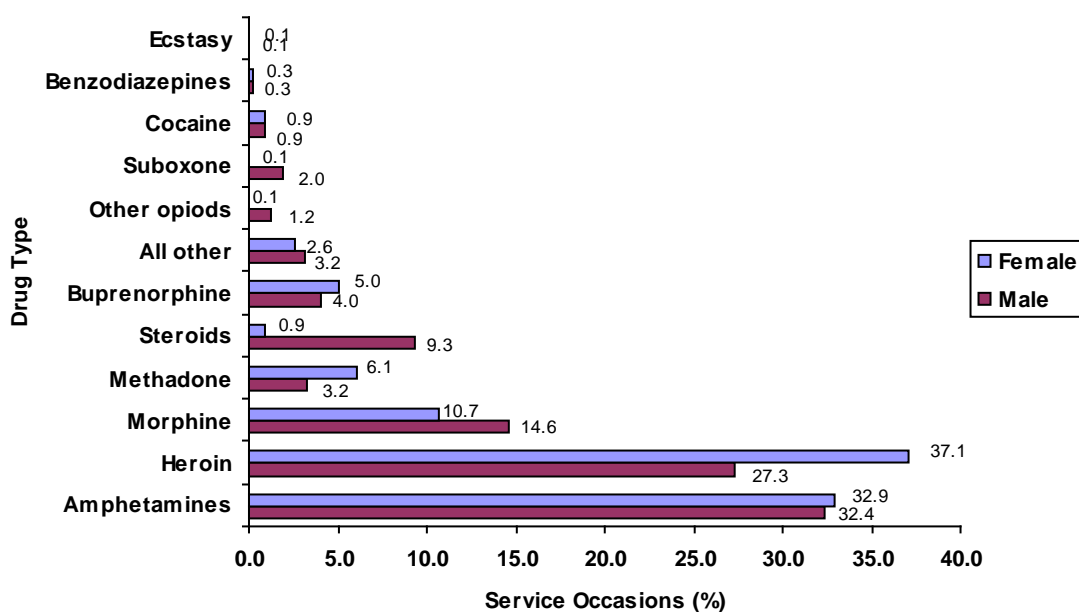


Figure 17 Brisbane City: Age distribution, 2013, (N=59,673)

- The average age of clients attending was 35.8 years (SD = 9), almost similar to the state-wide mean (36.3 years), consistent with State-wide patterns, the 30-34 and 35-39 year age groups comprised the largest proportion of clients attending Brisbane city NSPs.

## Drug Trends



**Figure 18 Brisbane City: Service occasions related to male and female drug use, 2013, (N=59,673)**

- Consistent with State-wide trends, service occasions related to amphetamine, heroin, and morphine use were more prevalent than for any other drug types.
- Similar to State-wide data, females (33%), while heroin was reported by a greater number of females (39%) when compared to the males (29%) and was higher than state-wide levels.

## Interventions Provided

**Table 2 Brisbane City: Interventions provided, January 2013 to December 2013**

Information/Education	Interventions
NSP Policy Information	2513
Safe Injecting Information	2425
Safe Disposal	1345
Drug Information	973
Other Information	462
BBV Information	407
Physical Health	232
Sexual Health Information	145
Mental Health Information	60
Client Complaint	10
All Other	145
<b>Total interventions</b>	<b>8717</b>

\*All Other includes ORT program information, Condom dam provision, Drug treatment information and Antenatal information

On 15 % of service occasions, at least one intervention was provided to clients attending Brisbane City NSPs.

Information on NSP policy information was provided most often, followed by safe injecting information, safe disposal, drug information, BBV information and physical health information.

## Referrals to Services

**Table 3** Brisbane City: Referrals provided, January 2013 to December 2013

Services	Referrals
Other Referral	476
ORT	263
Other NSP	170
Drug & Alcohol Treatment	126
All Other	58
Medical Service	43
Hepatitis Service	39
Sexual Health Service	17
Accommodation	15
Mental Health	13
<b>Total Referrals</b>	<b>1220</b>

\* All Other includes HIV services, Oral Health, Hospital, Legal Service, NGO, Welfare services, Antenatal and Client complaint

- Referrals (other than those falling in the 'Other' category) to drug and alcohol, other NSPs and medical services were provided more frequently than any other referrals.

