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Harm Reduction Database Report 01/10/2010 – 31/03/2012

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- **Welsh Government Blood Borne Viral Hepatitis and Substance Misuse Divisions**
- **Public Health Wales Blood Borne Viral Hepatitis subgroups**
- **Substance Misuse Area Planning Boards, CSPs, SMATs, Housing and Homelessness and Substance Misuse service providers**

Purpose and Summary of Document:

The report provides data on activity within all 46 statutory and voluntary sector needle and syringe programmes (NSPs) across Wales recorded on the Harm Reduction Database Wales over the period 01/09/2010 to 31/03/2012

Work Plan reference: Substance misuse and Blood borne viruses

HARM REDUCTION DATABASE WALES – NEEDLE AND SYRINGE PROGRAMMES

1ST SEPTEMBER 2010 TO 31ST MARCH 2012

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1 Executive Summary

The Harm Reduction Database (HRD) Wales was implemented in all statutory and voluntary needle and syringe (NSPs) programmes across Wales from 1st September 2010 in response to a lack of robust evidence on the number of individuals at high risk of infection with blood borne viruses (BBVs) as a consequence of injecting drug use. This report outlines key findings on demographics and nature of drug use and risk behaviour over the first 18 months of implementation. An annual report with recommendations will be published financial year from 01/04/2013.

Key findings:

- A total of 7343 unique individuals accesses statutory or voluntary NSP services across Wales on two or more occasions over this period
- Gender profile: 13.3% female and 86.7% male. Gender profile was influenced by over representation of males in steroid and image enhancing drug (SIEDs) user population
- The majority, 45.6%, were aged 25-34 years. Age range: 14 to 68 years. 18.4% were in the 'young people' category (under 25 years)
- Where recorded, 14.2% of NSP service users were in temporary accommodation (B&B, Hostels, NFA). Housing status varied by primary drug used.
- Of the total number of individuals registered, primary substance was recorded for 73% (n=5354). Where recorded, primary drug group profiles indicated:
 - Primary opioid – 32.7% (n=2399)
 - Primary stimulants – 5.9% (n=431)
 - Primary steroid / image enhancing drug – 34.3% (n=2524)
- Where recorded, 66% of service users indicated that they had received a complete course of hepatitis B vaccination -
- 37.5% self reported hepatitis C status as 'unknown'. Of the remaining with known status, 10.8% indicated chronic hepatitis C infection.
- Data quality remains a significant issue and varies by site. Further work has been undertaken to improve completeness of service user records for further reports
- From April 2013 all NSP services in Wales, including pharmacy based services, will be recording activity on the Harm Reduction Database

2 Background

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 (previously referred to as Needle Exchanges) across Wales. The HRD was developed in response to research indicating a lack of consistency with regard high quality needle syringe programme (NSP) provision, including accessibility of a full range of sterile injecting equipment.

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 web-based system went live across Wales on September 1st 2010, in 35 static sites and 5 mobile NSP's. There is planned roll out to all 204 existing Community Pharmacy NSP's in 2013/14.

During the first 18 months of data collection that is covered by this report the NSP's in Powys and Hwyl Dda health board area relied primarily on pharmacy NSP provision, as a result there is very low activity recorded for these areas on the HRD. Data is therefore presented on a Wales-wide basis. Regional (Health Board area / APB / CSP) reports are available from the regional HRD co-ordinators.

3 Structure of the Harm Reduction Database

The HRD is a web-based data collection system that records unique client details of activity relating and is divided into two main sections: client details and client transactions

3.1 Client Details

The client detail section is a profile of an individual's demographic and health status information (as indicated by the individual) for each person accessing NSP services, and includes:

- **Demographics** including – ethnicity, housing status, employment status
- **Substances used**, this section includes -
Substance - the name of each substance used
Priority – whether the named substances are the main, secondary or tertiary substance used

Route – whether each of the substances are taken orally, smoked, injected intramuscularly (IM), intravenously (IV) or subcutaneously (SC)

Frequency – how often the substance is taken i.e. daily, twice daily, weekly, monthly

- **Blood borne virus status** including - HIV and Hepatitis A, B or C; date of last test (within last six months, 1-2 years, 2-5 years); Record of Hepatitis A or B vaccination 1,2,3 or 4 received; If a vaccination referral has been offered by the NSP and whether it was accepted or declined

3.2 Client Transaction

The client transaction data is a record of activity for each individual; the data includes a record of:

- If the individual is collecting for themselves and/or others i.e. friend / partner / for the gym (secondary or peer distribution)
- All injecting equipment supplied (needles and syringes)
- All paraphernalia that was supplied (acidifier, spoons, filters, foil)
- Sharps bins provided (number and size) and returned
- Harm reduction information provided
- Any items that were requested but not available

There is also a free text box section which allows the NSP worker to keep a record of information / advice given for future reference or follow up with the individual.

