Harm Reduction Database Wales:

Needle and Syringe provision 2012-13

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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1 Executive Summary

- 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
- 9,766 unique individuals accessed statutory and voluntary sector NSPs in Wales in 2012-13, however, this report analyses data for the 8,140 NSP service users for whom full data was available, representing 83 per cent of all NSP contacts
- Of the 8,140 NSP services users, reported primary injecting substance type profiles indicated:
  - Steroid and Image Enhancing Drugs (SIEDs) – 51.5 per cent
  - Opioids (principally heroin) – 39 per cent
  - Stimulants – 6.9 per cent
  - New psychoactive substances (NPS) – 2 per cent
- Overall, 88.3 per cent of NSP users were male and 11.7 per cent were female. However, the gender profile varied by drug type: amongst people injecting psychoactive drugs (i.e. SIEDs data excluded), 79 per cent of NSP users were male and 21 per cent were female
- The highest proportion of NSP service users were within the 30-34 age range (22.7 per cent), however, the age profile varied according to primary drug type, with those injecting SIEDs most frequently recorded in the 25-29 age range
- Of those NSP users reporting housing and employment status, 46.1 per cent were employed and 84.4 per cent were in secure accommodation
- 37.3 per cent of NSP service users were 'recent initiates', those reporting injecting for two years or less. However, primary SIED users were more likely to have recently initiated injecting than users of psychoactive substances
- Current or previous direct sharing of injecting equipment (i.e. sharing needles) was reported by 9.9 per cent of those reporting their sharing behaviour; 11.1 per cent reported indirect sharing (i.e. sharing other injecting paraphernalia). However only 11.7 and 11.3 of all NSP users reported their direct and indirect sharing behaviour respectively
- Whilst recording of hepatitis status, testing history and vaccinations was low relative to some other measures, the data suggest SIED users are failing or refusing to engage with hepatitis information, support and vaccination when offered at a substantially higher rate than users of other substances
- Analysis of all NSP service users and reported frequency of injecting indicate that the coverage rate (the provision of sterile injecting equipment for each injecting event) of NSP services in Wales is at 36.7 per cent

1.1 Summary of recommendations

Recommendation

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 SIED users. This could include the provision of dedicated SIEDs NSP evening clinics and outreach NSP provision in gyms, utilising peer workers.

Recommendation

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.

Recommendation

A number of NSP users are of non-White Welsh/British heritage. Where required, harm reduction information should be provided in languages other than English according to profile of local NSP access at Health Board level.

Recommendation

Local, national and international drug markets are evolving rapidly.[9,10,11] 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

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

Recommendation

The injecting practices and behaviours of many injectors, both primary SIED and primary psychoactive users, continue to expose them to the risk of infection from BBVs. Commissioners and providers of both NSP and BBV services should ensure all injectors are informed of the risks and offered HBV vaccination and BBV testing using approaches and methods of engagement most appropriate to subgroups such as SIED users.

2 Purpose and background

This report describes findings from the Harm Reduction Database – Needle and syringe programme module, for the period 2012-13. 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 1.

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 2012-13 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 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 Hwyel 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.

9,766 unique individuals accessed statutory and voluntary sector NSPs in Wales during 2012-13

Of these 9,766 unique individuals, the following were excluded from analyses:

- 1,580 unique individuals (16.2 per cent) - where no substance was recorded
- 46 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 8,140 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, 88.3 per cent (n=7,194) of NSP users reporting data were male and 11.7 per cent (n=946) 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 79 per cent (n=3,121) male and 21 per cent (n=830) 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, 2012-13

	Number	% of all NSP users	% male	% under 25
Primary SIED users	4,189	51.5%	97.6%	25.5%
Primary opioid users	3,178	39%	78.6%	7.3%
Primary stimulant users	565	6.9%	78.4%	6.9%
Primary NPS users	159	2%	76.1%	15.7%
Primary users of 'other substances'*	49	0.6%	83.7%	2%
ALL NSP users	**8,140**	**100%**	**88.3%**	**16.8%**

* 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, 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, 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 (22.7 per cent, n=1,792), followed by the 25-29 age range (22.3 per cent, n=1,765). Ages ranged from 14 to 66 years in males and 18 to 60 years in 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 25.4 per cent (n=1,060) aged under 25. Primary new psychoactive substance (NPS) users also tend to be younger with 15.6 per cent aged below 25 years compared to 7.3 per cent for both the primary opioid and primary stimulant categories.