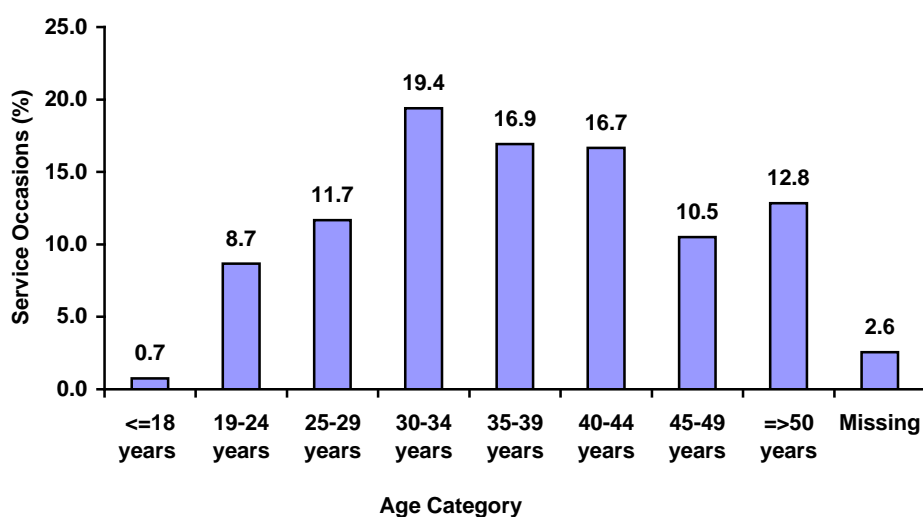
## Central Area

- From January 2013 to December 2013, Central Area (comprising Rockhampton ATODS, Bundaberg ATODS, Caboolture Community Health, Redcliffe Community Health, Sunshine Coast ATODS, QulHN Sunshine Coast, Hervey Bay, Maryborough and Gladstone ATODS) conducted 34,049 occasions of service.

### Client Gender

- Female attendance in this region was higher than State-wide attendance (29.4% vs 24.8%) and all other regions.
- Male clients comprised 70 % of service occasions.
- Indigenous clients made up six per cent of occasions of service in Central Area which was lower than the nine percent State-wide representation..

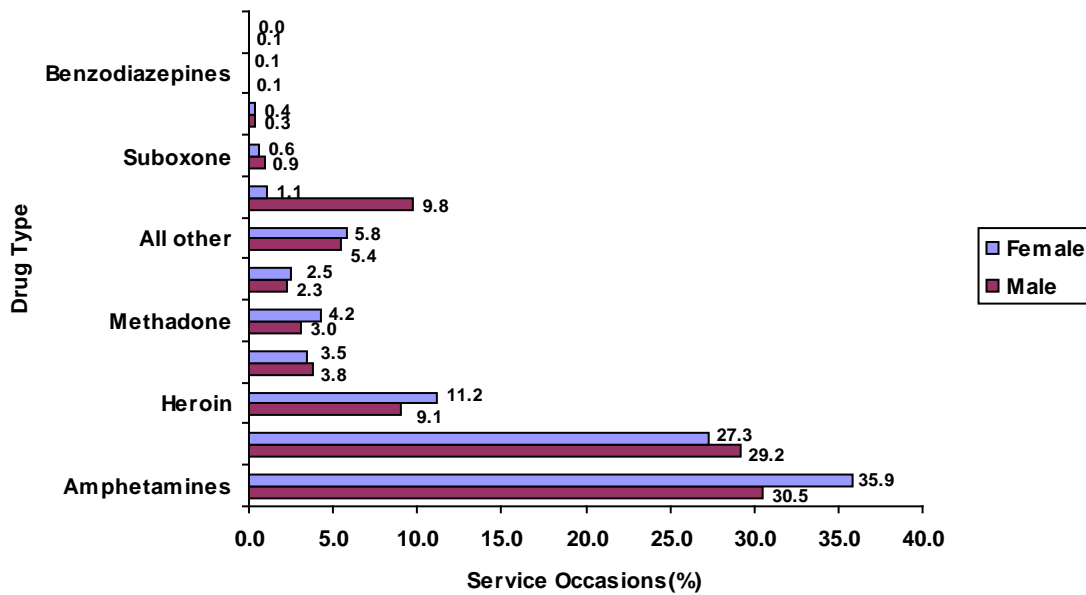
### Client Age



**Figure 19 Central Area: Age distribution, 2013, (N=34,049)**

- The average age of clients was 37 years (SD=11.5), higher than the State-wide average.
- Consistent with State-wide data, the 30-34 age group made up the largest proportion of client presentations.

## Drug Trends



**Figure 20 Central Area: Service occasions related to male and female drug use, 2013, (N=34,049)**

- Amphetamine use was slightly lower than State-wide patterns of use for male and female service occasions (30.5% and 35.9% respectively).
- The use of heroin was lower for males and females when compared to State-wide data (9.1% vs 19.3% & 11.2% vs 20.3% respectively); also service occasions related to morphine was higher for both males (29.2%) and females (27.8%) in comparison to State-wide data.

## Interventions Provided

Table 4 Central Area: Interventions provided, January 2013 to December 2013

Information/Education	Interventions
Safe Disposal	3734
Safe Injecting Information	1624
BBV Information	1558
Drug Information	1433
Other Information	1300
NSP Policy Information	1073
Physical Health	901
Condom Provision	899
Client Complaint	514
Sexual Health	292
All Other	200
<b>Total interventions</b>	<b>13488</b>

\* All Other includes ORT program information, Drug treatment information, Mental Health information and Antenatal information

Information and education was provided to clients on 40 % 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 Area: Referrals provided, January 2013 to December 2013

Services	Referrals
Drug & Alcohol Treatment	75
ORT	40
Medical Service	26
Other NSP	18
Hepatitis Service	18
Sexual Health Service	16
Mental Health	15
Accommodation	12
Other Referral	7
All Other	73
Total Referrals	300

\* All Other includes HIV services, Oral Health, Hospital, Legal Service, Antenatal and Client complaint

Referrals to drug and alcohol, ORT, medical and hepatitis services were more prevalent than to any other referral service.