3.3 Data definition

This report covers activity on the database for the period 01/10/2010 to 31/03/2012. **Only those individuals registered on the HRD who have accessed NSP services twice or more during this period, or those who were new registrants during the period 01/03/2012 – 31/03/2012 are included in the analysis to ensure that this report includes only those who are current PWID.** The report indicates, where reported, secondary distribution, but is not possible to quantify the number of PWID who do not access NSP services personally. This report does not include individuals who only access pharmacy based NSP services.

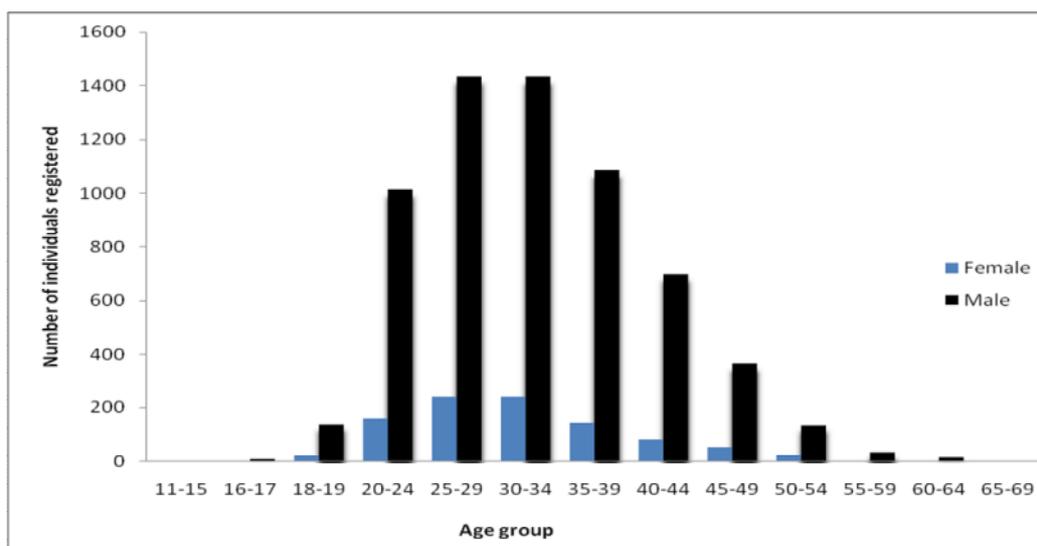
4 Findings from across Wales

4.1 Demographics

4.1.1 **Gender profile:** Within the criteria outlined above a total of 7343 unique individuals registered on the HRD as current injectors. Of these: 13.3% female (n=977) and 86.7% male (n=6366)

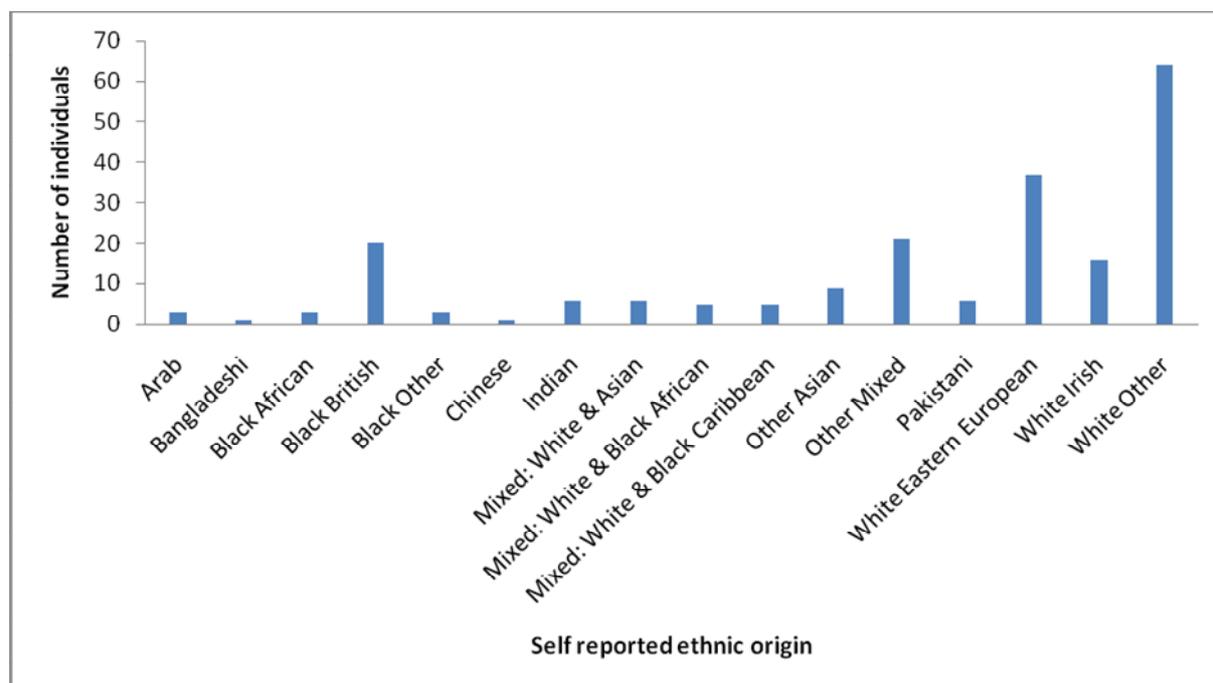
4.1.2 **Age profile:** The majority of registered individuals, both male and female were in the 25 to 29 and 30 to 34 age ranges and indicated in figure 1, representing 45.6% of the total. There were 174 individuals aged under 20: 13 individuals aged 11-17 years and 161 aged 18 to 19 years, with a further 1175 aged 20-24 years. Overall, 18.4% of the total reported here was aged under 25 years.

