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SUBSTANCE MISUSE PROGRAMME

**Harm Reduction Database
Wales:
Needle and syringe provision**

About Public Health Wales

Public Health Wales exists to protect and improve health and wellbeing and reduce health inequalities for people in Wales. We work locally, nationally and internationally, with our partners and communities.

The Substance Misuse Programme works to address both the current and emerging public health threats in Wales and in line with the overarching strategic objective to **'reduce health inequalities, and prevent or reduce communicable and non-communicable disease, wider harms and premature death related to drugs and alcohol'**.

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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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Executive Summary

- Needle and Syringe programmes (NSPs) provide a well-evidenced, effective and cost-effective means of reducing bacterial infections and transmission of blood borne virus (BBV) infection (including hepatitis B, hepatitis C and HIV).^{1,2} Whilst guidance has been published for the provision of NSP services³ in Wales, there is evidence that rates of these infections have increased in more recent years⁴
- The Harm Reduction Database (HRD) NSP module has been available in all statutory and voluntary NSP sites since 2012 and in all pharmacy based NSP sites since April 2014. In 2015-16 the HRD was live in 42 specialist sites and 215 pharmacy sites across Wales, providing comprehensive data on activity in all NSP sites
- Once exclusions (no relevant substance, invalid age) had been applied, there were 24,926 individual records on the HRD in 2015-16, with 17,161 regular service users (those accessing on two or more occasions in 2015-16 and/or accessing in multiple years). There were 136,073 recorded transactions and 3,251,844 dispensed syringes associated with all individual records
- **Of regular service users:**
 - **The primary drug injected profile⁵ was:**
 - 48.8 per cent - Image and Performance Enhancing Drugs (IPEDs), (n= 8,375)
 - 40.2 per cent - Opioids (n= 6,902) regular service users (40.2 %)
 - 9.4 per cent - Stimulants (n= 1,611)
 - 1.6 per cent - New Psychoactive Substances (NPS) (n= 273)

¹ NICE. Needle and Syringe Programmes Guidance 2014. Available at:

<https://www.nice.org.uk/guidance/ph52>

² NICE. Costing statement: Needle and syringe programmes Implementing the NICE guidance on Needle and syringe programmes (PH 52). Available at:

<https://www.nice.org.uk/guidance/ph52/resources/69237469>

³ Welsh Government. 2011. Substance Misuse Treatment Framework (SMTF) Service Framework for Needle and Syringe Programmes in Wales. Available at:

<http://www.substancemisuserct.co.uk/staff/adults/frameworks/service%20framework%20for%20needle%20exchange.pdf>

⁴ Public Health England, Health Protection Scotland, Public Health Wales, and Public Health Agency Northern Ireland. Shooting Up: Infections among people who inject drugs in the UK, 2015. London: Public Health England, 2016. Available at: <https://www.gov.uk/government/statistics/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring>

⁵ It should be noted that a number of individuals injected more than one drug type which are recorded in priority order

- **The type of NSP service accessed during 2015-16** was:
 - 44 per cent (n=7,614) accessed a statutory/voluntary service NSP
 - 72 per cent (n= 12,346) accessed a pharmacy-based NSP
 - However, 55.6 per cent (n= 9,546) only accessed pharmacy-based NSP services, i.e. no specialist NSP services access. Those pharmacy-only NSP service users were more likely to be male, under 25 and primarily using IPEDs

- **The NSP profile by gender** was:
 - 12 per cent female (n=2,062) and 88% male (15,099). However, this profile varied by primary substance of use, with female NSP service users representing only 3.9 per cent of primary IPED users (329 individuals) compared with 19.7 per cent of primary users of psychoactive substances (1,733 individuals)

- **The NSP profile by age** was:
 - 21.1 per cent (n=2,070) were aged under 25 years. Again, this profile varied by primary substance; amongst primary IPED users the proportion was 19.9 per cent (1,668 individuals), for primary users of psychoactive substances it was 4.6 per cent (402 individuals)

- Where recorded, 12.3 per cent of primary psychoactive drug injectors were ‘new initiates’ (i.e. had been injecting for less than three years), whilst 51.4 per cent had been injecting for more than ten years
 - 24 per cent of primary New Psychoactive Substances (NPS) injectors⁶ were new initiates
 - 36 per cent of primary SIED users were new initiates

This is consistent with evidence from previous years that primary psychoactive substance users, in particular opioid users, form an aging cohort, but a substantial number of primary SIED and NPS users have begun injecting relatively recently

- Despite all NSP projects using the same recording system, data quality varied substantially between projects and was poor for a range of data items including secondary and other drug use, reuse of injecting equipment and sharing of injecting paraphernalia and needles / syringes. This represents a clear threat both to providing appropriate and sufficient injecting equipment and harm reduction advice to service users but also in evidencing the nature of drug use and injecting risk practices amongst people who use and inject drugs in Wales

⁶ The majority injecting cathinones including mephedrone and ethylphenidate

1. Summary of recommendations

Recommendation 1: Harm reduction and health protection interventions should be tailored to meet the needs of all people who inject drugs

Given continued evidence of high rates of risk behaviour and consequent spread of blood borne viruses amongst people who inject drugs in Wales, and in the context of the diverse injecting population described in this report, those commissioning, managing and working in NSPs must ensure services are effective in reaching and meeting the needs of all those who inject drugs. Services should ensure they are collaborating with a range of health and social care professionals and peer workers, and using proactive outreach to engage with those at risk of marginalisation by services, in particular:

- young people
- those whose first language is not English
- those primarily injecting stimulants and new psychoactive substances
- those not in contact with specialist substance misuse services

Recommendation 2: NSPs should be resourced for a minimum of 100% coverage and dedicated NSP staff to increase engagement and effectiveness

Research evidence and relevant guidelines^{1,2,3} stress the importance of providing at least one set of sterile injecting equipment for every injection. The proportion of clean needle/syringes to reported injections is known as the coverage rate. This rate is currently estimated to be around 35-40 per cent in Wales i.e. sterile injecting equipment for only one in 2 or 3 injecting events. Commissioners and service providers should ensure adequate resource to provide at least 100% coverage in their area in order to prevent bacterial infection and disease transmission.

Recommendation 3: Local and national needs should be addressed collaboratively and in a timely way

This report provides evidence of geographical variation across a range of measures, including substances used, housing and homelessness status, rates of service access and high-risk behaviours. There is also continued evidence of rapid changes to drug markets and harmful practices that can result in substantially increased risks over short periods of time. Those working at national, local and service levels should continue to develop rapid response and effective collaboration to ensure local and national intelligence is used to support services to reduce harm. These collaborations should be both vertical (between local services and teams and organisations with a national perspective including Public Health Wales) and horizontal (between service users, local teams and services).

2. Purpose and background

This report describes findings from the Harm Reduction Database – Needle and syringe programme module, for the period 2015-16. 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. Over 2015-16 the HRD was available in 46 static voluntary and statutory NSP sites covering 32 villages/towns, 215 Community Pharmacy NSPs covering 147 villages/towns and 6 mobile sites. See Figure 1 below for a map of NSP sites in 2015-16 and Appendix 1 for further details on the HRD.

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 substance 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 report begins with an analysis of the data set and data quality, identifying and comparing a number of distinct cohorts amongst those accessing NSPs in Wales in 2015-16. Next a 'snapshot' of the data gives a brief overview of the gender and age of those who used services in 2015-16 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 with 2014-15 and previous years are also presented.

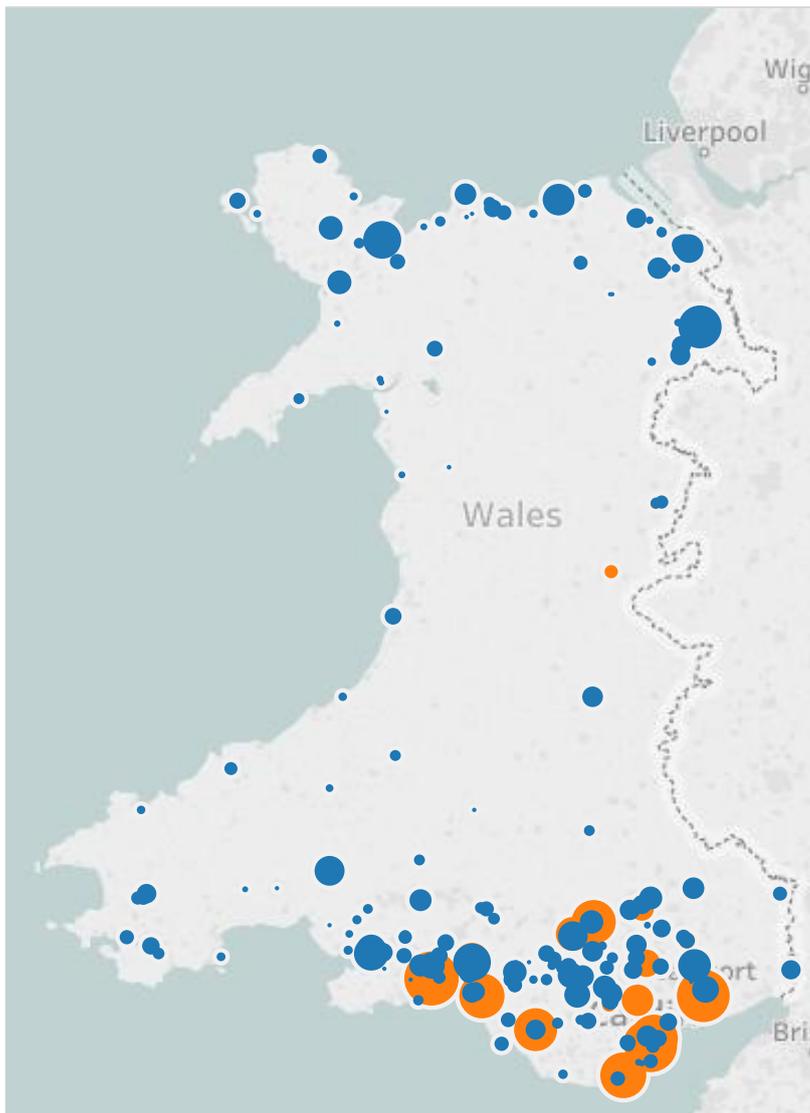


Figure 1: Statutory and voluntary Needle and Syringe Programme sites active in Wales in 2015-16, by site type and number of syringes dispensed

3. Data set and quality

In 2015-16, the total number of individual records on the HRD was 25,185; however, following 21 exclusions due to data entry errors⁷, the total number of valid records was 21,164. The HRD allows for the recording of over 30 different substances and aims to capture all substance use (including alcohol), regardless of route of ingestion, alongside those substances injected. Within this report, these substances are aggregated into the following types which broadly reflect the similarities and differences between substances in terms of chemical profile, typical effects and categories (but not levels) of associated risks.

- **Opioids**, including heroin, methadone and prescribed diamorphine
- **Stimulants**, including cocaine powder, crack cocaine, amphetamines and ecstasy
- **Image and Performance Enhancing Drugs (IPEs)**, including anabolic steroids, human growth hormone, melanotan and other peptides
- **New psychoactive substances (NPS)**, including ketamine, MPA and amphetamine-like cathinones including mephedrone, etc

All those who were not using any of these main substances types were removed from the analysis: this excluded a further 238 records, resulting in a final total for analysis of 24,926 unique NSP service users.

Further analysis showed some individual records had only a single transaction recorded for 2015-16. Records with only one transaction may be indicative of individuals using different details at different transactions (thus creating multiple records for a single individual) and/or may be evidence of a specific subgroup who have only come into contact with services on a single occasion and may either not inject regularly or most commonly access injecting equipment through sources not recorded on the HRD (such as commercial sales), friends or other secondary distribution networks. In addition, it is desirable to explore characteristics of those service users who were recorded as accessing for the first time in 2015-16.

In order to ensure the quality of analysis, to distinguish between cohorts that may have different characteristics and needs and to explore attrition amongst service users, five distinct cohorts have been defined:

- **'Regular service users'** who were recorded as attending an NSP service on two or more occasions in 2015-16 and/or were recorded as attending in more than one year
- **'New regular service users'** who accessed for the first time in 2015-16 and accessed on two or more occasions in that period

⁷ A total of 21 records were excluded from analysis due to data entry errors: 14 records were excluded as no substance of use was reported and a further 7 records were excluded as age was recorded as over 100 years and were assumed to have been entered in error.

- **'Single time service users'** who were recorded as accessing one time only in 2015-16
- **'Occasional service users'** who were recorded as accessing one time only in 2015-16 but had accessed in previous years
- **'Regular service users no longer accessing'** who have were recorded as accessing two or more times in 2014-15, but not in 2015-16

Note that the number of 'regular service users' and 'single time service users' for 2015-16 will sum to the total number of records for 2015-16 once the exclusions described above have been applied. 'Occasional service users' and 'new regular service users' are distinct and non-overlapping subsets of 'regular service users' for 2015-16. 'These relationships are shown diagrammatically in Figure 2.

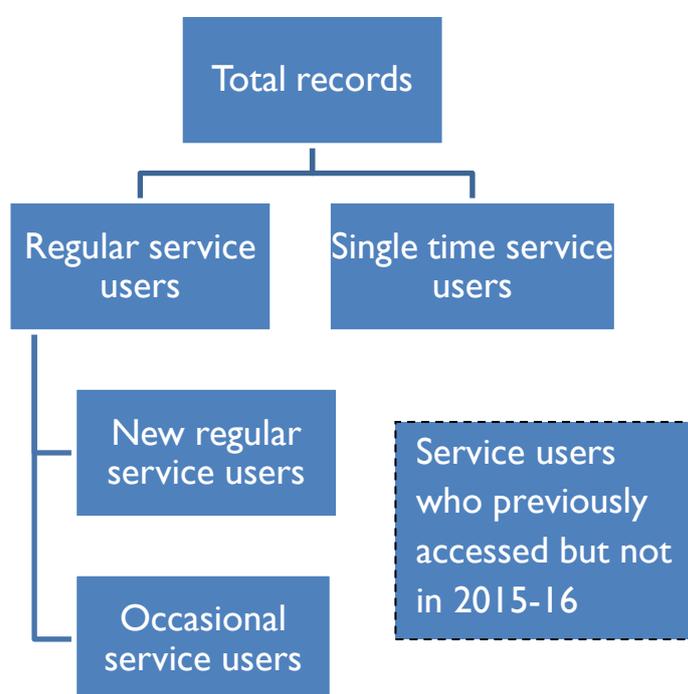


Figure 2: Relationship between cohorts identified for analysis

The number of total records and the number of service users in each cohort recorded in 2015-16 are presented in Table 1. Note that, as described above, data from all community pharmacy-based NSPs first became available in 2014-15 with the resultant data on a large number of individuals who were previously only accessing these services becoming available to the HRD for the first time. Therefore figures for most of these cohorts, particularly those which depend on analysis of access in prior years, are only comparable with 2014-15 to a limited degree. The total number of records, which is directly comparable, fell by 1 per cent in 2015-16 compared with 2014-15.