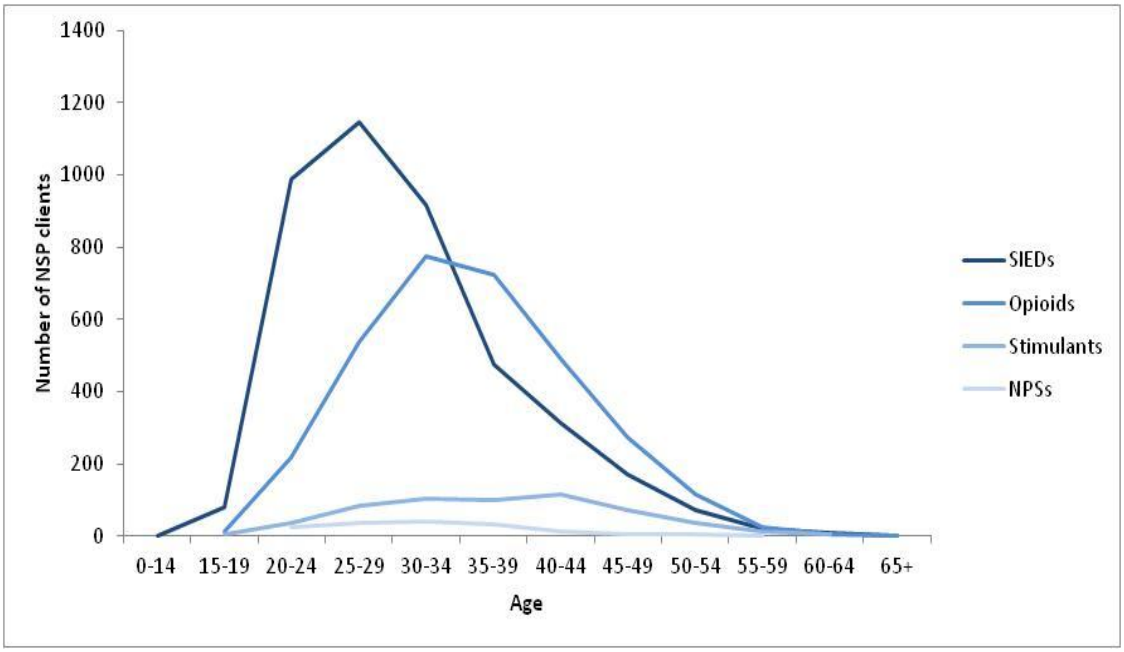


Chart 1: Primary substance use by age group for individuals accessing NSP services in Wales 2012-13

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 and stimulant use are in the 30-34 age range. This pattern changes for the 35-39 year age group, with higher numbers of primary opioid NSP users in the older age categories.

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

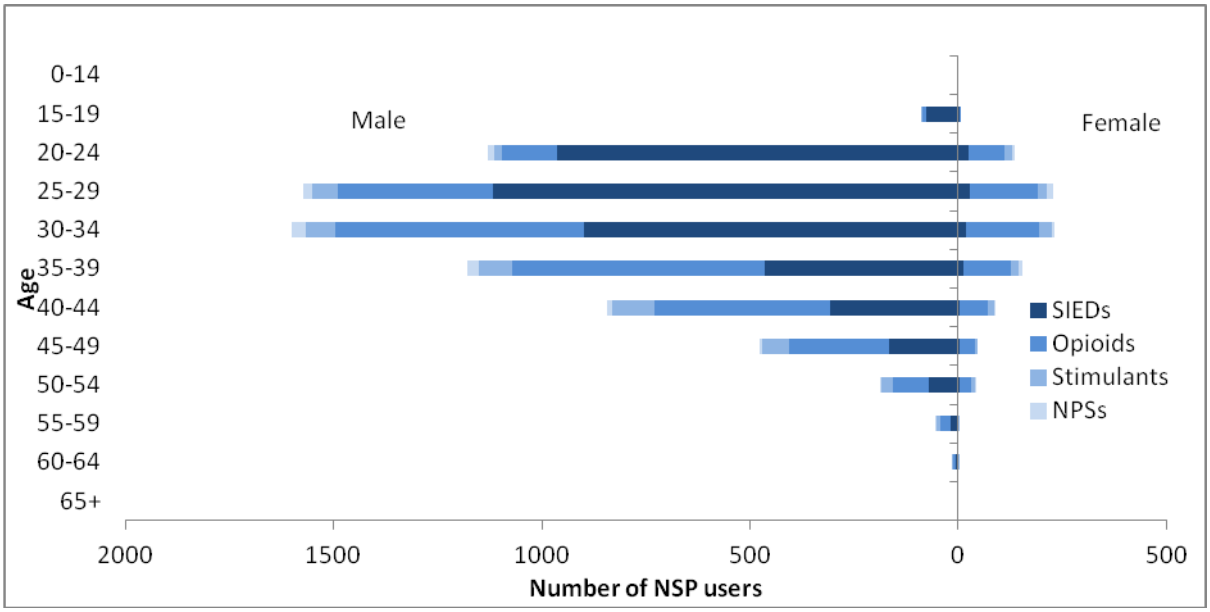


Chart 2: Numbers of NSP users by age, gender and primary substance type, 2012-13

There are clear differences amongst females accessing NSPs in terms of primary substance reported, with 71.7 per cent (n=678) of females reporting primary use of opioids, a further 12.9 per cent (n=122) reporting primary stimulants use and only 10.5 per cent (n=99) reporting use of SIEDs. The differences in age profile across substances used are further described in Chart 19, which presents primary substance use across all age ranges.

The figures presented in Chart 2 are comparable to those recorded for NSP users accessing services in the period 2011-12. As in 2012-13, the 30-34 age category was the most frequently recorded for primary opioid and stimulant users, whilst SIED users were most frequently recorded within the 25-29 category.

Overall, the proportion of those accessing NPS services aged under 25 years fell from 19.7 per cent (n=1,563) in 2011-12 to 16.8 per cent in 2012-13, however, the rate varied by primary substance type:

- Amongst primary SIEDs users, the proportion aged under 25 years fell from 28.3 per cent (n=1,235) in 2011-12 to 25.5 per cent (n=1,068) in 2012-13
- For primary opioid users the proportion fell from 9.3 per cent (n=278) to 7.3 per cent (n=233)
- 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 (2011-12 – n=50 and in 2012-13 – n=64)

The proportion of all those accessing NSP services who were female was not substantially different between the two time periods, with females accounting for 21.2 per cent (n=759) of all users (excluding SIEDs use) in 2011-12 and 21 per cent (n=830) in 2012-13. Opioids were the most commonly reported type of substances used by

females by a considerable margin in both years, with primary opioid use reported by 75.5 per cent (n=658) in 2011-12 compared to 71.7 per cent (n=678) in 2012-13.

The Welsh Government Substance Misuse Treatment Framework: Needle and Syringe Programmes recommends that services are provided to meet the needs of young people[4]. 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.

Recommendation

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 SIED users. This could include the provision of dedicated SIEDs NSP evening clinics and outreach NSP provision in gyms, utilising peer workers.

Recommendation

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.