## Northern Area

- From January 2013 to December 2013, the Northern Area (comprising Cairns ATODS, Mackay ATODS, Townsville, North Ward Community Health (Townsville), Innisfail Community Health and Cairns Youth Link) conducted 33,764 occasions of service.

### Client Gender

- Male and female attendance was similar to State-wide attendance; with 73 % of service occasions being for males and 27% for females.
- Indigenous clients made up six per cent of occasions of service in Northern Area which was lower than the eight percent State-wide representation.

### Client Age

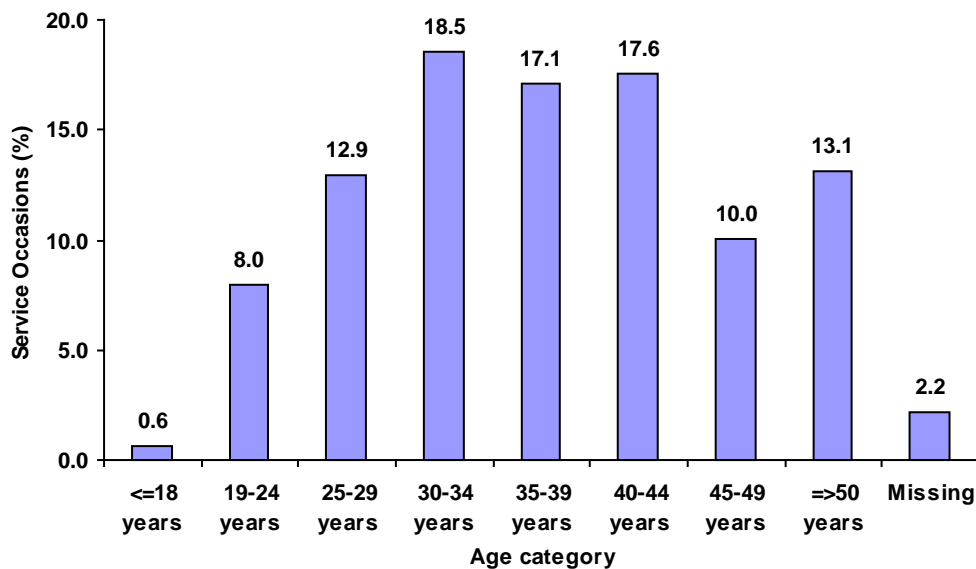
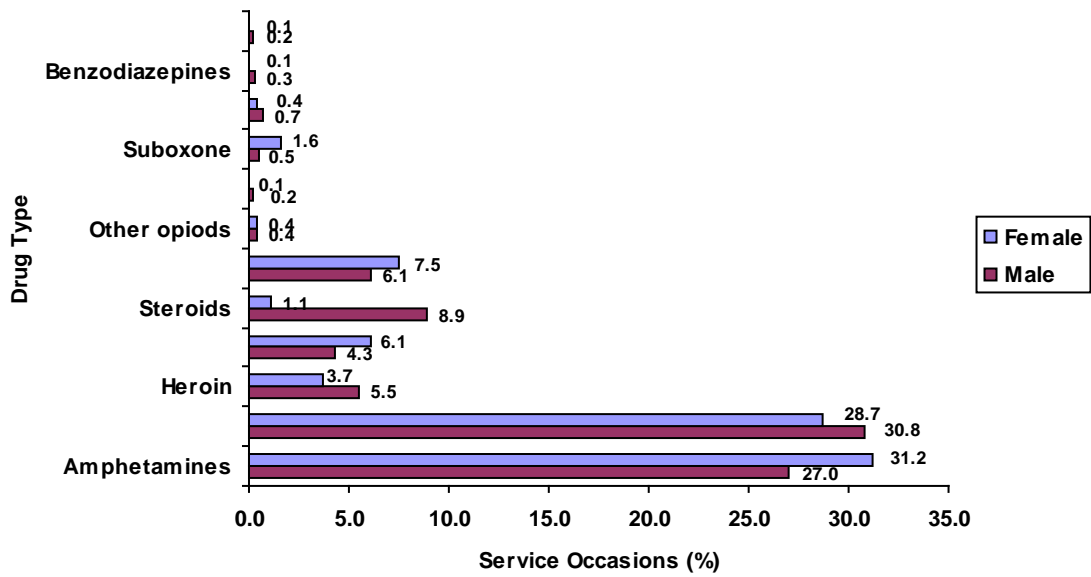


Figure 21 Northern Area: Age distribution, 2013, (N=33,764)

- The average age of clients attending was 37.3 years (SD=9.7) and 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 under 30 years and higher attendance of clients aged over 35 years.

## Drug Trends



**Figure 22 Northern Area: Service occasions related to male and female drug use, 2013, (N=33,764)**

- 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 Area (Figure 22).
- Heroin use in the Northern Area is substantially lower than State-wide data; it accounts for 5% of male and female service occasions, compared to approximately 19.5% of male and female service occasions State-wide.