Figure 1 – Age and gender profile of current PWID across Wales



4.1.3 **Ethnicity:** Ethnicity was recorded for 58.3% of individuals (n=4280). The majority – 95.2% - were White Welsh or White British. The ethnic profile of the remaining 4.8% is shown in figure 2. This data indicates that in areas of higher prevalence of current injecting drug use amongst individuals from minority ethnic groups, particularly eastern European, harm reduction information should be provided in languages other than English.

Figure 2 – Self reported ethnic origin (excluding White Welsh and White British)



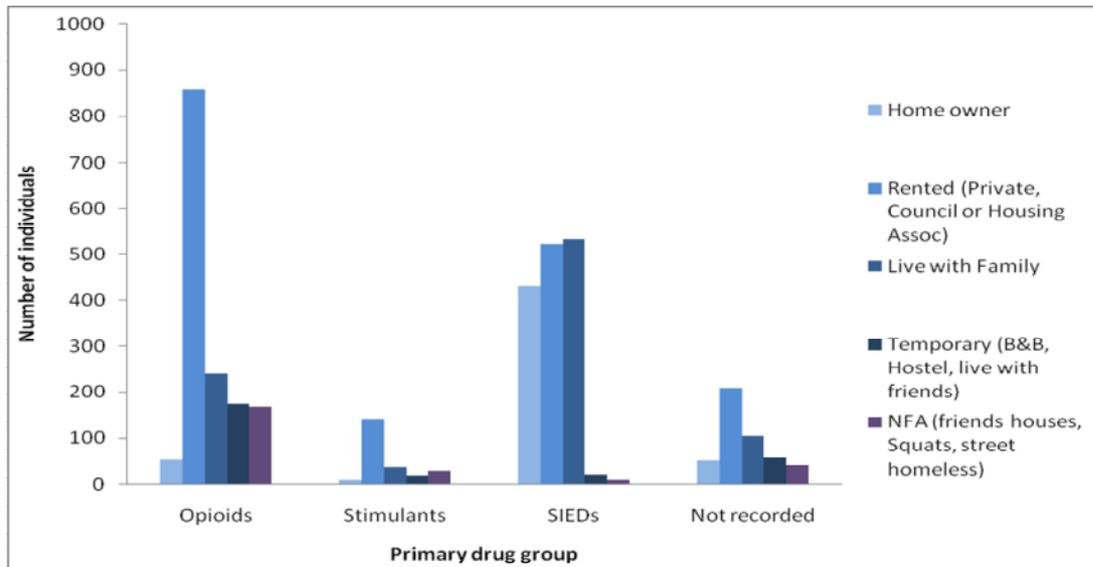
4.1.4 **Housing Status:** Housing status was recorded for 50% (n=3721) of registrations as shown in Table 1. Housing status has implications for an injecting drug user in relation to the ability to access clean and safe injecting environments, clean water and for safe storage of injecting equipment.