5.2 Ethnicity

Ethnicity was reported by 71.3 per cent (n=5,802) of all NSP users reporting data. The majority of those reporting ethnicity described themselves as White Welsh (67.4 per cent, n=3,909) or White British (27 per cent, n=1,566). The ethnicity of NSP users in other categories (5.6 per cent, n=327) is shown by primary substance use in Chart 3. Only three non-White Welsh/British NSP users reported primary use of NPSs (one Pakistani, one 'black other' and one 'white other') and only two reported primary use of 'other substances' (both 'white other'); therefore these substances have been excluded from Chart 3.

[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

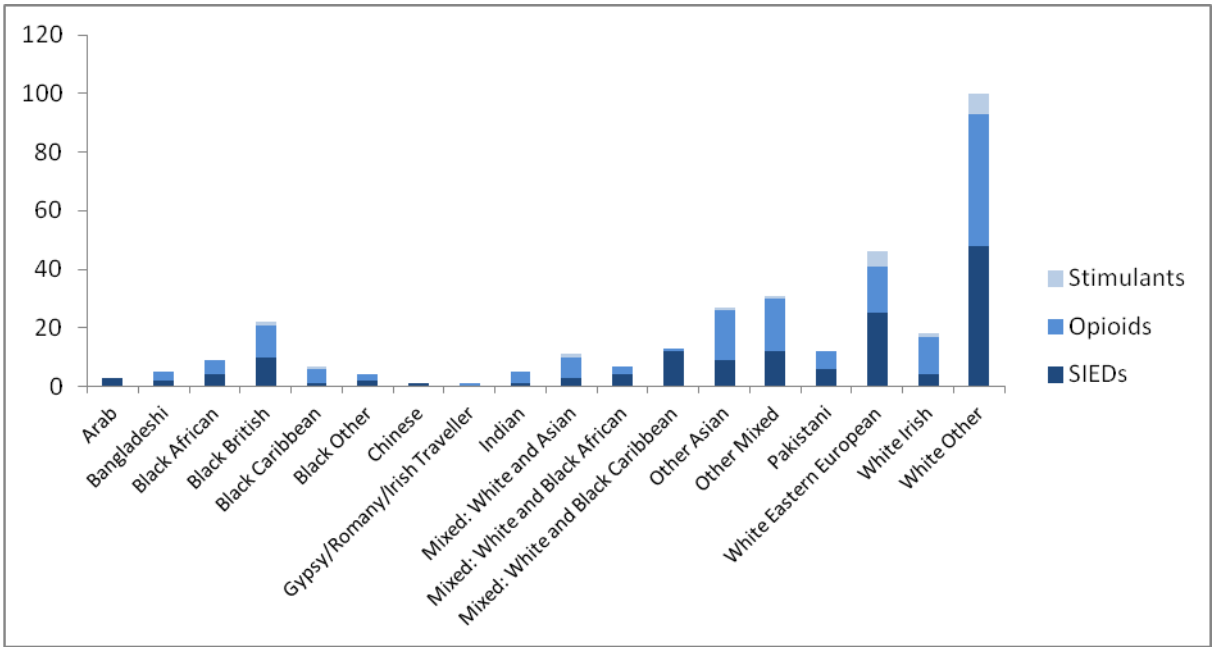


Chart 3: Self reported ethnicity of NSP users across Wales, excluding White Welsh/British, by primary substance use

The most marked differences were observed in the proportion of primary opioid users. 48 per cent (n=157) of those reporting their ethnicity as other than White Welsh/British were primary opioid users compared to 39 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
Male (all substances)	11.7%	10.4%
Male (psychoactive substances only)	21%	22.4%
Under 25	14%	16.8%
Primary SIED users	51.5%	48%
Primary opioid users	39%	48%
Primary stimulant users	6.9%	5.5%

There was considerable variation between Health Board areas in the profiles of ethnicity of those accessing services, with ABMU, Cardiff and Vale and Aneurin Bevan Health Board areas collectively accounting for 91.8% of those of non-White Welsh/British

ethnicity accessing services. However, rates of collection of this data also varied considerably between Health Board areas, as shown in Table 3.

Table 3: Percentages of non-White Welsh/British NSP users and proportion of NSP users for whom no ethnicity data was recorded by Health Board area

Health Board area	% of NSP users of non-White Welsh/British ethnicity	% of users for whom no ethnicity data was recorded
ABMU	**3.9%**	**13.6%**
Aneurin Bevan	**6.9%**	**22.3%**
Betsi Cadwaladr	**3.3%**	**14.5%**
Cardiff and Vale	**14.5%**	**61.2%**
Cwm Taf	**1.8%**	**27.2%**
Hywel Dda	**0.0%**	**50.8%**
Powys Teaching	**0.0%**	**39.0%**
All Wales	**5.6%**	**28.7%**

These data indicate that Cardiff and Vale and Aneurin Bevan Health Board areas have higher rates of NSP access by those from minority ethnic groups compared with other Health Board areas. However, the data also indicate that recording of ethnicity varies considerably by Health Board area, and may mean that users from black and minority ethnic backgrounds may be underrepresented in these figures.

Recommendation

A number of NSP users are of non-White Welsh/British heritage. Where required, harm reduction information should be provided in languages other than English according to profile of local NSP access at Health Board level.

5.3 Employment and housing

In 2012-13, 70 per cent (n=5,662) NSP users gave details of their current employment status (full time, part time, unemployed or sex work).

Less than 2 per cent (n=65) of NSP users defined themselves as sex workers. Of these, 77 (n=50) per cent were female and 83 (n=54) per cent were primarily opioid users. This means that 6 per cent of all women accessing NSPs and reporting data were

recorded as sex working; of the 658 women who specifically reported their employment status, 7.6 per cent reported sex working.

Of NSP users reporting employment status (excluding sex work), 43.8 per cent (n=2,454) were employed full time, 2.8 per cent (n=155) were employed part time and 53.4 per cent (n=2,988) were unemployed. Chart 4 shows the proportion of NSP users in full/part time employment and unemployed by primary substance type.

