

Queensland Minimum Data Set for Needle and Syringe Programs (QMDS-NSP):

January 2010 to December 2010

Queensland Needle and Syringe Program

Queensland Health

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1. Introduction

The purpose of the Queensland Minimum Data Set for Needle and Syringe Programs (QMDS-NSP) is to establish a state-wide standardized data collection system. This will support the ongoing development of the Needle and Syringe Program (NSP) sector 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 help ensure, for example, that access is adequate in different locations and that an optimal mix of services and resources is available to clients. Hence, 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, collected since 1995, and the Australian NSP Survey (Finger Prick Survey), collected since 1995, have been the key data sources. Service occasion data has also been collected by NSPs; however, shortcomings in regard to data uniformity and comparability have limited its value.

Collection of standardised data began in December 2006 with 13 primary programs sending in monthly data; since then the numbers have increased to 19 primary programs and four secondary programs.

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 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 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 on their program activities via the reporting tools of their data collection software;
- Providing regular analyses of NSP data available to participating NSPs.

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

There are a total of 16 items or data elements in the QMDS-NSP. Only a subset of these will be collected on most occasions of service, depending on the client's injection equipment requirements and whether any interventions and referrals are provided.

Conceptually, 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
- Sex
- 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 was made mandatory since January 2010.

1.2 Data Collection and Analysis

Collection of standardised data began in December 2006 with 13 primary programs sending in monthly data, since then the numbers have increased with 19 primary programs and three secondary programs sending data collected through the QMDS-NSPs between January and December 2008. A fourth secondary program has been added to the previous 22 programs that were regularly collecting data through QMDS-NSPs.

The needle and syringe provision at these 23 sites comprised of 86% of the State-wide provision at the end of 2010/11 financial year. Brisbane City, comprising Biala and Brisbane QuIHN, has been analysed separately from the Southern Area as these NSPs are the state's two busiest sites, contributing over 38 % of the service occasions across these 23 agencies. The Northern and Central Areas formed the other categories when data was grouped according to the geographical location of the NSPs.

Data for 2010 was collected from all 23 of the participating NSP programs. Data was collected and sent to the QNSP statistics team, who cleaned the data according to the QMDS-NSPs guidelines and sorted it according to their unique identifiers*.

The cleaned data was then collated and entered onto an Access database. 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 across the state in this 12-month period. Data is further analysed at a regional level to observe any variations among the participating NSPs.

* numerical code assigned to individual NSPs by NSPMU

2. 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 2010, 19 primary programs and four secondary programs collected data in accordance with the QMDS-NSP guidelines.
- The needle and syringe provision of these 23 agencies comprised of 86% of the State-wide activity at the end of the 2010/11 financial year.
- From January 2010 to December 2010 there were 166,779 occasions of service across the 23 participating NSPs.
- There was a 3.7 % growth 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 was the primary drug type for 53% of the total occasions of service delivery; amphetamines and other stimulants made up of 30% of the service occasions.
- Heroin use constituted 48% of all opioid-related service occasions.
- Methadone continued to be the ORT drug most often reported by clients despite decreases in methadone prescribing.
- Base[^] methamphetamine continues to be the type of amphetamine most often reported by clients

Client demography and drug use

- The average age of clients was 37 years (SD = 12), with the 30-34 age group comprising the largest proportion of clients (21%).
- Clients in the 30 to 34 year age group had the most service occasions at 21% and clients more than 35 years in age made up 50% of the occasions of service.

[^] heroin, morphine, methadone, buprenorphine, suboxone and other opioid drugs

- Amphetamines were the primary drug of choice for injecting purposes for clients younger than 25 years (35%). 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 45 years and older (51%). Majority of steroid use was limited to clients aged less than 30 years with them making up 64% of the 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 over 89,735 primary interventions provided 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 54 % of service occasions.
- There were over 3910 referrals provided by NSP staff during the 12-month period; two % of all primary interventions involved referrals.
- The top 3 referral destinations across the state were to drug and alcohol, sexual health services and hepatitis services.

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 30 % of service occasions being females, compared with 25 % State-wide. Brisbane city recorded the lowest attendance of females with 21 % 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 (60% v 53%).
- Northern area displayed distinctively different drug use trends to other areas: morphine use comprised the majority of opioid-related service occasions (70%), while heroin accounted for less than five % of all service occasions.

3. Statewide Data Profile

3.1 Occasions of Service

There were 166,779 occasions of service for year 2010 across the 23 participating NSPs; this was an increase over the 160,679 occasions of service observed for year 2009 (Figure 1). The growth can be attributed to increases in service occasions among programs in the Northern area followed by Southern and Central areas; larger programs in Brisbane city (Biala & QuIHN Brisbane) did not contribute to this increase.

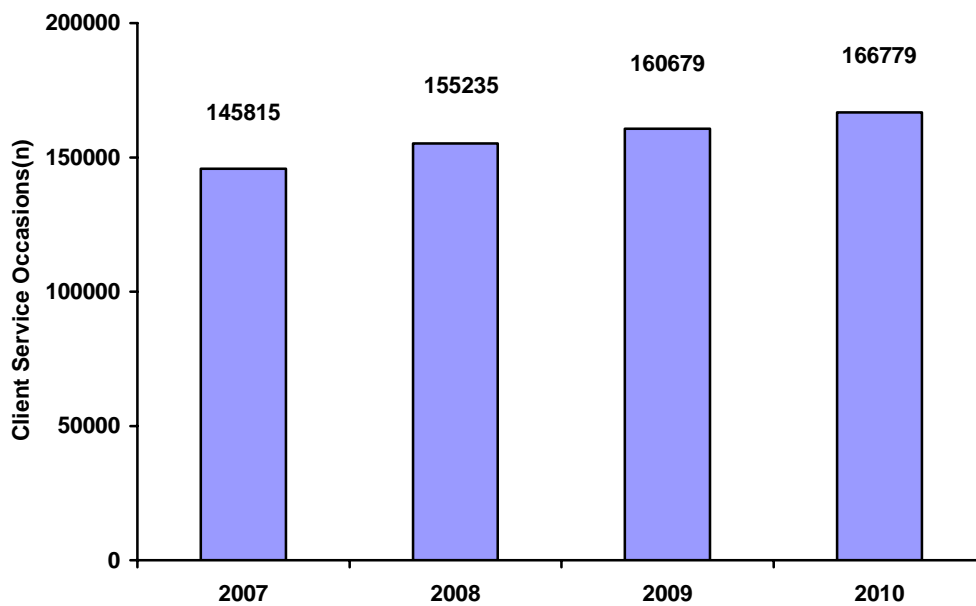


Figure 1: Total service occasions across participating NSPs, 2007-10

3.2 Client Demographics

3.2.1 Client Age

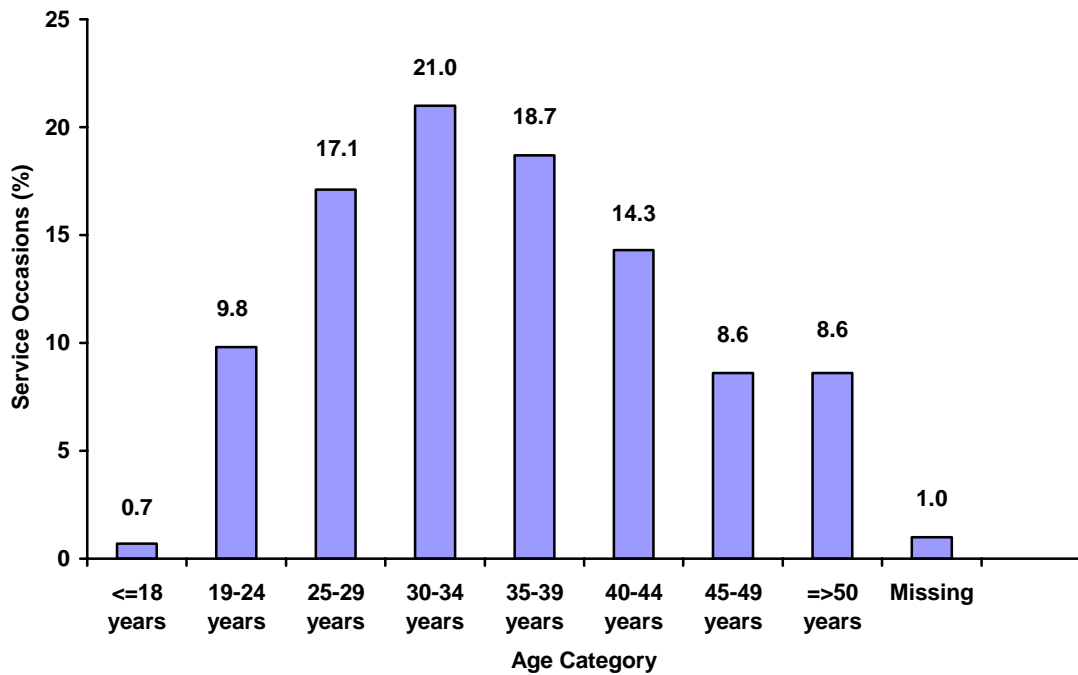


Figure 2: Service occasions by age category, 2010, (N=166,779)

The average age of clients was 37 years (SD = 12), with the 30-34 year age group comprising the largest proportion of clients (21%) (Figure 2). The 25-29 and the 35-39 age groups were the second largest groups with equal proportions of clients, followed by 40-44 year olds. Clients aged under 18 years comprised less than one % of all clients, while clients under the age of 25 comprised 10.5 %.

