



**Harm Reduction Database Wales:
Needle and Syringe provision
2013-14**

Public Health Wales would like to thank all those that contributed to the Harm Reduction Database Wales: NSP service users, NSP staff and all provider organisations including specialist substance misuse services, Criminal Justice services including DIP and IOIS and specialist housing and hostel/homelessness service providers.

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Contents

1	Executive Summary.....	4
2	Purpose and background.....	6
3	Data set and data quality.....	7
4	Age, gender and primary substance use: a snapshot.....	8
5	Demographics.....	9
5.1	Age and gender in relation to primary substance use.....	9
5.2	Ethnicity.....	11
5.3	Employment and housing.....	12
5.4	Geographic variation.....	13
5.4.1	Overall numbers accessing NSP services by Health Board area.....	13
5.4.2	Rates of NSP service use (per 1,000 population) and primary substance use.....	14
6	Substance and service use.....	17
6.1	Secondary substance use.....	17
6.2	Injecting history and practices.....	18
6.2.1	Injection initiation and length of time injecting.....	18
6.2.2	Injecting routes.....	19
6.2.3	Sharing and reuse of injecting equipment.....	20
7	Service coverage and provision.....	23
7.1	Sterile injecting equipment coverage.....	23
7.2	Health measures – Blood Borne Viruses (BBV).....	24
7.2.1	Hepatitis B (HBV) vaccination.....	24
7.2.2	Hepatitis C (HCV) Status.....	25
7.3	Onward Referrals.....	26
	Appendix 1: The Harm Reduction Database.....	27
	Appendix 2: Data quality.....	28

I Executive Summary

- 9,773 unique individuals accessed statutory and voluntary sector NSPs in Wales during 2013-14. Of these, 589 unique individuals (6 per cent) were excluded as no substance was recorded, a further 47 unique individuals (0.5 per cent) were excluded as the only substance(s) recorded was not relevant to the current analysis (e.g. those individuals only reporting cannabis use). As such, **this report focuses on the 9,137 unique individual NSP users where full data is available**
- The gender profile for NSP users of psychoactive substances was 78.1 per cent (n=3,718) male and 21.8 per cent (n=1,039) female
- Overall, the highest number of NSP users was found within the 30-34 age range (22.4 per cent, n=2,048), followed by the 25-29 age range (21.7 per cent, n=1,981). Steroid and image enhancing drug (SIED) users are disproportionately likely to be younger compared to other primary substance categories with 24.5 per cent (n=1,071) aged under 25.
- There are clear gender differences: amongst women accessing NSPs in 2013-14, 69.4 per cent (n=792) reported primary use of opioids, a further 15.1 per cent (n=172) reported primary stimulants use and 8.9 per cent (n=102) reported use of SIEDs. For men the comparable figures were 36.8 per cent (n=2947) primarily using opioids, 7.2 per cent (n=579) primarily using stimulants and 53.5 per cent (n=4,276) using SIEDs.
- Where recorded, 50.5 per cent (n=1,096) of psychoactive drug injectors reported injecting careers of ten or more years. This data reflect wider evidence that those injecting psychoactive substances, particularly heroin, are an aging cohort.
- Where recorded, 28.2 per cent (n=1,249) reported previous or ongoing reuse of own equipment, representing an increase from the figure of 16.9 per cent reporting equipment reuse in 2012-13.
- Hepatitis B vaccination was 'offered but refused' by 3.6 per cent of primary opioid users, 5.9 per cent of primary stimulant users and by 22.4 per cent of primary SIED users. Whilst the rates of refusal amongst users of opioid and stimulant users were comparable to 2012-13, there was a substantial fall in the refusal rate amongst SIED users, which was 33.2 per cent in 2012-13.
- The quality of the data provided by statutory and voluntary needle and syringe programmes across Wales showed substantial variation, despite utilising the same system for over three years. Further work is required to improve data quality across the country.

I.1 Summary of recommendations

Recommendation 1

Commissioners and service providers should ensure the provision of tailored harm reduction information and interventions, including needle and syringe programmes, hepatitis B vaccination and BBV testing to meet the needs of ALL people who inject drugs. This should include proactive outreach, engagement and utilisation of peer workers for those whose first language is not English, those injecting stimulants and new psychoactive substances, those not in contact with specialist substance misuse services and steroid and image enhancing drug users.

Recommendation 2

Overall, one sixth of those accessing NSPs are under 25, including a population of under 18 year olds. Commissioners and service providers should ensure that NSPs have clear and effective policies to address the needs of young people and services that are tailored to reduce the harms associated with specific drug use patterns and injecting behaviours

Recommendation 3

Local, national and international drug markets are evolving rapidly. Commissioners, and service providers must measure changes in drug use in their area, particularly in relation to injecting and poly-drug use, and adapt services to ensure harm reduction interventions and onward referral pathways remain appropriate and effective.

Recommendation 4

Research evidence and relevant guidelines stress the importance of providing at least one set of sterile injecting equipment for every injection. Commissioners and service providers should aim to provide at least 100% coverage in their area.

Recommendation 5

NSP services have, to date, been instrumental in reducing the impact of blood borne virus transmission amongst people who inject drugs, including HIV, hepatitis B and hepatitis C. Changes in injecting practice and in the drugs market continue to challenge services and staff and investment in training and support for this specialist service should remain a priority.

Recommendation 6

Commissioners and providers should ensure optimal data quality and completion of service user records on the Harm Reduction Database – Needle and Syringe Module. This data can and should be used to inform future activity, identify trends in injecting and poly-drug use and highlight potential threats and possible solutions to improve care and services.

2 Purpose and background

This report describes findings from the Harm Reduction Database – Needle and syringe programme module, for the period 2013-14. The Harm Reduction Database (HRD) is a web-based system that enables point of contact recording of Needle and Syringe Programme (NSP) activity including transactions, provision of tailored harm reduction and health related support, and onward referrals to unique individuals within Wales. The HRD was introduced into statutory and voluntary Needle and Syringe Programmes (NSPs) in Wales in 2010 and became available in Community Pharmacy NSPs in April 2014. It is currently available in 41 static voluntary and statutory NSP sites, including five mobile units, and 207 Community Pharmacy NSPs. Further details on the HRD are provided in Appendix I.

The report is structured to provide key information to policy makers, commissioners / planners, Substance Misuse Area Planning Boards and Harm Reduction Groups, public health practitioners, substance misuse service providers and other key stakeholders. Key issues covered include the scope and trends in injecting drug use in Wales, accessibility of services and their provision of sterile injecting equipment, the reduction of risk behaviours and improving health and wellbeing and data quality.

The main report begins with a 'snapshot' giving a brief overview of the gender and age of those who used services in 2013-14 across different categories of substance. Three main sections follow. The first explores demographic data to establish *who* is using substances and services. The next looks in more detail at use of substances and services to consider *how* these are being used. The final main section considers a range of indicators including syringes provided and records of blood borne virus testing to determine *what* is being provided for substance users in those services. Selected comparisons between 2013-14, 2012-13 and 2011-12, the first full period for which comparable data are available, are also presented.

3 Data set and data quality

Powys Teaching and Hwyl Dda Health Boards / Substance Misuse Area Planning Board areas, as well as North West Wales and the Isle of Anglesey, have relied primarily on pharmacy based NSP services for injecting equipment provision over this period. As pharmacy-based NSP service data will not be covered by the HRD until 2014/15, activity in these Health Board areas is under-represented in this report.

9,773 unique individuals accessed statutory and voluntary sector NSPs in Wales during 2013-14

Of these 9,773 unique individuals, the following were excluded from analyses:

- 589 unique individuals (6 per cent) - where no substance was recorded. This represents a fall in the number of individuals excluded from analysis because no substance use data was recorded compared with 2012-13, when 1,580 unique individuals (16.2 per cent) were excluded for this reason.
- 47 unique individuals (0.5 per cent) where the only substance(s) recorded was not relevant to the current analysis (e.g. those individuals only reporting cannabis use)

As such, **this report focuses on the remaining 9,137 unique individual NSP users where full data is available**, hereafter referred to as 'NSP users reporting data'. Further discussion of data quality issues is presented in Appendix 2 of this report.