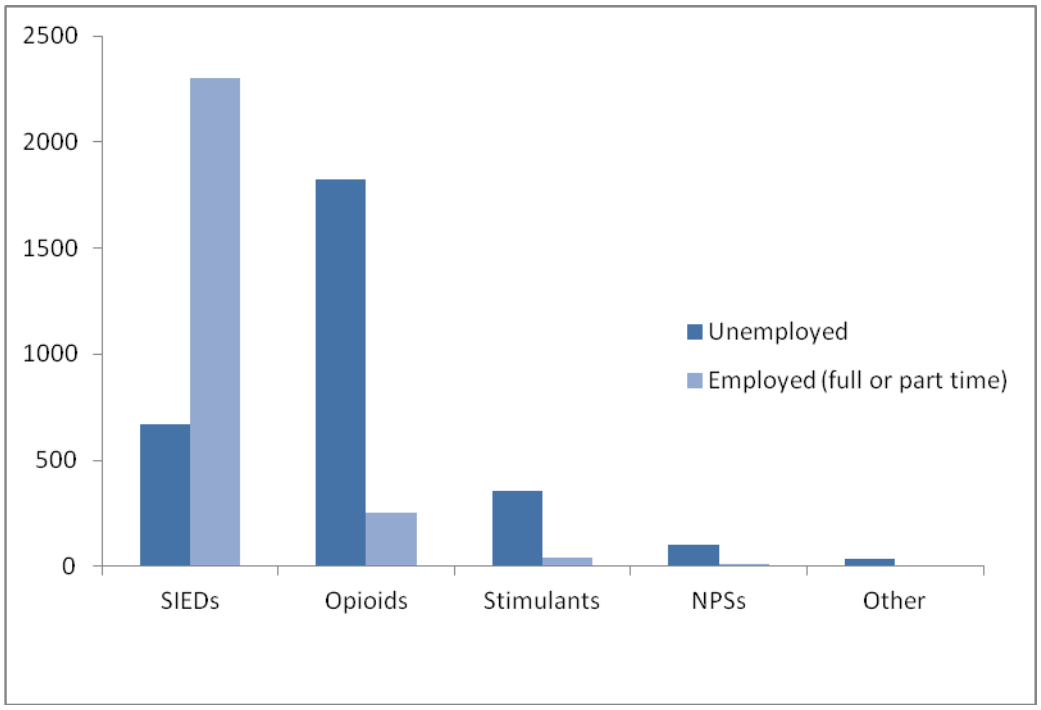


Chart 4: Percentages of NSP users employed or unemployed across Wales in 2012-13 by primary substance use

Housing status was reported by 61.8 per cent (n=5,028) of all NSP users. 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 5 indicates the proportions of NSP users by housing category and primary substance use.

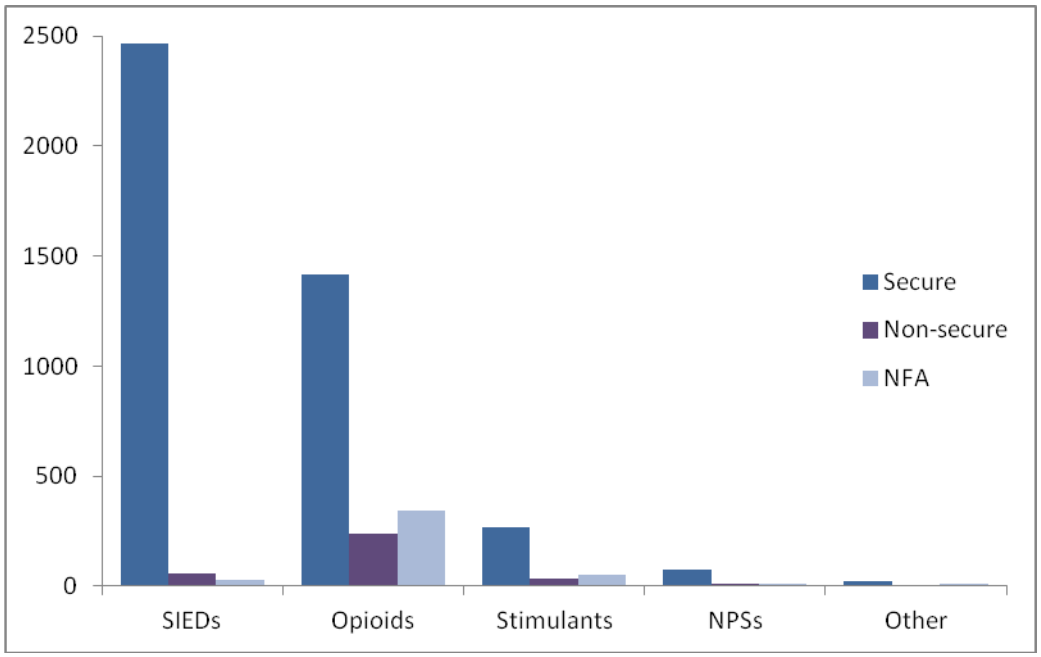


Chart 5: Unique individuals NSP users in Wales 2012-13 by type of accommodation and primary substance use

As Charts 4 and 5 indicate, 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, 77.3 per cent (n=2,300) reported that they were employed full or part time and 96.7 per cent (n=2,463) were in secure accommodation. The comparable proportions for all those injecting psychoactive drugs (opioids, stimulants and NPSs) was 11.8 per cent (n=304) in full or part time employment and 71.9 per cent (n=1,757) in secure accommodation.

It is noticeable that a higher proportion of SIED users who reported housing status were 'living with family' (37.3 per cent, n=949) compared with users of other substances (14.9 per cent, n=369). 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 6 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.