Table 1. Per cent of service occasions related to drug type, by age group (N=166,779)

Drug Type (%)	Total	<=18	19-24	25-29	30-34	35-39	40-44	45-49	=>50	Missi
Amphetamines	30.4	41.5	34.6	33.5	33.5	31.7	29.3	24.4	18.2	14.
Heroin	25.8	13.5	21.0	25.6	27.9	26.3	26.2	25.9	27.0	6.7
Morphine	18.1	8.0	12.4	14.1	16.3	18.9	20.5	24.8	25.0	15.3
Methadone	18.0	1.9	1.6	3.2	3.1	4.0	5.8	4.8	5.45	4.9
Buprenorphine	2.1	2.4	1.9	2.6	3.2	1.5	1.9	1.8	0.6	0.5
Suboxone	0.9	0.5	0.8	1.0	1.1	1.1	0.6	1.0	0.4	0.6
Fentanyl	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other opioids	2.5	1.7	1.4	2.6	2.5	2.8	2.7	3.1	2.7	0.8
Steroids	4.7	13.0	16.6	7.5	3.6	2.5	1.6	1.2	1.2	2.3
Benzodiazepines	0.2	0.0	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3
Ecstasy	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cocaine	0.6	0.7	0.3	0.6	0.8	0.6	0.5	0.5	0.5	0.2
All other categories*	5.0	5.5	4.7	4.3	3.4	5.4	5.2	6.4	7.3	14.
Missing	5.6	10.5	4.1	4.4	4.0	4.6	5.3	5.7	11.7	40.
Total in each age group (n)	166779	1137	16399	28571	35114	31175	23823	14450	14449	165

*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, it can be seen that amphetamines accounted for a majority of service occasions across all age groups except for those aged greater than 45 years. Amphetamine was reported as being used in 42 % of service occasions involving clients aged 18 years and under, while for the 19-24 and 25-29 year olds this drug was used on fewer occasions (35% and 34% respectively). For clients aged over 45 years, heroin use accounted for the majority of service occasions (26%) followed by morphine (25%) and amphetamines (21%). Steroid use was more prevalent in the younger age group with clients younger than 30 years making up 64% of the service occasions related to steroid use.

3.2.2 Client Gender

Of the 166,779 service occasions, 74 % (n = 124,131) were for male clients and 25 % (n = 42,011) were for female clients. In less than 1 % (n = 587) of service occasions this information was missing or not stated. Compared with males, a higher proportion of female clients were less than 30 years of age (27% Vs 29% respectively).

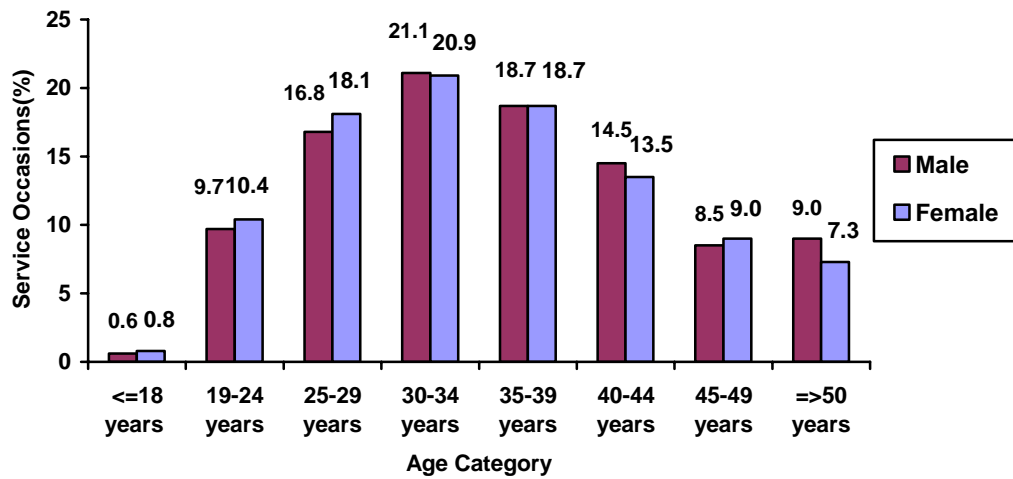


Figure 3: Service occasions by age category & gender, 2010 (N=166,779)

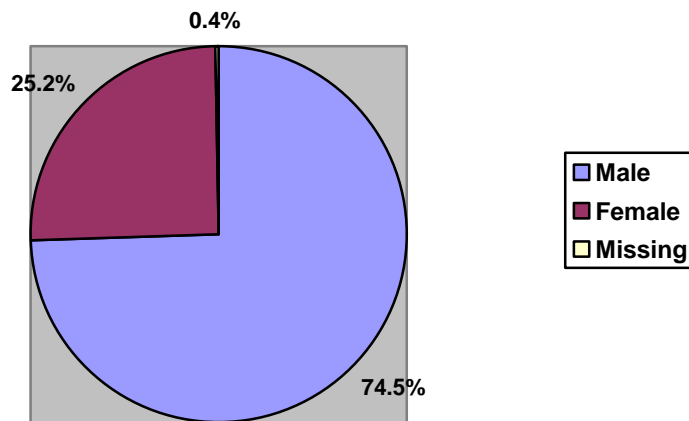


Figure 4: Service occasions by gender, 2010 (N=166,779)

3.2.3 Indigenous profile

The Indigenous status was collected as a mandatory data element of the QMDS-NSP for the first time beginning in 2010. Of the 166,779 service occasions 7.1 % (n = 11,872) were for clients who identified as an Indigenous person. This can be an under-representation due to the inconsistencies in data collection for Indigenous status across programs and missing data.

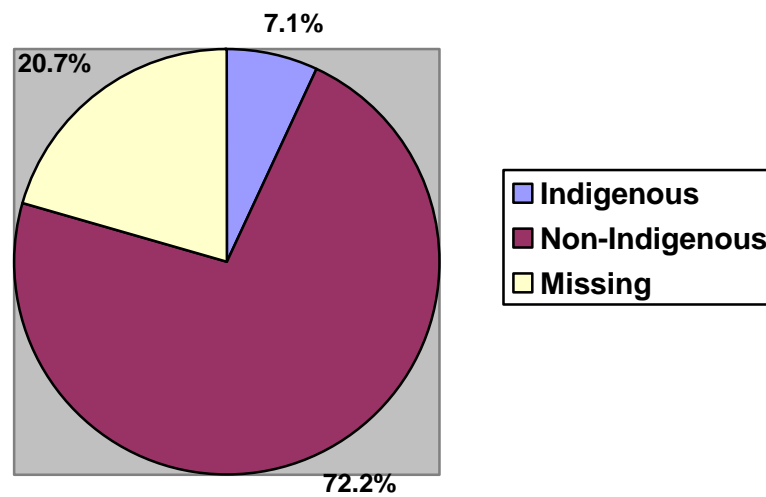


Figure 5: Service occasions by Indigenous status, 2010 (N=166,779)

3.3 Drug Trends

3.3.1 Service Occasions Related to Male and Female Drug Use

Figure 6 displays service occasions related to male and female drug use, by drug type. State-wide, the three most commonly used drug types were the same for males and females. Amphetamines accounted for 34 % of male and 32 % female occasions of service. Heroin use was quite similar in both males and females with 28 % and 27 % of service occasions respectively, morphine use was slightly higher in males compared with females (17.2% vs. 18.5%). A key difference between male and female drug use was the occurrence of steroid use; as expected, use of this substance was much higher in male clients (4.7% of male vs. 0.5% 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 related to this category comprised less than 5 % of all service occasions.

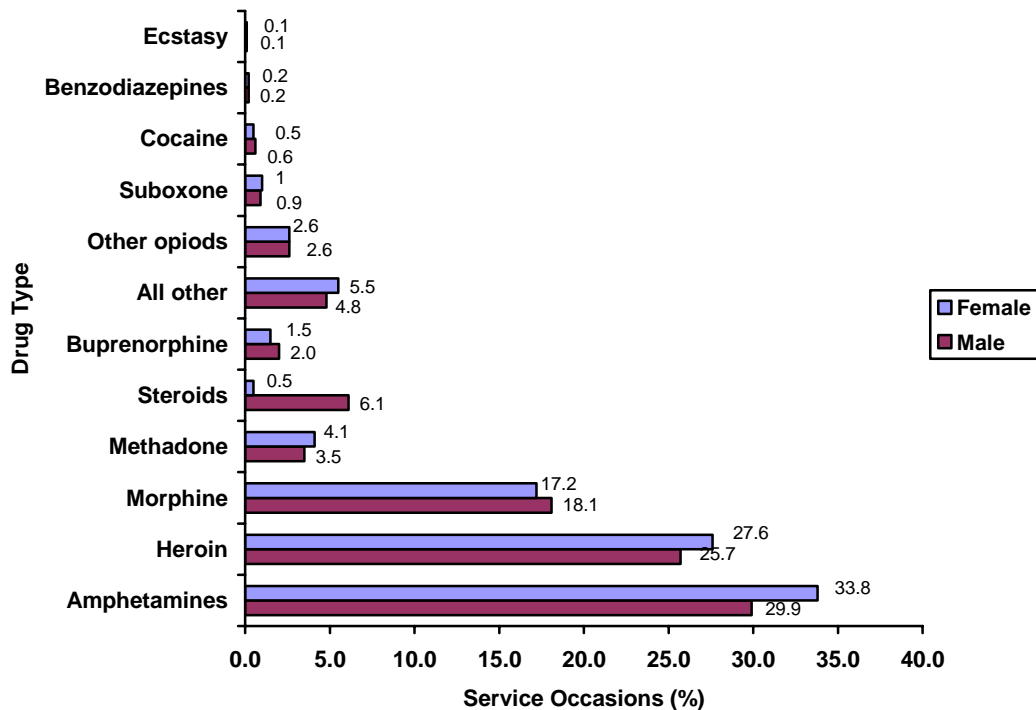


Figure 6: Service occasions related to male and female drug use, 2010 (N=166,779)

3.3.2 Amphetamine Subtypes

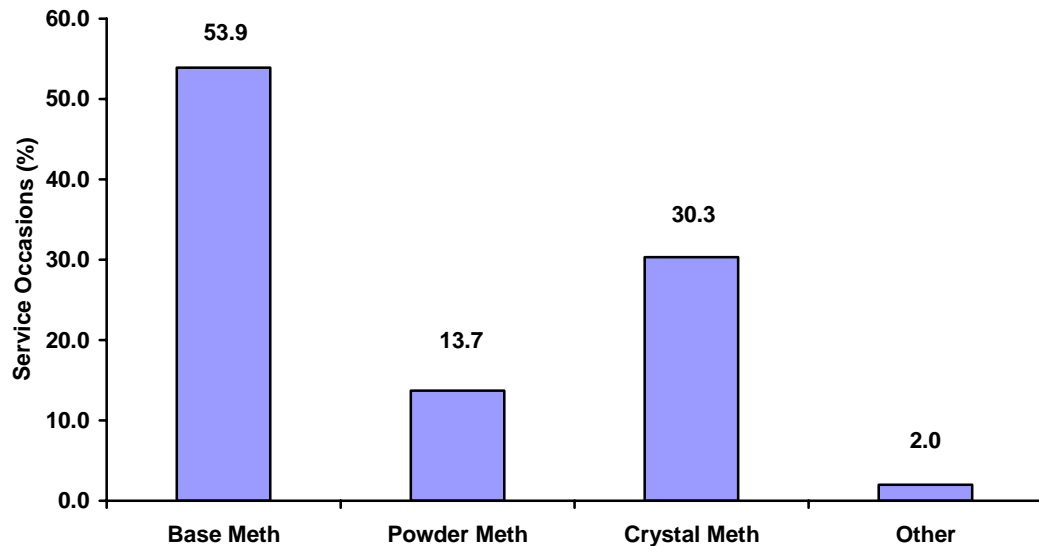


Figure 7: Per cent of service occasions for each amphetamine sub-type (where specified) 2010, (N=26,658)

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 of this substance as well as amphetamine sulphate.