The HRD allows for the recording of over 30 different substances / drugs and aims to capture all substance use (including alcohol), regardless of route of ingestion, alongside those drugs injected. Within this report, these substances are aggregated into the following categories which broadly reflect the similarities and differences between substances in terms of chemical profile, typical effects and types (but not levels) of associated risks.

- **Opioids**, including heroin, methadone and prescribed diamorphine
- **Stimulants**, including cocaine powder, crack cocaine, amphetamines and ecstasy
- **Steroid and image enhancing drugs (SIEDs)**, including anabolic steroids, human growth hormone, melanotan and other peptides
- **New psychoactive substances (NPS)**, including ketamine, MPA and amphetamine-like cathinones including mephedrone, etc

It should be noted that, as this dataset does not include pharmacy based NSP data, it is not currently possible to evidence demographics or service usage by NSP service type. This data will be available from 2014/15.

4 Age, gender and primary substance use: a snapshot

Overall, 87.5 per cent (n=7,994) of NSP users reporting data were male and 12.5 per cent (n=1,141) were female. However, as shown in Table 1, there was considerable variation in gender profile by primary substance type. Research undertaken in Wales and elsewhere in the UK^{1,2,3} would suggest that the gender profile of people who inject psychoactive drugs (PWID) is around 3:1 male to female. Once SIEDs, which are not psychoactive drugs, are excluded, the gender profile for NSP users of psychoactive substances is consistent with this evidence, with 78.1 per cent (n=3,718) male and 21.8 per cent (n=1,039) female. The data in Table 1 also indicate that SIED users are on average younger and more likely to be male compared with those using psychoactive substances, and those indicating primary use of NPSs are more likely to be under 25 compared with those primarily using opioids and stimulants.

Table 1: Profile of substance use by gender and percentage of users under 25 for all NSP users and for primary substance type, 2013-14

	Number	% of all NSP users	% male	% under 25
Primary SIED users	4378	47.9%	97.7%	24.5%
Primary opioid users	3740	40.9%	78.8%	6.9%
Primary stimulant users	752	8.2%	77.0%	7.8%
Primary NPS users	206	2.3%	68.9%	16.5%
Primary users of 'other substances'*	61	0.7%	82.0%	8.2%
ALL NSP users	9137	100.0%	87.5%	15.6%

* Other substances category includes: individuals whose primary substance was recorded as either alcohol, benzodiazepine or cannabis but their secondary substance was either an opioid, a stimulant, a NPS or SIED.

¹ Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (PWID), Public Health England (PHE) [online] http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1202115519183, viewed 20 May 2014

² The incidence of HCV, HBV and HIV in South Wales, Final report on the South Wales blood borne viral hepatitis incidence study 2004 – 2006, National Public Health Service for Wales, 2006 [http://www2.nphs.wales.nhs.uk:8080/BloodBorneVirusesDocs.nsf/7c21215d6d0c613e80256f490030c05a/c966d33343dac12180257355004c7fff/\\$FILE/Incidence%20of%20blood%20borne%20viral%20hepatitis%20in%20injecting%20drug%20users%20in%20South%20Wales.pdf](http://www2.nphs.wales.nhs.uk:8080/BloodBorneVirusesDocs.nsf/7c21215d6d0c613e80256f490030c05a/c966d33343dac12180257355004c7fff/$FILE/Incidence%20of%20blood%20borne%20viral%20hepatitis%20in%20injecting%20drug%20users%20in%20South%20Wales.pdf), viewed 20 May 2014

³ Needs assessment of harm reduction and health care services for substance misusers across Wales, National Public Health Service for Wales, 2006, [http://www2.nphs.wales.nhs.uk:8080/BloodBorneVirusesDocs.nsf/7c21215d6d0c613e80256f490030c05a/c662fce951549dd880257355004ccbbf/\\$FILE/Needs%20assessment%20of%20harm%20reduction%20and%20health%20care%20services%20for%20substance%20misusers%20across%20Wales.pdf](http://www2.nphs.wales.nhs.uk:8080/BloodBorneVirusesDocs.nsf/7c21215d6d0c613e80256f490030c05a/c662fce951549dd880257355004ccbbf/$FILE/Needs%20assessment%20of%20harm%20reduction%20and%20health%20care%20services%20for%20substance%20misusers%20across%20Wales.pdf), viewed 20 May 2014

5 Demographics

This section details the demographic data derived from the HRD, including profiles of age, gender, ethnicity and housing and employment status, to establish *who* is using substances and accessing NSP services in Wales and detailing the specific risk indicators for those accessing NSP. All these variables are recorded to ensure the provision of a tailored NSP and harm reduction service to individual service users.

5.1 Age and gender in relation to primary substance use

Across all substance categories, the highest number of NSP users was found within the 30-34 age range (22.4 per cent, n=2,048), followed by the 25-29 age range (21.7 per cent, n=1,981). The proportions of NSP users falling into these age categories was almost identical to those observed in 2012-13, when 22.7 per cent of NSP users were aged 30-34 and 22.3 per cent were 25-29. Ages of NSP service users in 2013-14 ranged from 15 to 76 years amongst males and 16 to 75 years amongst females.

There is considerable variation in age profile by primary substance type as indicated in Chart 1. SIED users are disproportionately likely to be younger compared to other primary substance categories with 24.5 per cent (n=1,071) aged under 25. Primary new psychoactive substance (NPS) users also tend to be younger with 16.5 per cent (n=34) aged below 25 years compared to 6.9 per cent (n=258) for primary opioid service users and 7.8 per cent (n=59) for those primarily using stimulants.

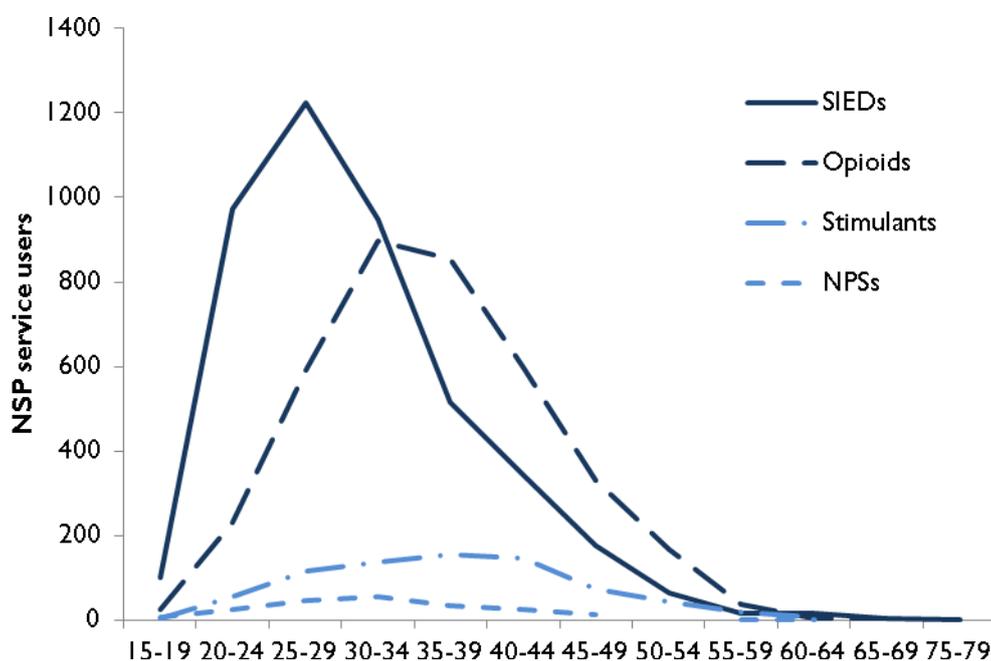


Chart 1: Primary substance use by age group for individuals accessing NSP services in Wales 2013-14

Chart 1 shows that within primary SIED users accessing NSP services the majority fall within the 25-29 age range, whereas the highest numbers of those reporting primary opioid use are in the 30-34 age range, with stimulant users most frequently recorded as

being aged 35-39. This pattern changes for the 35-39 year age group, with higher numbers of primary opioid NSP users in the older age categories. In older age categories (35-39 to 55-59) opioid users are the most frequently recorded group.