Section 5 provides an overview comparison between the cohort in terms of demographic characteristics, use of substances and service access. Remaining sections provide more detail on the cohort of **regular service users**.

4. Comparison of cohorts accessing NSP services in 2015-16

Table 1 shows a comparison between the cohorts of service users accessing services in 2015-16 by key demographic characteristics and substance and service use. Across all records, measures are broadly comparable to 2014-15, with the exception of figures polydrug use, length of time injecting and, notably, age. The increase in the reported numbers using more than one substance, from 16.5 per cent to 20.5 per cent, may be indicative of increasing polydrug use or may be the result of improved recording in this area. The rise in mean length of time injecting from 7.4 years to 8.1 years may be correlated with the increase in mean age by almost a year across all records (34 to 34.9 years) and the proportion of under 25s recorded on the HRD, which fell substantially from 17.2 per cent to 13.7 per cent. Whilst this may be evidence of an aging population of psychoactive substance injectors (for which the rise in the proportion of primary opioid records may provide some evidence), this finding requires further research.

When compared with single time service users, regular users were slightly older on average (35.2 compared with 34.3 years old), but considerably more likely to be aged under 35 (12.1 per cent compared with 17.5 per cent). There were also notable differences in primary substance used, with the proportion primarily using opioids higher amongst regular service users (40.2 per cent compared with 35.7 per cent) and a lower proportion reporting primary IPED use (48.4 per cent compared with 54.4 per cent). It is interesting to note that whilst regular service users reported a substantially longer mean length of injecting career (8.8 years compared with 4.3 years) the proportion of recent initiates (i.e. those who first injected within the last three years) was very similar (11 per cent compared with 10.2 per cent). The other clear difference between these two cohorts is service use, with 55.6 per cent of regular service users only accessing pharmacy based NSP compared with 74.4 per cent of single time service users.

New regular service users were, as might be expected, both younger than the regular service user cohort as a whole (average age 34.2 compared with 35.2; proportion under 25 16.4 per cent compared with 12.1 per cent) and reported shorter injecting careers (4.8 years compared with 7.8 years; 13.6 reporting injecting initiation within the past three years compared with 10.2 per cent). New regular service users also recorded fewer transactions on average when compared with all regular service users (4.7 compared with 7.5).

Reported polydrug use was considerably higher amongst regular service users than amongst either single time or new regular service users (28.8 per cent compared with 2.2 per cent and 8.1 per cent); however, this may reflect data quality issues.

Occasional users showed a number of differences with regular service users, with a smaller proportion of women (9.3 per cent compared with 12 per cent), a substantially higher proportion of primary IPED users (62.9 per cent compared with 48.8 per cent) and a higher mean number of syringes per transaction (32.3 compared with 23.7).

Table 1: Comparison of cohorts, service users recorded on the Harm Reduction Database, 2015-16

	All records 2015-16	All records 2014-15	Regular service users	Single time service users	New regular service users	Occasional service users	Service users accessing in previous years but not during 2015-16
Total	24,926	25,179	17,161	7,765	3,645	4,811	4,098
Mean age (yrs)	34.9	34	35.2	34.3	34.2	34.5	33.7
% female	12 %	11.5 %	12 %	11.9 %	12.6 %	9.3 %	11.2 %
% under 25	13.7 %	17.2 %	12.1 %	17.5 %	16.4 %	13.3 %	18.4 %
% reporting primary use of IPEDs	50.5 %	51.4 %	48.8 %	54.4 %	50.9 %	62.9 %	50.5 %
% reporting primary use of opioids	38.8 %	37.6 %	40.2 %	35.7 %	39 %	29.4 %	37.6 %
% reporting poly-drug use	20.5 %	16.5 %	28.8 %	2.2 %	8.1 %	29.2 %	17 %
% using pharmacy only	61.8 %	61.5 %	55.6 %	74.4 %	65.8 %	62.6 %	59.9 %

Mean number of annual transactions	5.5	5.2	7.5	1	4.7	1	4.1
Mean number of syringes dispensed annually	130.5	126.4	177.7	26.1	102.6	32.3	91.8
Mean syringes per transaction	23.7	24.3	23.7	26.1	21.8	32.3	22.4
<i>All the above figures are derived from data fields that NSP staff are required to complete to record a transaction. Therefore these figures are based on all service users within the cohort. Injecting history is not a mandatory field and therefore data quality varies between cohorts. This issue is discussed further in Appendix 2</i>							
Number of records including injecting history (% of all records)	8,252 (33.1 %)	8,388 (33.3 %)	6,947 (40.5 %)	1,305 (16.8 %)	820 (22.5 %)	2,084 (43.3 %)	1,333 (32.5 %)
Mean length of time injecting (yrs)	8.1	7.4	8.8	4.2	4.8	7.9	6.8
% injecting less than 3 years	10.4 %	12.4 %	10.2 %	11 %	13.6 %	10.5 %	13.7 %

4.1. Populations accessing pharmacy and statutory/voluntary services

As discussed in previous Annual Reports, only a relatively small number of service users access both pharmacy and statutory/voluntary services. In 2015-16, 4,814 regular service users (28.1 per cent) accessed statutory/voluntary services only; 9,547 (55.6 per cent) only attended pharmacy-based services and 2,800 (16.3 per cent) attended both types of service.

There are notable differences between those regular service users accessing only pharmacy services and those who access any statutory/voluntary service, and this should be considered when reviewing the analysis presented in this report. Table 2 compares some key statistics for these populations.

Table 2: Comparison of population accessing statutory/voluntary services only and population accessing pharmacy services only in Wales, 2015-16, selected statistics. Note that length of injecting career data is only available for a subset of service users, as indicated.

	Accessing any stat/vol service (n=7,614)	Accessing pharmacy service(s) only (n=9,547)
Mean age	35.8	34.7
% female	13.4 %	10.9 %
% under 25	8.8 %	14.7 %
% reporting primary use of IPEDs	41.3 %	54.8 %
% reporting primary use of opioids	47.8 %	34.2 %
Mean number of annual transactions	9.2	6.1
Mean number of syringes dispensed annually	235.9	131.3
Mean length of time injecting	9.3 years	7.8 years
% injecting less than 3 years	18.5 % (n=4,358)	35.8 % (n=2,589)

As can be seen in Table 2, regular service users who only accessed pharmacy based NSPs were more likely to be male, to be under 25 and to be using IPEDs as their primary substance. Those who don't access statutory/voluntary services also access NSP less frequently and take fewer syringes annually. Regular service users only accessing pharmacy NSPs fit more closely the profile of primary IPED users.

5. Snapshot: key figures

As shown in Table 3, there was considerable variation in gender profile by primary substance type. Research undertaken in Wales and elsewhere in the UK^{8,9,10} would suggest that the gender profile of people who inject psychoactive drugs is around 3:1 male to female. Once IPEDs, which are not psychoactive drugs, are excluded, the gender profile for regular service users is closer to this frequently observed gender profile, with the percentage of those accessing NSP who were male at 88 per cent across all regular service users, but 80.3 per cent for those primarily using psychoactive substances.

Table 3: Profile of substance use by gender and percentage of users under 25 for all regular service users, 2015-16

	Number (% of total)	% male	% under 25
Primary IPED users	8,375 (48.8 %)	96.1 %	19.9 %
Primary opioid users	6,902 (40.2 %)	80.3 %	4.1 %
Primary stimulant users	1,611 (9.4 %)	80.3 %	5.5 %
Primary NPS users	273 (1.6 %)	78 %	4.1 %
Total	17,161	88 %	12.1 %

On average, 126 syringes were dispensed to each individual accessing NSP service in Wales in 2014-15. However, there was again considerable variation between users of different substance types, with a mean of 65 syringes per person dispensed to primary IPED users, 177 to primary opioid users, 234 to primary stimulant users and 312 primary NPS users.

⁸ 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

⁹ 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

¹⁰ 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

The mean number of transactions, syringes and syringes per transaction are shown by primary substance of use in Table 4. Consistent with previous years, this suggests that IPED users, who typically inject as part of a periodic cycle of training and IPED use, access NSPs less frequently but take more syringes on each visit.

Table 4: Profile of substance use by annual transactions and syringes dispensed for all regular service users, 2015-16

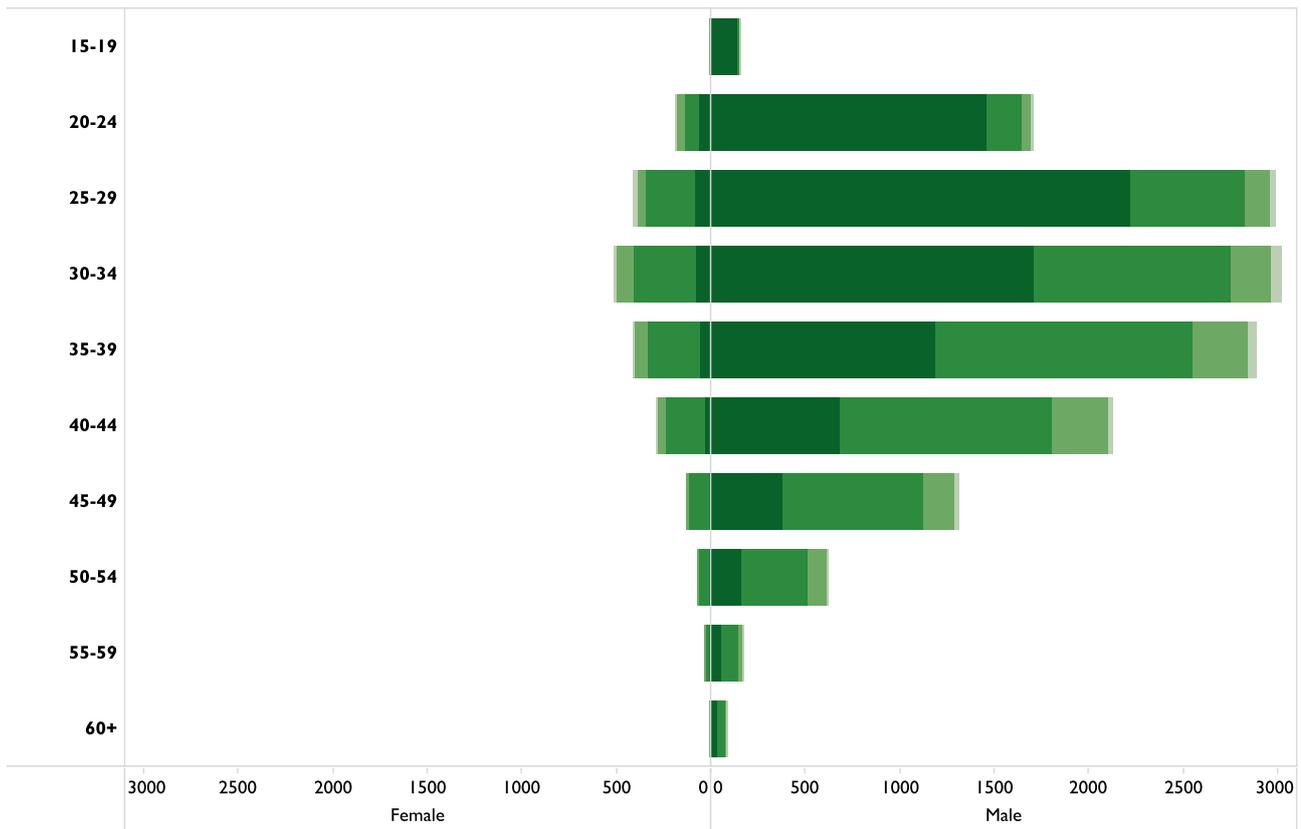
	Number (% of total)	Mean annual transactions	Mean annual syringes dispensed	Mean syringes per transaction
Primary IPED users	8,375 (48.8 %)	2.9	88.3	30.4
Primary opioid users	6,902 (40.2 %)	12.1	253	20.9
Primary stimulant users	1,611 (9.4 %)	10.6	296	27.9
Primary NPS users	273 (1.6 %)	11.6	316.4	27.3
Total	17,161	7.5	177.7	23.7

6. 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.

6.1. Age and gender in relation to primary substance use

Across all NSP sites, the most frequently recorded age band for regular service users was 30-34 years old, with around a fifth (20.6 per cent, 3,530 individuals) of all regular service users in this age band. Whilst this aspect of the age distribution was true for both men and women across all substances, there were notable differences in the age distribution between substances. For opioids and stimulants, the most frequently recorded age category was 35-39, with 23.7 per cent (1,638 individuals) and 22.7 per cent (366 individuals) respectively of primary users of those substances falling into that age band. In contrast, more than a quarter of IPED users (27.5 per cent, 2,304 individuals) were aged 25-29, the most frequently recorded age band for primary IPED users. Chart 1 shows regular service users in 2015-16 by age, gender and primary substance of use.



Primary substance type

- New Psychoactive Substances
- Stimulants
- Opioids
- Image and Performance Enhancing Drugs

Chart 1: Regular service users of NSPs in Wales, 2015-16, by age, gender and primary substance of use

6.2.Ethnicity

Across all NSP services in Wales, ethnicity was recorded for 57.3 per cent of all regular services users in 2015-16, meaning 9,828 records were available for analysis. All percentages in this subsection refer to individuals for whom ethnicity data was recorded.

A total of 9,176 individuals (93.4 per cent) reported their ethnicity as ‘white Welsh’ or ‘white British’, with a further 2.7 per cent (263 individuals) recorded as ‘white other’ and 1.1 per cent (109 individuals) as ‘white Eastern European’. Excluding those reporting their ethnicity as ‘white Welsh’ or ‘white British’ left 652 records. These are shown by reported ethnicity and primary substance use in Chart 2.