## Interventions Provided

**Table 6 Northern Area: Interventions provided, January 2013 to December 2013**

Information/Education	Interventions
BBV Information	5712
Safe Injecting Information	3244
Safe Disposal	2655
NSP Policy Information	1337
Physical Health	977
Drug Information	906
Other Information	766
Drug Treatment	524
Condom Provision	379
Client Complaint	54
All Other	437
<b>Total interventions</b>	<b>16991</b>

\* All Other includes ORT program information, Mental Health information, Sexual Health information and Antenatal information

At least one intervention was provided on 50 % of service occasions.

Safe disposal, safe injecting and BBV information were the most common interventions provided.

## Referrals to Services

Table 7 Northern Area: Referrals provided, January 2013 to December 2013

Services	Referrals
NGO	656
Other NSP	626
Hepatitis Service	406
Medical Service	386
Drug & Alcohol Treatment	215
Welfare Service	168
Sexual Health Service	153
Other Referral	118
ORT	94
All Other	211
Total Referrals	3229

\* All Other includes HIV services, Oral Health, Hospital, Legal Service, Accommodation, Mental Health, Antenatal and Client complaint

- Referrals to NGOs, other NSPs, hepatitis and medical services were the most frequently provided referrals in the Northern Area.
- Referrals to NGOs made up 20% of the referrals provided across Northern Area.

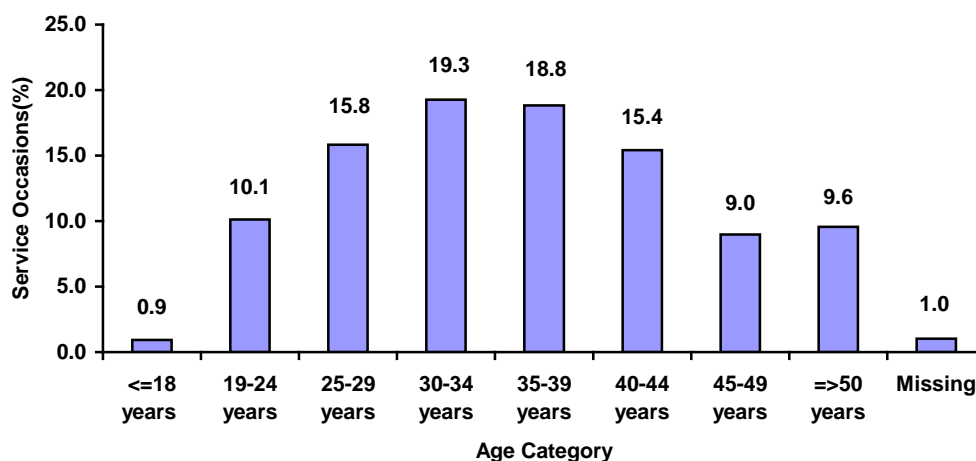
## Southern Area

- There were a total of 72,900 occasions of service conducted in this region (comprising Beenleigh Community Health, Gold Coast ATODS, Logan Youth & Family Services, Logan Central Community Health, Toowoomba Sexual Health, Ipswich Sexual Health, Inala ATODS, Browns Plains ATODS, and QulHN Gold Coast) from January 2013 to December 2013. The NSP service at Palm Beach was interrupted in 2013 for maintenance purposes and was therefore excluded from the QMDS-NSP report. Browns Plains NSP in the southern region has consistently collected data for QMDS-NSP and has been included for the first time for reporting purposes.

### 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 14% of occasions of service in Southern Area which was higher than the eight percent State-wide representation and the highest in the state.