The age profile differs by gender as well as primary drug profile, as indicated in Chart 2.

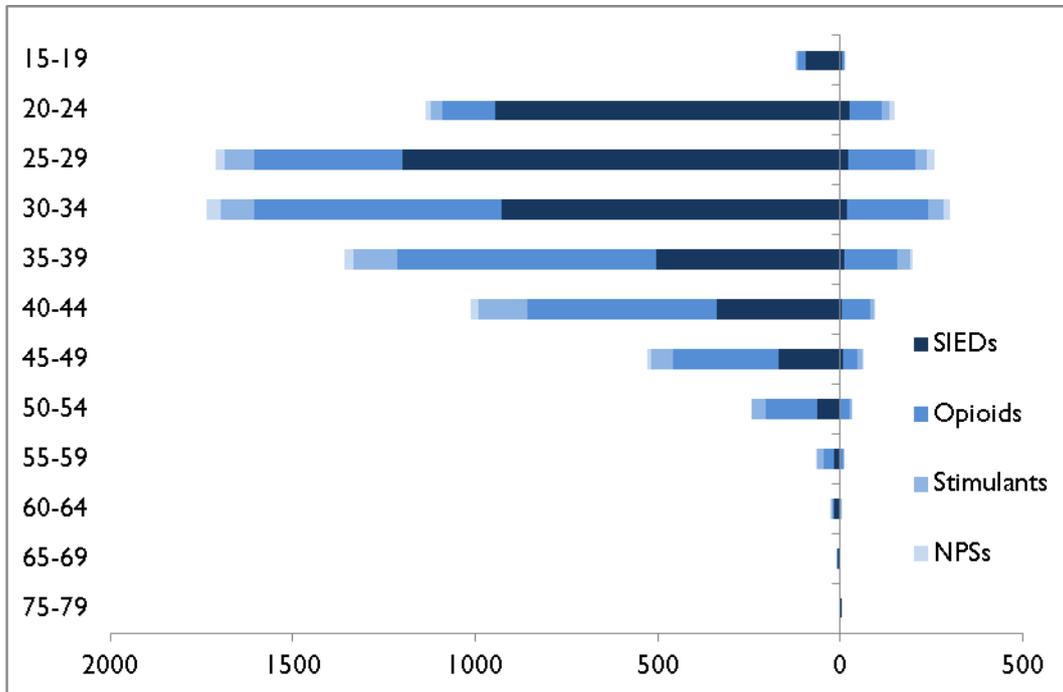


Chart 2: Numbers of NSP users by age, gender and primary substance type, 2013-14

The proportion of all those accessing NSP services who were female was not substantially different between the two time periods, with females accounting for 21 per cent (n=830) of all users (excluding SIEDs use) in 2012-13 and 21.9 per cent (n=1,028) in 2013-14. However, as in 2012-13, there are clear gender differences. Amongst women accessing NPSs in 2013-14, 69.4 per cent (n=792) reported primary use of opioids, a further 15.1 per cent (n=172) reported primary stimulants use and only 8.9 per cent (n=102) reported use of SIEDs. For men the comparable figure were 36.8 per cent (n=2947) primarily using opioids, 7.2 per cent (n=579) primarily using stimulants and 53.5 per cent (n=4,276) using SIEDs.

The figures presented in Chart 2 are comparable to those recorded for NSP users accessing services in the period 2012-13. Overall, the proportion of those accessing NPS services aged under 25 years continued to fall year-on-year, from 19.7 per cent in 2011-12 to 16.8 per cent in 2012-13 to 15.6 per cent in 2013-14. However, the rate varied by primary substance type:

- Amongst primary SIEDs users, the proportion aged under 25 years fell from 25.5 per cent (n=1,068) in 2012-13 to 24.5 per cent (n=1,071) in 2013-14

- For primary opioid users the proportion fell from 7.3 per cent (n=233) to 6.9 per cent (n=258) between 2012-13 and 2013-14
- There were slight rises in the proportions of stimulant and NPS users who were aged under 25 years, however, the number of primary users of these substances were low in both time periods (n=64 in 2012-13 and n=93 in 2013-14 for both substances combined)

The Welsh Government Substance Misuse Treatment Framework: Needle and Syringe Programmes recommends that services are provided to meet the needs of young people⁴. Analysis of the HRD suggests that both these groups are significant users of NSPs in Wales and that the revised NICE guidelines may be of particular relevance to those commissioning and managing these services.

5.2 Ethnicity

Ethnicity was reported by 68.8 per cent (n=6,290) of all NSP users reporting data. The majority of those reporting ethnicity described themselves as White Welsh (65.4 per cent, n=4,115) or White British (28.5 per cent, n=1,794), with 6.1 per cent (n=381) reporting any other ethnicity. The primary substance used by NSP users reporting a non-White Welsh/British ethnicity is shown in Chart 3, with two service users reporting primary use of 'other' substances excluded.

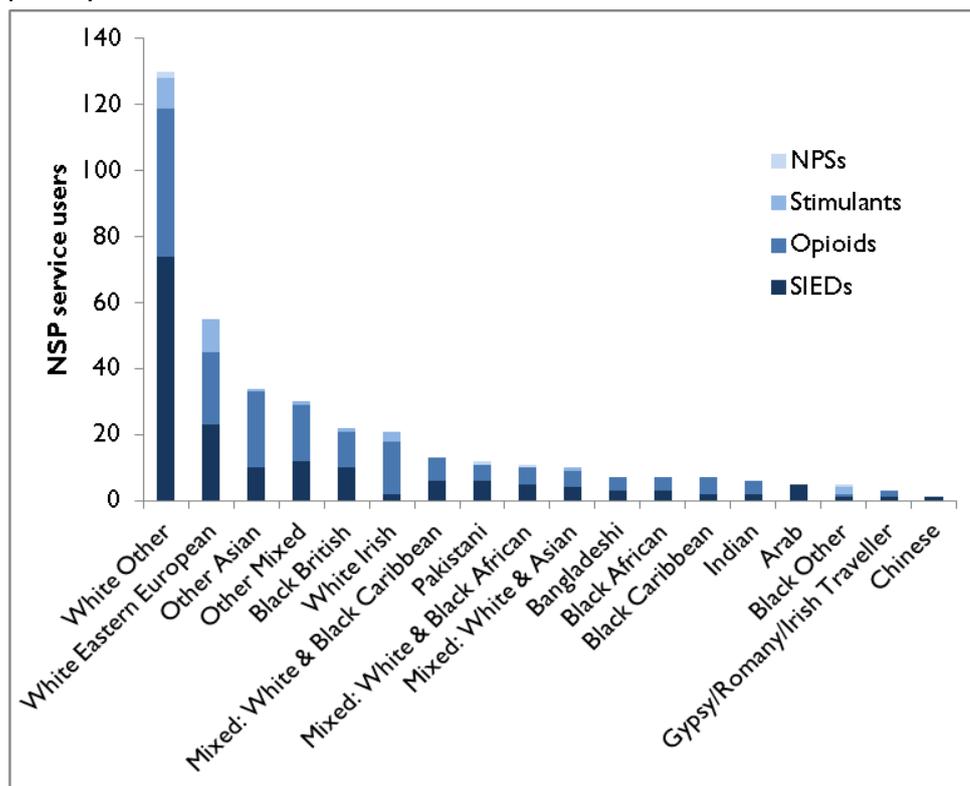


Chart 3: Self reported ethnicity of NSP users across Wales, excluding White Welsh/British, by primary substance use

⁴ Welsh Government. Substance Misuse Treatment Framework (SMTF) Service Framework for Needle and Syringe Programmes in Wales. 2011. <http://wales.gov.uk/docs/dsjlg/publications/commsafety/110628needleen.pdf>

As in 2012-13, the most marked differences were observed in the proportion of primary opioid users. 46.2 per cent (n=176) of those reporting their ethnicity as other than White Welsh/British were primary opioid users compared to 40.9 per cent across all those reporting data. Table 2 summarises these proportions for all users and for the subset of individuals who were not White Welsh or White British.