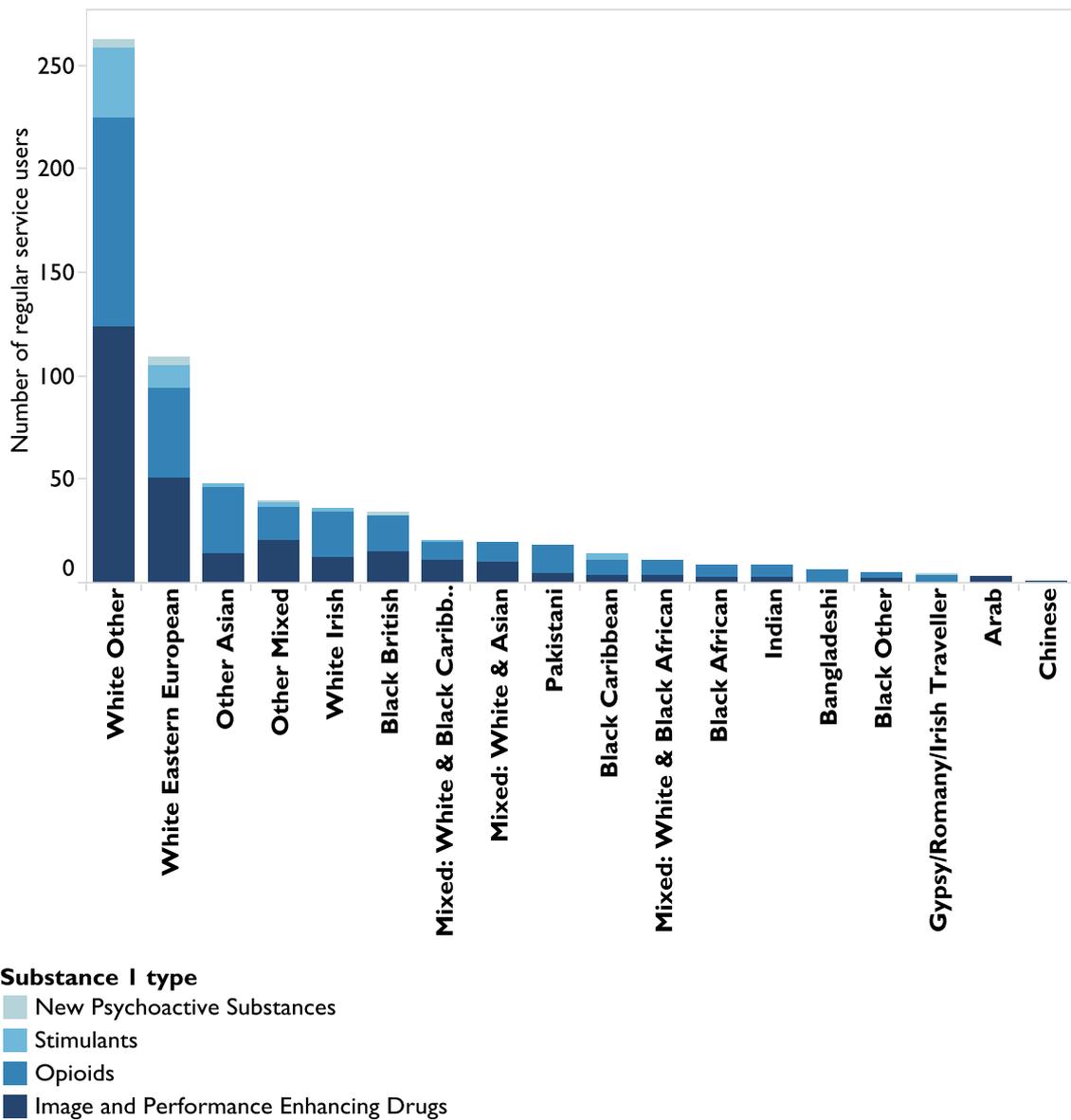


Chart 2: Self reported ethnicity of regular NSP service users across Wales, excluding White Welsh/British, by primary substance use, 2015-16

There was considerable variation in the distribution of regular service users by ethnicity in relation to area of service access, substance use, gender and age category ethnicity, as shown in Chart 4.

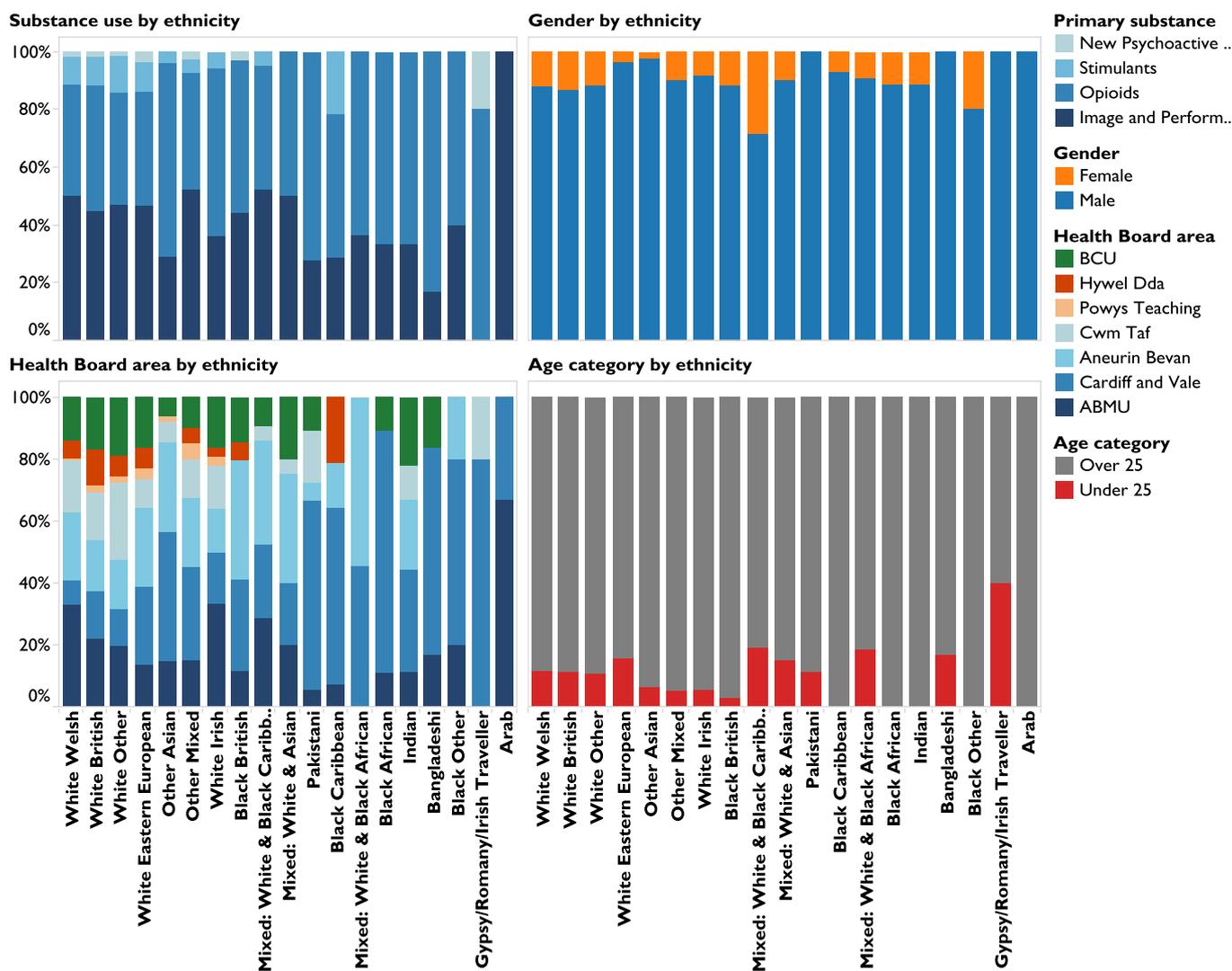


Chart 3: Self reported ethnicity of regular NSP service users across Wales, proportion by Health Board area of service, primary substance use, gender and age category, 2015-16 (ethnicities reported by only one regular service user excluded). Note that ethnicities are ordered left to right by most frequently reported

Cardiff and Vale had the highest proportion of regular service users in the majority of non-white Welsh/white British categories, with those of any self declared ‘black’ (including British, mixed, African and Caribbean), South Asian (particularly Pakistani or Bangladeshi) or Gypsy/Romany/Irish Traveller ethnicity in particular very likely to access services in Cardiff and Vale compared with services in other areas. Notable exceptions were those of mixed white and black African and Arab ethnicity, who were most likely to access services in Aneurin Bevan and ABMU respectively. However, the number of regular service users reporting these latter ethnicities was low.

There were a number of ethnicity categories within which the number of regular service users reporting primary use of opioids was notably higher than amongst those identifying as white Welsh/white British. Two thirds or more of those recorded as ‘Indian’, ‘Pakistani’,

'Bangladeshi' or 'other Asian' reported primary use of opioids, with 'white Irish' (58.3 per cent, 21 individuals) and 'Gypsy/Romany/Irish Traveller' (80 per cent, 4 individuals) also recording high proportions of primary opioid users compared with those of other ethnicities. Rates of primary stimulant use were similar to or lower amongst non-white Welsh/white British regular service users when compared with those of white Welsh/British ethnicity, except amongst those identifying as Black Caribbean, amongst whom 21.4 per cent reported primary use of stimulants (3 individuals). This rate was more than double that for those identifying as white Welsh/British.

Regular service users identifying as Pakistani or Bangladeshi were all male as were the small number identifying as 'Gypsy/Romany/Irish Traveller' and 'Arab'. Males were also over represented compared with white Welsh/British regular service users amongst those identifying as white Eastern European (96.3 per cent male, 105 individuals) and those recorded as 'other Asian' (97.9 per cent, 47 individuals). Two categories of ethnicity, 'mixed white and Black Caribbean' and 'Black other', were notable for higher rates of women compared with the white Welsh/British category, although numbers were low (6 individuals and 1 individual respectively).

There were a number of ethnic categories within which a relatively high proportion of individuals were under 25, notably white Eastern European (15.6 per cent, 17 individuals), 'mixed white and Black Caribbean' (19 per cent, 4 individuals), 'mixed white and Black African' (18.2 per cent, 2 individuals), Bangladeshi (16.7 per cent, 1 individual) and 'Gypsy/Romany/Irish Traveller' (40 per cent, 2 individuals). There were a number of categories of ethnicity within which all regular service users were over 25, including Black Caribbean, Black African and Indian. In addition, within the categories of 'other mixed', 'white Irish' and 'Black British', the proportion of those under 25 was less than half that for those identifying as white Welsh/British.

6.3.Housing

Housing status was recorded for 8,664 regular service users, a rate of 50.5 per cent. All figures reported in this section refer to this subsection of regular service users for whom housing status was recorded. The number of regular service users recorded within each category of housing is shown in Chart 4.

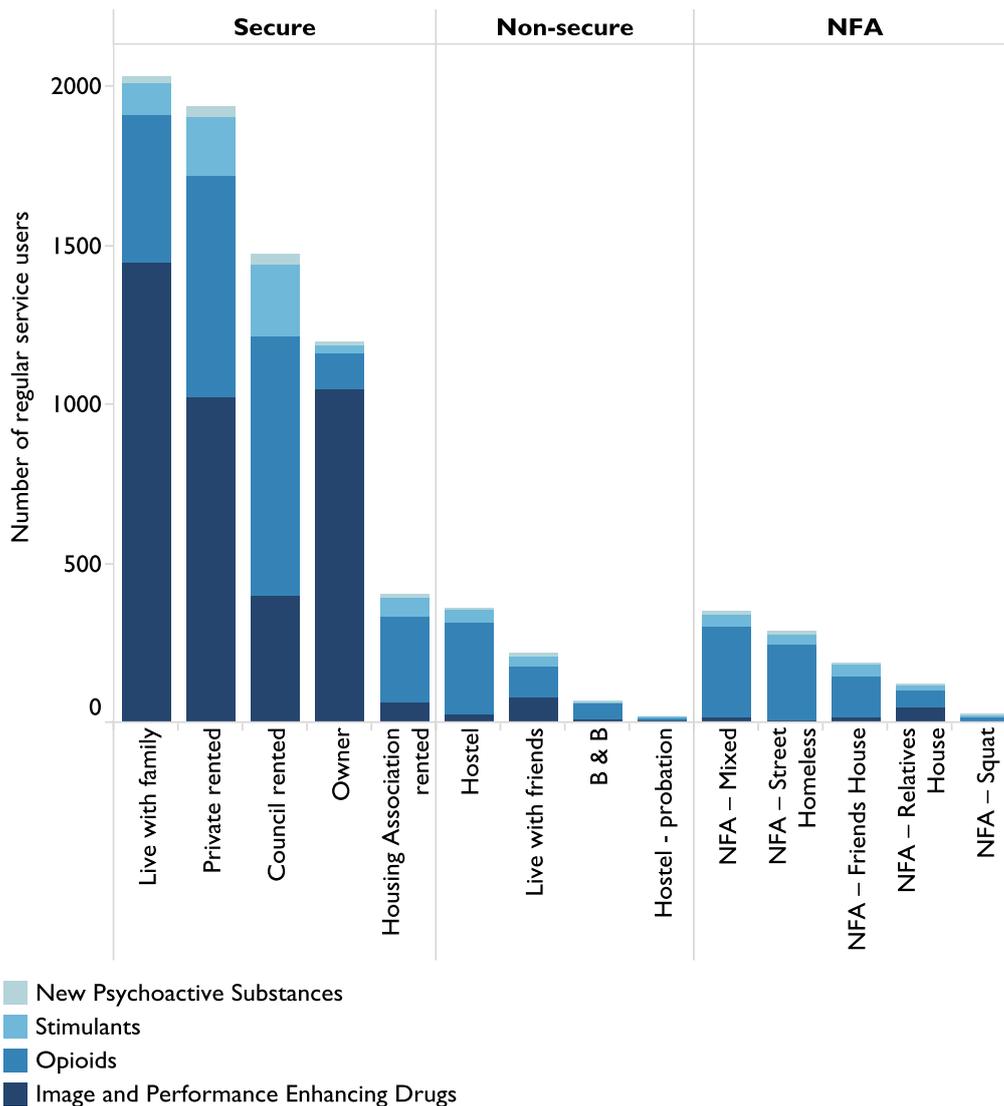


Chart 4: Self reported housing status of regular NSP service users across Wales, by primary substance use, 2015-16

As shown in Chart 4, of those regular service users reporting housing status, the greatest number; 2,032 (23.5 per cent) were recorded as ‘living with family’. Indeed, considering the overarching categories of housing, 81.4 per cent of regular service users reporting housing status were recorded as being in ‘secure’ accommodation (7,039 individuals). IPED users were over-represented in this housing category, making up 56.6 per cent (3,983 individuals) of all those securely housed. 33.8 per cent (2,363 individuals) in this housing category were primary opioid users.