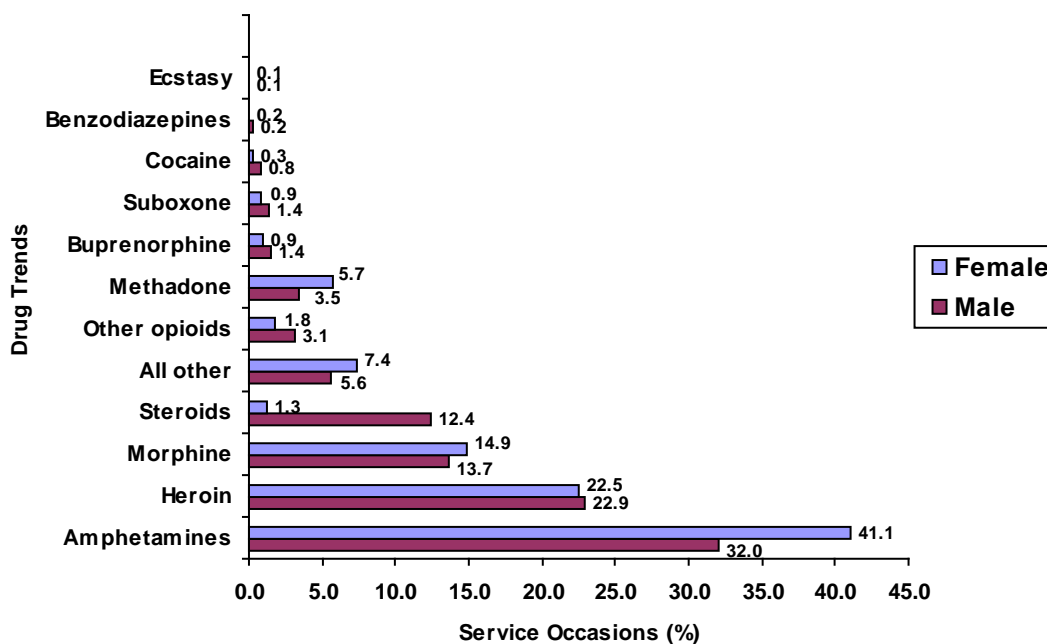
### Client Age



**Figure 23 Southern Area: Age distribution, 2013, (N=72,900)**

- The average age of clients attending was 35.9 (SD=9.6), younger than 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 Area: Service occasions related to male and female drug use, 2013, (N=72,900)**

- For Southern Area, 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 15% steroid use among males was highest in the southern region at 11%.

## Interventions Provided

**Table 8 Southern Area: Interventions provided, January 2013 to December 2013**

Information/Education	Interventions
BBV Info	15338
Safe Injecting Information	7948
Physical Health Information	5513
Safe Disposal	3551
Sexual Health	2650
NSP Policy Information	2538
Drug Treatment	1547
Other Information	1248
Drug Information	863
Client Complaint	7
All Other	76
<b>Total interventions</b>	<b>41513</b>

\*All Other includes ORT program information, Mental Health information, Condom Provision and Antenatal information

On 57 % of service occasions, at least one intervention was provided. BBV information was the most 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 Area: Referrals provided, January 2013 to December 2013

Services	Referrals
Hepatitis Service	623
Medical Service	521
Sexual Health Service	492
Other NSP	174
Drug & Alcohol Treatment	157
ORT	139
All Other	73
Other Referral	6
NGO	2
Total Referrals	2187

\* All Other includes HIV services, Welfare Services, Oral Health, Hospital, Legal Service, Accommodation, Mental Health and Client complaint

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

## Discussion

### The Minimum Data Set

The Queensland Minimum Data Set for Needle and Syringe Programs (QMDS-NSP) collection of standardised data began in December 2006 with 13 programs (including three QulHN sites). Since then, the numbers have increased with a total of 25 programs collecting and submitting data between January and December 2013.

These 25 sites accounted for 86% of the State-wide needle and syringe ordering during the 2013/14 financial year. This report examines the data over the 12-month period from January 2013 to December 2013 inclusive.

The information generated through the QMDS-NSP contributes to efforts to reduce the spread of blood borne viruses including HIV and hepatitis C. The improved standardised collection of data throughout Queensland enables more accurate monitoring of NSP service provision, including the distribution of sterile injection equipment. Trends in demand for sterile injecting equipment in a Health Service District can be readily ascertained, and considered in the context of current and emerging drug use patterns and service needs of the target population.

The QMDS-NSP reiterates the important role of NSPs as the primary contact point for people who inject drugs to access the health system. For this reason the data set emphasises clear reporting of the types of interventions and referrals provided by NSPs, including the quality of the referrals provided.

The data set also specifies the different types of injecting equipment distributed. This information, in conjunction with clients' reported use of specific types of drugs and information about equipment usage can increase our understanding of clients' drug use behaviour and exposure to health risks.

### Trends in Service Access

There were 200,386 occasions of service from January 2013 to December 2013. This was an increase from the 194,103 occasions of service across the 23 participating NSPs reported between January 2011 and December 2011. The 3 % growth in client activity among participating NSPs underscores the need for continuing to develop a strategic regional focus for the diversification and enhancement of program delivery in Queensland. There have been new programs and Needle Dispensing Machines (NDMs) established towards sustaining this growth. The NSPMU will facilitate and support the Hospital and Health Services (HHSs) in future to deliver the program effectively in their jurisdictions.

### 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 now makes up almost half of all service occasions.

Heroin (41%) and morphine (39%) made up 80 % of opioid related occasions of service. Methadone (8%) was the OTP drug most often reported by clients.

Crystal methamphetamine overtook Base methamphetamine for the first time to become the most reported type in 2013. Although clients were frequently unsure of what type they used; on 54 % of amphetamine-related service occasions the client did not report a specific type of amphetamine.

Service occasions for steroid use increased to 8% with males again making up the bulk of it.

## Age, Gender and Indigenous Status

Based on client data, the average age of injectors in Queensland remained relatively similar to 2012. The average age of clients was 36.3 years (SD = 9.5), with the 30-34 age group comprising the largest proportion of clients (20%). The majority of NSP clients are male, which is consistent with established patterns of program utilisation. Of the 200,386 service occasions, approximately 75 % (n = 150,254) were male and 25% (n = 49,832) were female.

In 2013, of the 200,386 service occasions, eight per cent (n = 15,741) were for clients who identified as an Aboriginal and/or Torres Strait Islander person. Indigenous clients were younger with a mean age of 34.3 (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 injection 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 10ml syringes, as well as butterflies. Twenty ml syringes were mostly distributed for methadone use. Steroid-related service occasions have increased to 8.1% from 7.2% in 2013, and the related 3ml syringe distribution was second only to morphine.