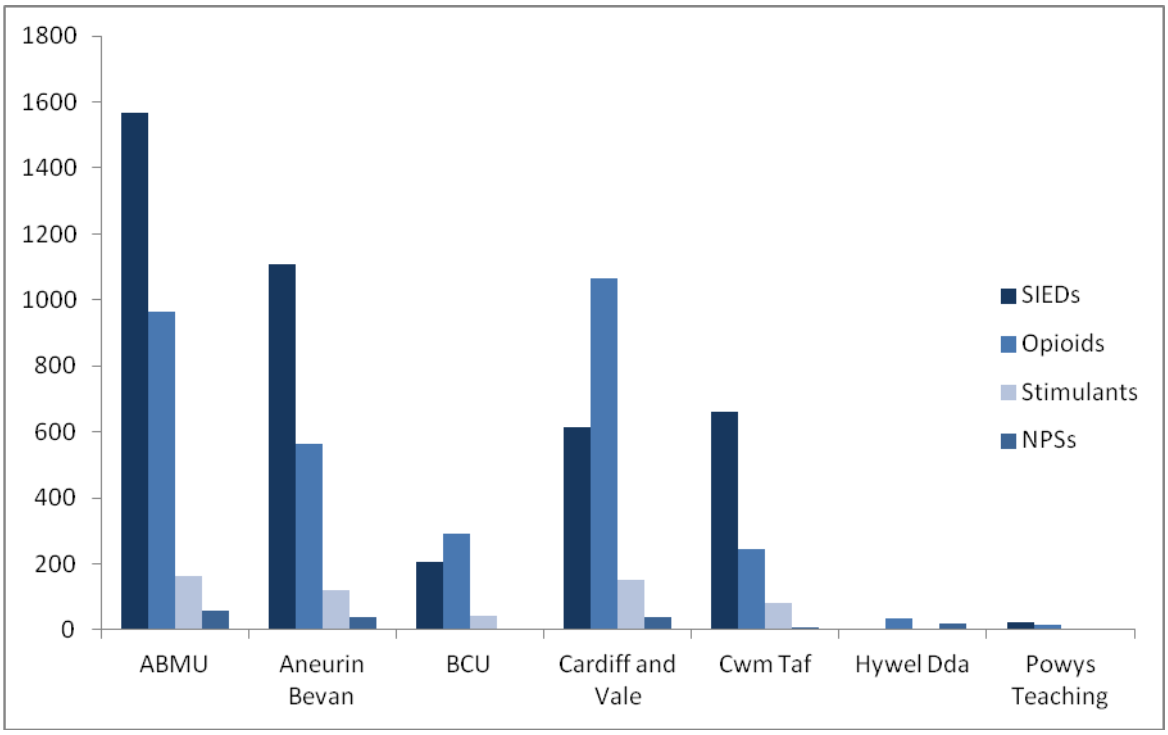


Chart 6: Unique individuals accessing NSP services by Health Board area and primary substance use

As Chart 6 shows, ABMU recorded the highest number of unique NSP users, with 33.9 per cent (n=2,758) of all NSP users across Wales (excluding pharmacy NSP providers). Cardiff and Vale and Aneurin Bevan Health Boards had 23.2 per cent (n=1,886) and 22.6 per cent (n=1,840) 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 33.5 per cent of all primary opioid users (n=1,066) followed by ABMU with 30.3 per cent of all primary opioid users (n=964). Of all recorded unique primary SIED users across Wales, more than a third (37.4 per cent, n=1,567) 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 thousand population for all users of NSPs within Health Board areas and for different categories of substances are presented in Chart 7.[7]

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

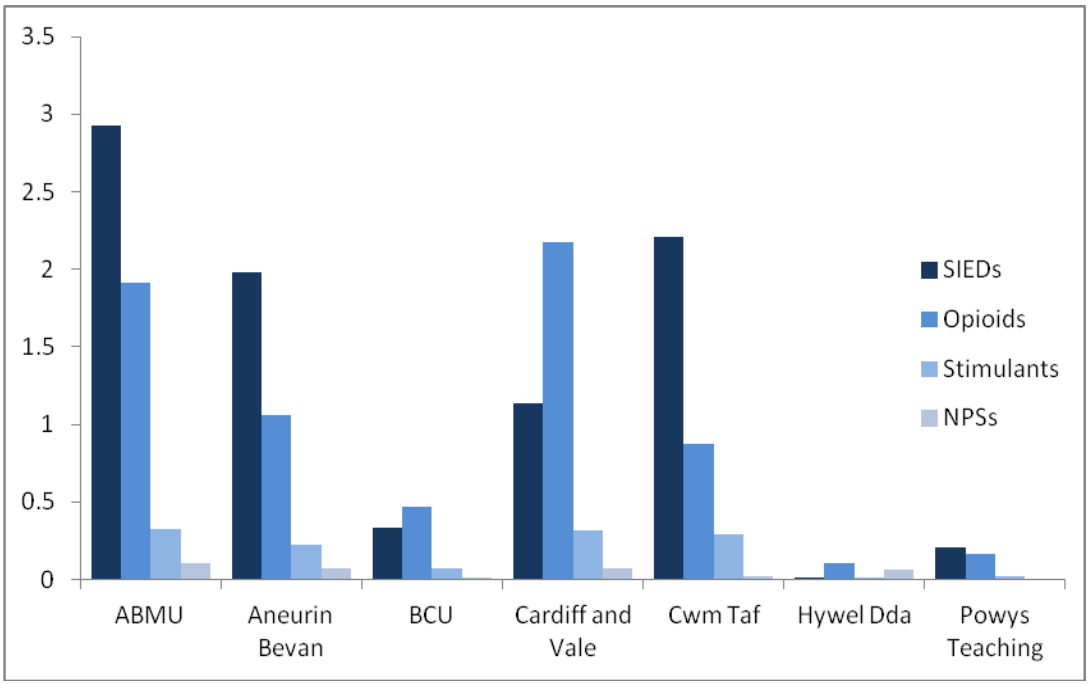


Chart 7: Directly standardised rate per thousand population of primary substance use by individuals accessing NSPs, by Health Board

When compared with 2011-12 directly standardised rates for SIED, opioid and stimulant use, 2012-13 rates indicate marginal changes; SIED use decreased by 6 users per 100,000 population and opioid and stimulant use increased by 8 and 2 users per 100,000 population respectively. Whilst NPS use showed the same increase between 2011-12 and 2012-13 as stimulant use, this represented a doubling of the rate of primary NPS use between these two years, from less than 3 to more than 5 per 100,000.