Table 1 – Self-reported housing status of NSP service users

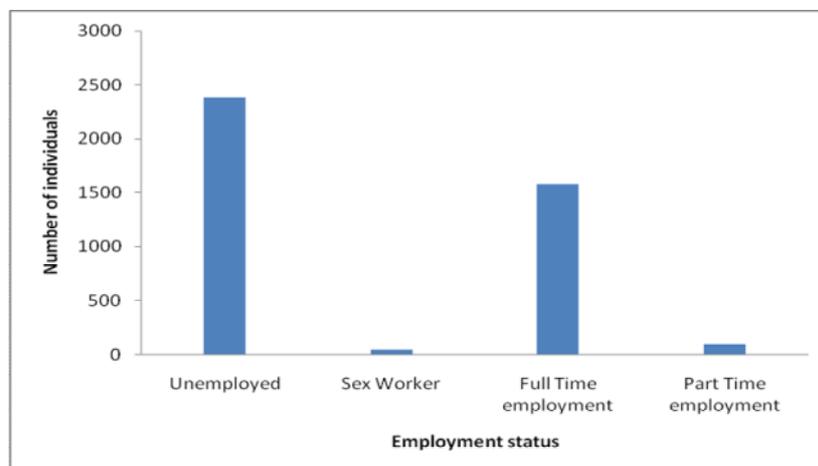
Housing Status	Total	% by housing type
Owner	546	85.8% in stable accommodation
Private rented	835	
Council rented	692	
Housing Association rented	205	
Live with family	914	
B & B	43	7.6% in temporary accommodation
Hostel	159	
Hostel - probation	10	
Live with friends	70	
NFA – Friends House	90	6.6% of no fixed address/street homeless
NFA – Mixed	40	
NFA – Relatives House	24	
NFA – Squat	2	
NFA – Street Homeless	91	
Grand Total	3721	

However, housing status varied by primary drug group with a higher number of primary opioid users reported being in temporary accommodation or homeless with the associated risks in poor hygiene and lack of safe storage for injecting equipment or a fixed address with which to register with health and other services.

Figure 3 – Housing status by primary drug group injected.
(SIEDs refers to steroids and image enhancing drugs)



4.1.5 **Employment:** Employment status was recorded for 56% of total (n=4097). Whilst the majority, 56%, (n=2382) indicated they were unemployed, a further (n=1671) were full time employed as shown in figure 4. Ensuring access to NSP services in relation to flexible opening times for working people is important for increasing coverage (clean injecting equipment for each injecting event). In addition, commercial sex working carries increase risk and the requirement for additional advice and onward referral, e.g. to sexual health services for regular checks. **Figure 4 – Employment status**



4.1.6 Substances Used

Primary substance

The substance used section allows a record of all substances used by an individual, as well as frequency and route of administration.

Of the total number of individuals registered, primary substance was recorded for 73% (n=5354). This means that for 27% of individuals accessing NSP services on two or more occasion, information relating to the substance being injected, as well as other substances used, had not been recorded. This represents a clear issue for quality service delivery as it is not possible to ensure that the correct injecting equipment is being issued along with the appropriate safer injecting advice if the type/s of drug/s and route of administration is not known. Table 2 indicates the profile of primary drug recorded by drug group:

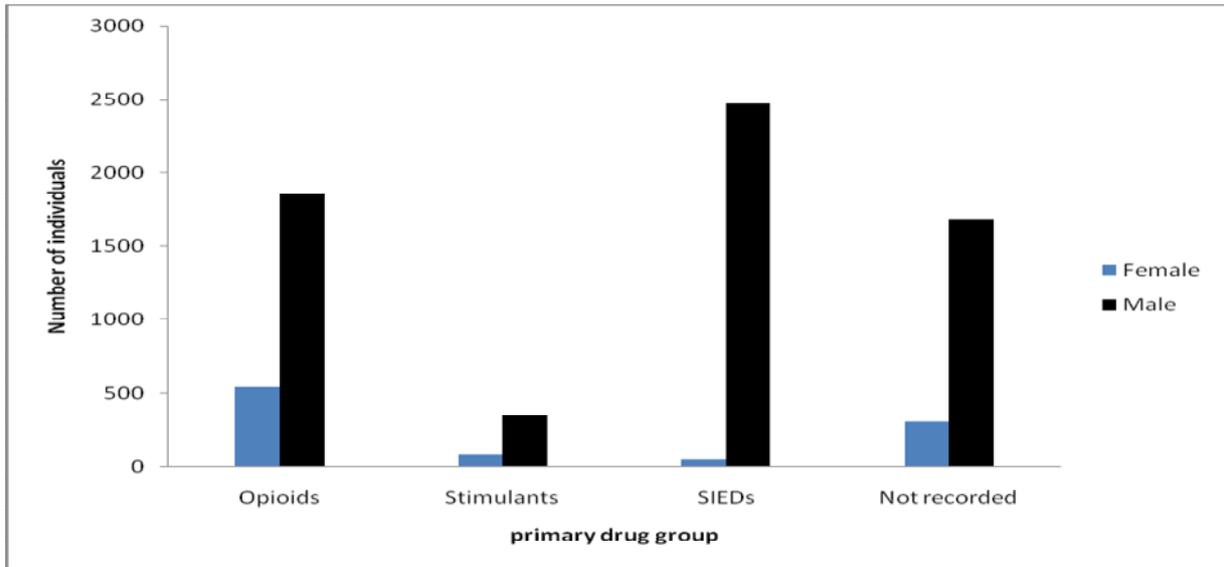
- Opiates, which include heroin, methadone, prescribed diamorphine etc
- Stimulants, which include cocaine powder, crack cocaine and amphetamine etc
- Steroid and image enhancing drugs (SIEDs), which include steroids, human growth hormone and other peptides.