Amphetamine and steroid use were clearly more prevalent in the younger age group. In 31 % 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 45 years and older (52%). The majority of steroid use was limited to clients aged less than 35 years with 79% 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 injection-related harm, and also demonstrate the unique and sentinel position of NSPs in the healthcare system, in terms of being able to build trust and rapport with the People Who Inject Drugs (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 40 % of service occasions. The top five interventions provided were Blood Borne Virus information, safe injecting information, safe disposal information and education, physical health information and Needle and Syringe Program information. The prominence of these interventions reflects the health needs and concerns of clients and their communities.

## Referral Activity

As part of an NSP occasion of service a client may be referred to another service. There were 6,936 referrals provided by NSP staff during 2013; 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 Hepatitis services, Other NSPs, Medical services, Non-Government Organisations, Sexual Health 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.

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 emphasize 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, and also demonstrate 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 2013, a total of 2,407 people were recruited through 52 NSP sites participating in the survey; of these 565 people and eight sites were in Queensland.

Data collected from the survey shows that prevalence of HIV antibody has increased among survey participants in Australia and decreased for the same in Queensland (Figure 25), most of the increase in HIV antibody prevalence was limited to the males and a greater proportion was among Men who have Sex with Men (MSM).

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 2013. In comparison the average HCV antibody prevalence for Queensland has been lower than the National data since 1995 and declined further in 2011 to 43 %, a small increase can be observed in 2012 with the prevalence rising to 47% and remaining stable with a slight decrease for 2013 (Figure 26)

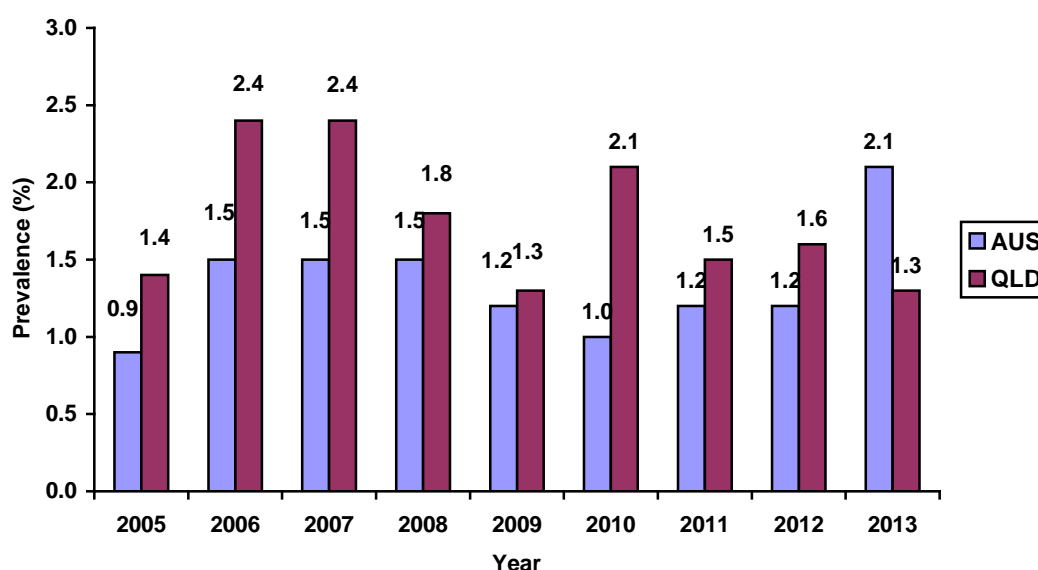
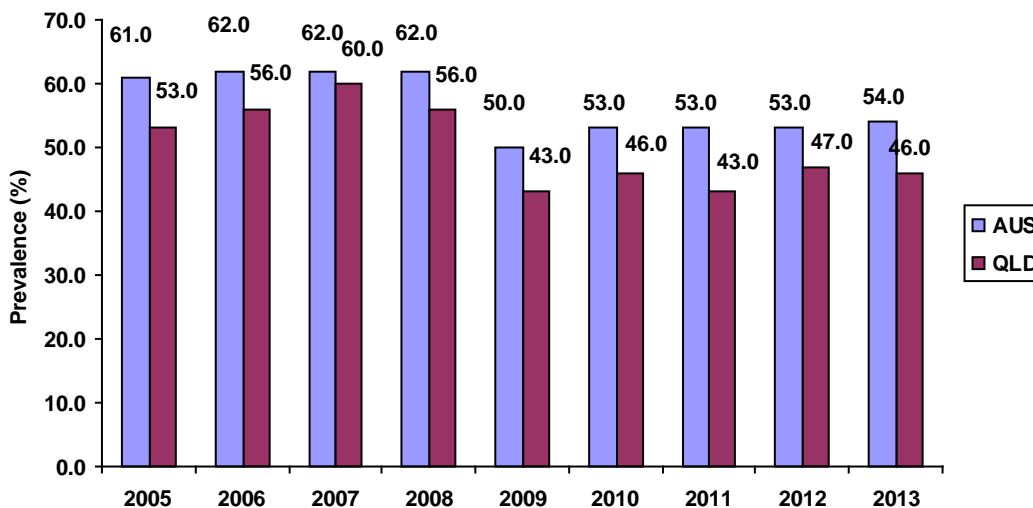
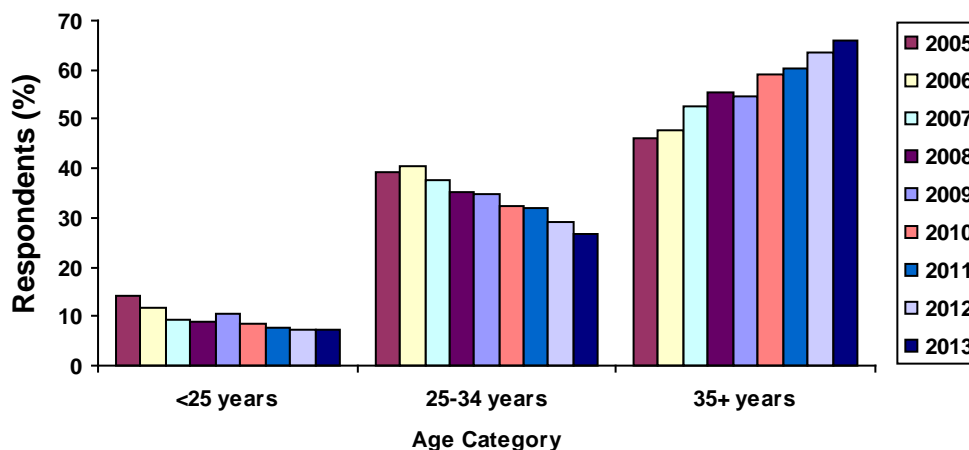