Analysis of the rates between Health Boards shows relative geographic stability in populations of injecting drug use accessing NSP services. Considering changes in rates of use of specific substances by year and health board, in only four cases were there changes that equated to a difference of 10 NSP users per 100,000 population or greater (over the period 2011/12 – 2012/13):

- Cwm Taf NSP services - Primary SIED users fell by 24 per 100,000 population
- Powys NSP services – Rise of 11 per 100,000 population in SIEDS users
- Aneurin Bevan NSP services – Rise of 16 per 100,000 in primary opioid users
- Cardiff and Vale NSP services – increase of 25 per 100,000 population in primary opioid users

Recommendation

Local, national and international drug markets are evolving rapidly.[9,10,11] 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.

[8] EMCDDA (2014) European Drug Report 2014, Trends and Developments. Lisbon, EMCDDA. http://www.emcdda.europa.eu/edr2014

[9] 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

[10] Welsh Government (2013) Profile of substance misuse in Wales 2012-13, education, health and criminal justice data. Cardiff, Welsh Government. http://wales.gov.uk/docs/dhss/publications/131031profilesmeduhealthjusten.pdf

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 is substantially under-reported via the Harm Reduction Database with data available for only 22.1 per cent (n=1,799) of NSP users as indicated in Table 4. 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, 79 per cent of opioid users accessing Take-home Naloxone reported poly-drug use.[11]

Table 4: Secondary substance use amongst NSP users by primary substance of use

Primary substance use		Secondary substance use					
		SIEDs	**Opioids**	**Stimulants**	**NPSs**	**Other**	**TOTAL**
	SIEDs	914	28	12	3	1	**958**
	Opioids	90	102	236	68	74	**570**
	Stimulants	14	102	5	16	11	**148**
	NPSs	4	48	20	6	2	**80**
	Other	0	36	4	1	2	**43**
	TOTAL	**1,022**	**316**	**277**	**94**	**90**	**1,799**

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 (18.8 per cent, n=338)
- Opioid and NPS (6.4 per cent, n=116)
- Opioid and 'other' (6.1 per cent, n=110); alcohol was the substance most frequently reported as 'other')
- Two opioids (5.7 per cent, n=102).

[11] Public Health Wales. 2013. Harm Reduction Database Wales: Take Home Naloxone 2009-13. http://www.wales.nhs.uk/sites3/documents/457/Naloxone%20report%202013%20FINAL.pdf

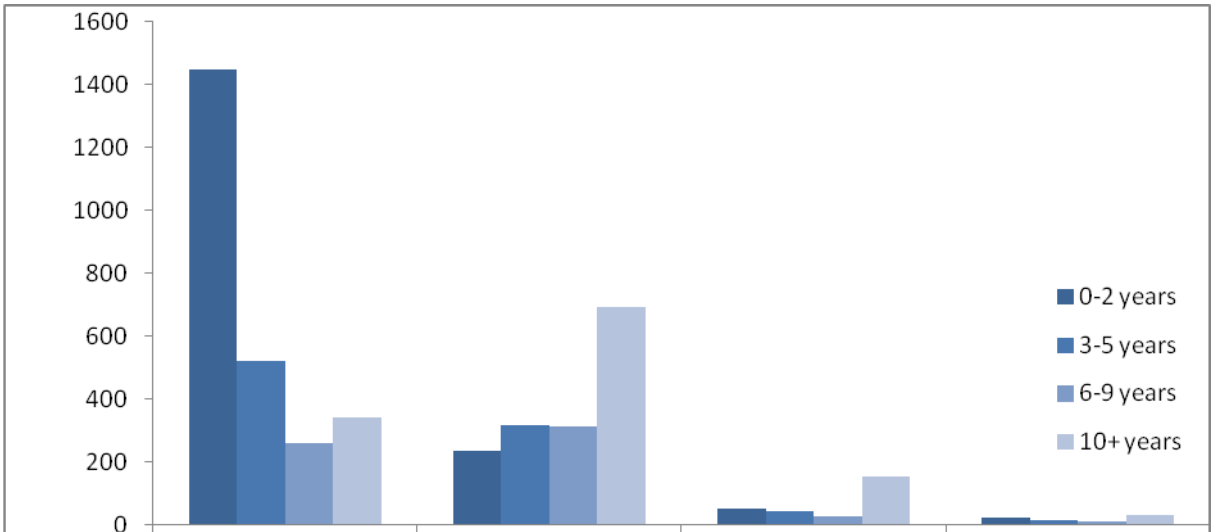
These patterns of psychoactive poly-drug use all carry specific risks, which include increased danger of overdose (poly-opioid use) and more frequent, riskier injecting (opioid and stimulant or NPS).

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 55.4 per cent (n=4,509) of all NSP users. Of these 39 per cent (n=1,760) were 'recent initiates' - individuals who have been injecting for less than three years. Length of injecting career varied by current primary substance type as shown in Chart 8.



	SIEDs	Opioids	Stimulants	NPSs
0-2 years	1449	236	51	21
3-5 years	521	317	44	16
6-9 years	260	311	28	12
10+ years	343	694	153	29

Chart 8: length of injecting career by primary substance used

The majority, 56.3 per cent, of primary SIED injectors accessing NSP services reported initiating injecting in the past three years, compared with 15.1 per cent (n=236) of opioid users. The age profile of psychoactive drug injectors is consistently older than SIED users across the categories of injecting age: 46 per cent (n=891) 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. These proportions are comparable to 2011-12, where 55.6 per cent (n=1,388) of SIED injectors had been injecting for less than three years and 45 per cent (n=826) of psychoactive drug injectors had been injecting for ten or more years. The data also reflect wider evidence that those injecting psychoactive substances, particularly heroin, are an aging cohort.[12]

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 5.