Table 2 – Profile of primary drug type

	n	%
Opioids	2399	32.7%
Stimulants	431	5.9%
SIEDs	2524	34.3%
Not recorded	1989	27.1%

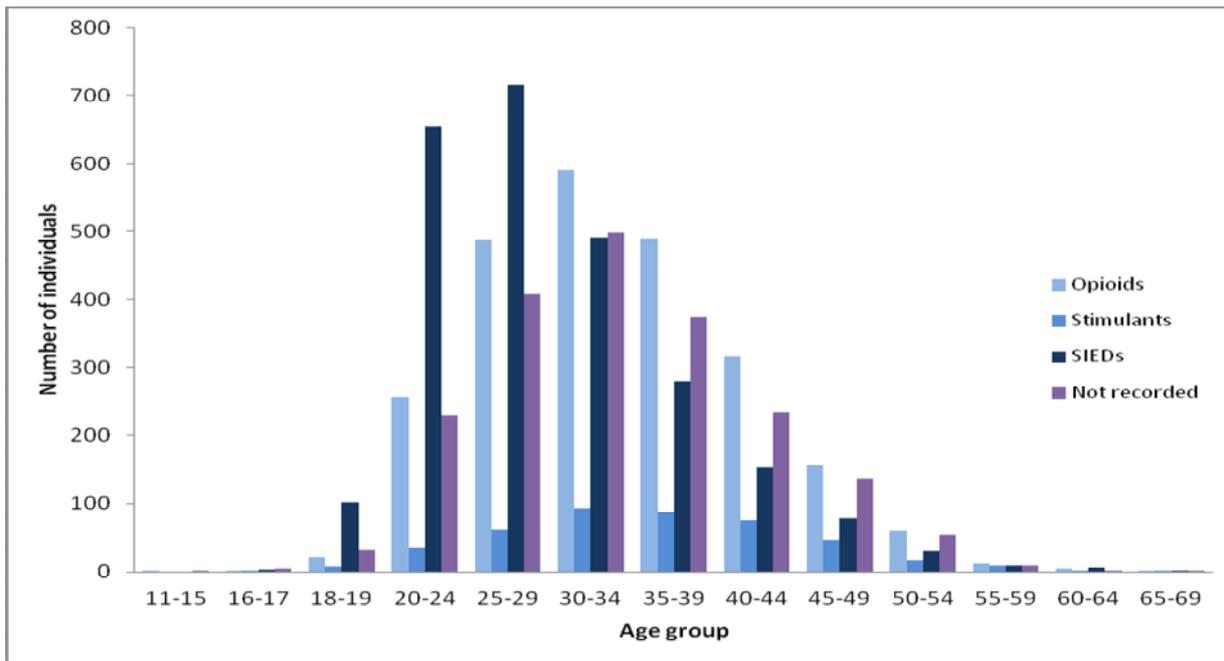
As indicated in Figure 5, there is considerable variation in the ratio of males to females dependant on primary drug group. Amongst primary opioid injectors the ratio of male to female is 3.4:1, whereas amongst primary SIEDs users the ratio is 52:1. It is not possible to establish the nature of primary drug use where primary substance is not recorded, however, the authors believe that the rates of primary stimulant users may well be under-reported.

Figure 5 – Primary drug group by gender



Primary drug group injected also varies by age. As indicated in Figure 6, the highest number of NSP service users in the 18-19, 20-24 and 25-29 year age groups are primary SIEDs injectors. However, from the 30-34 year age group and older, primary opioid users represent the majority in all age groups. It is important to reiterate that this data not does not include those accessing pharmacy based services or secondary distribution. In addition, primary drug was not recorded for 27% of individuals.

Figure 6 – Primary drug group by age



This data is consistent with the UK evidence of an aging opioid injecting population. It also highlights the need for early intervention with young people at risk of injecting any substance.

Route of administration of primary drug

Route of administration impacts greatly on the health consequences of substance use, particularly in relation to injecting. Route of administration for primary drug was recorded for 72.9% (n=5353) of individuals. However, information was incomplete (i.e. IV – unspecified) for 279 cases – representing a clear data quality issue.

SIEDs users inject oil or water based steroids via intramuscular injection (IM), and peptides/hormones via subcutaneous injection (subcut). There are an increasing number of reports from health services and SIEDs users of infections related either to poor injecting technique or as a consequence of injecting substances containing contaminants within underground or counterfeit products. The provision of harm reduction advice and information relating to the early identification of infections is essential for this injecting group. Further information and advice regarding SIEDs is available at: www.siedsinfo.co.uk.