Of the 50,776 occasions of service related to all amphetamine use, 52% were recorded as specific amphetamine types. Figure 7 displays the breakdown of amphetamine types on occasions when specific amphetamine types were reported. Base (54%) followed by crystal methamphetamine (30%) were the most common forms used.

3.3.3 Opioid related service occasions

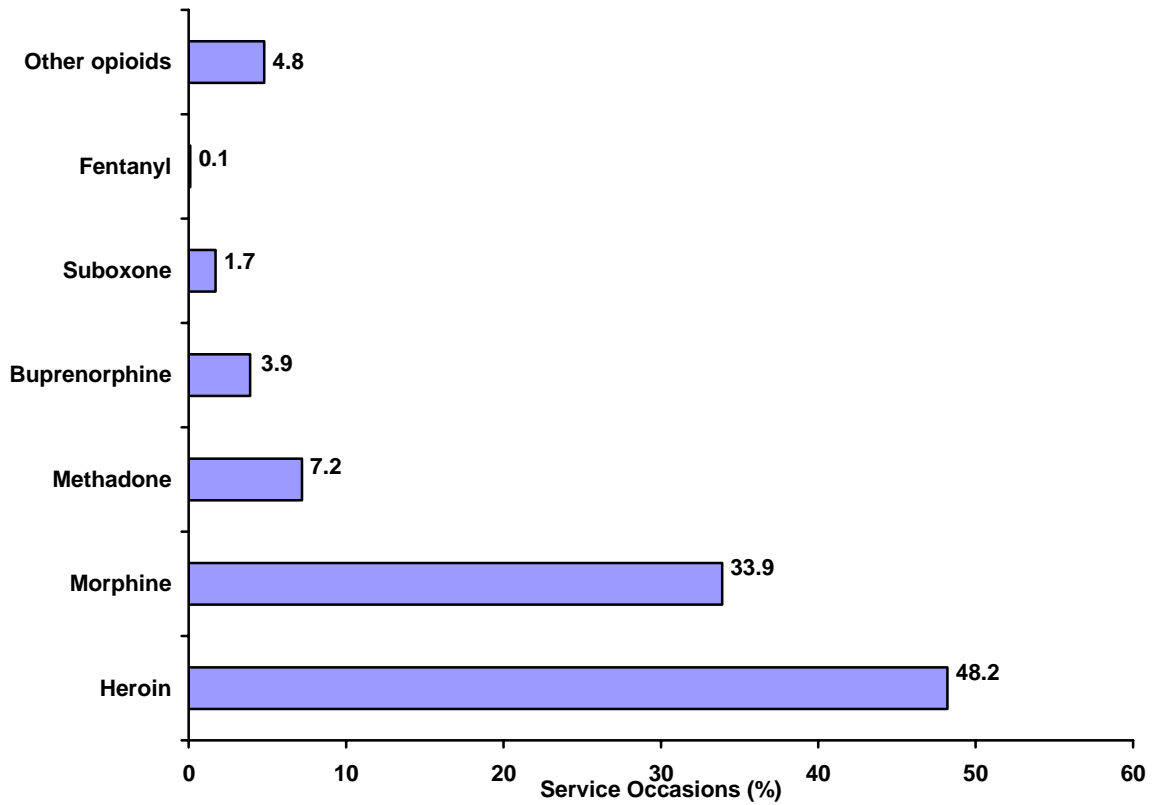


Figure 8: Percentage breakdown of opioid-related service occasions, 2010, (N=88,966)

Figure 8 displays the percentage breakdown of service occasions related to all opioid use. Heroin and morphine, comprising over 82 % of opioid-related service occasions were the most commonly used opioids throughout this period.

3.4 Equipment Ordering and Distribution

3.4.1 Equipment Ordering

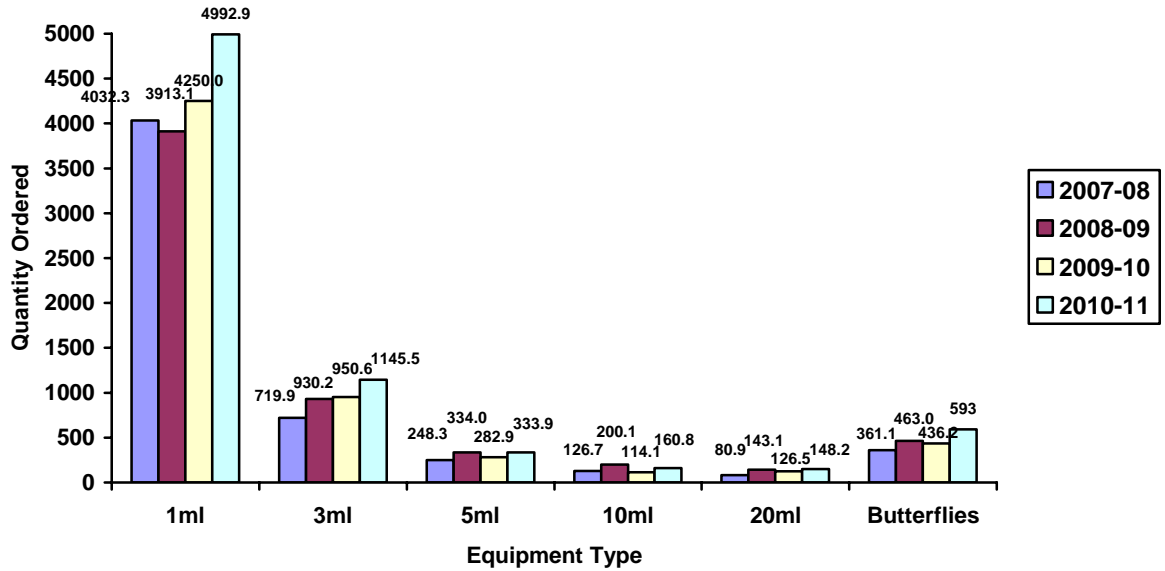


Figure 9: Total equipment ordered, Financial Year 2007-08, 2008-09, 2009-10 & 2010-2011 (in thousands of units)

The total for each equipment type ordered by all primary and secondary NSP sites in Queensland for financial years 2007-08, 2008-09, 2009-10 and 2010-11 is displayed in Figure 9. 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 10).

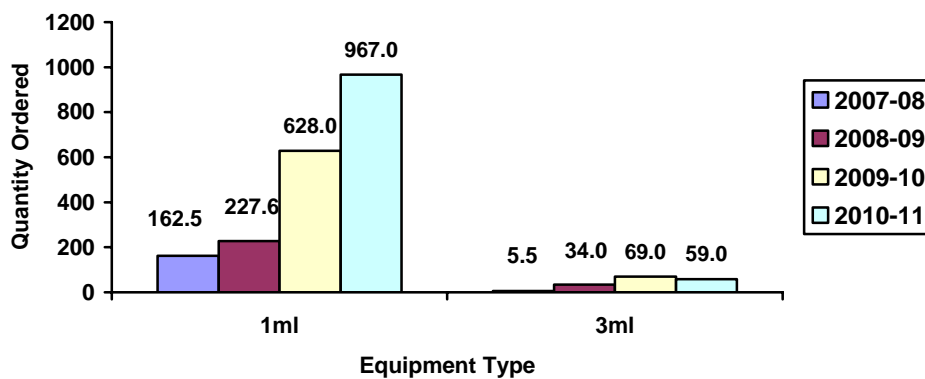


Figure 10: Total equipment ordered as Vending Kits, Financial Year 2007-08, 2008-09, 2009-10 & 2010-2011 (in thousands of units)

3.4.2 Equipment Distributed

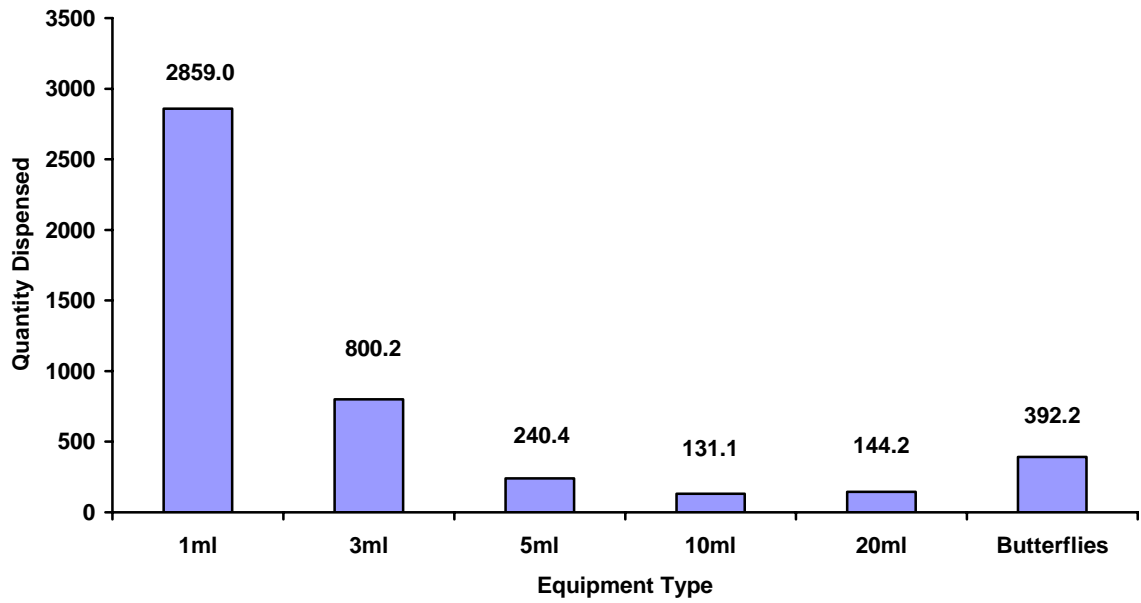


Figure 11: Total equipment distributed, 2010 (in thousands of units)

Total distribution for each equipment type is displayed in Figure 11. One *ml* syringes were the most commonly dispensed item, comprising 63 % of all equipment dispensed without charge followed by 3 *ml* syringes which accounted for 18 %.