Chart 5 shows proportions of regular service users across a number of demographic variables by reported housing status.

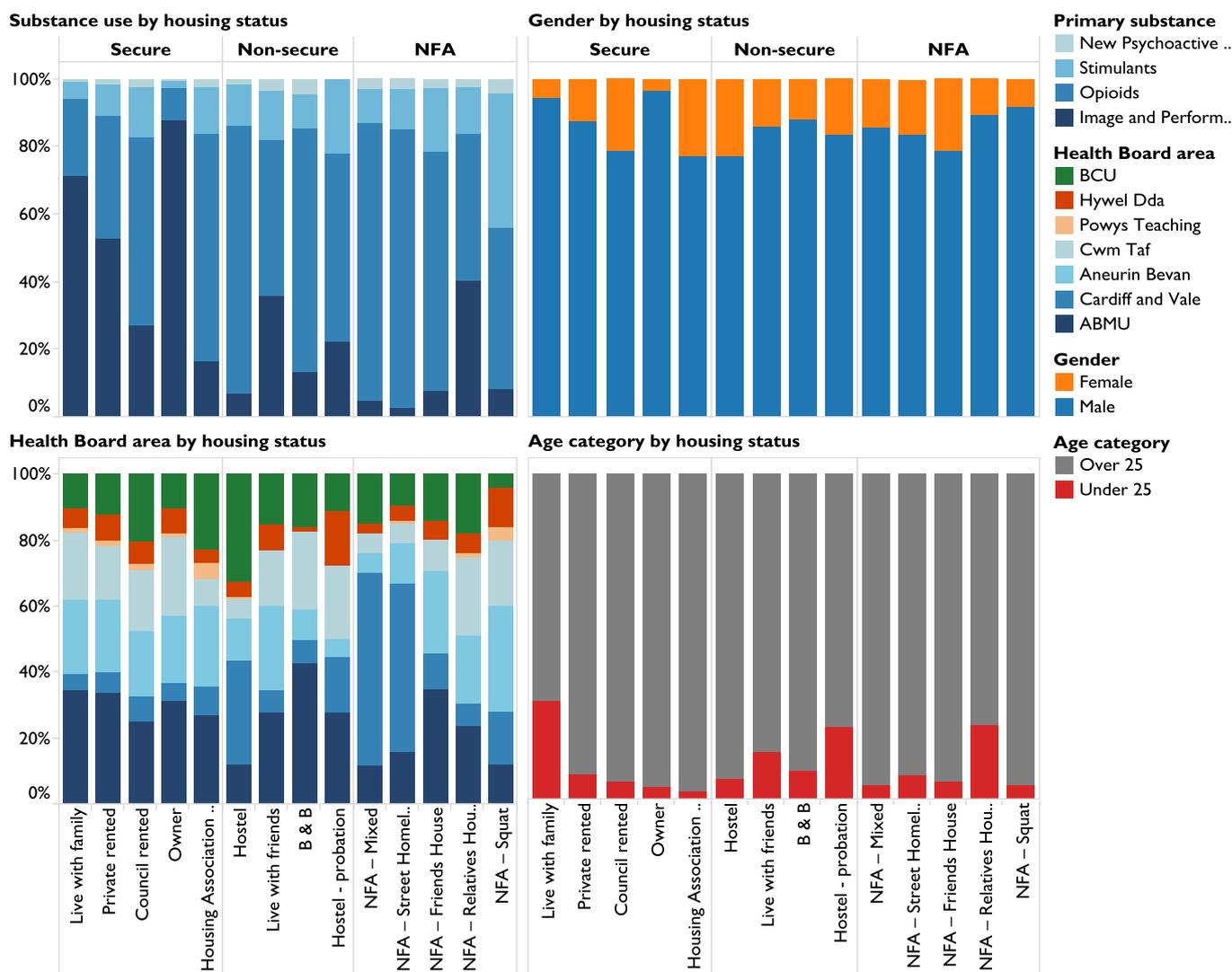


Chart 5: Self reported housing status of regular NSP service users across Wales, proportion by Health Board area of service, primary substance use, gender and age category, 2015-16. Note that statuses are ordered left to right within categories by most frequently reported

As shown in Chart 5, there is considerable variation in the proportions of primary substance use by housing status. A substantial majority of those reporting home ownership were IPED users (87.8 per cent, 1,048 individuals), with IPED users also making up more than half the regular service users recorded either as 'living with family' (71.2 per cent, 1,447 individuals) or in private rented accommodation (52.8 per cent, 1,024 individuals). However, primary opioid users made up the majority of those renting in the public sector, accounting for 55.5 per cent (817 individuals) of those in council rented accommodation and 67.3 per cent (270 individuals) of those renting from a housing association.

The predominance of opioid users was more marked amongst those reporting non secure accommodation with a majority of those in general hostels (79 per cent, 286 individuals), probation hostels (55.6 per cent, 10 individuals) and bed and breakfast accommodation (72.1 per cent, 49 individuals) recorded as primary opioid users. Both primary stimulant and primary

opioid use increase substantially as a proportion of all regular service users when considering the 'No fixed abode' (NFA) categories that represent those with the greatest housing needs and vulnerabilities. Primary opioid users make up 74.4 per cent (716 individuals) of all those reporting their housing status within any NFA category, with stimulant users accounting for a further 13.5 per cent (130 individuals) of regular service users reporting as NFA. The exception to this pattern amongst those recorded as NFA is those who live at a relative's house, amongst whom 40.2 per cent (49 individuals) reported primary IPED use. This may reflect commonalities with the 'living with family' category; given comparable proportions in both categories recorded as being under 25 (see below).

The most notable variations in the housing status of NSP users between Health Board areas is the substantially larger proportions of hostel residents and street homeless or 'other' NFA in certain areas, particularly Cardiff and Vale. Almost one third of all regular service users who living in a hostel (31.8 per cent, 115 individuals) were resident in Cardiff and Vale, along with 58.6 per cent (204 individuals) of those recorded as 'other/mixed' NFA and 51.1 per cent (145 individuals) of those reporting as street homeless. These variations may reflect different provision of housing and homeless services in different areas but also data quality issues.

The largest proportions of regular service users in each housing category who were female compared with the proportion across all service users were found amongst those in public sector rented accommodation, with women making up 21.2 per cent (312 individuals) of those in council rented accommodation and 22.7 per cent (91 individuals) of those renting from housing associations. Of those in hostels, 22.9 per cent (83 individuals) were women and amongst those reporting being 'NFA whilst living at a friend's house' 21.3 per cent (39 individuals) were women. Indeed, the proportions of women in both non-secure accommodation (18.7 per cent, 124 individuals) and reporting as being NFA (15.6 per cent, 150 individuals) were higher than across the entire population of regular service users. Women were notably under-represented amongst regular service users who were home owners (3.5 per cent, 42 individuals) and who lived with family (5.5 per cent, 111 individuals).

As briefly noted above, those living with family and those reporting being NFA whilst living at a relative's house were more likely to be recorded as being under 25 than those in other housing categories, with 30.2 per cent (614 individuals) and 23 per cent (28 individuals) respectively. In general, those reporting secure accommodation other than living with family were less likely to be under 25, with 5.2 per cent (77 individuals) of council tenants, 3.9 per cent (47 individuals) of home owners and 2.2 per cent (77 individuals) of council tenants recorded as being under 25.

6.4. Employment

Employment was recorded for 9,259 regular service users, 54 per cent of all regular service users. All figures reported in this section refer to this subsection of regular service users for whom employment status was recorded. Unemployment was reported by a majority of these with 5,159 regular service users (55.7 per cent). The number of regular service users recorded within each category of employment is shown in Chart 6. It is assumed that figures for the number of NSP services users who are sex workers is under-reported.

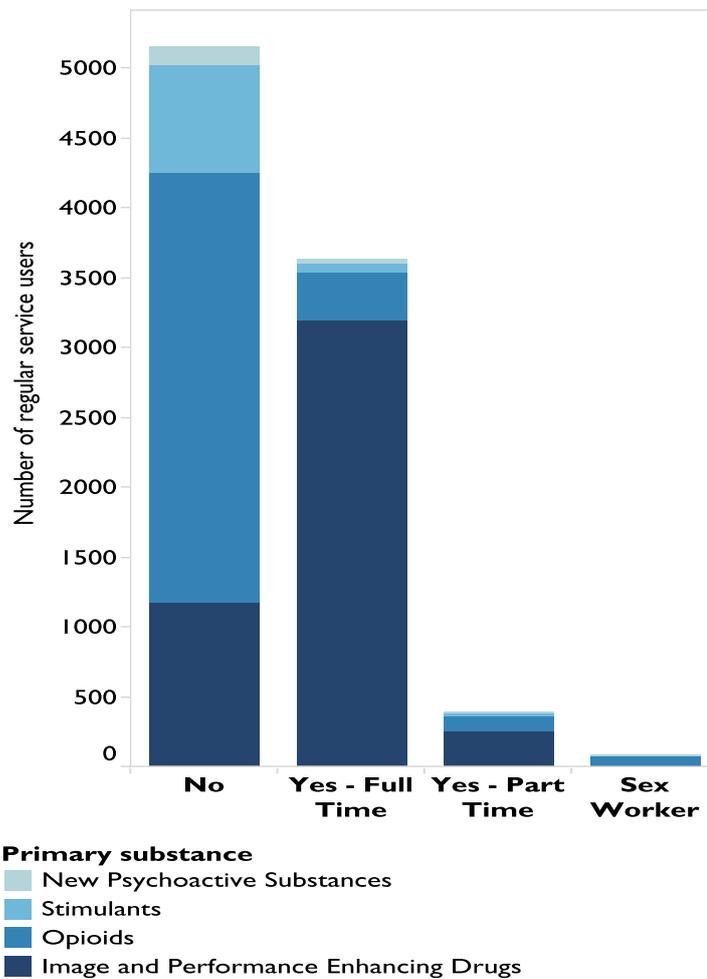


Chart 6: Self reported employment status of regular NSP service users across Wales, by primary substance use, 2015-16

Chart 7 shows the proportions of regular service users by Health Board area in which services were accessed, by gender, by substance used and by age category for all recorded employment statuses.

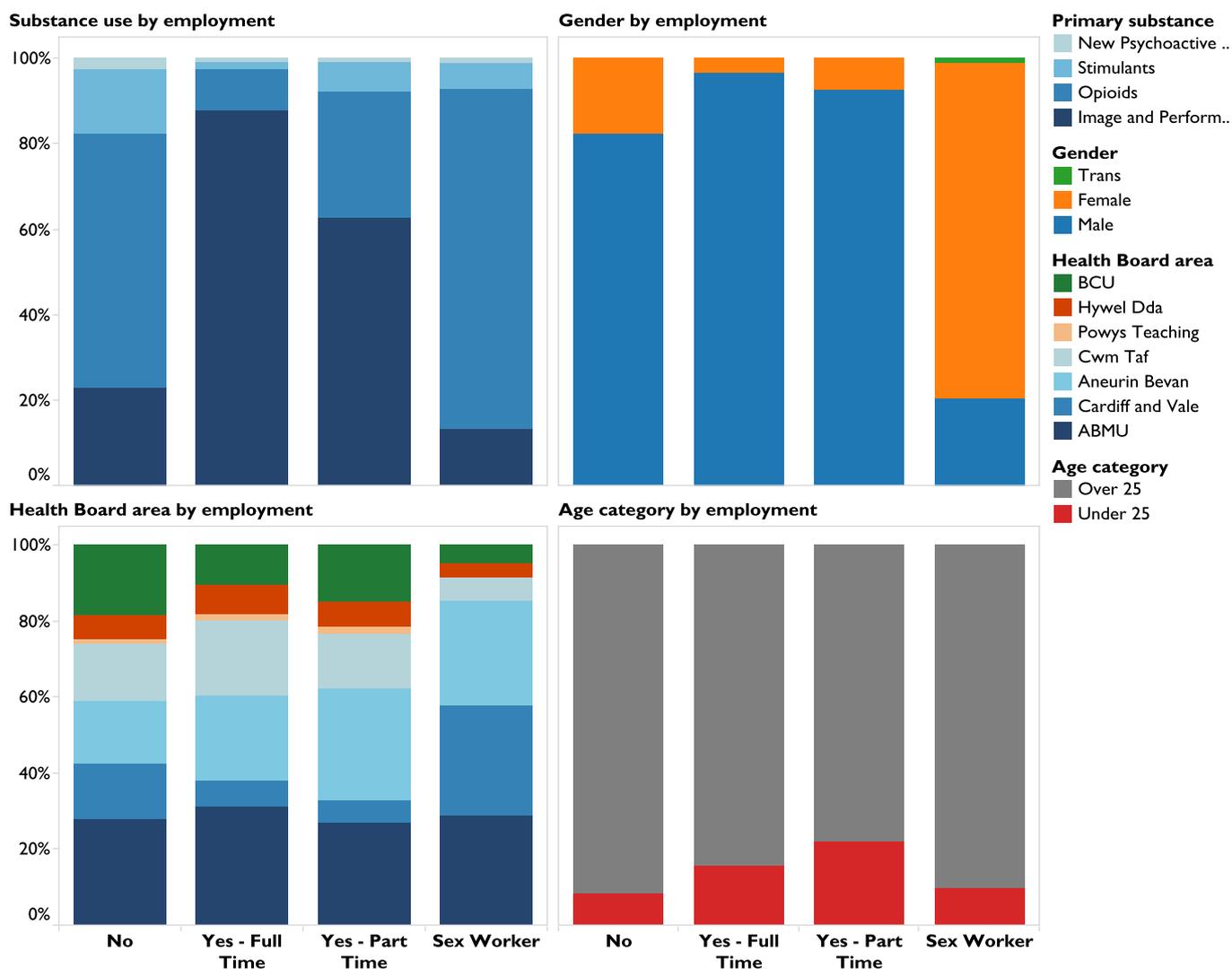


Chart 7: Self reported employment status of regular NSP service users across Wales, proportion by Health Board area of service, primary substance use, gender and age category, 2015-16. Note that statuses are ordered left to right by most frequently reported

As shown in Chart 7, primary IPED users made up the majority of those reporting full time employment (88 per cent, 3,194 individuals) and part time employment (62.8 per cent, 243 individuals). Primary opioid users made up the largest proportion of those reporting unemployment (59.7 per cent, 3,079 individuals) and sex working (79.5 per cent, 66 individuals). Women were over-represented compared with the entire population of regular service users amongst those reporting unemployment (17.7 per cent, 911 individuals) and also made up 78.3 per cent (65 individuals) of sex workers. Those reporting part time work were more likely to be under 25 than those in any other employment category (22.2 per cent, 86 individuals).