Those injecting opioids or stimulants are potentially at greater risk of harms as intravenous injection (IV) is the primary route of administration. Infections are common with around a third of injectors reporting symptoms of bacterial infection (sore or abscess) in the previous year. As with all injecting, regardless of the type of substance, sharing of injecting equipment may result in transmission of blood borne viruses (hepatitis B, hepatitis C and HIV).

Figure 7 and 8 indicate the route of administration reported amongst current primary opioid users and primary stimulant users respectively.

Rates of groin or femoral injecting are higher amongst primary opioid users, accounting for over 11% of those injecting. Over and above the risks associated with IV injecting, the increased risks associated with groin injecting include Deep Vein Thrombosis (DVT), increased risk of arterial bleeds and the development of fistula. Likewise neck injecting carries significant risk as the arteries, veins, tendons and nerves are all very close together in this area. Abscess or cellulitis in the neck can cause dangerous pressure on nerves or obstruct the airway.

Figure 7 – Route of administration of primary opioid users

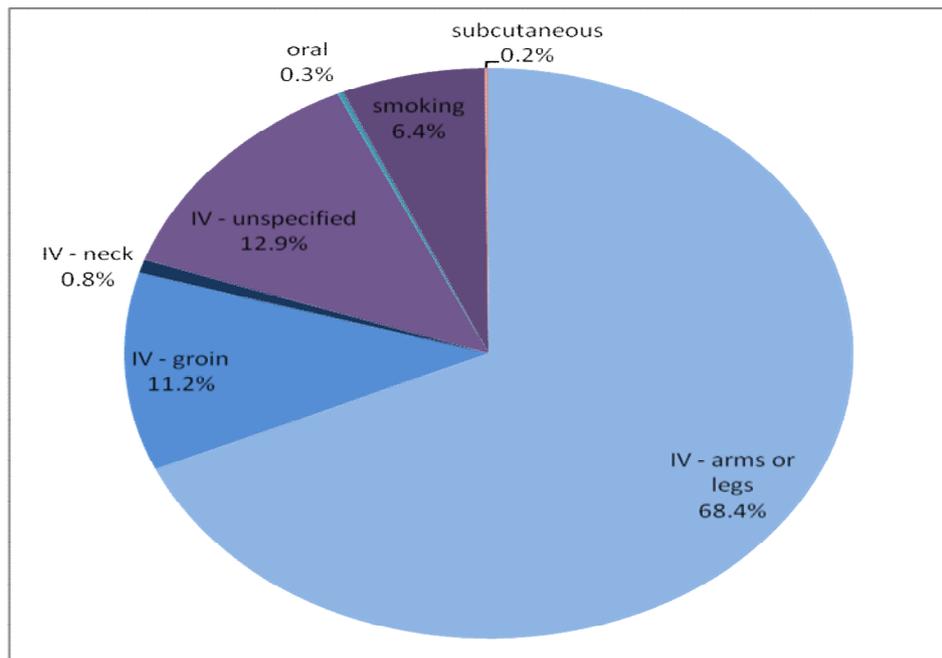
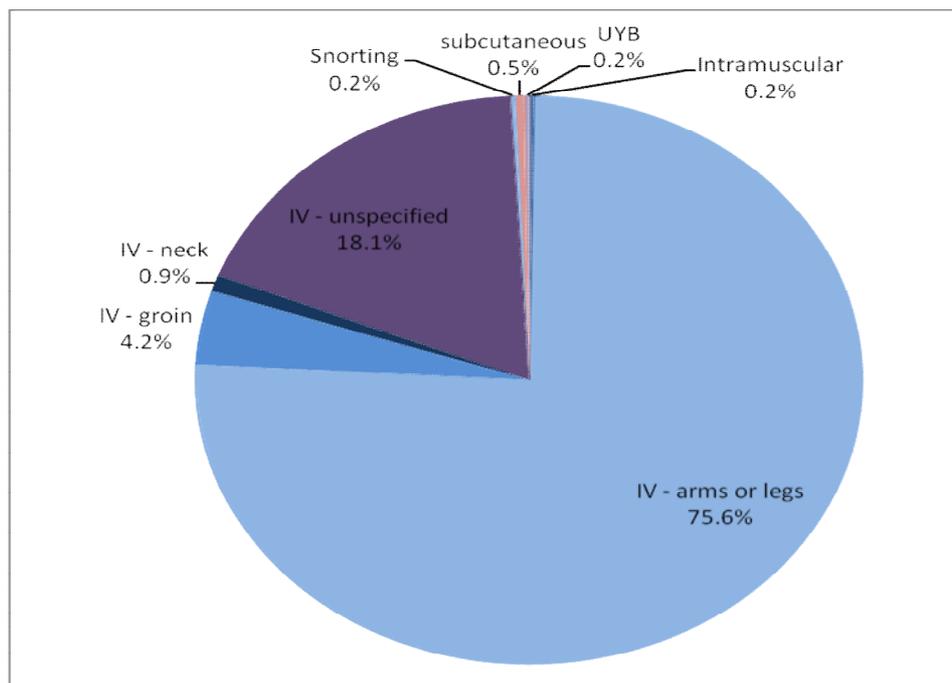