3.5 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 syringes, drug-related topics, sexual health and antenatal information. Interventions also include ‘client-focussed discussion’. Client-focussed discussion comprises any discussion between the client and staff member focussed upon the client’s health or other needs, and includes rapport-building.

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 12 displays the primary interventions provided across all sites, from January 2010 to December 2010.

Staff provided a primary intervention on 54 % of service occasions. The top five interventions provided across the state were safe disposal information and education, client-focussed discussion, vein care, drug information and blood borne virus 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.

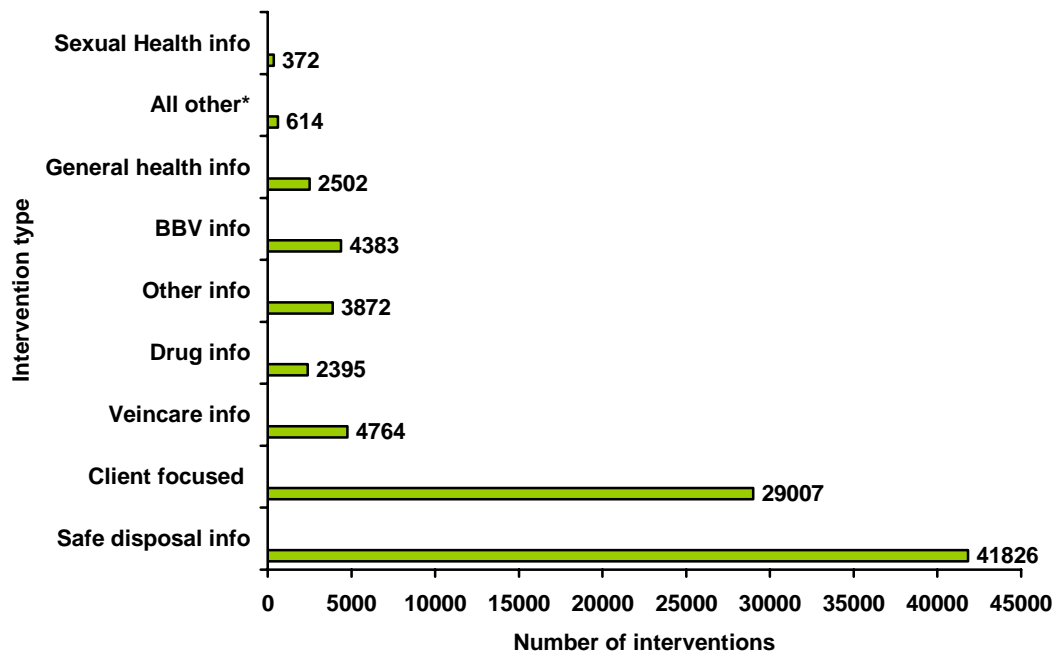


Figure 12: Type of interventions provided, 2009, (N=81,173)

*Includes antenatal education and condom/dam provision

3.6 Referrals to Services

As part of an NSP occasion of service a client may be referred to a service. There were 3,910 referrals provided by NSP staff during the 12-month period; 2 % of all occasions of service involved referrals. Figure 13 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 across the state (excluding the 'Other' category) were referrals to drug and alcohol, sexual health services, hepatitis and medical 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.

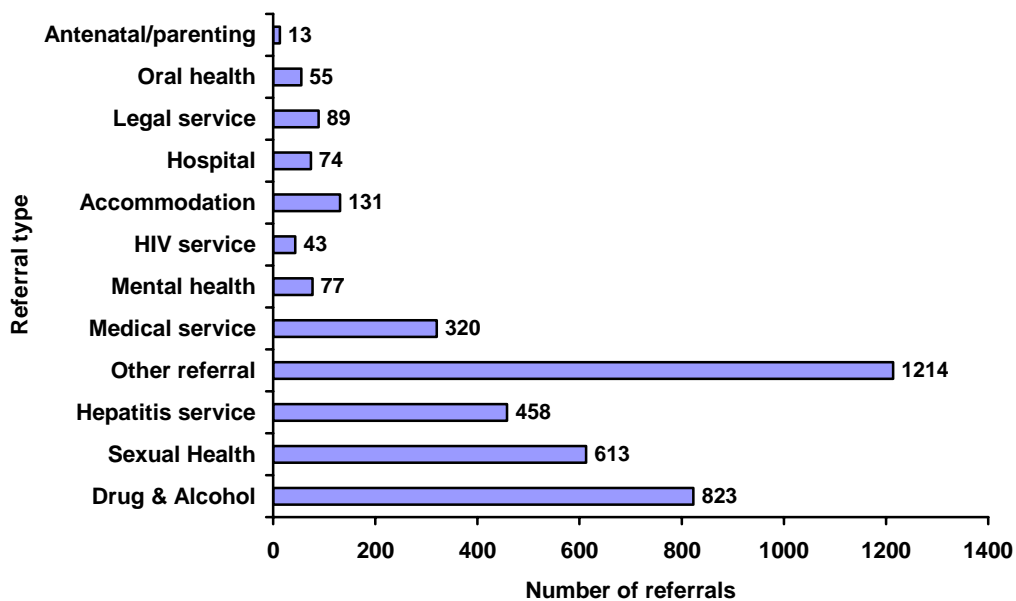


Figure 13: Type of referrals provided, 2010, (N=3,910)

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 NSP staff 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.

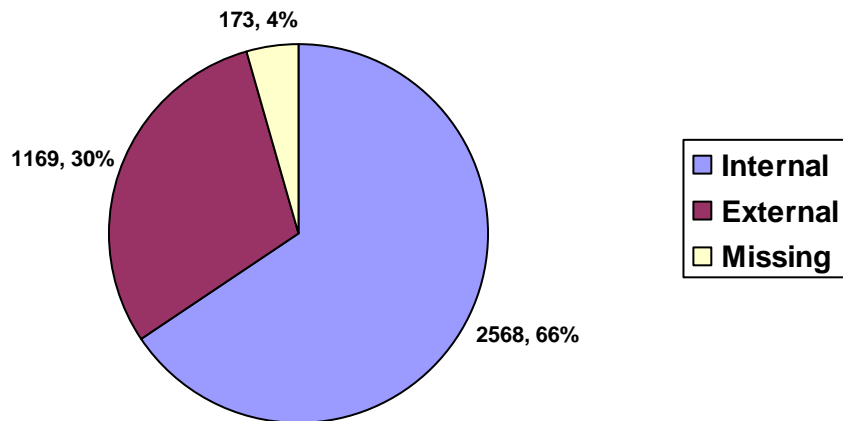


Figure 14: Percent of internal and external referrals, 2009, (N=4,843)

Figures 14 and 15, display the breakdown of internal and external referrals, and active and passive referrals respectively. More than half of the referral sites were located internally within the partnership health service supporting the NSP program; informal referrals were the most commonly provided referral type.

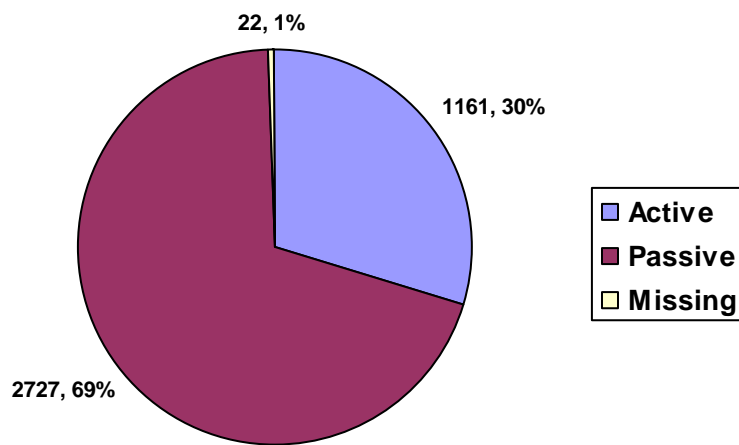


Figure 15: Percent of active and passive referrals, 2010, (N=3,910)

4. Regional Profiles

4.1 Brisbane City

- From January 2009 to December 2009 there were 62,758 occasions of service conducted in the Brisbane City region (comprising Biala and QuIHN Brisbane).

4.1.1 Client Gender

- Brisbane City's male attendance (78%) was higher than state-wide attendance (74%).
- 21.8 % of clients attending were female, this was lesser than overall service occasions related to females (25%).

4.1.2 Client Age

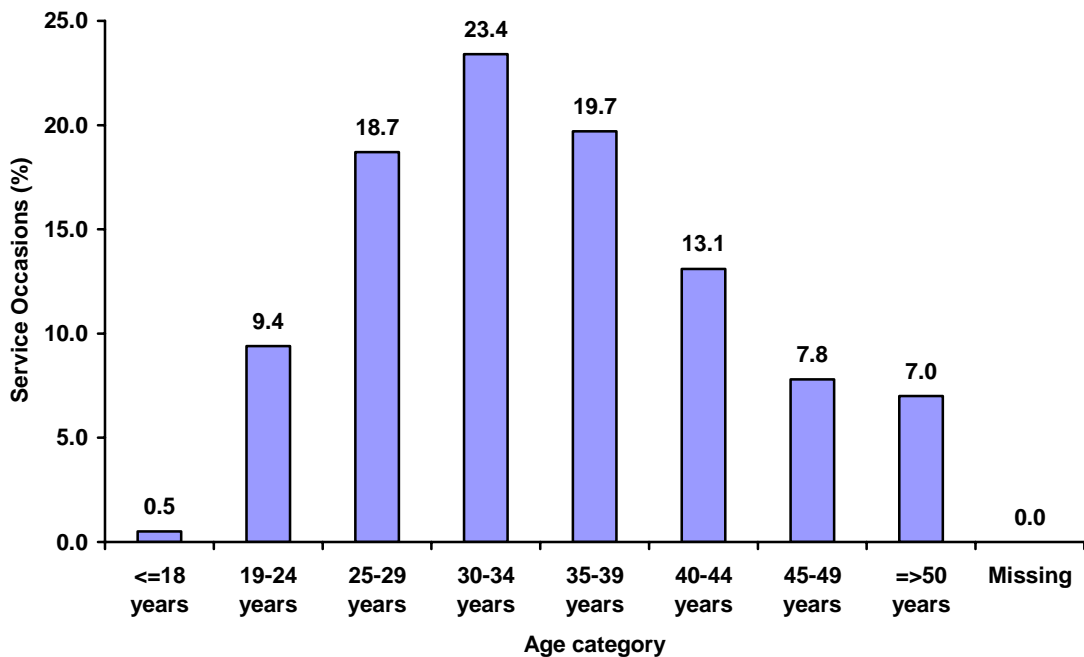


Figure 16: Brisbane City: Age distribution, 2010, (N=62,758)

- The average age of clients attending was 35.1 years (SD = 9.4), lower than the State-wide mean of 36.5 years (SD = 12.3), consistent with State-wide patterns, the 30-34 age group comprised the largest proportion of clients attending. Almost a quarter of service occasions were for clients in this age group.