6.5. Secondary substance use

The HRD allows for the recording of further substances of use in addition to a primary substance. Any additional substance was recorded for only 4,749 regular service users, 27.7 per cent of all regular service users recorded, representing a clear data quality issue. Of all regular service users, 876 (5.1 per cent) reported using three or more substances in 2015-16. This subsection uses data from those 4,749 who used two or more substances and where comparisons are made with primary substance of use, uses the second most frequently used substance. Chart 8 shows the numbers reporting use of a secondary substance by that substance and their primary substance of use.

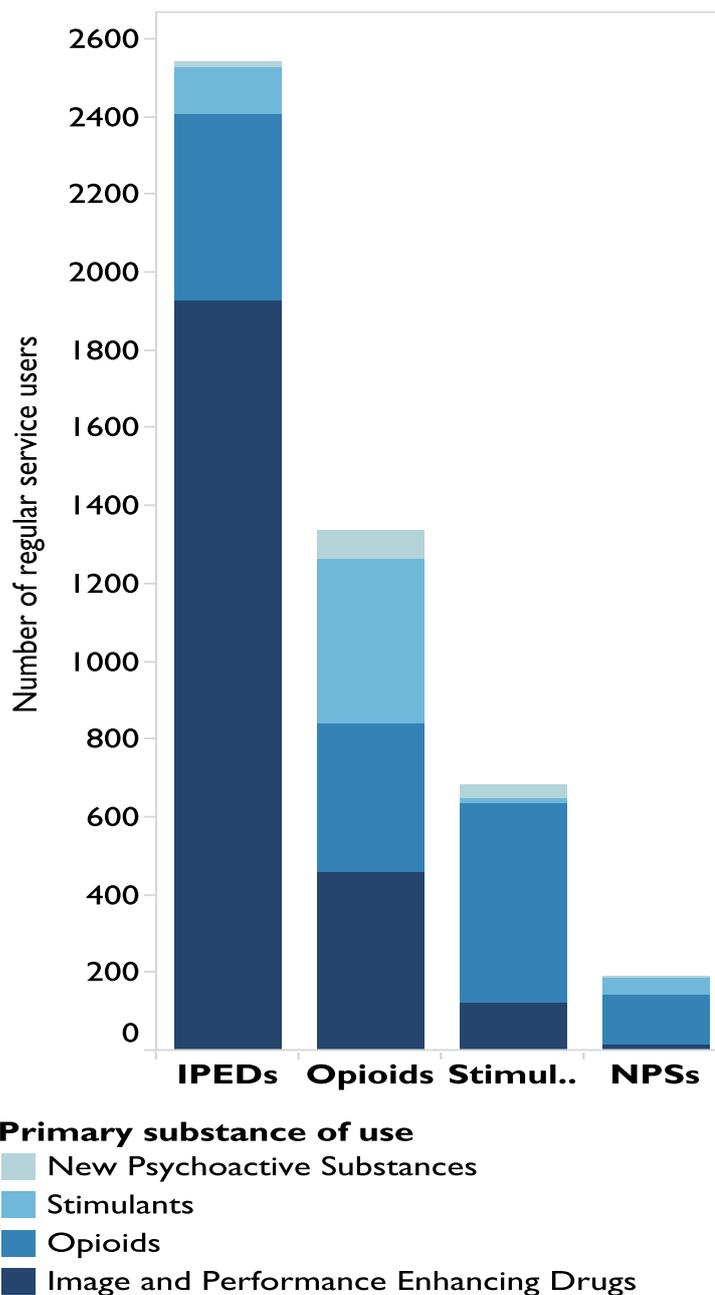


Chart 8: Self reported secondary substance use of regular NSP service users across Wales, by primary substance use, 2015-16

As shown in Chart 8, the most frequently reported secondary substances were IPEDs, with 2,541 regular service users (53.3 per cent of all reporting a secondary substance) declaring a second substance which was an IPED (e.g. anabolic steroids and human growth hormone). Chart 9 shows the proportion of primary substance users within each category of secondary substance of use. In the majority of cases in which an IPED was used as a secondary substance (75.9 per cent, 1,928 individuals), this was an additional IPED. There were 1,335 individuals using an opioid as a secondary substance, 28.1 per cent of all regular service users reporting a secondary substance. There were an almost identical number of individuals using both IPEDs and opioids (936, 19.7 per cent of all regular users reporting secondary substance use) as reporting opioid and stimulant use (933, 19.6 per cent).

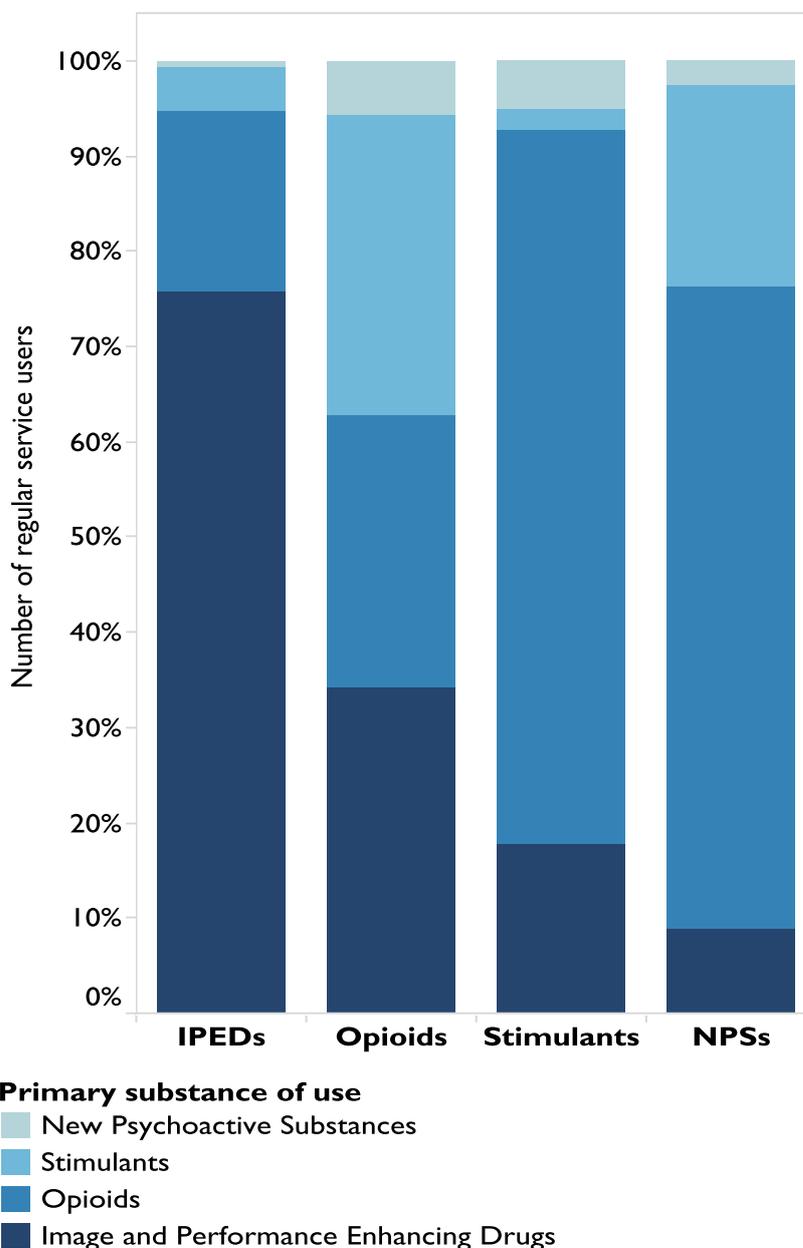


Chart 9: Self reported secondary substance use of regular NSP service users across Wales, by primary substance use, proportions, 2015-16

6.6. Geographic variation

There was considerable geographic variation in the numbers of regular service users and the rates at which they accessed services located in different locations around Wales. Note that data presented in this section are based on primary NSP sites accessed rather than on the residences of regular service users. Differences may therefore reflect the distribution of NSP services as well as the substances reported by NSP service users. Figure 3 maps the number of regular service users accessing services across Welsh local authorities for all users and by primary substance used.

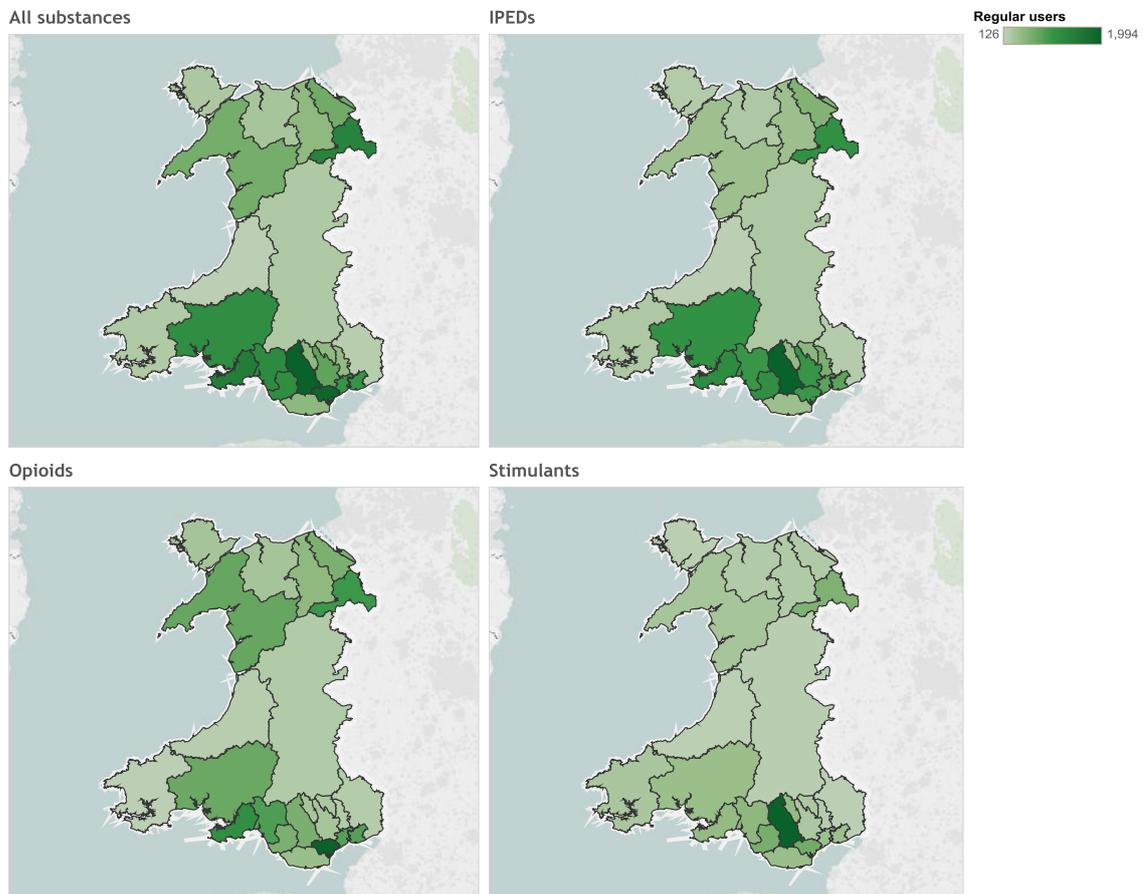


Figure 3: Number of regular service users accessing services by primary substance of use mapped to local authority of service location

NSP services in Rhondda Cynon Taf recorded the greatest number of regular service users overall (1,994) followed by Cardiff (1,917) and Swansea (1,483). Services in Wrexham, with 1,348, recorded the largest number of service users in local authority areas in North Wales. Services based in Rhondda Cynon Taf also recorded the highest number of primary IPED users (1,187) and the highest number of stimulant users (438). Cardiff services saw the most primary opioid users of any local authority areas with 1,164.

6.7. Rates of NSP service use (per 100,000 population) and primary substance use

Whilst numbers of those accessing services in different areas allow comparisons of the volume of service use, an alternative way to describe differences between areas is to use age standardised rates. Age standardised rates adjust for the size and age structure of the population so that areas with different population levels and demographics can be more easily compared. This section uses the European Age Standardised Rate (EASR) to compare the number of regular service users accessing services across Health Board areas in Wales. As above, it is important to note that analysis in this section allocates individuals to their most frequently accessed NSP service rather than to their home residence.

As shown in Chart 10, when adjusted for population size and age structure, Cwm Taf recorded the highest rate of regular service user access across NSPs, with 848.4 regular service users per 100,000 population, compared with a rate for all Wales of 592.7 per 100,000 population. Cwm Taf was also the Health Board area with the highest rate of primary IPED regular service users (475.8 per 100,000 population) and primary stimulant users (187 per 100,000 population). The all Wales rates for these substances were 278.3 and 57.2 per 100,000 population respectively. The high rate of primary stimulant use amongst regular service users accessing NSPs in Cwm Taf is particularly notable, with the EASR per 100,000 population more than three times the rate found in ABMU which, with 61.1 per 100,000 population, saw the second highest rate of primary stimulant use.