Figure 25 HIV antibody prevalence by year of survey, Australia & Queensland, 2005-2013



**Figure 26 HCV antibody prevalence by year of survey, Australia & Queensland, 2005-2013**

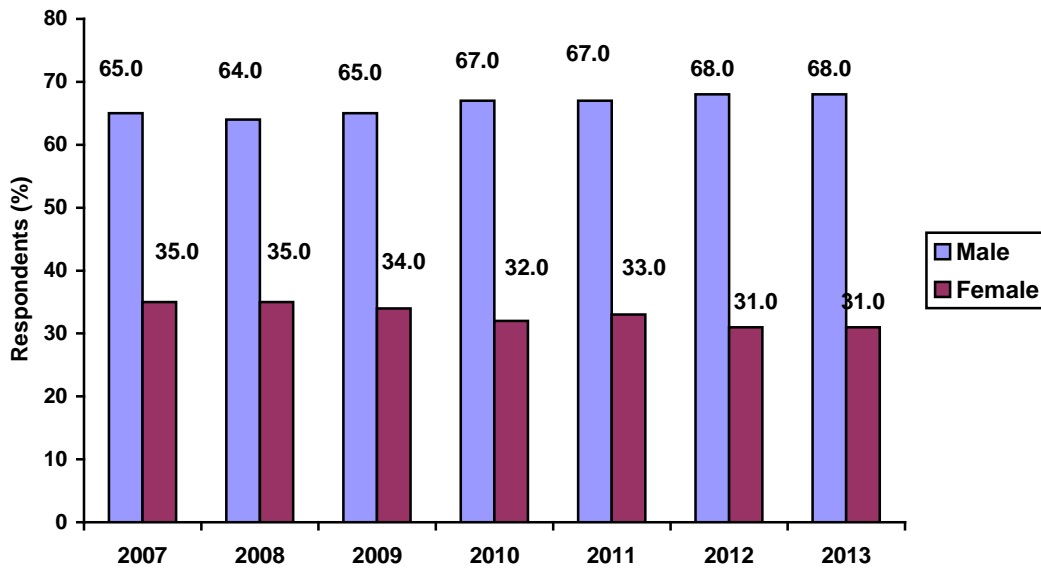
The median age of the participants at the time of the survey was 39 years for 2013 and shows a steady increase over the years. The largest proportion of the NSP survey participants were from 35+ years age group followed by the 25-34 years age group, over all nine years (Figure 26). The proportion of participants aged less than 25 years has declined annually from 14% in 2005 to 7 % in 2013 (Figure 27). A corresponding increase can be observed for participants aged 35 years and above with 66% of participants in 2013 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 27 Age profile of respondents by year of survey, Australia, 2005-2013**