4.1.3 Drug Trends

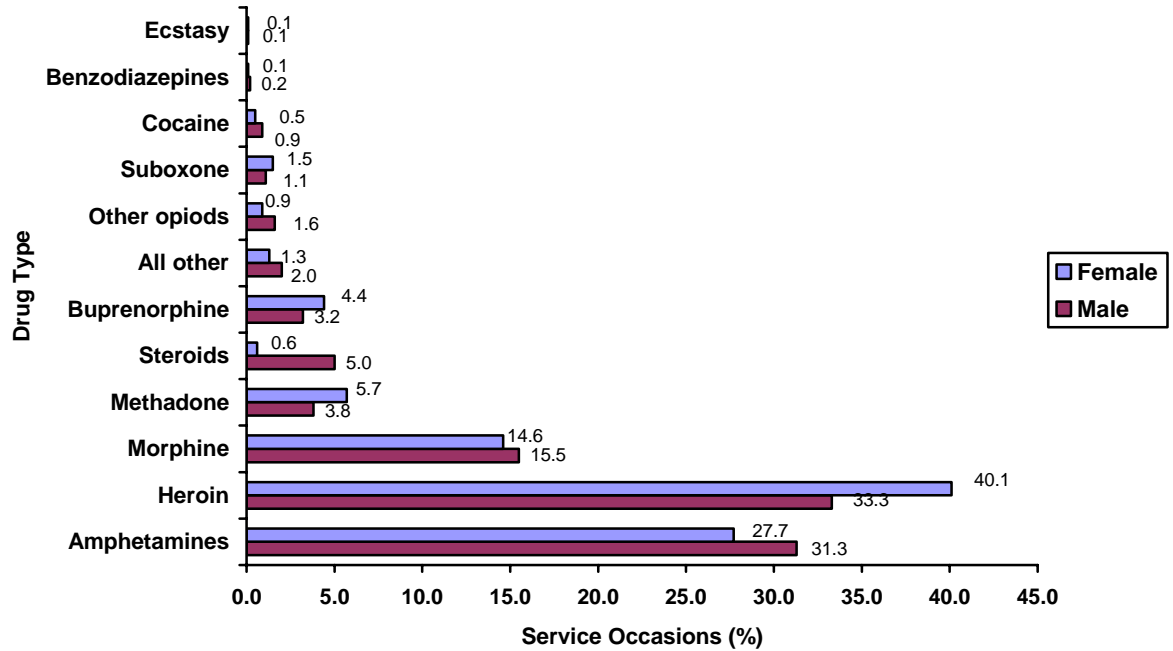


Figure 17: Brisbane City: Service occasions related to male and female drug use, 2008, (N=69,918)

- Consistent with State-wide trends, for males and females, service occasions related to amphetamine, heroin, and morphine use were more prevalent than for any other drug types.
- In contrast to State-wide data, 31 % of male and 28 % of female service occasions were related to amphetamines, while heroin was reported by a greater number of females (40.1%) when compared to the males (33.3%) In sync with State-wide data.

4.1.4 Interventions Provided

Table 2. Brisbane City: Interventions provided, January 2010 to December 2010

Information/Education	Interventions
Safe Disposal	13491
Client-focussed Discussion	6451
Drug Information	1092
Veincare	1754
BBV	396
Other	1859
General Health	528
Sexual Health	91
Condom/dam provision	16
Antenatal	6
Total interventions	25684

- On 40 % of service occasions, at least one intervention was provided to clients attending Brisbane City NSPs.
- Information on the safe disposal of equipment was provided most often, followed by client-focussed discussion, drug information, vein care and blood borne virus information and education.

4.1.5 Referrals to Services

Table 3. Brisbane City: Referrals provided, January 2010 to December 2010

Services	Referrals
Drug Alcohol	281
Hepatitis	214
Sexual Health	34
Other	843
Medical	141
Mental Health	44
Accommodation	28
HIV/AIDS	25
Legal	20
Antenatal	5
Hospital	12
Oral Health	3
Total Referrals	1650

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

4.2 Central Area

- From January 2010 to December 2010, Central Area (comprising Rockhampton ATODS, Bundaberg ATODS, Caboolture Community Health, Redcliffe Community Health, Sunshine Coast ATODS, QuIHN Sunshine Coast and Gladstone ATODS) conducted 20,657 occasions of service.

4.2.1 Client Gender

- Female attendance in this region was higher than State-wide attendance (30.3% versus 25.1%) and all other regions.
- Male clients comprised 68.2% of service occasions..

4.2.2 Client Age

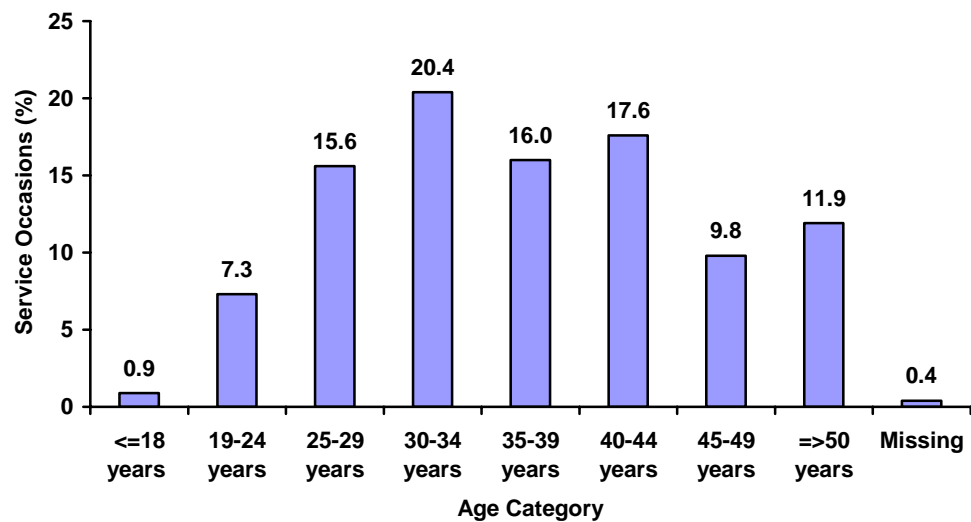


Figure 18: Central Area: Age distribution, 2010, (N=20,992)

- The average age of clients was 37.9 years (SD=12.9), more than a year older than the State average.
- Consistent with State-wide data, the 30-34 age group made up the largest proportion of client presentations.

4.2.3 Drug Trends

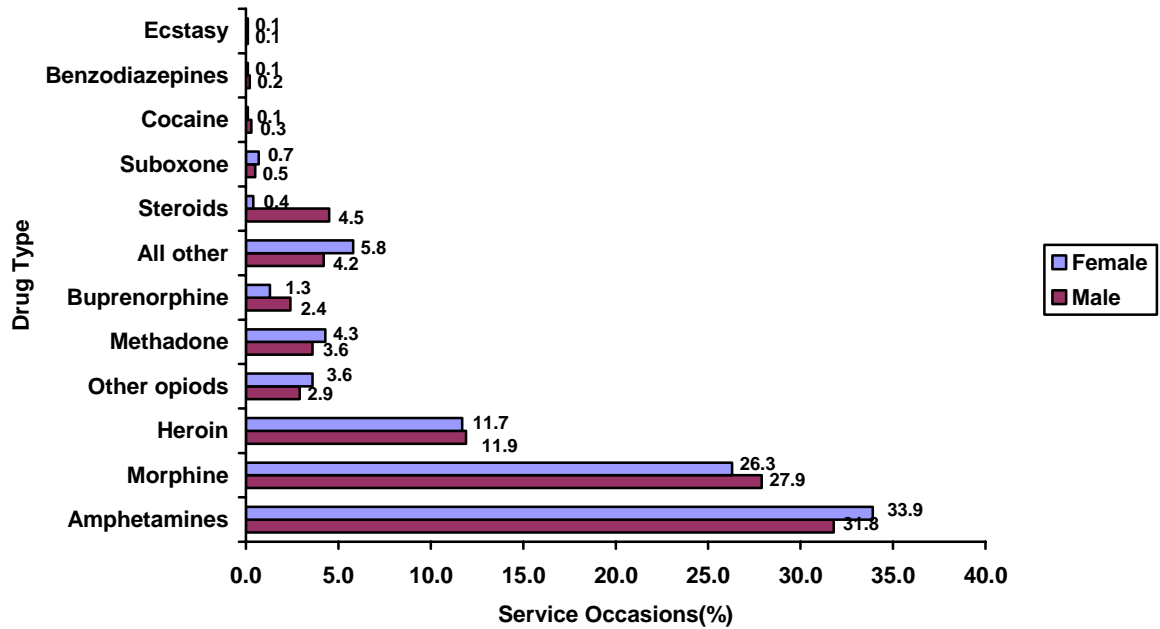


Figure 19: Central Area: Service occasions related to male and female drug use, 2009, (N=24,005)

- Amphetamine use was higher than State-wide patterns of use for male and female service occasions (31.8% and 33.9% respectively).
- The use of heroin was lower for males and females when compared to State-wide data (11.9% Vs 25.7% & 11.7% Vs 26% respectively); also service occasions related to morphine was higher for both males (27.9%) and females (26.3%) in comparison to State-wide data.

4.2.4 Interventions Provided

Table 4. Central Area: Interventions provided, January 2010 to December 2010

Information/Education	Interventions
Safe Disposal	6707
Client-focussed Discussion	823
Veincare	956
BBV	1804
Drug	191
Other	438
Condom/dam provision	131
General Health	1070
Sexual Health	13
Antenatal	19
Total Interventions	12152

- Information and education was provided to clients on approximately 59 % of service occasions, particularly education related to safe disposal of equipment, client-focussed discussion, veincare, blood borne viruses and safe drug use general health

4.2.5 Referrals Provided

Table 5. Central Area: Referrals provided, January 2010 to December 2010

Referral to Services	Referrals
Drug Alcohol	59
Oral Health	5
Other	17
Hepatitis	14
Medical	16
Sexual Health	7
Accommodation	10
Antenatal	0
Mental Health	6
Legal	2
HIV/AIDS	1
Hospital	0
Total Referrals	137

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

4.3 Northern Area

- From January 2010 to December 2010, the Northern Area (comprising Cairns ATODS, Mackay ATODS, Townsville, North Ward Community Health (Townsville), Innisfail Community Health and Cairns Youth Link) conducted 20,992 occasions of service.

