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Public Health Wales

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Welsh Government

# Profile of substance misuse in Wales 2012-13

# Education, health and criminal justice data

**Authors: Substance Misuse Programme, Health Protection Division, Public Health Wales. 2013**

# Contents

# 1.0 Introduction

This statistical report provides a summary of routinely-reported substance misuse related evidence currently available in Wales. Evidence is drawn from a number of data sources including information from the Patient Episode Database Wales (PEDW), the Harm Reduction Database (HRD) Wales, Office for National Statistics (ONS) information, Education, Drug Intervention Programme (DIP) and Home Office data. This report is intended for use alongside the Welsh Government Substance Misuse report on treatment activity for the same period to provide a complete profile on the scale and nature of substance misuse in Wales.

# 2.0 Executive Summary

- Substance misuse accounted for 2.4 per cent of school exclusions (permanent or fixed term) in Wales in 2011-12. This represents an increase of 0.2 percentage points on the previous year
- Total hospital admissions with alcohol specific diagnoses for young people (aged 0-14 and 15-19 years) have decreased by 41.8 per cent over the five year period 2008-2012
- Hospital admissions, for all ages, in which the primary diagnosis was alcohol specific, decreased by 12.6 per cent over the period 2008-2012
- In 2012, there were 15,071 hospital admissions, for all ages, in which there is any mention of alcohol specific diagnoses. This figure has remained relatively stable over the period 2008-2012.
- In 2012 there were a total of 504 alcohol related deaths, an increase of 9.8 per cent from the previous year. Of these deaths, 62 per cent were males and 38 per cent females
- The highest proportion of alcohol related deaths occurred in the 45-49 year age group, however, gender differences existed. Amongst males, the highest number of deaths occurred in those aged 60-64 years, whereas the highest number of deaths in females was in the 45-49 year age group.
- From 2008 to 2012, a decrease of 56.2 per cent was recorded in hospital admissions in which the primary diagnosis was mental and behavioural disorders due to use of opioids
- From 2008 to 2012, an increase of 52.7 per cent was recorded in hospital admissions in which the primary diagnosis was mental and behavioural disorders due to multiple/psychoactive drug use.
- There were 131 drug misuse related deaths in Wales in 2012, representing a decrease of 4.4 per cent from the previous year. Regional variation existed in the increase or decrease in rates of drug related death per 100,000 population from 2011
- For the period 2012-13, a total of 12,919 drugs offences were reported by police forces across Wales, representing a 5.4 per cent decrease from 2011-12
- There were 13,388 seizures of controlled drugs in Wales in 2011-12 which represents an increase of 0.3 per cent on the previous year.

# 3.0 Young people and school exclusions due to substance misuse

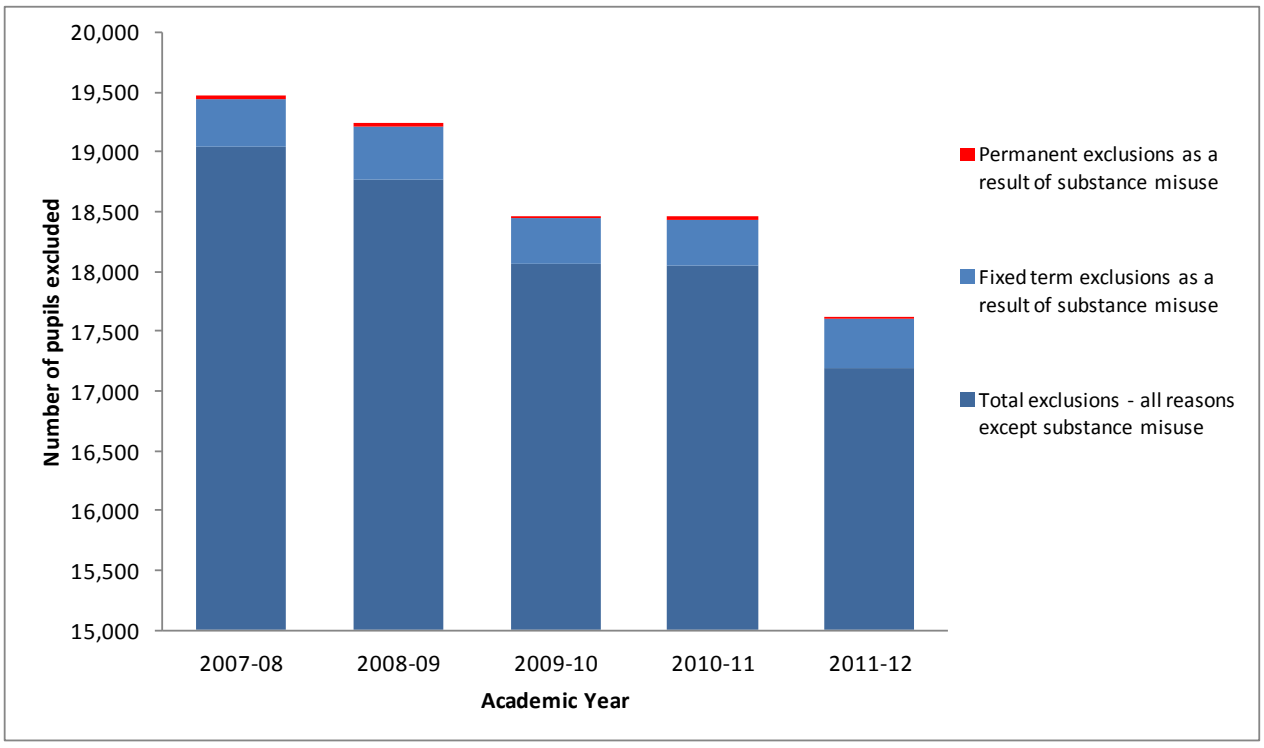
For the academic year 2011-12 there were a total of 102 permanent exclusions, 16,279 fixed term exclusions (5 days or less) and 1,229 fixed term exclusions (6 days or more) in school children aged up to 16 years.[1]