BCU recorded the highest rate of regular service users reporting opioid use with 315.1 per 100,000 population, closely followed by ABMU with 308.2 per 100,000 population and Cardiff and Vale with 285 per 100,000 population. The rate for Wales was 245.6 per 100,000 population. Powys Teaching recorded the lowest rate of NSP access of all Health Board areas for all service users and for primary IPED, opioid and stimulant users.

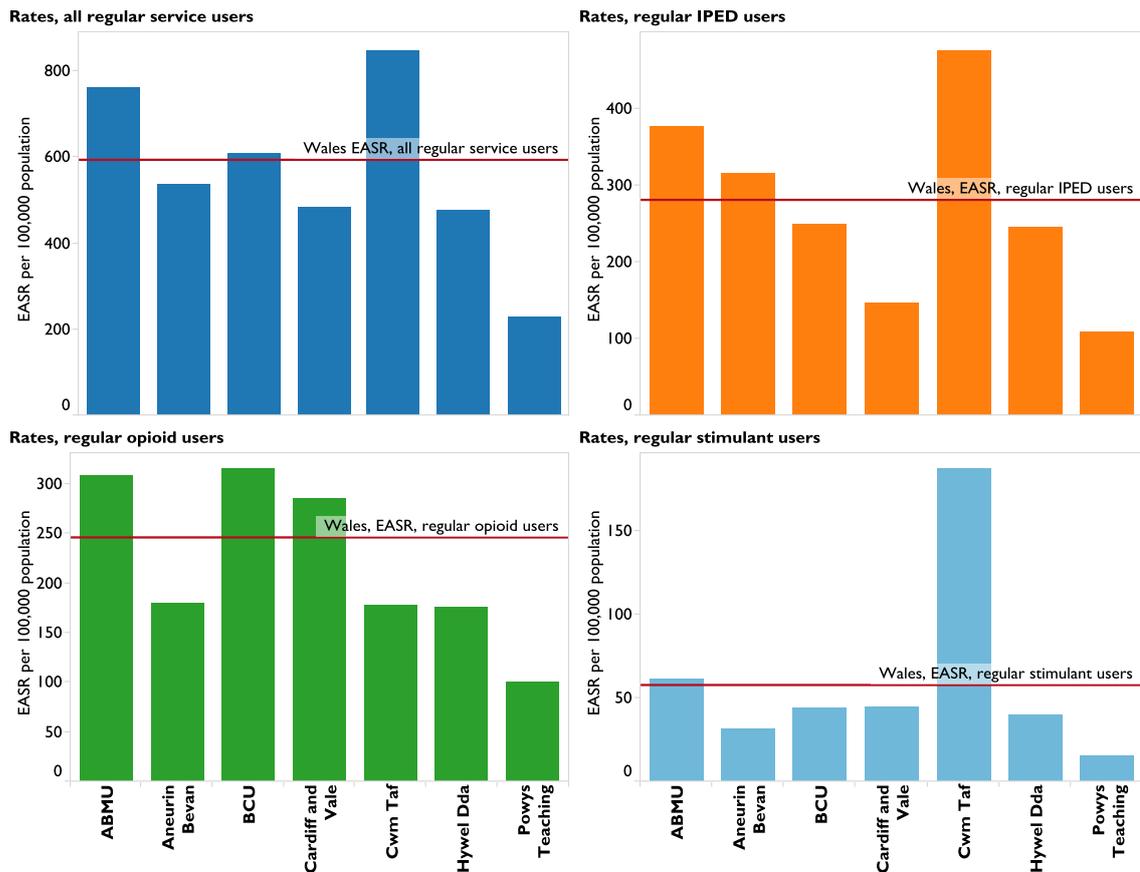


Chart 10: European Age Standardised Rates (EASR) per 100,000 population, regular service users by primary substance of user and Health Board area of primary NSP service

When compared with 2014-15, there were changes in the EASR per 100,000 population of regular service users accessing by both Health Board area and primary substance of use. As seen in Chart 11, showing the percentage change across primary substances and Health Board areas, there was considerable variation between these two time periods. Whilst there was a very small reduction of 0.2 per cent in the rate at which regular service users accessed NSPs across Wales, changes in service access within individual Health Board areas rates varied from a 10.1 per cent increase in Hywel Dda to a 7.1 per cent fall in ABMU. This may well be due to NSP service development and/or changes in resources.

However, these changes did not form a consistent pattern by primary substance used. Overall, the rate of access by regular service users changed little for primary IPED users (a reduction of 0.6 per cent), but rose by 2 per cent for primary opioid users and fell by 6.3 per cent for primary stimulant users. The small change in the overall rate of access for primary IPED users across Wales conceals considerable variation between Health Boards, with falls of 7 per cent, 4.2 per cent and 4.1 per cent in ABMU, Powys Teaching and Cwm Taf respectively, but rises of 9.3 per cent in Hywel Dda and 7.4 per cent in Cardiff and Vale. The rate of access by primary opioid users rose in every Health Board except ABMU, with the increases of 34.5 per cent in Powys Teaching and 18.2 per cent in Hywel Dda particularly notable (although it should be noted that the overall number of primary opioid users accessing services in Powys

Teaching remains relatively small at 102). The rate of service users reporting primary stimulant use fell in across all Health Board areas except Cardiff and Vale, with Cwm Taf (down 10.5 per cent) and Hywel Dda (down 11.2 per cent) showing the largest decreases.

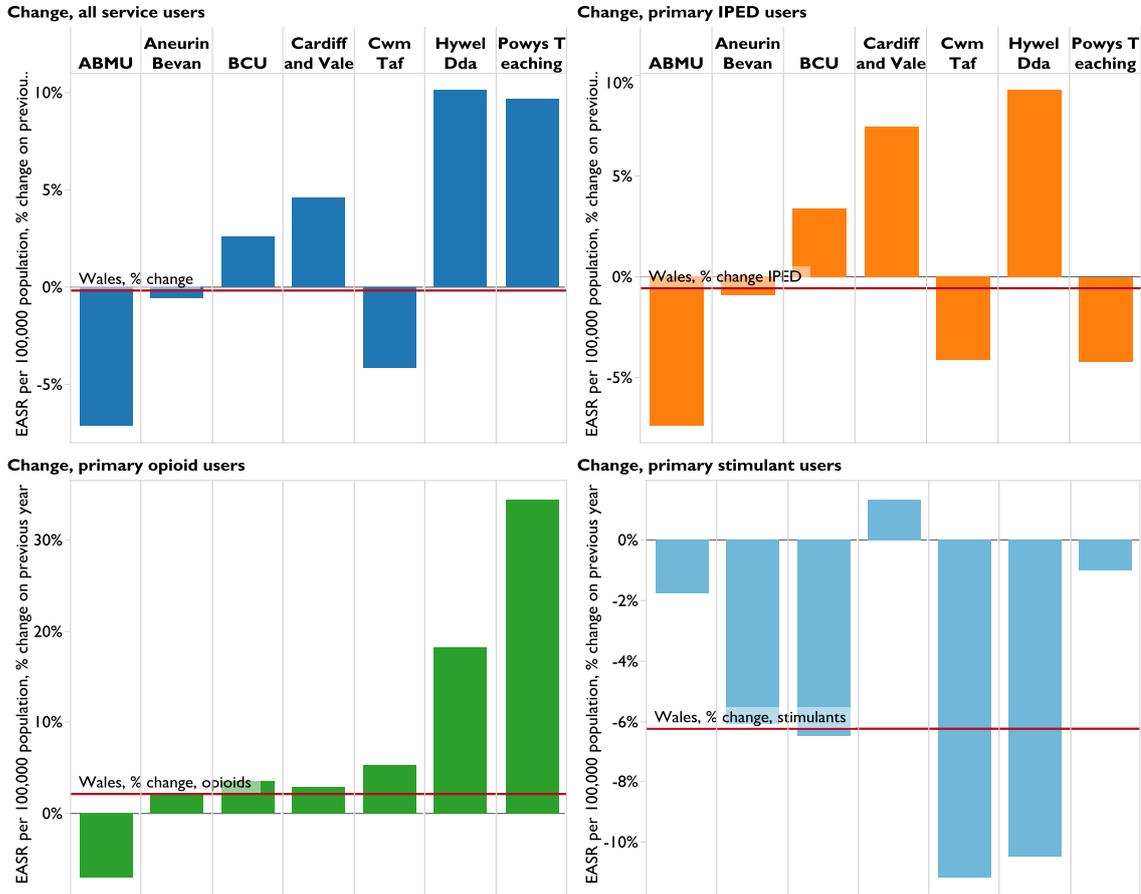


Chart 11: Changes in European Age Standardised Rates (EASR) per 100,000 population, regular service users by primary substance of use and Health Board area of primary NSP service

7. Injecting history and practices

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. 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).

7.1. Injection initiation and length of time injecting

There were 6,841 regular service users for whom the date of first injecting was recorded, representing 39.9 per cent of all regular service users.¹¹ The mean length of time injecting amongst this group was 8.5 years, with the mean age at first injection of 26.3 years. Whilst the mean age of first injection varied little by primary substance of use, from 26.8 years old for primary stimulant users to 27 years old for primary NPS users, there was considerably more variation by primary substance use for mean time injecting. Primary IPED users had been injecting for 5.9 years on average; for primary NPS users this rose to 8.2 years whilst for primary opioid and primary stimulant users the figure was 11.7 years and 12.5 years respectively.

Chart 12 shows the reported year of first injecting by primary substance type and by the type of site primarily accessed (for ease of interpretation, this Chart excludes all reported dates before 1990, 203 records). It is important to note that the apparent spike in injecting initiation in 2014 is likely to reflect the accession of large numbers of pharmacy only NSP users from April 2014. Chart 12 suggests that, given this interpretation of 2014 initiates, statutory/voluntary NSPs may be increasingly working with service users who have a longer history of injecting, whilst pharmacy NSPs may be seeing a greater proportion of relatively recent initiates.

¹¹ As such, and as with other incomplete datasets, this data may not be representative.

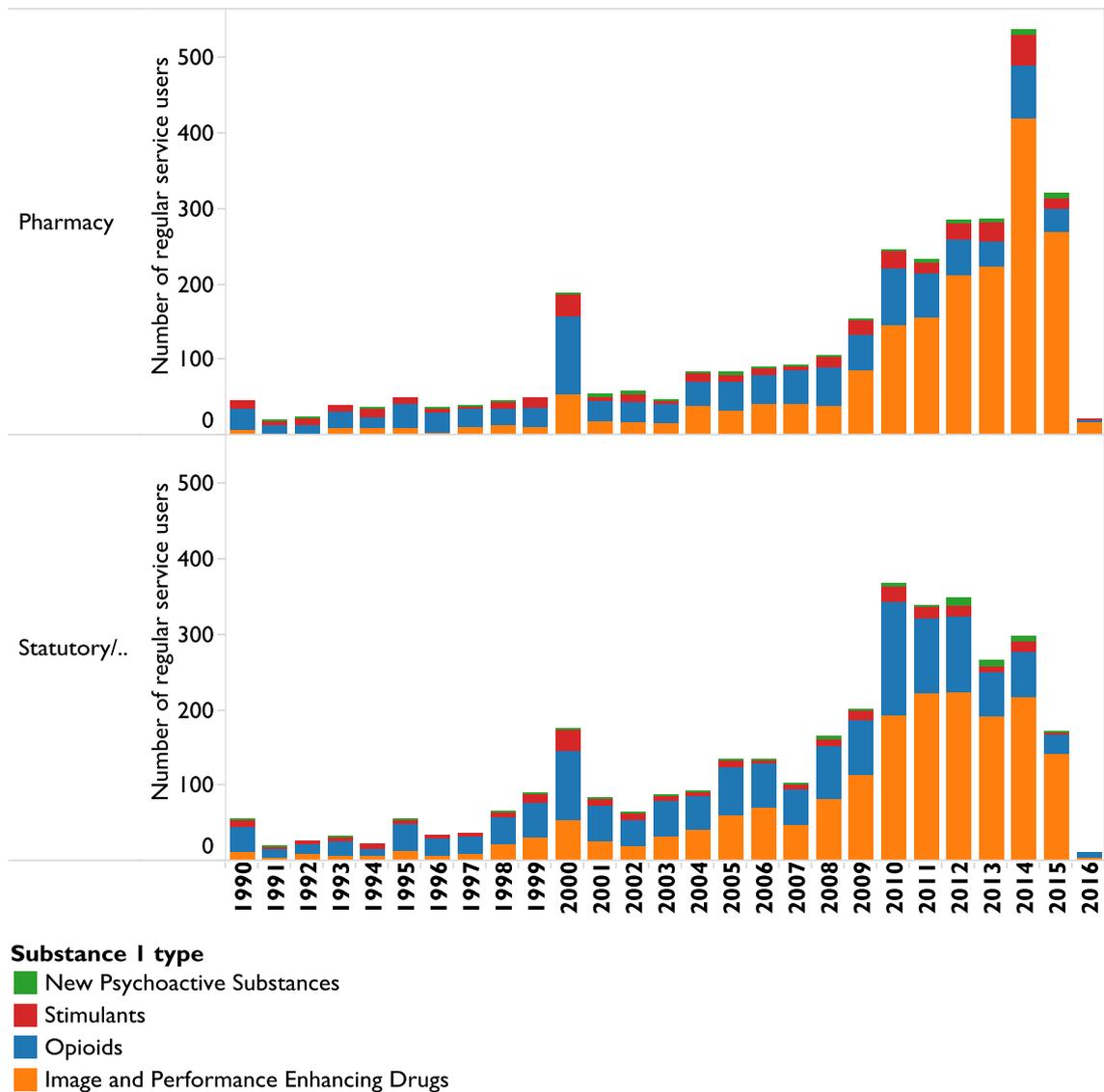


Chart 12: Reported year of injecting initiation by primary substance of use, regular service users, years from 1990 onwards (203 records excluded, 3 per cent of all reporting date of first injection)

The most frequently reported category of length of time injecting was 10 years or more, with 2,208 regular service users (32.3 per cent). The 1,731 ‘recent initiates’ (i.e. those who have been injecting for fewer than three years) made up 25.3 per cent of regular service users reporting their injecting history. There was a substantial fall in the proportion of regular service users who reported their injecting history who were considered ‘recent initiates’ compared with 2014-15, when 32 per cent of regular service users were in this category (however, see above for issues with comparing ‘regular service users’ between years). By contrast, the proportion of those injecting for ten or more years rose only by 2.3 percentage points year on year.