Table 5: Characteristics of new initiates to injecting compared with those injecting for longer than three years

	% male	% injecting daily
New initiates (0-3 years injecting)	93%	26.6%
Other injectors (3+ years injecting)	87.7%	53.4%

6.2.2 Injecting routes

Injecting route was recorded for 96.1 per cent (n=7,824) of unique individuals. SIEDs injecting accounted for the majority of intramuscular and subcutaneous injecting, 98.8 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 9.

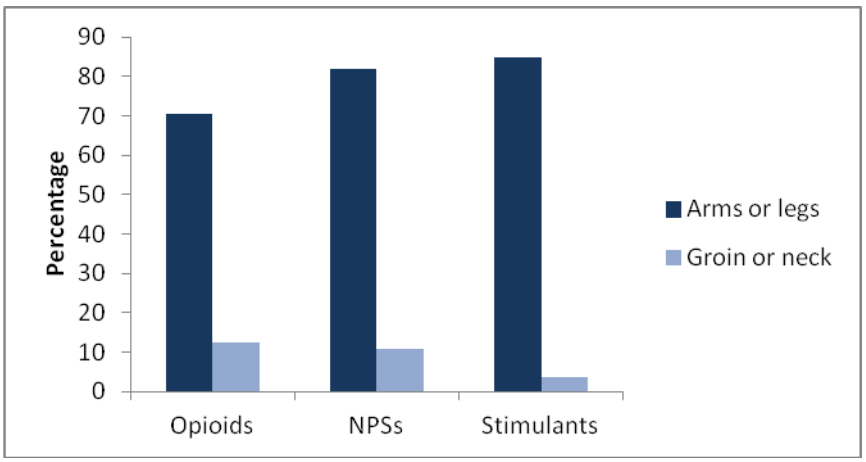


Chart 9: Selected routes of injection for primary NPS, opioid and stimulant users as a proportion of all routes of administration

[12] 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

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 accidently 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 only available for 11.7 per cent (n=951) of NSP users reporting data as indicated in Table 6. Current or previous direct sharing was reported by 9.9 per cent of NSP service users, the same proportion reporting direct sharing in 2011-12.

Table 6: Self reported direct sharing of injecting equipment

	Never shared	**Occasionally shared (once a month)**	**Often shared (once a week or more)**	**Shared in past (in last year) but not currently**	**Grand Total**
Total number	857	16	7	71	**951**
Percentage of all for whom status recorded	90.1%	1.7%	0.7%	7.5%	**100%**

Consistent with the data in Table 6, the Unlinked Anonymous Monitoring Survey indicates that rates of self-reported direct sharing (within the previous 4 weeks) have continued to decrease over recent years with current rates at around 10 per cent in Wales.[1]

6.2.3.2 Indirect Sharing

Self-report data on indirect sharing was available for 11.3 per cent (n=919) of all NSP users. Current or previous indirect sharing was reported by 11.1 per cent of those

reporting indirect sharing behaviour as shown in Table 7, representing a decrease from the 2011-12 rate of 13.6 per cent.

Table 7: Self reported indirect sharing of injecting equipment

	Never shared	Occasionally shared (once a month)	Often shared (once a week or more)	Shared in past (in last year) but not currently	Grand Total
Total number	817	16	11	75	**919**
Percentage of all for whom status recorded	88.9%	1.7%	1.2%	8.2%	**100%**

Despite poor data completion, the rates of self-report direct and indirect sharing (combined rate of 21 per cent) are consistent with those evidenced for Wales in the Unlinked Anonymous Monitoring Survey, which reported levels of sharing (direct and indirect) of 23 per cent in 2012.

6.2.3.3 Reuse of Equipment

Data on individuals reusing their own injecting equipment was available for 19.8 per cent (n=1,614) of NSP service users. Of those, 16.9 per cent (n=272) reported previous or ongoing reuse of own equipment, representing a reduction of 1.6 percentage points compared to 2011-12.

Table 8: 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	1,342	110	27	12	123	1,614
Percentage where reuse status was recorded	**83.1%**	**6.8%**	**1.7%**	**0.7%**	**7.6%**	**100%**

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 Wales[13], supported by UK-wide guidance[14], 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 included:

- 10,203 cases – i.e. all NSP service users and all the substances they used
- NSP users[15] required 3,455,685 syringes in 2012-13
- 1,266,892 syringes were supplied over 45,743 transactions.

This suggests a coverage rate of 36.7 per cent of all injections for 2012-13.

This represents a decrease from 2011-12 where data indicated a coverage rate of 39.4 per cent of all injections. However, since the difference in the number of syringes supplied between the two periods was less than 0.1 per cent, the difference in coverage was accounted for by a larger number of reported injections required, particularly for secondary and tertiary injected substances. This suggests that the difference in figures for coverage may be a result of better recording of data in 2012-13 compared to other periods.

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

[13] Welsh Government. Substance Misuse Treatment Framework (SMTF) Service Framework for Needle and Syringe Programmes in Wales. 2011.
[14] NICE. Needle and syringe programmes. NICE public health guidance 52. London: NICE; 2014, http://www.nice.org.uk/Guidance/PH52
[15] Statutory and voluntary NSP service users only

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[16,17] (i.e. providing *at least* one sterile syringe for each injection). Both NICE guidelines[18] and the Welsh Government treatment framework for Needle and Syringe Programmes[19] reflect this evidence.