Table 2: Comparison of proportions of non-White Welsh/British NSP users with all NSP users by gender and selected age and primary substance categories

	% of all NSP users	% of non-White Welsh/British NSP users
Female (all substances)	12.5 %	10.8 %
Female (psychoactive substances only)	21.8 %	18.5 %
Under 25	15.6 %	15.5 %
Primary SIED users	47.9%	44.6 %
Primary opioid users	40.9%	46.2 %
Primary stimulant users	8.2%	7.3 %

5.3 Employment and housing

In 2013-14, 66.4 per cent (n=6,066) of NSP users reporting data gave details of their current employment status (full time, part time, unemployed or sex work).

Less than 1 per cent (n=63) of NSP users defined themselves as sex workers. Of these, 77.8 per cent (n=49) per cent were female and 79.4 per cent (n=50) were primarily opioid users. This means that 4.3 per cent of all women accessing NSPs and reporting data were recorded as sex working; of the 735 women who specifically reported their employment status, 6.7 per cent reported sex working.

Of NSP users reporting employment status (excluding sex work), 42.3 per cent (n=2,539) were employed full time, 2.9 per cent (n=175) were employed part time and 54.8 per cent (n=3,289) were unemployed. Chart 4 shows the proportion of NSP users in full/part time employment and unemployed by primary substance type.

Housing status was reported by 59.4 per cent (n=5,431) of all NSP users reporting data. Responses have been aggregated to create three housing categories: 'secure' (including owners, secure tenants and those living with their family), 'non-secure' (including those in bed and breakfast accommodation and hostels) and 'No fixed accommodation (NFA)' (including those staying temporarily with friends, 'sofa surfing' or street homeless). Chart 4 shows the proportions of NSP users reporting data who were in full or part

time employment and the proportion in secure accommodation by primary substance use.

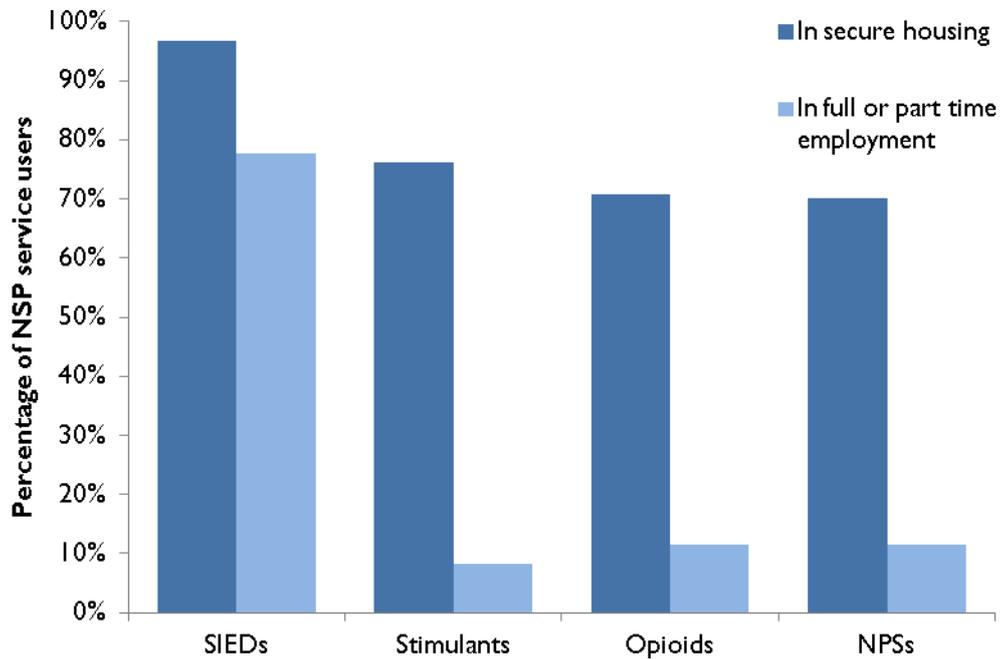


Chart 4: Proportions of NSP users reporting data in secure housing and in full or part time employment by primary substance

As Chart 4 indicates, housing and employment profiles for SIED users differ from those of users of other substances. SIED users are more likely to be employed and to be in secure accommodation than users of other substances. Of all SIED users who indicated their employment status, 77.6 per cent (n=2388) reported that they were employed full or part time and 96.6 per cent (n=2,541) were in secure accommodation. The comparable proportions for all those injecting psychoactive drugs (opioids, stimulants and NPSs) was 11 per cent (n=323) in full or part time employment and 71.8 per cent (n=1,974) in secure accommodation.

It is noticeable that a higher proportion of SIED users who reported housing status were 'living with family' (38.5 per cent, n=1,011) compared with users of other substances (14.4 per cent, n=404). This is consistent with the evidence in section 4 that SIED users tend to be younger than users of other substances.

5.4 Geographic variation

5.4.1 Overall numbers accessing NSP services by Health Board area

The numbers of NSP users accessing services in different Health Board areas is shown in Chart 5 by primary substance used. N.B. as indicated previously, Hywel Dda and Powys NSP activity is predominantly based with pharmacy NSP services and as such is not represented here. Full NSP activity from all services will be available from 2014/15.

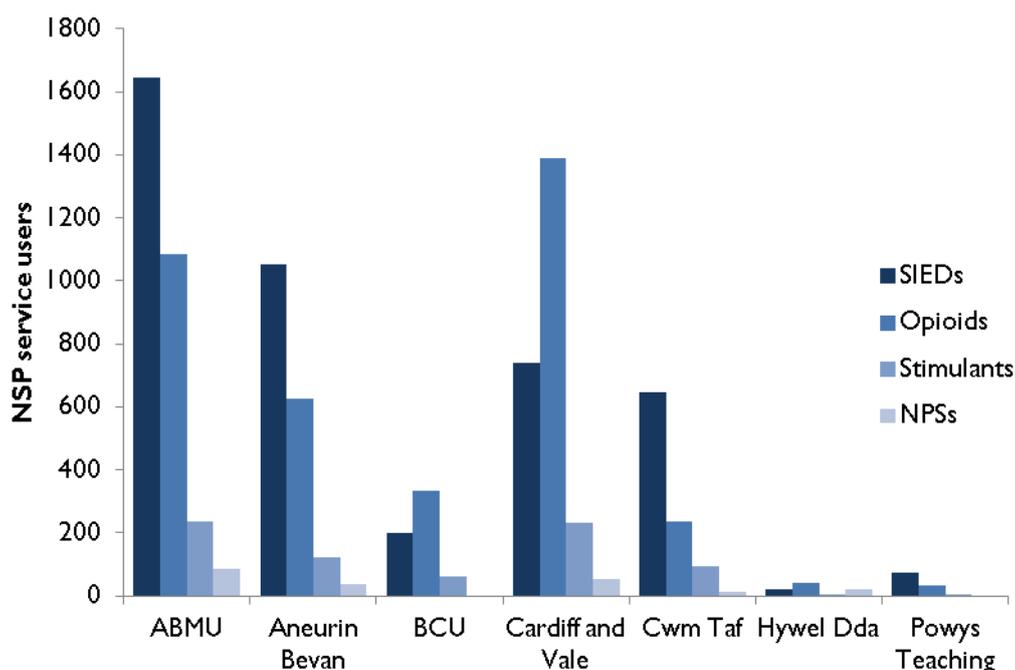


Chart 5: Unique individuals accessing NSP services by Health Board area and primary substance use

As Chart 5 shows, ABMU recorded the highest number of unique NSP users, with 33.5 per cent (n=3,063) of all NSP users across Wales (excluding pharmacy NSP providers). Cardiff and Vale and Aneurin Bevan Health Boards had 26.6 per cent (n=2,426) and 20.2 per cent (n=1,846) respectively. It is important to reiterate that there exists variation in the level of pharmacy NSP services across Health Boards in Wales relative to statutory and voluntary NSP services.