4.3.1 Client Gender

- Male and female attendance was not in large variation to State-wide attendance; with 72% of service occasions being for males and 27% for females.

4.3.2 Client Age

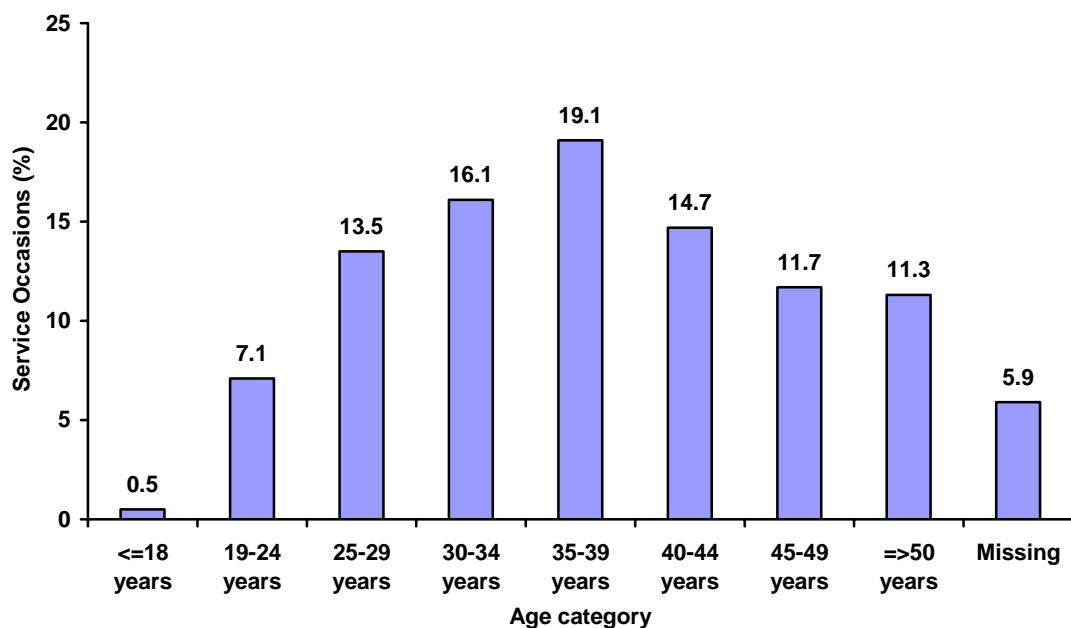


Figure 20: Northern Area: Age distribution, 2010, (N=20,992)

- The average age of clients attending was 41.3 years (SD=18.0), about five years higher than the State-wide average.
- The age distribution for this region was divergent from the State-wide distribution, there were lower proportions of under 30 year olds and higher attendance of clients aged over 35 years.

4.3.3 Drug Trends

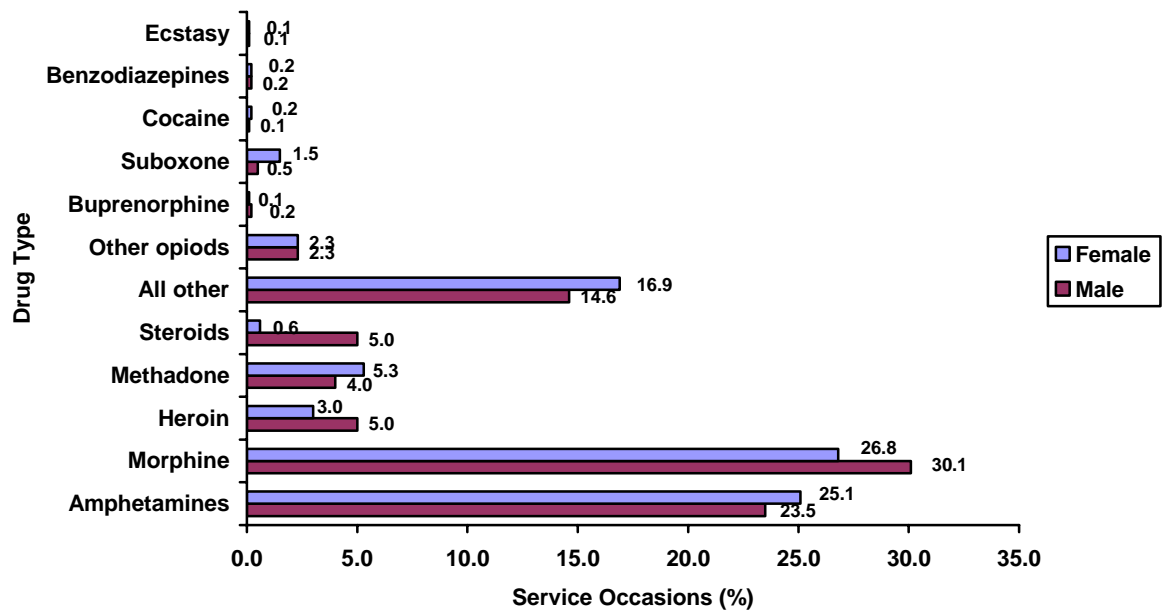


Figure 21: Northern Area: Service occasions related to male and female drug use, 2010, (N=20,992)

- Morphine-related service occasions were more common than service occasions for any other drug type for both males and females (30.1% and 26.8 %) in Northern Area.
- Heroin use in the Northern Area is substantially lower than State-wide data; it accounts for approximately 4% of male and female service occasions, compared to approximately 30% of male and female service occasions State-wide.

4.3.4 Interventions Provided

Table 6. Northern Area: Interventions provided, January 2010 to December 2010

Information/Education	Interventions
Client-focussed Discussion	4897
Safe Disposal	2684
Other	498
General Health	467
Drug	441
Veincare	459
BBV	496
Condom/dam provision	160
Sexual Health	175
Antenatal	36
Total Interventions	10313

- At least one intervention was provided on 49 % of service occasions.
- After client-focussed discussion, safe disposal, and BBV were the most common interventions provided.

4.3.5 Referrals to Services

Table 7. Northern Area: Referrals provided, January 2010 to December 2010

Referral to Services	Referral
Sexual Health	89
Drug & Alcohol	188
Medical	98
Other	215
Hepatitis	146
HIV/AIDS	14
Hospital	28
Accommodation	35
Mental Health	13
Oral Health	25
Legal	29
Antenatal	8
Total Referrals	888

- Referrals to hepatitis, drug and alcohol, medical and sexual health services were the most frequently provided referrals in the Northern Area.
- Referrals to drug and alcohol services made up 21 % of the referrals provided across the Northern Area.

4.4 Southern Area

- There were a total of 62,372 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, Palm Beach Community Health, and QuIHN Gold Coast) from January 2010 to December 2010.

4.4.1 Client Gender

- Male and female attendance was not in large variation to State-wide attendance; with 74 % of service occasions being for males and 26% for females.

4.4.2 Client Age

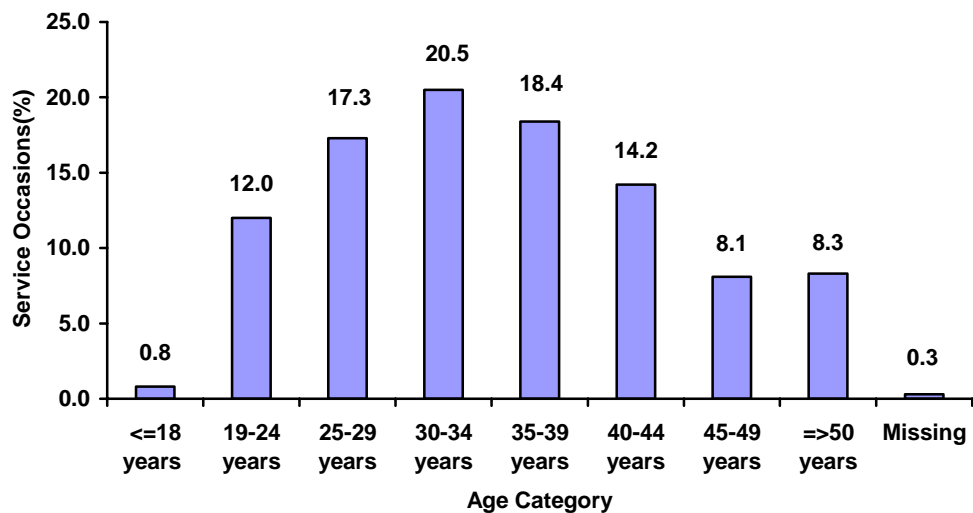


Figure 22: Southern Area: Age distribution, 2010, (N=62,372)

- The average age of clients attending was 35.8 years (SD=11.9), almost similar to the State-wide average age of 36.5 years (SD=12.3).
- The age distribution for this region was very similar to the State-wide distribution; 30-34 year olds comprised the largest proportion of clients attending followed by 35-39 and 25-29 year olds.