Recommendation

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

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 only 23.8 per cent (n=1,937) of all NSP users reporting data. The majority of individuals providing this information (93.8 per cent, n=1,817) had visited a NSP more than once during 2012-13; this subgroup was used as the basis for analysis as these individual had had more than one opportunity to be offered a vaccine.

As shown in Table 9, 63.1 per cent (n=1146) of individuals indicated that they had previously received a full course of HBV vaccination. Vaccinations were provided onsite for 15.3 per cent of individuals, whilst a further 11.8 per cent were referred to another healthcare provider to receive a vaccine. The remaining 9.8 per cent were recorded as having been offered, but refused, a referral for HBV vaccination, a decline from the 10 per cent refusal rate reported in the 2011-12.

[16] 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

[17] 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

[18] NICE. Needle and syringe programmes. NICE public health guidance 52. London: NICE; 2014, http://www.nice.org.uk/Guidance/PH52

[19] 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

Table 9: Self reported Hepatitis B vaccination status by primary substance use

	Primary drug group				
Hepatitis B vaccination status	**Not recorded**	**Opioids**	**SIEDs**	**Stimulants**	**Total**
Course completed elsewhere	44	642	349	111	**1146**
Vaccination 1 given	4	27	9	11	**51**
Vaccination 2 given	4	28	5	6	**43**
Vaccination 3 given	4	65	11	14	**94**
Vaccination 4 given	4	63	15	8	**90**
Vaccination offered and referral for vacc made	6	94	94	20	**214**
Vaccination offered and refused	15	35	116	13	**179**

Vaccination was offered to but refused by 3.6 per cent of primary opioid users, 7.1 per cent of primary stimulant users and by 33.2 per cent of primary SIED users. The prevalence of exposure to HBV amongst SIED users was reported in 1 in 11 participants of the Unlinked Anonymous Monitoring Survey in England & Wales.[1] Additionally, this group also report high levels of unsafe sexual activity with 47 per cent reporting to have had 2 or more sexual partners in the 12 months prior and only 20 per cent reporting having always used condoms. As such this is indicative of SIED users being at elevated risk of HBV infection.

Recommendation

The injecting practices and behaviours of many injectors, both primary SIED and primary psychoactive users, continue to expose them to the risk of infection from BBVs. Commissioners and providers of both NSP and BBV services should ensure all injectors are informed of the risks and offered HBV vaccination and BBV testing using approaches and methods of engagement most appropriate to subgroups such as SIED users.

7.2.2 Hepatitis C (HCV) Status

Analysis of HCV status data was restricted to those individuals who had visited NSP services on two or more occasions (n=5,717). Given the sensitive nature of this issue, it is not expected that questions regarding BBV status would be asked on initial visits to an NSP.

Self report HCV status data was provided for 28.9 per cent (n=1,653), of whom 134 (13.4 per cent) reported chronic HCV infection. Of the remaining individuals asked, 39.4 per cent (n=652) of individuals did not know their HCV status.

The overall rate of self-report HCV positive statues differed by primary substance type:

- Amongst primary opioid injectors the rate of individuals positive for hepatitis C was 16.5 per cent
- Amongst primary stimulant injectors the rate was 15 per cent
- Amongst primary SIED users the rate was lower at 2.1 per cent

These rates of self-reported HCV exposure **do not** reflect prevalence data presented by the Unlinked Anonymous Monitoring Survey (2011/12) where 39 per cent of injecting substance users in Wales who participated in the survey tested positive for HCV antibodies. Low rates of reported HCV infection recorded on the HRD may be explained by the fact that only 42 per cent of those participating in the UAM were aware of their status. As a result of this 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 10: Self reported hepatitis C status by primary substance

	Primary substance group				
Self reported Hepatitis C status	**Not recorded**	**Opioids**	**SIEDs**	**Stimulants**	**Total**
Negative	39	554	189	85	867
Positive	5	110	4	15	134
Not Known	32	237	342	41	652

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 level[20].

Data relating to the type of referrals offered (accepted and declined) was only recorded for 13.7 per cent of NSP users reporting data. Table 11 illustrates the number of referrals offered (accepted and declined) to unique individuals.

Due to poor data completion, further analysis into the type of referrals offered, the rate of referral dismissal, and demographic correlates associated with dismissal is not possible at present. However, Table 11 details the rates of referrals to specific types of health and support agencies, including referrals to substance misuse specialist treatment services.

Table 11: Onward referrals to specialist health and support agencies from NSPs

Type of agency	Percentage of referrals
Voluntary sector support and other services	29.5%
Hepatitis B Vaccination	18.9%
BBV Testing	16.1%
Community Drug Services - Prescribing services	7.7%
Housing Support	3.7%
Primary Care	3.2%
Sexual Health Clinic	2.3%
Naloxone training	1.5%
Women's support services	1.0%

[20] 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 1: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 2013, the HRD web-based system was routinely utilised in 41 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 12 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 12: 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	**3044**	**2041**	**710**	**2662**	**1133**	**78**	**98**	**9766**
No substance recorded	9.5%	9.9%	20.3%	28.6%	11.4%	21.8%	58.2%	**16.4%**
Total number reporting data	**2758**	**1840**	**560**	**1886**	**996**	**59**	**41**	**8140**
No ethnicity recorded	13.6%	22.3%	14.5%	61.2%	27.2%	50.8%	39%	**28.7%**
No housing status recorded	19.9%	41.9%	25.5%	66.3%	33.2%	76.3%	53.7%	**38.2%**
No home postcode recorded	21.9%	42.6%	15.5%	70.4%	30.8%	74.6%	51.2%	**39.0%**
No date of first	22.6%	35.5%	57.7%	83.1%	37.3%	91.5%	90.2%	**44.6%**

injecting recorded								
No emplymnt status recorded	12.3%	27.7%	21.3%	63.6%	25.6%	61%	51.2%	**30.4%**
No substance route recorded	0.4%	0.9%	0.7%	1.8%	0.2%	0%	4.9%	**0.9%**

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.