Substance misuse accounted for:

- 7.8 per cent (n=8) of permanent exclusions, a decrease from the previous year (n=23) [1,2]
- 2.1 per cent (n=342) of fixed term exclusions (5 days or less), an increase on the previous year (n=320) [1,2]
- 5.9 per cent (n=73) of fixed term exclusions (6 days or more), an increase on the previous year (n=67). [1,2]

The total number of exclusions has decreased year on year over the previous five year period as indicated in Chart 1, but variability exists in the proportion of permanent to fixed term exclusions and the proportion of exclusions due to substance misuse year on year.

**Chart 1: Number of Pupils (aged up to 16) excluded from schools in Wales (permanently or fixed term) and the number due to substance misuse 2007-08 to 2011-12**

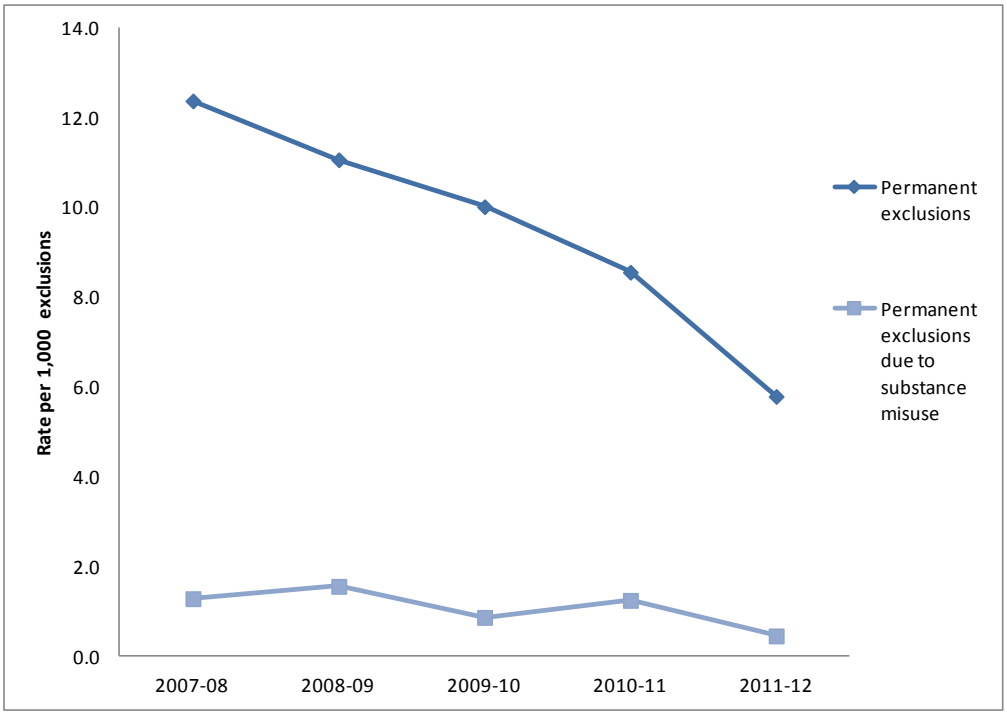



Source: Exclusions from Schools in Wales, 2007-08 to 2011-12 KAS, Welsh Government

Over this five year period, the total number of permanent exclusions, for any reason, has shown a consistent downward trend and total numbers have decreased by 57.7 per cent (from 241 in 2007-08 to 102 in 2011-12). However, the proportion of permanent exclusions due to substance misuse remains relatively stable. Chart 2 shows these trends in terms of rate per 1,000 exclusions.