4.4.3 Drug Trends

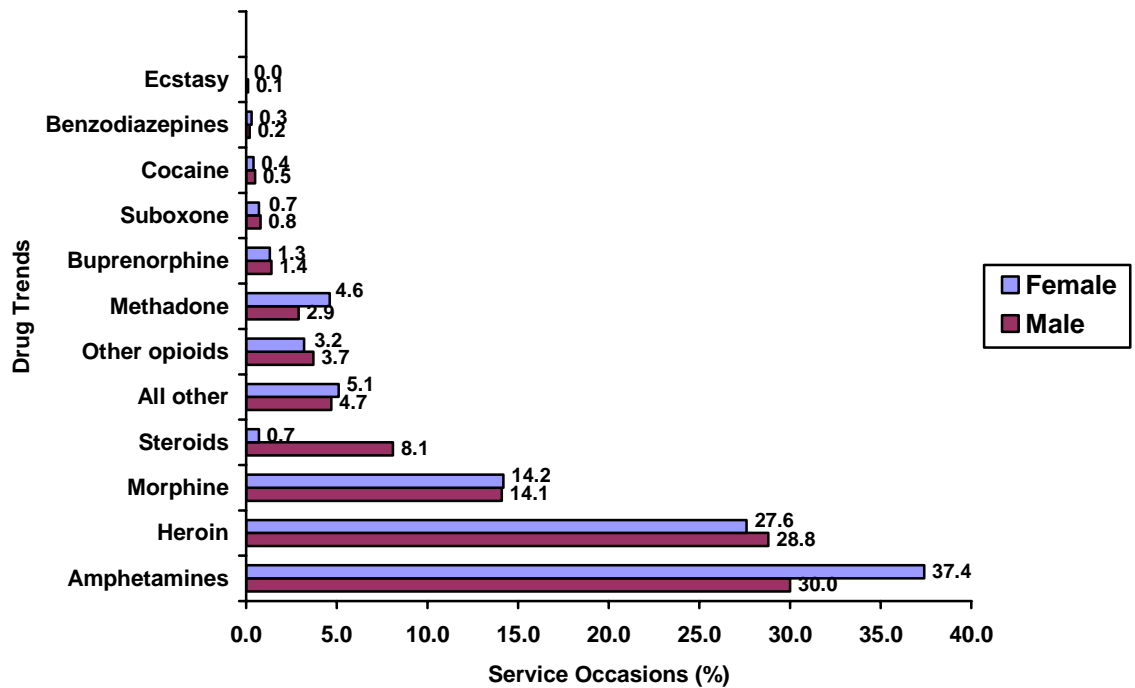


Figure 23: Southern Area: Service occasions related to male and female drug use, 2010, (N=62,372)

- For Southern Area, the most commonly used drug types for males and females were amphetamines, heroin and morphine, consistent with State-wide data.
- Proportion of males using amphetamines was consistent with State-wide data: approximately 33 % of service occasions were related to amphetamine use, heroin use was higher among males with 32 % of service occasions being heroin related and 13 % were morphine related and lower than the State-wide trend.
- Female service occasions for amphetamine use were higher than for males and State-wide average at 37 %, while morphine occasions were lower than State-wide trend for females at approximately 14 %.

4.4.4 Interventions Provided

Table 8. Southern Area: Interventions provided, January 2010 to December 2010

Information/Education	Interventions
Client-focussed Discussion	14474
Safe Disposal	18719
BBV	1464
Drug	177
Veincare	1013
Condom/dam provision	117
General Health	383
Other	64
Sexual Health	81
Antenatal	8
Total Interventions	36500

- On 53 % of service occasions, at least one intervention was provided.
- Safe disposal education occurred most frequently, followed by Client-focussed discussion, drug-related information, vein care and blood borne virus education.

4.4.5 Referrals to Services

Table 9. Southern Area: Referrals provided, January 2010 to December 2010

Referral to Services	Referrals
Drug & Alcohol	241
Sexual Health	481
Other	122
Medical	57
Accommodation	58
Hepatitis	79
Antenatal	0
Legal	37
HIV/AIDS	3
Mental Health	11
Oral Health	22
Hospital	34
Total Referrals	1145

- Sexual health was the most common referral destination that was specified, followed by drug and alcohol services, hepatitis and medical services.

5. Discussion of QMDS-NSP findings

5.1 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 20 programs (including three QuIHN sites) sending in monthly data. Since then, the numbers have increased with a total of 23 programs collecting and submitting data between January and December 2010.

The needle and syringe provision of these 23 sites comprised 86% of the State-wide provision at the end of the 2011 financial year. This report examines the data over the 12-month period from January 2010 to December 2010 inclusive.

The information generated through data collected by 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 readily be 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 with people who inject drugs for the health system.. For this reason the data set emphasises on 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.

5.2 Trends in service access

There were 166,779 occasions of service from January 2010 to December 2010. This was an increase from the 160,679 occasions of service across the 23 participating NSPs reported between January 2010 and December 2010. The 3.7 % growth underscores the need for continuing to develop a strategic regional focus for the diversification and enhancement of program delivery in Queensland.

5.3 Drug use patterns and trends

There are a number of key findings in terms of drug use patterns. The use of all opioids has overtaken amphetamine use, and the consistent upward trend presents the likelihood of further growth.

Heroin (48%) and morphine (34%) made up 82 % of opioid related occasions of service. Methadone (7%) was the OTP drug most often reported by clients.

Base methamphetamine continued to be the type of amphetamine most often reported by clients, although clients were frequently unsure of what type they used; on 47 % of amphetamine-related service occasions the client did not report a specific type of amphetamine.

Service occasions for steroid use comprised 5 % of the occasions of service with males outnumbering the females.

5.4 Age, gender and drug use

Based on client data, the average age of injectors in Queensland increased for 2010. The average age of clients was 37 years (SD = 12), with the 30-34 age group comprising the largest proportion of clients (21%).

Amphetamine and steroid use were clearly more prevalent in the younger age group. In 35 % of service occasions involving under 25 year old clients, 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 (51%). Majority of steroid use was limited to clients aged less than 30 years with them making up 64% of the occasions of service related to steroids.

The majority of NSP clients are male, which is consistent with established patterns of program utilisation. Of the 166,779 service occasions, approximately 74 % (n = 124,131) were male clients and 25% (n = 42,011) were female clients.

5.5 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. Despite steroid-related service occasions comprising only 3.6 % of all service occasions, 3ml syringe distribution for this substance was second only to morphine.

5.6 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 target population.

NSP interventions comprise information and education on topics such as blood-borne viruses (BBV), vein care and safe injecting practices, safe disposal of syringes, drug-related topics, sexual health and provision of condoms and dams, and antenatal and parenting information. Interventions also include 'client-focussed discussion'. Client-focussed discussion comprises any discussion between the client and staff member focussed upon the client's health or other needs, and includes rapport-building.

Staff provided a primary intervention on 54 % of service occasions. The top five interventions provided across the state were safe disposal information and education, client-focussed

discussion, vein care, blood borne virus information and drug information. The prominence of these interventions reflects the health needs and concerns of clients and their communities.

5.7 Referral activity

As part of an NSP occasion of service a client may be referred to a service. There were 3,910 referrals provided by NSP staff during the 12-month period; two % of all occasions of service involved referrals.

The top four referral destinations across the state (excluding the 'Other' category) were referrals to drug and alcohol, sexual health services, hepatitis and medical 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. There was little variance in the number of internal and external referrals; internal, informal referrals were the most commonly provided referral type.

It is important to note that there is under reporting of referral activity across the programs. Consequently there is a need for ongoing data training and simplification of referral reporting, while retaining the capacity to report the quality of the referrals provided.

6. Australian NSP Survey

The Australian NSP survey monitors Human Immunodeficiency Virus (HIV) and hepatitis C virus (HCV) antibody prevalence among injecting drug users 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 2010, a total of 2,396 people recruited through 51 NSP sites participated in the survey; of these 801 people and eight sites were in Queensland.

Data collected from the survey shows that National prevalence of HIV antibody has remained stable over the past 5 years; in contrast the prevalence of HIV antibody in Queensland has varied between a high of 2.4 % and a low of 1.3 % over the past six years (Figure 24). The National HCV antibody prevalence had been relatively high but stable at approximately 62 % across the past four years, but has declined in 2009 to 50 %. This decline sustained in 2010 at 53 % In comparison the average HCV antibody prevalence over the past four years for Queensland has been lower than the National data at 55 % and, it declined further to approximately 45% for 2009 and 2010.

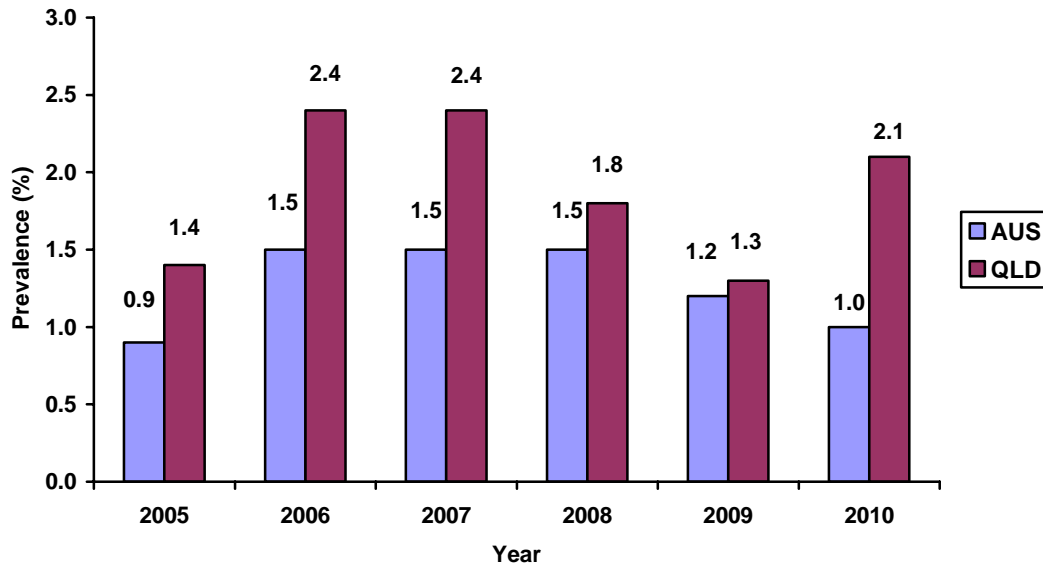


Figure 24: HIV antibody prevalence by year of survey, Australia & Queensland, 2005-2010

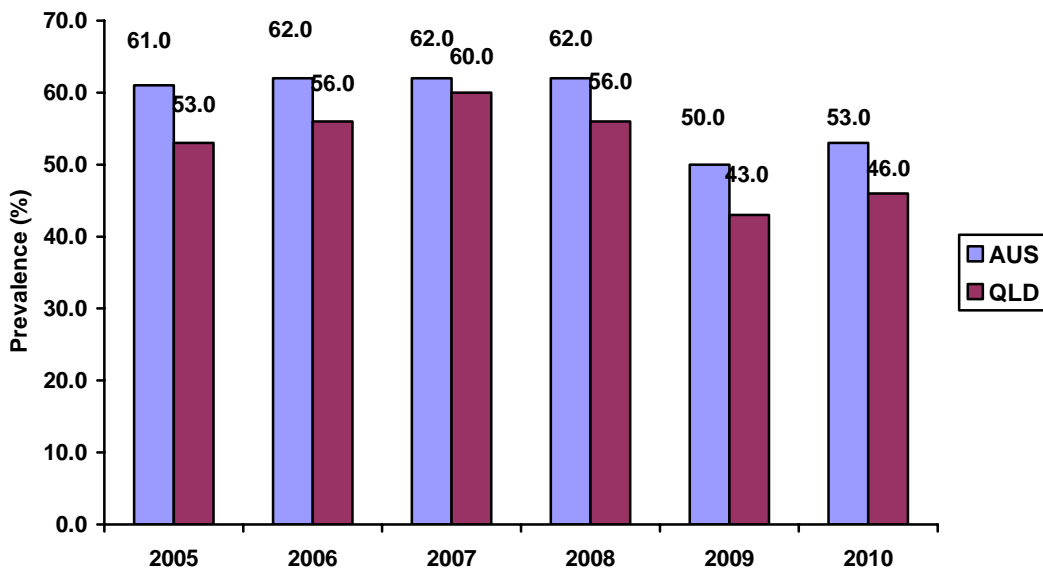


Figure 25: HCV antibody prevalence by year of survey, Australia & Queensland, 2005-2010