NSPs in Cardiff and Vale had the highest number reporting opioids as their primary substance with 37.1 per cent of all primary opioid users accessing NSPs in Wales (n=1,388) followed by ABMU with 29 per cent (n=1,086). Of all recorded unique primary SIED users across Wales, more than a third (37.6 per cent, n=1,645) were in the ABMU Health Board area.

5.4.2 Rates of NSP service use (per 1,000 population) and primary substance use

Directly standardised rates allow comparison between areas where the age structure of the population may differ. Directly standardised rates per 100,000 population for all users of NSPs within Health Board areas and for different categories of substances are presented in Chart 6.⁵

⁵ Calculated using mid-year population estimates provided by the Office for National Statistics 2012 and the European Standard Population 2013

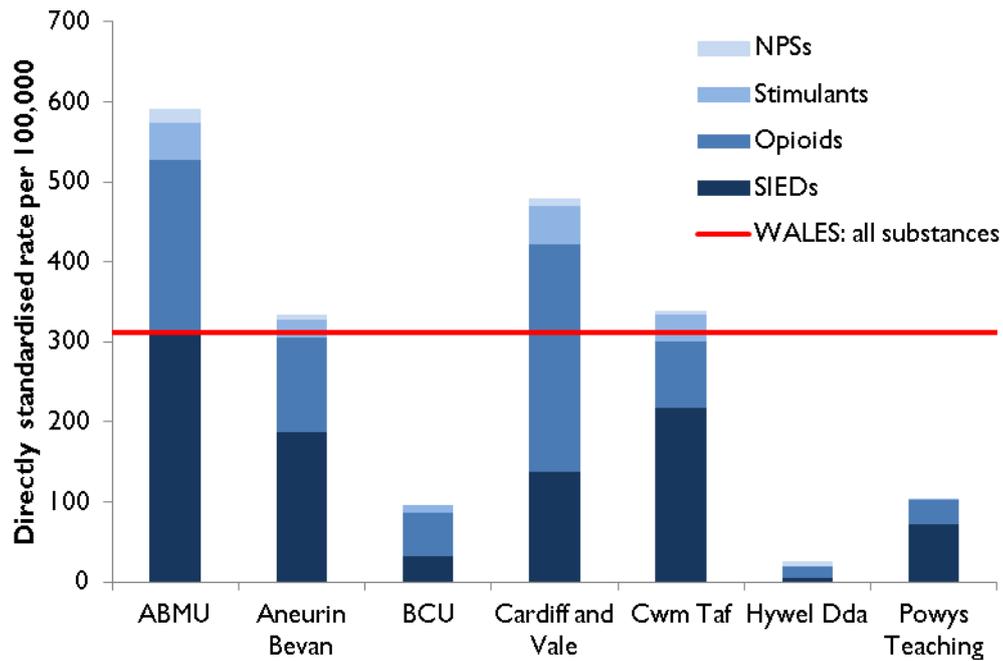


Chart 6: Directly standardised rate per 100,000 population of primary substance use by individuals accessing NSPs, by Health Board, 2013-14

When compared with 2012-13 directly standardised rates for SIED, opioid and stimulant use, 2013-14 rates indicate some notable changes. Overall the directly standardised rate at which individuals accessed NSPs in Wales increased by 13.6 per cent (an additional 37 individuals per 100,000, from 275 to 312) for those individuals reporting data. However, this increase reflects a substantial increase in the number of individuals from whom information enabling analysis was gathered (as described in Section 3) rather than an increase in the underlying number of individuals accessing NSPs.

Rates of NSP access for different substances increased across all categories. However, that increase was considerably greater for opioid use (from 112 to 132 individuals per 100,000) than for SIED users (from 138 to 145 individuals per 100,000), stimulant use (from 20 to 26 per 100,000) or NPS use (from 5 per 100,000 to 7). Proportionally, however, stimulants and NPS rates showed the largest increases, of 34 per cent and 28 per cent respectively.

The increase in opioid rates continues the observed rise between 2011-12 and 2012-13; rises in the rates of stimulants and NPS have also risen year on year. However, the rate of SIED use, which fell between 2011-12 and 2012-13, has now returned to almost its former level.

By Health Board, Cardiff and Vale has shown the largest increase in overall rates of NSP access, from 370 to 438 per 100,000; however, this may disproportionately reflect improvements in data quality within this Health Board. Rates of access of NSP also increased substantially in BCU (from 87 to 96 per 100,000) and ABMU (from 527 to 592 per 100,000) but were almost unchanged in Aneurin Bevan and Cwm Taf (Hywel Dda and Powys Teaching are not considered due to low numbers).

Increases in the rates of users accessing due to primary SIED across Wales masked considerable local differences, with the rate in Cardiff and Vale rising from 114 to 137 per 100,000; access due to SIED use rose slightly in AMBU and fell fractionally in Aneurin Bevan, BCU and Cwm Taf.

Rates of access due to opioid use rose in every Health Board except for Cwm Taf, where there was a slight fall from 88 to 84 per 100,000. The largest rise was in Cardiff and Vale, where 285 per 100,000 population accessed NSPs in 2013-14 for opioid use compared with 218 in the previous year. Rates of access of NSPs due to stimulant use rose in all Health Boards except Hywel Dda, with Cardiff and Vale (from 32 to 48 per 100,000) and ABMU (from 33 to 47 per 100,000) showing the most substantial increases. The Health Board level rates of those accessing NSPs due to NPS use were so small relative to other substances that drawing conclusions is problematic.

6 Substance and service use

This section considers evidence from the HRD regarding the use of substances and services by those accessing NSPs: in other words, *how* these substances and services are being used.

6.1 Secondary substance use

Secondary substance misuse amongst NSP users remains substantially under-reported via the Harm Reduction Database with data available for only 20.6 per cent (n=1,882) of NSP users reporting data. This represents a data quality issue for NSP providers and will continue to be addressed by Public Health Wales. Poly-drug use (use of more than one drug or type of drug by an individual — consumed at the same time or sequentially) is widely evidenced as normative behaviour amongst problematic and injecting drug users. Data from the Harm Reduction Database: Naloxone module indicates that in Wales, 67.4 per cent of opioid users accessing Take-home Naloxone in 2013-14 reported poly-drug use (n=315).⁶ Table 3 shows the relationship between primary and secondary substance use where reported.

Table 3: Secondary substance use amongst NSP users by primary substance of use, 2013-14

	Secondary substance use				
	SIEDs	Opioids	Stimulants	NPSs	TOTAL
SIEDs	946	57	23	5	1031
Opioids	96	139	25	81	341
Stimulants	26	177	213	29	445
NPSs	5	44	10	6	65
TOTAL	1073	417	271	121	1882

Overall, just over half of those reporting using more than one substance were using two SIEDs, most commonly Steroids and Human Growth Hormone. Of those using two or more substances, not including SIEDs, the most common patterns of poly drug use were:

- Stimulant and opioid (10.7 per cent, n=202)
- Opioid and NPS (6.6 per cent, n=125)
- Two opioids (7.3 per cent, n=139).

⁶ Public Health Wales. 2014. Harm Reduction Database Wales: Take Home Naloxone 2013-14.

Whilst the proportion of NSP service users providing data on secondary substance use who reported opioid and NPS use and use of two opioids have remained relatively stable between 2012-13 and 2013-14 (6.4 per cent and 5.7 per cent in 2012-13 respectively) the proportion reporting use of a stimulant and an opioid in 2013-14 represents a substantial fall in the current period, from 18.8 per cent in 2012-13.