Overall, women were more likely to be longer term injectors than men, with 38.2 per cent (293 individuals) reporting an injecting career of ten years or longer compared with 31.5 per

cent 1,907 individuals) of men. The relative proportions of recent initiates was 19.6 per cent for women (151 individuals) and 26 per cent (1,580 individuals) for men. However, these gender differences are likely to be related to differences in the primary substances used, with IPED users making up 77.5 per cent (1,341 individuals) of all recent initiates, but only 29.3 per cent (644 individuals) of those injecting for ten years or more. Opioid users made up 15.3 per cent (264 individuals) of recent initiates, but more than half (54 per cent, 1,188 individuals) of those with a ten or more year long injecting career. Chart 13 shows the length of time regular service users reported injecting by category and primary substance of use. In relation to those indicating long term injecting use of New Psychoactive Substances (NPS), this may relate to long term injecting career and then more recent transition from other primary psychoactive drug injecting (i.e. heroin/opioids or stimulant) to primary NPS injecting.

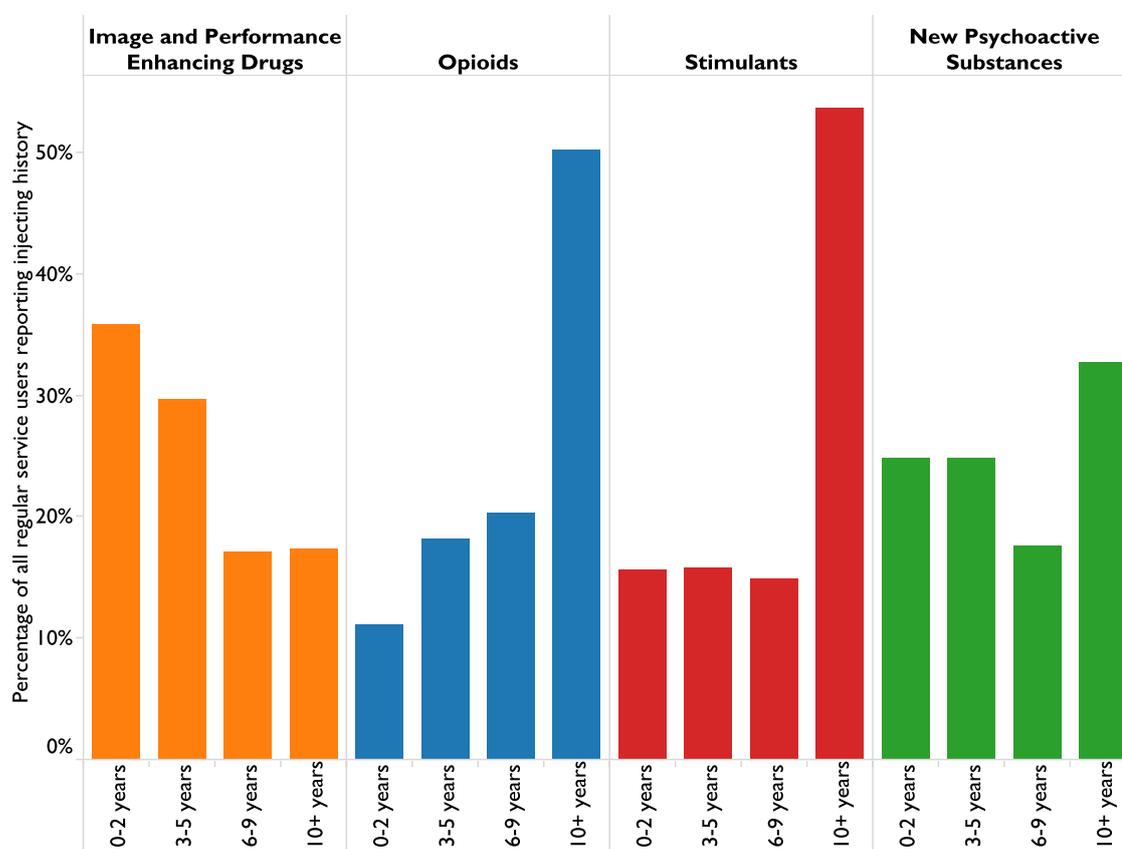


Chart 13: Proportion of regular service users reporting injecting history by length of time injecting category and primary substance of use

In addition to variation by primary substance of use, there is notable variation by Health Board area in the profile of injecting history, as shown in Chart 14. Hywel Dda had the greatest proportion of recent initiates, with 41 per cent (220 individuals) of all regular service users accessing NSP services in that Health Board area reporting less than three years of injecting. This was more than double the rate for recent initiates in AMBU, where 18 per cent (364 individuals) of regular service users reporting were in this category. BCU recorded the highest proportion of regular service users with a ten year or longer injecting history (45 per cent,

298 individuals); the lowest proportion was found in Aneurin Bevan (24 per cent, 398 individuals) with Hywel Dda (25 per cent, 133 individuals) recording similar figures.

Whilst some of this geographic variation can be attributed to different profiles of primary substance use in different areas, this does not fully explain the differences in profiles of injecting history between areas. The proportion of all recent initiates who were primary IPED users in 2015-16 varied between 60 per cent in Cardiff and Vale (95 individuals) to 84 per cent (264 individuals) in Cwm Taf. The proportion of those with an injecting career of ten years or longer who were opioid users was 32 per cent (128 individuals) in Cwm Taf but 70 per cent (149 individuals) in Cardiff and Vale. There appear to be genuine differences in the distribution of regular service users in terms of their injecting careers across Welsh Health Board areas, however, data is incomplete representing a clear data quality issue which must be resolved for further analysis to be meaningful.

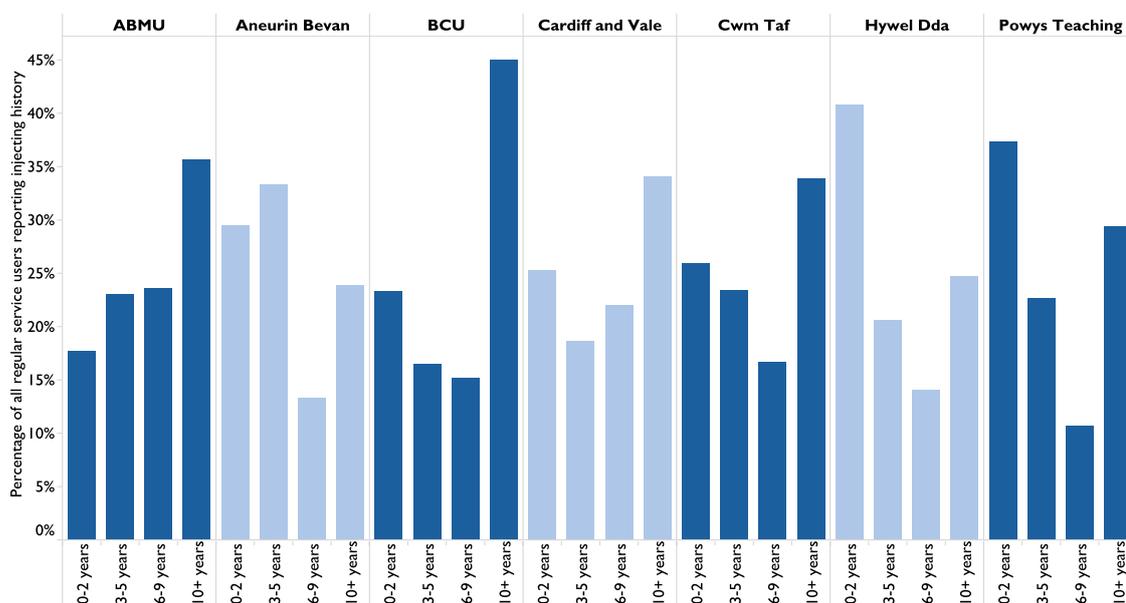


Chart 14: Proportion of regular service users reporting injecting history by length of time injecting category and Health Board area of service

7.2. Injecting routes

The injecting route of their primary reported substance was recorded for 14,156 regular service users, 82.5 per cent of all regular service users. The majority of primary IPED users (86.3 per cent) were recorded as injecting using intramuscular or subcutaneous routes. As there are only limited options for injecting IPEDs, the 7,279 primary IPED users who provided data on injecting routes are excluded from the following analysis in order to identify trends amongst psychoactive substance users, for whom a range of injecting options exist, each with different risk profiles.

The majority of all regular psychoactive injecting service users (63.2 per cent, 4,346 individuals) were recorded as injecting intravenously (IV) into their arms and/or legs, just under 10 per cent (644 individuals) reported groin injecting and just under one per cent (51

individuals) reported neck injecting. The remainder were recorded as injecting intravenously, but with the location unspecified.

Whilst comparisons of regular service users between 2014-15 and 2015-16 must be interpreted with caution (see above), figures suggest there have been increases in both riskier intravenous injection and in non-IV and non-injecting routes. Across all substances, IV injecting into arms and/or legs fell by 7.3 per cent, whilst 9.3 per cent more regular service users of psychoactives (695 individuals) reported injecting their primary substance of choice into the groin and/or neck. Chart 15 shows the number of regular service users primarily using psychoactive substances by route of injection for the current and previous year.

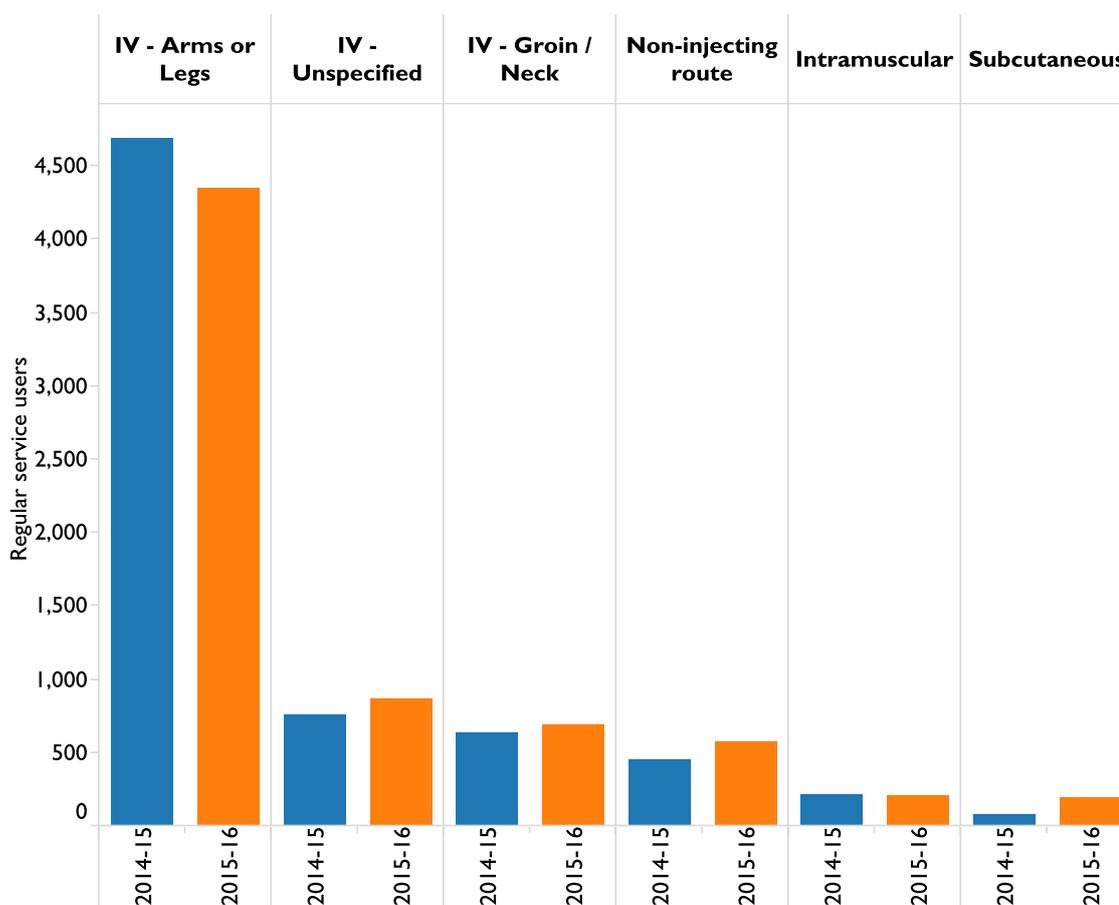


Chart 15: Number of regular service users primarily using psychoactive substances, injecting route, by year

Compared with other categories of intravenous injecting, primary opioid users make up a larger proportion of those injecting using riskier methods. Primary opioid users made up 73.9 per cent (3,211 individuals) of those injecting intravenously into their arms and/or legs, but 86.5 per cent (601 individuals) of those injecting into their groin or neck. Injectors using riskier sites were also more likely to be over 25. 4.7 per cent (206 individuals) of those injecting into arms/legs were under 25; for groin/neck injectors the proportion was 2.2 per cent (15 individuals) and marginally more likely to be female (women making up 20.1 per cent (874 individuals) of arm/leg injectors but 23.5 per cent (163 individuals) of groin/neck injectors).

There were some notable variations in injecting routes by Health Board area. Regular service users with primary psychoactive use in BCU made up 15 per cent of those injecting intravenously into arms and/or legs (655 individuals), but 24 per cent of those injecting into their groin and/or neck (164 individuals). This correlates with the higher proportion of an older cohort who have longer duration of injecting career reported in BCU. By contrast, regular service users based in Cardiff and Vale made up 22 per cent (961 individuals) of all primary psychoactive service users injecting into their arms and/or legs, but slightly less than one in ten of those injecting into their neck or groin (9.8 per cent, 68 individuals); for Cwm Taf the figures were 12 per cent (524 individuals) and 6 per cent (40 individuals) respectively. Chart 16 shows data on injecting routes by substance use, gender, age and Health Board area of service access.