Figure 8 – Route of administration of primary stimulant users



Secondary drug

Secondary drug used was reported for only 15.3% of individuals (n=820). **This represents a serious data quality issue** as it has been well documented that the majority of opioid, stimulant and SIEDs users are poly drug users. The HRD allows for the recording of all substances used regardless of route of administration, in order to build a profile of an individual's substance use and provide the appropriate harm reduction advice to fit that profile. Primary and secondary drug profiles are outlined in Table 3.

NSP service providers should ensure that all staff discuss with service users the range of substances that are being used in order to provide high quality harm reduction advice, and where appropriate, offer further information and/or onward referral. This information should be recorded to ensure that this advice is consistent across the range of NSP services that an individual service user may be accessing.

The under-reporting of stimulant and other illicit drug use is highlighted again here in all categories. For example, recent research from the Unlinked Anonymous Monitoring Survey of Image and Performance Enhancing Drug Users in the UK (in press, 2013) reported that 46% of current SIEDs users self-reported snorting cocaine in the previous 12 months, 4.8% had 'ever injected' an illicit drug other than SIEDs and 12% has snorted or swallowed amphetamine in the previous year.

Table 3 – Profile of primary and secondary drug profiles

	Secondary drug												
	Alcohol	Amphetamine	AS - injectable	AS - oral	Cocaine powder	Crack cocaine	Diazepam	Growth hormone /peptides	Heroin	Stimulants inc ecstasy and mephedrone	Melanotan	Methadone / subutex	Solvents
Primary drug - SIEDs													
Anabolic steroids (AS) – injectable	2	2	-	2	1			439	5	1	27	1	
Growth hormone			95	1				-			6		
melanotan								1					
primary drug - Stimulants													
Amphetamine		-	5			1		2	41		2	2	
Cocaine powder									2				
Primary drug - opioids													
Diamorphine - prescribed									1				
Heroin	10	98	22		1	9	9	8		8		10	1
methadone									1				

4.2 Risk behaviour – sharing and reuse of injecting equipment

The sharing of injecting equipment, both direct (used needles and syringes) and indirect (injecting paraphernalia including spoons/cookers, filters, water etc) represents a clear risk for transmission of blood borne viruses and infections. Good practice guidance (NICE, 2009) promotes the provision of over 100% coverage i.e. at least one full set of sterile injecting equipment (including all paraphernalia required) for each injecting event. The provision of over 100% coverage allows for accidents, mis-hits or secondary distribution to occur. Reuse of one's own injecting equipment may result in a range of health problems including increases in injecting site bacterial infections, increased damage to injecting site and veins as a result of blunt needles etc.

Data on rates of sharing used injecting equipment was recorded for 45.3% (N=3329). The vast majority indicated that they had never shared, however, a total of 16.8% indicated previous or ongoing direct sharing.

Table 4 – Self reported direct sharing of used injecting equipment

	Never shared	Occasionally shared (once a month or more)	Often shared (once a week or more)	Regularly shared (once a day or more)	Shared in past (in last year) but not currently	Grand Total
Total number	2769	157	25	11	367	3329
Percentage where sharing status was recorded	83.2%	4.7%	0.8%	0.3%	11%	

Data from the unlinked anonymous monitoring survey (HPA, 2012) indicate that rates of direct sharing (within the previous 4 weeks) have decreased over recent years with current rates at around 11% in Wales. The data indicated in Table 4 are consistent with the UAM findings, however, it is important to note that response rates vary depending on the way in which the question is asked, and the environment in which it is asked. In addition, this data was not recorded for over half of those accessing NSP services and this represents not only a data quality but also a service quality issue.

In relation to individuals reusing their own injecting equipment, data was recorded for 41.7% of individuals. As indicated above, sufficient injecting equipment should be provided for each injecting event and the HRD system allows for the recording of the average number of injections each individual will undertake each week so sufficient equipment should be

provided as indicated for own use. As indicated in Table 5, where reported, 33.3% reported previous or ongoing reuse of own equipment.