These patterns of psychoactive poly-drug use all carry specific risks, which include increased danger of overdose (poly-opioid use) and more frequent, riskier injecting (opioid and stimulant or NPS).

6.2 Injecting history and practices

The HRD enables the capture of a range of information on injecting experience and practices of public health concern, including trends in routes of injection and direct and indirect sharing of injecting equipment that may impact on health risks such as infection with blood borne viruses (BBVs).

6.2.1 Injection initiation and length of time injecting

Data on the age of first injecting was available for 52.8 per cent (n=4,827) of all NSP users. Of these 33.1 per cent (n=1,600) were 'recent initiates' - individuals who have been injecting for less than three years. The proportion of those accessing NSPs who were recent initiates fell from 2012-13, when it was 39 per cent. Length of injecting career varied by current primary substance type as shown in Chart 7.

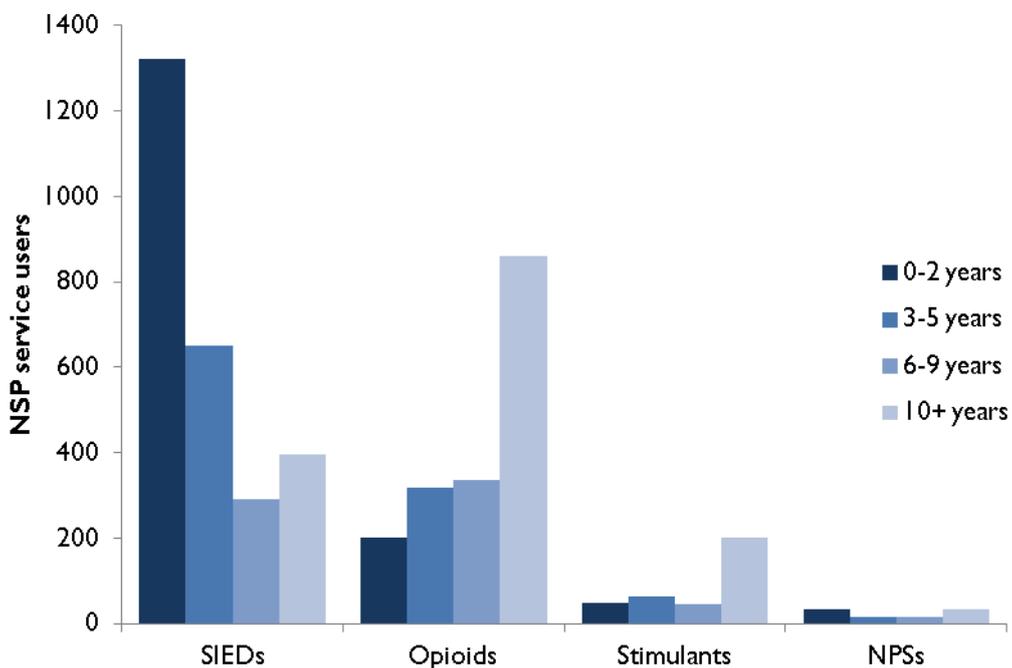


Chart 7: length of injecting career by primary substance used, 2013-14

Just under half (49.7 per cent, n=1,321), of primary SIED injectors accessing NSP services and reporting injecting initiation began injecting in the past three years, compared with 11.7 per cent (n=200) of opioid users. Both of these proportions represented reductions when compared with 2012-13, when recent initiates accounted for 56.3 per cent of SIED users and 15.1 per cent of opioid users.

As in 2012-13, the age profile of psychoactive drug injectors is consistently older than SIED users across the categories of injecting age: 50.5 per cent (n=1,096) of psychoactive drug injectors accessing NSP have injecting careers of ten or more years; a greater proportion than any other category of injecting career length. The data reflect wider evidence that those injecting psychoactive substances, particularly heroin, are an aging cohort.⁷

Consistent with other data on individuals accessing NSP services, new initiates are not only more likely to be SIED users, but also more likely to be male and to be injecting less frequently, as shown in Table 4.

Table 4: Characteristics of new initiates to injecting compared with those injecting for longer than three years

	% male	% injecting daily
New initiates (0-3 years injecting)	92.6 %	25.2 %
Other injectors (3+ years injecting)	87 %	54.9 %

6.2.2 Injecting routes

Injecting route was recorded for 92.9 per cent (n=8,484) of unique individuals. SIEDs injecting accounted for the majority of intramuscular and subcutaneous injecting, 98.6 per cent and 98.7 respectively.

Location of intravenous (IV) injecting site is recorded to address specific risk patterns of injecting. Sites include arms or legs, neck and femoral/groin. Overall, injecting site varied by primary substance injected, as shown in Chart 8.

⁷ Davies C, English L, Stewart C, Lodwick A, McVeigh J, Bellis MA. United Kingdom drug situation, 2011 edition. London: UK Focal Point on drugs, Department of Health; 2011. <http://www.nwph.net/ukfocalpoint/writedir/00c6FOCAL%20POINT%20REPORT%202011%20FINAL%2010.04.12.pdf>

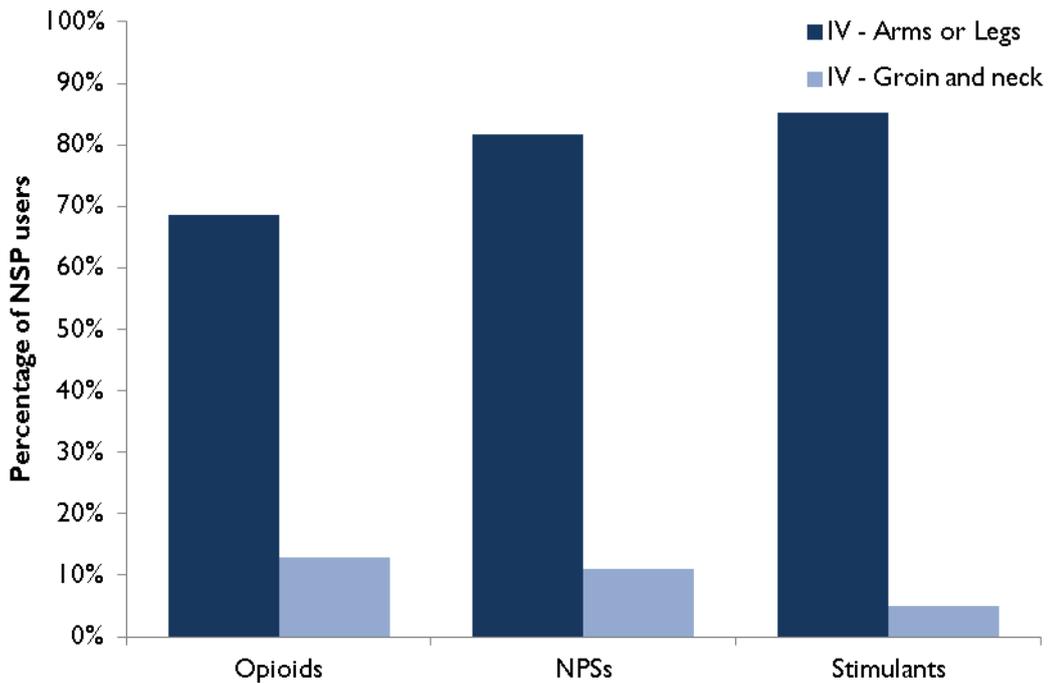


Chart 8: Selected routes of injection for primary NPS, opioid and stimulant users as a proportion of all routes of administration, 2013-14

The data indicate that those using opioids and NPSs are more likely than primary users of other substances to inject using routes e.g. groin and neck, that carry the highest risks, in particular the increased likelihood of accidentally puncturing a major artery or causing nerve damage. The data also indicate that amongst those injecting opioid or NPS, length of injecting career and high injecting frequency may impact on injecting site choice and availability with a move to groin injecting due to arm / leg vein damage.