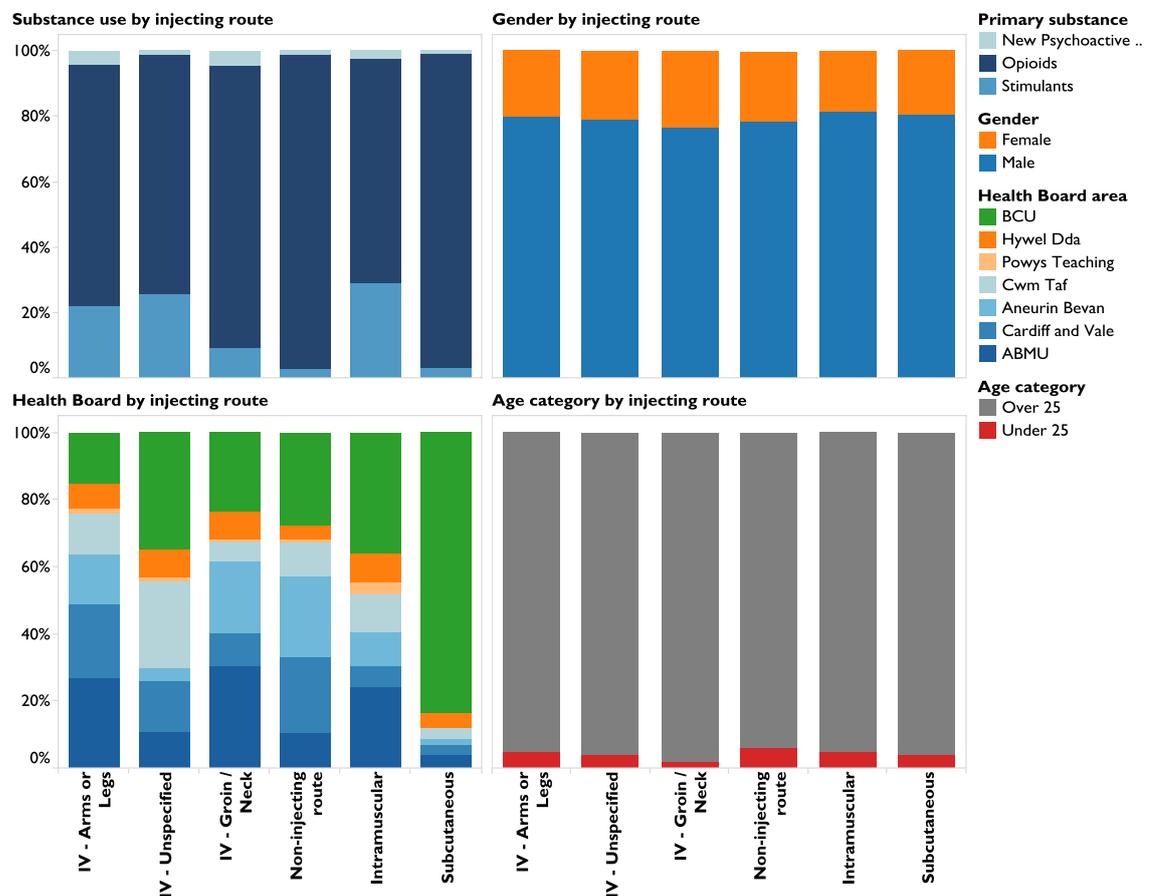


Chart 16: Self reported injection route of primary substance of use, regular NSP service users primarily using psychoactive substances, proportion by Health Board area of service, primary substance use, gender and age category, 2015-16. Note that routes are ordered left to right by most frequently reported

7.3 Injecting frequency

Those accessing NSPs are routinely asked to provide details of how frequently they inject, with response options for monthly (once or twice per month), weekly (once or twice; three to six times) and daily (one to four times) available. From these data, a figure for the estimated

number times per week each service user injects can be calculated, assuming a clean syringe is used for each injection. Data on injecting frequency was available for 11,813 regular service users, 68.8 per cent of all regular service users. A total of 6,203 regular service users, 52.5 per cent of all those reporting injecting frequency, reported injecting less than once per day on average. There were 2,308 regular service users (19.5 per cent) who reported injecting at least once per day but less than twice on average with more than a quarter (28 per cent, 3,302 individuals) recorded as injecting at least twice per day.

There was considerable variation in injecting frequency by primary substance of use. The proportion of regular service users reporting different injecting frequencies is shown in Chart 17. Those primarily using IPEDs generally inject fewer times per week, with 75.1 per cent (4,670 individuals) injecting less than once per day. This compares with 25.5 per cent (1,095 individuals) of primary opioid users reporting this injecting frequency. Almost three quarters of primary opioid users (74.5 per cent, 3,194 individuals) reporting injecting at least once per day on average, with just over half (50.2 per cent, 2,153 individuals) reporting injecting twice per day or more. These figures are higher than for primary stimulant users, 66.7 per cent (738 individuals) of whom inject at least once per day, with 42.2 per cent (467 individuals) injecting twice per day or more. However, whilst there are fewer primary NPS users reporting injecting once per day or more (65.3 per cent, 132 individuals) there appears to be a cohort of more frequent NPS injectors, with more than one third (37.6 per cent, 76 individuals) reporting injecting four or more times per day.

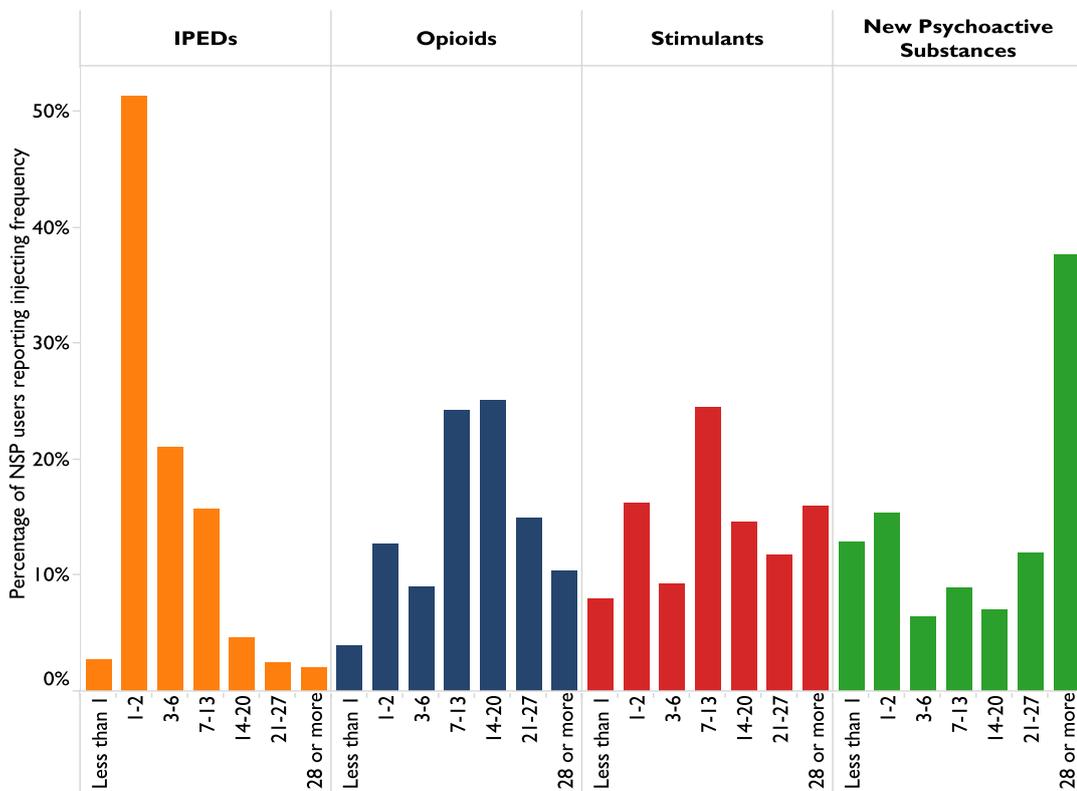


Chart 17: Estimated average number of injections per week by primary substance type

7.3 Direct and indirect sharing and reuse of injecting equipment

Sharing injecting equipment, both directly (injecting with needles and/or syringes that have been used for injection by or for another person) and indirectly (sharing other injecting paraphernalia including water, cookers etc) represent a clear risk for transmission of blood borne viruses and bacterial infections. Reusing one’s own injecting equipment can also result in health problems including bacterial infections and vein damage.

To ensure that data reflects current risk practices, only those who accessed services for the first time in 2015-16 and on two or more occasions in the current year (“new regular service users”) are considered in this section.

Data quality in relation to sharing and reuse of equipment is generally poor. Of the 3,645 new regular service users who accessed NSPs in 2015-16, direct sharing status was only recorded for 986 individuals (27 per cent) indirect sharing status was recorded for 914 individuals and (25.1 per cent) syringe reuse behaviour for 965 individuals (26.5 per cent). Figures and proportions for direct and indirect sharing, and equipment reuse for new regular service users are shown in Table 5.

Table 5: Self reported direct sharing of injecting equipment

	Never	Occasionally (once month)	Often (once a week or more)	Regularly (once a day or more)	In last year but not currently	Total
Direct sharing	921 (93.4%)	13 (1.3%)	2 (0.2%)	0 (0%)	50 (5.1%)	986
Indirect sharing	820 (89.7%)	53 (5.8%)	7 (0.8%)	2 (0.2%)	32 (3.5%)	914
Equipment reuse	832 (86.2%)	82 (8.5%)	13 (1.3%)	6 (0.6%)	32 (3.3%)	965

This data can be compared to that gathered by the Unlinked Anonymous Monitoring survey, an annual cross-sectional survey describing self reported risk factors for blood borne virus infection amongst injecting substance users accessing NSP services.¹² For 2015, the most recent year for which data is available, direct sharing was reported by 13 per cent of respondents in Wales who injected psychoactive substance (23 of 183 respondents), with 42 per cent reporting either direct or indirect sharing (78 of 186 respondents). 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 and reuse behaviour than those users providing information to the UAM and that therefore numbers reported by the HRD on this metric are likely to be substantial

¹² Public Health England, Health Protection Scotland, Public Health Wales, and Public Health Agency Northern Ireland. Shooting Up: Infections among people who inject drugs in the UK, 2015. London: Public Health England, November 2016. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/567231/Shooting_Up_2016_Update.pdf

underestimates. In addition, when compared with coverage rates of around 44 per cent, the responses to direct and indirect sharing and reuse rates do not equate. This represents an important issue for risk factor analysis, and consequent service planning, for people who inject drugs and further training is required by all those working within NSP services to ensure accurate data collection.

8. Service coverage and provision

It is a principle of NSP services in Wales¹³, supported by UK-wide guidance¹⁴, to provide people who inject substances 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 IPED use typically involves two needles per injection.

To carry out the coverage calculation amongst regular service users, we divide the number of syringes dispensed in a year to those service users who provided data on frequency of injection by the estimated weekly injection requirements of those service users. As described above, injecting frequency data was available for 11,813 regular service users. These regular service users reported a requirement of 5,295,888 syringes in order to have a clean syringe for each injection in 2015-16 but actually received a total of 2,351,601 syringes over that period. This gives an overall coverage figure of 44.4 per cent for Wales in 2015-16.

Coverage figures can also be calculated by primary substance of use. These calculations are shown in

Table 5. Leaving aside the relatively small number of primary users of new psychoactive substances, the considerable variation between coverage rates for primary IPED users, at 36.4 per cent and primary opioid users at 47.2 per cent suggests that there are key differences between these two groups of NSP users, although it is also possible that those reporting injecting frequency are not fully representative of the wider cohorts of primary substance users from which they are drawn. It may be of benefit to explore the possibility that these differing patterns of coverage are a result of differing patterns of drug use and/or differing engagement with and experiences at NSPs.

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>

Table 5: Coverage rates for regular service users reporting injecting frequency

Primary substance	Total regular service users reporting injecting frequency	Total required syringes	Total syringes dispensed	Coverage
IPEDs	6,218	1,582,828	575,375	36.4 %
Opioids	4,289	2,802,254	1,322,775	47.2 %
Stimulants	1,106	723,710	379,057	39.8 %
New psychoactive substances	202	187,096	74,394	52.4 %
Total	11,813	5,295,888	2,351,601	44.4 %

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 2015, the HRD web-based system was used in 42 statutory/voluntary sites (including 6 mobile units) covering 32 towns/villages and 215 pharmacies covering 147 towns/villages.

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 6 presents figures for completion rates of key fields for all records and for regular service users recorded by services in each Health Board area.

Table 6: percentage of all NSP users accessing/reporting data for whom key statistics were recorded, all records and regular service users by Health Board

		ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys Teach.	WALES
Total number accessing	All records	5,271	4,192	5,878	3,571	3,635	2,036	343	24,926
	Regular service users (% all records)	3,871 (73.4 %)	2,953 (70.4 %)	3,732 (63.5 %)	2,401 (67.2 %)	2,460 (67.7 %)	1,510 (74.2 %)	234 (68.2 %)	17,161 (68.8 %)
Ethnicity recorded	All records	63.0%	59.8%	31.6%	38.6%	54.3%	44.4%	57.4%	48.7 %
	Regular service users	71.4%	66.4%	40.4%	47.1%	64.6%	48.9%	60.3%	57.3 %
Housing status recorded	All records	57.0%	53.0%	26.6%	32.9%	51.4%	35.1%	47.2%	42.9 %
	Regular service users	65.2%	59.3%	33.6%	39.9%	60.8%	37.4%	50.9%	50.5 %

First part of postcode recorded	All records	47.1%	50.4%	20.6%	31.8%	45.3%	30.6%	46.4%	37.6 %
	Regular service users	54.4%	56.5%	28.1%	37.1%	54.1%	32.6%	48.3%	44.6 %
Date of first injecting recorded	All records	45.1%	49.8%	13.4%	20.8%	40.4%	33.5%	30.9%	33.1 %
	Regular service users	54.1%	57.2%	18.4%	26.5%	49.5%	36.2%	32.9%	40.5%
Employment status recorded	All records	61.4%	55.4%	29.8%	36.2%	52.9%	38.2%	53.9%	46.1 %
	Regular service users	69.8%	61.7%	37.4%	43.6%	62.8%	41.1%	56.0%	54 %
Substance route recorded	All records	81.6%	79.0%	69.9%	76.2%	85.1%	77.2%	80.8%	77.8 %
	Regular service users	86.9%	85.3%	74.7%	82.2%	85.6%	80.1%	83.8%	82.5 %

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.