Table 5 – Self report reuse of own injecting equipment

	Never reused	Occasionally reuse (once a month or more)	Often reuse (once a week or more)	Regularly reuse (once a day or more)	Reused in past (in last year) but not currently	Grand Total
Total number	2043	559	129	99	233	3063
Percentage where reuse status was recorded	66.7%	18.3%	4.2%	3.2%	7.6%	

4.3 Health measures – Blood Borne Viruses (BBV) – hepatitis B, hepatitis C and HIV

The reduction in transmission of blood borne viruses such as hepatitis and HIV remain one of the key objectives in NSPs. One of the ways this harm reduction model can be supported is by offering regular testing and vaccination for those deemed to be at risk. The BBV monitoring fields are a record of the individual's vaccination status and Hepatitis B, Hepatitis C and HIV testing status.

Information relating to BBV status should be recorded in all statutory and voluntary sector services with the exception of those in Betsi Cadwalader University Health Board Harm Reduction Services. This service indicated at initiation of this system that existing recording mechanisms were in place in relation to BBV status amongst their NSP service users and would be used to provide data required. As such, the data presented below covers statutory and voluntary sector NSP service users in the following health boards: Aneurin Bevan, Cardiff & the Vale, Cwm Taf and Abertawe Bro Morgannwg University

Hepatitis B (HBV) vaccination

Information on HBV vaccination status was recorded for 32.9% (n=2233 of 6791), of which primary drug group was recorded for 90%.

As indicated in Table 6:

- The majority (66%) of individuals indicated that they had previously received a full course of HBV vaccination elsewhere
- Vaccinations were provided onsite for 14.3% (n=320)

- Onward referrals to a health care provider (e.g. G.P, CDAT) were made for a further 9.7%
- The remaining 10% reported as being offered, but refusing, onward referral for HBV vaccination

Table 6 – Self reported hepatitis B vaccination status by primary drug group.

Hepatitis B vaccination status	Primary drug group				Total
	Not recorded	Opioids	SIEDs	Stimulants	
Course completed elsewhere	107	798	466	98	1469
Vaccination 1 given	11	27	12	5	55
Vaccination 2 given	10	31	6	6	53
Vaccination 3 given	20	66	16	11	113
Vaccination 4 given	18	53	17	11	99
Vaccination offered and referral for vacc made	21	113	64	18	216
Vaccination offered and refused	36	39	144	9	228

Of those where primary drug group was recorded, illicit substance users were proportionately more likely to report uptake of, or willingness to receive, vaccination. 96.5% of primary opioid users and 94.3% of primary stimulant users reported having completed the course elsewhere or accepted vaccinations or the offer of a referral for vaccination compared to 80% of primary SIEDs users, 20% of whom refused the offer of vaccination. Public Health Wales research (2012) on hepatitis and HIV awareness in Wales indicated high levels of awareness, both of transmission risk and hepatitis B vaccination as a preventative measure, amongst individuals who had regular contact with substance misuse services. Levels of knowledge amongst the general population were poor. Further work is required to ensure that those individuals accessing only NSP services, as opposed to wider substance misuse services, e.g. SIEDs users, are made aware of the importance of primary prevention measures such as HBV vaccination. In addition, this group also report high levels of unsafe sexual activity (in press, 2013) and as such are at elevated risk of HBV infection.

Hepatitis C status

Self report hepatitis C status was recorded for 29% (n=1970) of which primary drug group was recorded for 91% of individuals. There were a total of 133 individuals self-reporting chronic infection with hepatitis C, representing 10.8% of those whose hepatitis status was known.

However, this overall percentage differed by primary drug type:

- Amongst primary opioid injectors the rate of individuals positive for hepatitis C was 14%
- Amongst primary stimulant injectors the rate was 11%.

- Amongst primary SIEDs users the rate was lower at 1.5%.
- Hepatitis C status was reported as 'not known' in 37.5% of those asked as indicated in Table 7.

Table 7 – Self reported hepatitis C status by primary drug group

Self reported Hepatitis C status	Primary drug group				Total
	Not recorded	Opioids	SIEDs	Stimulants	
Negative	93	655	271	80	1099
Positive	13	106	4	10	133
Not Known	64	283	350	41	738

5 Improving Data quality

The value of the Harm Reduction Database lies in the completion and regular updating of client records by NSP service providers in order to ensure that the correct equipment, harm reduction advice and onward referrals are being provided to the service user regardless of the services they access. In addition, substance misuse service planners and commissioners are better able to allocate resources and identify areas of unmet need if robust data is available to them. As indicated throughout the report data quality requires improvement. To address this, during the spring and summer of 2012 each NSP service provider was issued with a data quality report indicating the completeness of their data for current service users. These reports were well received and it is expected that this process will be repeated on an annual basis to monitor consistency and improve data quality. In addition, for those indicators that should always be completed e.g. what substances an individual is injecting or using, the HRD indicator will become mandatory from 01/04/2013.

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