6.2.3 Sharing and reuse of injecting equipment

Sharing injecting equipment, both directly (sharing needles and syringes) and indirectly (sharing other injecting paraphernalia) represents a clear risk for transmission of blood borne viruses and infections. Reusing one's own injecting equipment can also result in health problems including bacterial infections and vein damage. Due to poor data quality (incomplete datasets), rates of self-report direct and indirect sharing should be treated with caution.

6.2.3.1 Direct Sharing

Self-report direct sharing data was available for 35.3 per cent (n=3,229) of NSP users reporting data as indicated in Table 5. Current or previous direct sharing was reported by 9.7 per cent (n=312) of those NSP service users who reported their direct sharing practices and history, a similar proportion to 2012-13, when the proportion was 9.9 per cent.

Table 5: Self reported direct sharing of injecting equipment

	Never shared	Occasionally shared (once a month)	Often shared (once a week or more)	Regularly share (once a day or more)	Shared in past (in last year) but not currently	Grand Total
Total number	2917	47	11	7	247	3229
Percentage (where status recorded)	90.3%	1.5%	0.3%	0.2%	7.6%	100.0%

Evidence on direct and indirect sharing and blood borne virus (BBV) testing and prevalence is gathered by the Unlinked Anonymous Monitoring (UAM) Survey of People Who Inject Drugs (PWID), an annual survey of PWID accessing specialist drug services in England, Wales and Northern Ireland, co-ordinated by Public Health England

Data from the 2013 UAM survey indicates that the rate of self-reported direct sharing (within the previous 4 weeks) was 16 per cent (265 of 1,622) of PWID across England, Wales and Northern Ireland; an increase from the rate of 14 per cent reported in 2012⁸.

6.2.3.2 Indirect Sharing

Self-report data on indirect sharing was available for 38.9 per cent (n=3,185) of all NSP users reporting data. Current or previous indirect sharing was reported by 12.4 per cent of those reporting indirect sharing behaviour as shown in Table 6. This represents an increase from the 2011-12 rate of 11.1 per cent.

Table 6: Self reported indirect sharing of injecting equipment

	Never shared	Occasionally shared (once a month)	Often shared (once a week or more)	Regularly share (once a day or more)	Shared in past (in last year) but not currently	Grand Total
Total number	2790	85	17	18	275	3185
Percentage (where status recorded)	87.6%	2.7%	0.5%	0.6%	8.6%	100.0%

⁸ Public Health England (2014) Data tables of the Unlinked Anonymous Monitoring Survey of HIV and Hepatitis in People Who Inject Drugs.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/326897/UAM_Survey_of_PWID_data_tables_2014.pdf

The UAM does not report indirect sharing specifically; however, it does provide figures for the proportion of PWID reporting direct and/or indirect sharing of equipment. In 2013, this was 39 per cent (641 of 1,636) sharing in the previous four weeks, up from 34 per cent in 2012.

It is clear that, despite the fact that statistics from the UAM and the HRD are not directly comparable in every case, NSP service users providing information to the HRD are reporting considerably less sharing behaviour than those users providing information to the UAM.

6.2.3.3 Reuse of Equipment

Data on individuals reusing their own injecting equipment was available for 48.5 per cent (n=4,433) of NSP service users. Of those, 28.2 per cent (n=1,249) reported previous or ongoing reuse of own equipment, representing an increase from the figure of 16.9 per cent reporting equipment reuse in 2012-13.

Table 7: Self reported reuse of own injecting equipment

	Never reused	Occasionally reuse (once a month)	Often reuse (once a week)	Regularly reuse (once a day)	Reused in past (in last year) but not currently	Grand Total
Total number	3184	572	138	81	458	4433
Percentage where reuse status was recorded	71.8%	12.9%	3.1%	1.8%	10.3%	100.0%

7 Service coverage and provision

This section considers a range of indicators including the number of syringes provided per injecting event and records of blood borne virus testing to determine *what* is being provided for NSP service users.

7.1 Sterile injecting equipment coverage

It is a principle of NSP services in Wales⁹, supported by UK-wide guidance¹⁰, to provide people who inject drugs with sufficient sterile injecting equipment for every injection. The term ‘coverage rate’ refers to the proportion of injecting events where sterile injecting equipment is available.

The HRD records all the equipment provided at every transaction at each NSP. The requirement for sterile injecting equipment can be calculated from NSP users’ reports of injection frequency, whilst coverage is calculated as the proportion of equipment actually provided in relation to NSP users’ requirements. Coverage analyses use syringes, including ‘all-in-one’ syringes with fixed head needles, as the basis for calculation. This avoids the double counting that can occur if a count of needles is used, as SIED use typically involves two needles per injection.

Coverage analysis showed:

- NSP users¹¹ required 3,413,887 syringes in 2013-14, a fall of 1.2 per cent on the previous year
- 1,429,072 syringes were supplied over 47,517 transactions: increases of 12.8 per cent and 3.9 per cent compared with 2012-13

This suggests a coverage rate of 41.9 per cent for all injections in 2013-14; an increase compared with 2012-13, when the coverage rate was 36.7 per cent.

However, not all those injecting substances are in contact with NSPs and over 1,500 NSP users were excluded from the analysis because details of substance use or frequency of injecting were unavailable. As such, the ‘syringes required’ figures represent an underestimate of the actual amount of sterile injecting equipment needed to ensure a clean syringe for each injection. Once pharmacy data is available in 2014-15 it will be possible to better evidence coverage rate. It should be noted that considerable research into the health and economic benefits of NSPs suggests that the greatest benefits in reduction of BBV prevalence are seen at 100% or greater coverage^{12,13} (i.e. providing *at*

⁹ Welsh Government. Substance Misuse Treatment Framework (SMTF) Service Framework for Needle and Syringe Programmes in Wales. 2011.

¹⁰ NICE. Needle and syringe programmes. NICE public health guidance 52. London: NICE; 2014, <http://www.nice.org.uk/Guidance/PH52>

¹¹ Statutory and voluntary NSP service users only

¹² Turner, K.M.E et al. (2011) The impact of needle and syringe provision and opiate substitution therapy on the incidence of hepatitis C virus in injecting drug users: pooling of UK evidence. *Addiction*, 106, 1978–1988

¹³ Aspinall, E.J. et al. (2014) Are needle and syringe programmes associated with a reduction in HIV transmission among people who inject drugs: a systematic review and meta-analysis. *International Journal of Epidemiology* 2014;43:235–248

least one sterile syringe for each injection). Both NICE guidelines¹⁴ and the Welsh Government treatment framework for Needle and Syringe Programmes¹⁵ reflect this evidence.

7.2 Health measures – Blood Borne Viruses (BBV)

The reduction in transmission of blood borne viruses such as hepatitis and HIV remains one of the key rationales for engaging people who inject drugs through NSPs. In addition to the provision of sterile injecting equipment, NSPs should provide regular testing and provision of HBV vaccinations where available or referrals to specialist services that offer these services. The Harm Reduction Database allows staff in NSPs to record self-reported testing and vaccination status for hepatitis B, hepatitis C and HIV, any HBV vaccinations carried out, as well as onward referrals to specialist BBV services.

7.2.1 Hepatitis B (HBV) vaccination

Information on HBV vaccination status was recorded for 34.7 per cent (n=3,174) of all NSP users reporting data. As shown in Table 8, 61.3 per cent (n=1,947) of those providing HBV vaccination data indicated that they had previously received a full course of HBV vaccination. Vaccinations were provided onsite for 11.8 per cent of individuals (n=376) whilst a further 13.8 per cent (n=438) were referred to another healthcare provider to receive a vaccine. The remaining 13 per cent (n=413) were recorded as having been offered, but refused, a referral for HBV vaccination, an increase from the 9.8 per cent refusal rate reported in 2012-13.