The median age of the participants at the time of the survey was 37 years for 2010 similar to the median age of the clients accessing NSP services in Queensland in 2010. The largest proportion of the NSP survey participants were from 35+ years age group followed by the 25-34 years age group, over all six years (Figure 26). The proportion of participants aged less than 25 years has declined annually from 14% in 2005 to 8 % in 2010 (Figure 24). Similar data trends across the age categories can be observed for survey participants from Queensland which points towards a cohort of ageing injecting drug users

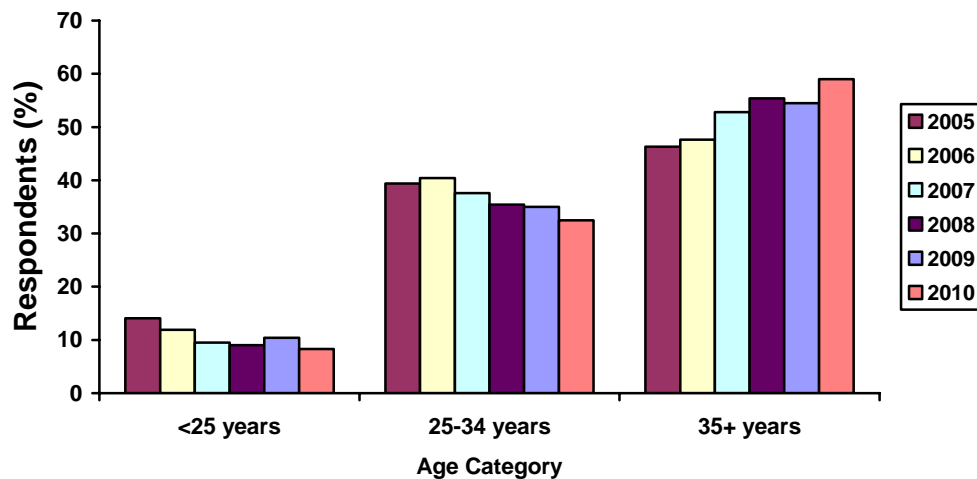


Figure 26: Age profile of respondents by year of survey, Australia, 2005-2010

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 six years. In contrast of the 166,779 service occasions across participating NSP's in Queensland, 74.4 % (n = 124,131) were for male clients and 25.2 % (n = 42,011) were for female clients. The gender differences among the respondents to the Australian NSP survey over a five year period can be observed in Figure 27.

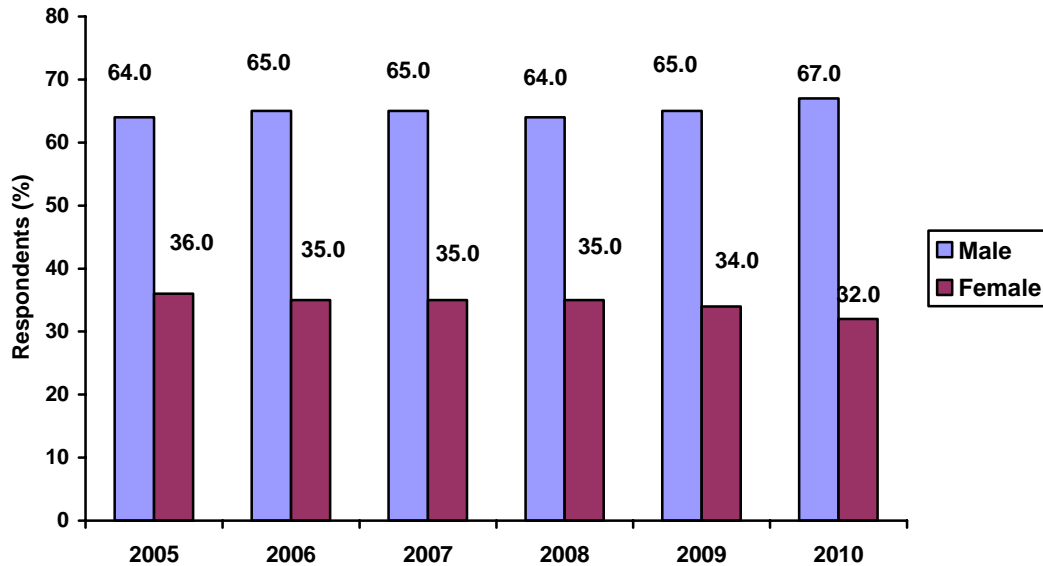


Figure 27: Gender profile of respondents by year of survey, Australia, 2005-2010

There was no marked increase in the proportion of survey respondents identifying as Aboriginal and/or Torres Strait Islander people over the six 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.

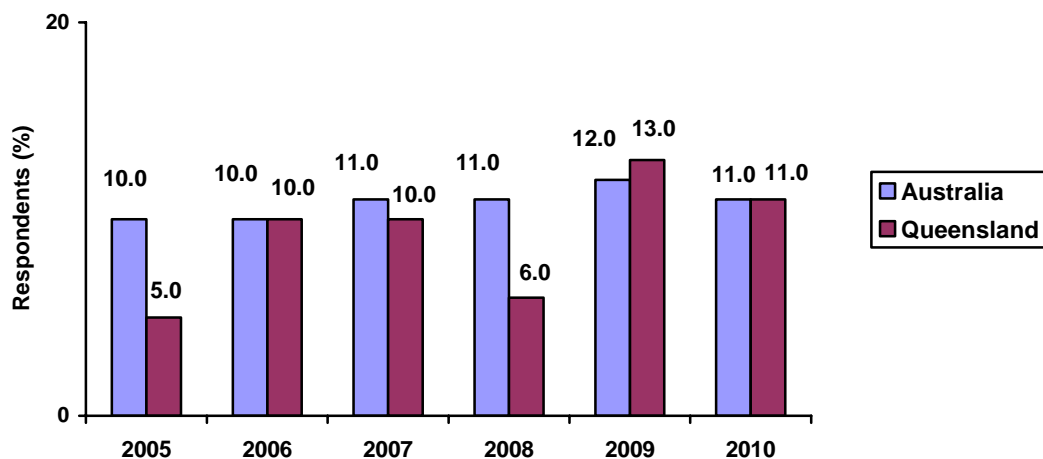


Figure 28: Indigenous status of respondents by year of survey, Australia, 2005-2010

According to the Australian NSP survey there were changes in the last drug injected in Australia over the six year period with increases in reporting of pharmaceutical opioids and decreases for amphetamines, heroin reporting has remained stable (Table 10). In Queensland, heroin has declined considerably with higher levels of pharmaceutical opioid reporting by the survey respondents Figure 29. A similar trend can be observed in Table 1 for clients accessing NSP services in QLD in 2010. Opioid drugs made up the greater proportion among the drugs reported by the clients for injecting purpose with a decline observed for amphetamines.

Table 10. Drug last injected by respondents by year of survey, Australia, 2005-2010

Drug Last Injected (%)	2005 N = 1800	2006 N = 1961	2007 N = 1912	2008 N = 2270	2009 N = 2697	2010 N = 2396
Amphetamines	573 (32)	737 (38)	574 (30)	645 (28)	657 (24)	628 (26)
Heroin	618 (34)	510 (26)	593 (31)	781 (34)	917 (34)	808 (34)
Rx Opioids	158 (9)	236 (12)	268 (14)	345 (15)	426 (16)	382 (16)
Methadone	166 (9)	180 (9)	187 (10)	192 (8)	232 (9)	177 (7)
Steroids	29 (1)	36 (2)	20 (1)	35 (2)	43 (2)	57 (2)
Bup/Subutex	56 (3)	101 (5)	99 (5)	104 (5)	134 (5)	100 (4)
Cocaine	53 (3)	44 (2)	33 (2)	53 (2)	66 (2)	31 (1)
Other	39 (2)	32 (2)	51 (3)	21 (1)	69 (3)	83 (3)

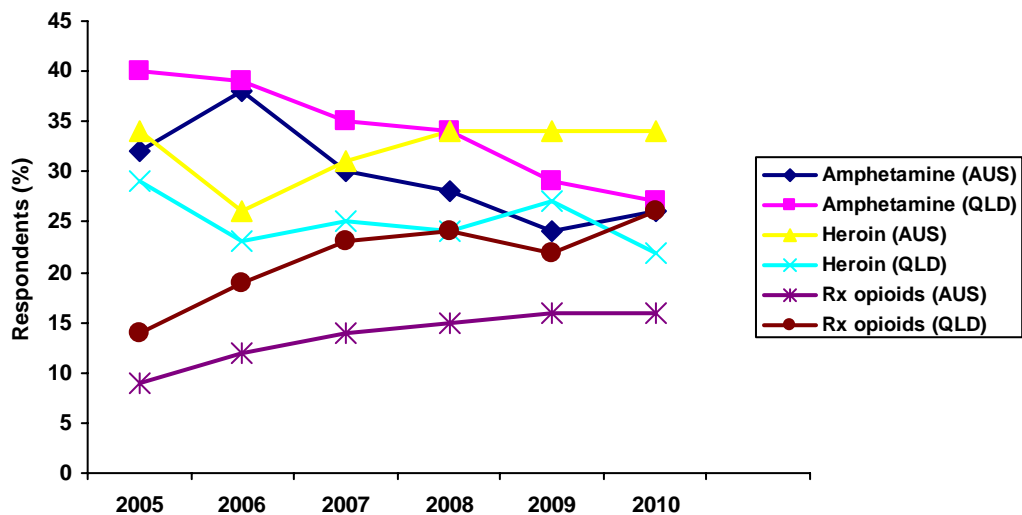


Figure 29: Drug last injected by year of survey, Australia & Queensland, 2005-2010

References:

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