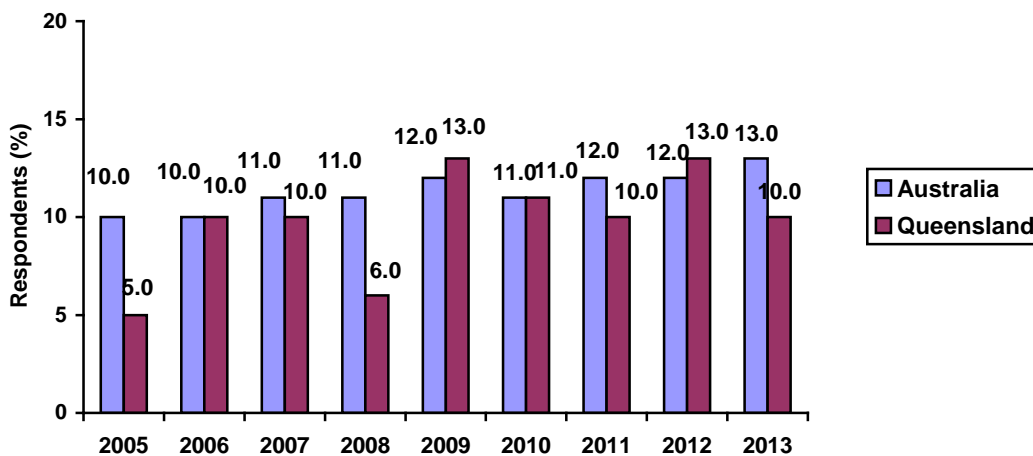
The survey reported that respondents were predominantly males in the age group of 30+ years; the male to female ratio was approximately 1:2 over all reported years. In contrast, of the 200,386 service occasions, 75% (n = 150,254) were male clients and 25% (n = 49,832) were female clients.

The gender differences among the respondents to the Australian NSP survey over a five year period can be observed in Figure 28.



**Figure 28 Gender profile of respondents by year of survey, Australia, 2005-2013**

There was no marked increase in the proportion of survey respondents identifying as Aboriginal and/or Torres Strait Islander people over the nine 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, this could be due to improved data collection on Indigenous status due to its mandatory status since 2009.



**Figure 29 Indigenous status of respondents by year of survey, Australia, 2005-2013**

According to the Australian NSP survey there were changes in the last drug injected in Australia over the nine year period with initial increases and later plateauing in reporting of pharmaceutical opioids and decreases for amphetamines; heroin reporting has remained stable. Performance and Image Enhancers like 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. 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, 2006- 2013

<b><u>Drug Last Injected (%)</u></b>	2006 N = 501	2007 N = 417	2008 N = 508	2009 N = 801	2010 N = 550	2011 N = 571	2012 N = 624	2013 N = 565
<b><u>Amphetamines</u></b>	197(39)	145(35)	171(34)	232(29)	149(27)	170(30)	165 (26)	162 (29)
<b><u>Heroin</u></b>	115(23)	106(25)	124(24)	218(27)	123(22)	114(20)	129 (21)	91 (16)
<b><u>Rx Opioids</u></b>	94(19)	96(23)	120(24)	177(22)	141(26)	132(23)	124 (20)	117 (21)
<b><u>Methadone</u></b>	24(5)	19(5)	32(6)	38(5)	36(7)	27(5)	45 (7)	36 (6)
<b><u>Performance/Image Enhancers</u></b>	13(3)	5(1)	11(2)	9(1)	24(4)	41(7)	70 (11)	71 (13)
<b><u>Bup/Subutex</u></b>	30(6)	28(7)	26(5)	53(7)	32(6)	39(7)	41 (7)	32 (6)
<b><u>Cocaine</u></b>	2(<1))	1(<1)	2(<1)	7(<1)	2(<1)	6(1)	3 (<1)	3 (<1)
<b><u>Other</u></b>	2(<1)	6(1)	6(1)	20(2)	22(4)	6(1)	8 (1)	1 (<1)

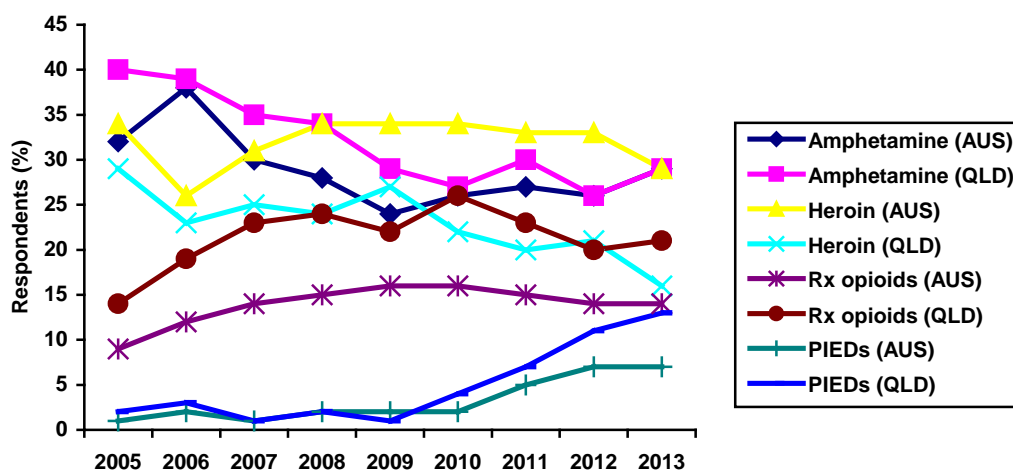


Figure 30 Indigenous status of respondents by year of survey, Australia, 2005-2013



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