Table 8: Self reported Hepatitis B vaccination status by primary substance use

Hepatitis B vaccination status	Opioids	SIEDs	Stimulants	NPS	Total
Course completed elsewhere	924	799	171	53	1947
Vaccination 1 given	39	18	10	5	72
Vaccination 2 given	39	21	8	3	71
Vaccination 3 given	91	31	14	3	139
Vaccination 4 given	65	20	7	2	94
Vaccination offered and referral for vacc made	115	287	31	5	438
Vaccination offered and refused	48	339	15	11	413

¹⁴ NICE. Needle and syringe programmes. NICE public health guidance 52. London: NICE; 2014, <http://www.nice.org.uk/Guidance/PH52>

¹⁵ Welsh Government. Substance Misuse Treatment Framework (SMTF) Service Framework for Needle and Syringe Programmes in Wales. 2011. <http://wales.gov.uk/docs/dsjlg/publications/commsafety/110628needleen.pdf>

Vaccination was offered to but refused by 3.6 per cent of primary opioid users, 5.9 per cent of primary stimulant users and by 22.4 per cent of primary SIED users. Whilst the rates of refusal amongst users of opioid and stimulant users were comparable to 2012-13, there was a substantial fall in the refusal rate amongst SIED users, which was 33.2 per cent in 2012-13.

The prevalence of HBV amongst SIED users participating in the UAM survey in 2012-13 was 2.8 per cent. In addition, more than half of SIED respondents (54 per cent) reported two or more sexual partners in the previous year and only 13 per cent reported always using a condom. As such this is indicative of SIED users being at elevated risk of HBV infection.

7.2.2 Hepatitis C (HCV) Status

HCV status data was provided by 33.7 per cent (n=3082) of all NSP users providing data. Chronic HCV infection was reported by 6.2 per cent (n=190) of all those reporting HCV status. Of those reporting, 40.8 per cent (n=1,256) did not know their HCV status. The overall rate of self-report HCV positive statuses differed by primary substance type:

- Amongst primary opioid injectors the self reported rate of individuals positive for hepatitis C was 12 per cent, down from 16.5 per cent in 2013
- Amongst primary stimulant injectors the rate was 9.1 per cent, compared with 15 per cent in 2012-13
- Amongst primary SIED users the rate was also lower than the rate for 2012-13, with 0.1 per cent reporting HCV positive status in 2013-14 compared with 2.1 per cent in the previous year

These rates of self-reported HCV infection **do not** reflect prevalence data presented by the Unlinked Anonymous Monitoring Survey (2012/13) where 47 per cent of all people who inject drugs (PWID) covered by the survey tested positive for HCV (a substantial rise on the 33 per cent testing positive in the 2011-12. For the subset of SIED users participating, 3.6 per cent tested positive for HCV. NSP staff should be vigilant in ensuring all clients accessing services are routinely tested for blood borne viruses. This process would be made easier through the availability of dry blood spot testing in all voluntary and statutory NSPs.

Table 9: Self reported hepatitis C status by primary substance

Self reported Hepatitis C status	Opioids	SIEDs	Stimulants	NPS
Negative	842	596	141	43
Positive	155	1	21	5
Not Known	292	872	69	20

7.3 Onward Referrals

In addition to the recording of individual client details, and the distribution/return of injecting equipment, HRD also enables the recording of onward referrals to specialist services/treatment. Referral options include: BBV testing, community drug services (support, counselling, prescribing services), hepatitis B vaccination, housing support, Naloxone training, primary care, sexual health clinic, social services (inc. Child protection), and women's support services. The key role that NSPs fulfil as a 'gateway' for people who inject drugs into a range of services including opioid replacement therapy, testing and treatment for hepatitis C and HIV and support to address other physical, psychological, social and health needs is recognised at a national and international level¹⁶.

The total number of individuals recording as having one or more referral in 2013-14 was 2,282 (25 per cent of all NSP users providing data); the total number of referrals was 4,570. Therefore, an average of 2 referrals were made for every person referred onward. Of all NSP users providing data, 11.9 per cent (n=1,091) were referred more than once. Table 10 presents the number of referrals to specific service types as a proportion of all referrals.

Table 10: Onward referrals to specialist health and support agencies from NSPs as a proportion of all referrals.

Type of agency	Percentage of referrals
Voluntary sector drugs agency	19.3%
Hepatitis B Vaccination	24.7%
BBV Testing	24.0%
Community Drug Services - Prescribing services	4.0%
Housing Support	2.0%
Primary Care	2.1%
Sexual Health Clinic	2.0%
Naloxone training	8.8%
Women's support services	1.0%

¹⁶ WHO. Guide to starting and managing needle and syringe programmes. AIDS Projects Management Group. Geneva: WHO; 2007.
http://whqlibdoc.who.int/publications/2007/9789241596275_eng.pdf?ua=1

Appendix I: The Harm Reduction Database

In 2010 Public Health Wales, supported by Welsh Government, introduced the Harm Reduction Database (HRD) in all statutory and voluntary sector Needle and Syringe Programmes (NSPs; previously referred to as Needle Exchanges) across Wales.

Although NSP have been proven to be cost effective in reducing injecting related harms for people who inject drugs (PWID), including prevention of transmission of blood borne viruses, prior to the development of the HRD there was no means to audit or evaluate provision in Wales within existing systems.

The HRD is web-based, allowing NSP staff to record NSP activity for unique individuals, live at point of contact. Unique identifier information is utilised to ensure that access to NSP services remains anonymous. In order to improve the quality of services, to reduce harm and to better understand the nature and scale of injecting drug use in Wales, the data collected for individual NSP users includes:

- Demographics
- Historical and current substance use
- Health and risk behaviours including sharing and reuse of injecting equipment and blood borne virus vaccination and testing status
- Onward referral to specialist health and social care providers
- Transactions and activity including injecting equipment provided and harm reduction information and advice issued

As at 31st March 2014, the HRD web-based system was routinely utilised in 42 static voluntary and statutory sites and 5 mobile units. The HRD became available in all 207 existing Community Pharmacy NSPs in Wales by 1st April 2014.

Appendix 2: Data quality

The HRD requires staff in community, statutory, mobile and pharmacy NSPs to complete a series of fields on a web-based form at the time service users register and at every transaction. Details such as date of birth and other demographic information, substances used and related information such as frequency and route of use and risk behaviours and blood borne virus status and testing history are expected to be captured at initial registration and updated at future presentations.

Table 11 details the extent to which data was recorded across a number of demographic and substance misuse categories, by Health Board. As described in section 3 above, records of those accessing services (n=9,766) included those for whom no primary substance was recorded; these records were excluded from detailed analysis, which was carried on the remaining 8,140 records for which a primary substance was recorded. Therefore, as set out in Table 12, data quality for recording of primary substance is shown in relation to the total number accessing, whilst data quality for other statistics is shown in relation only to those for whom a primary substance was recorded.

Table 11: percentage of all NSP users accessing/reporting data for whom key statistics were recorded, by Health Board

	ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys Teach.	WALES
Total number accessing	3124	1953	666	2779	1033	95	123	9773
No substance recorded	3.5%	2.8%	7.4%	10.9%	5.1%	5.3%	11.4%	6.0%
Total number reporting data	3063	1846	613	2426	999	83	107	9137
No ethnicity recorded	17.0%	17.6%	16.0%	65.5%	21.3%	32.5%	70.1%	31.2%
No housing status recorded	25.6%	30.6%	29.9%	72.5%	26.8%	68.7%	83.2%	40.6%
No home	30.7%	36.7%	20.4%	77.5%	27.4%	67.5%	82.2%	44.2%

postcode recorded								
No date of first injecting recorded	27.6%	31.7%	58.2%	82.7%	30.8%	89.2%	90.7%	46.8%
No employment status recorded	17.2%	20.4%	23.7%	69.0%	21.9%	53.0%	81.3%	33.6%
No substance route recorded	2.9%	2.2%	8.8%	18.5%	0.8%	9.6%	5.6%	7.1%

Following the initial launch of the HRD in 2010, Public Health Wales has continued to liaise with NSP providers to support accurate, timely and comprehensive information recording. This support has included additional advice and training on using the system and development of the HRD to, for example, make the recording of certain information mandatory at registration. It is anticipated that this ongoing work will improve the quality of the data on the Harm Reduction Database year-on-year.