The proportion of pupils with fixed term exclusions due to substance misuse shows a more consistent pattern over the five year period. Around 2 per cent of fixed term (5 days or less) and around 4 per cent of fixed term exclusions (6 days or more) are due to substance misuse year on year; however, in 2011-12, 5.9 per cent of pupils received longer fixed term exclusions (6 days or more), an increase of 1.4 percentage points on the previous year.

**Chart 2: All permanent exclusions and permanent exclusions due to substance misuse, rate per 1,000 exclusions 2007-08 to 2011-12**




Source: Exclusions from Schools in Wales 2007-08 to 2011-12 KAS, Welsh Government

Detailed information on the type and nature of substance misuse resulting in exclusion is not routinely available and as such it is not possible to differentiate between those exclusions occurring as a consequence of drugs or alcohol or drugs and alcohol, possession or intent to supply. Further work is required to provide this information in order to ensure trends in the nature of school exclusions as a consequence of substance misuse may be better monitored.

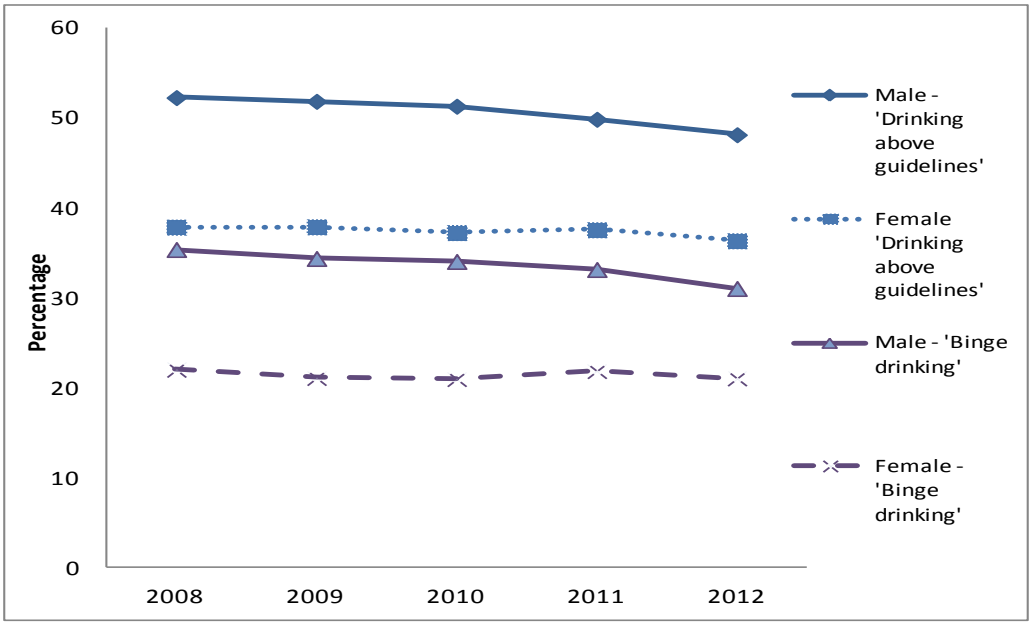
# 4.0 Alcohol

## 4.1 Self report alcohol use

The Welsh Health Survey[3] provides annual self-report data including alcohol consumption, specifically the measures of 'drinking above recommended guidelines on at least one day in the past week' and 'Binge drinking (drinking twice the daily guideline amount) on at least one day in the past week'. As indicated in Chart 3, over the five year period 2008 to 2012 the proportion of males and females aged 16 or over self-reporting these measures has declined very slightly.

In relation to 'binge drinking' as defined above, the proportion of males reporting binge drinking has reduced over the five year period from 35 percent to 31 per cent; however, there was only a very slight reduction amongst females, from 22 per cent to 21 per cent.

**Chart 3 – Percentage of adults self-reporting drinking 'above guidelines' and 'binge drinking' by gender 2008-2012**




Source: Welsh Health Survey 2011 and 2012, KAS, Welsh Government

## 4.2 Hospital admissions due to Alcohol

There are a number of specific acute and chronic health problems associated with alcohol misuse*. These include damage to the digestive system, mental and behavioural disorders and liver damage including hepatitis and alcoholic cirrhosis of the liver. The patient episode database Wales (PEDW) provides information on hospital episodes within the general population in Wales. Following admission, a diagnosis of the condition to be treated is made which can be recorded as either 'primary' or 'any mention of'. When the alcohol specific diagnosis is the main condition to be treated this is considered 'primary' and where the alcohol specific diagnosis is one of the related conditions it is recorded as secondary or other and is included as 'any mention of'.

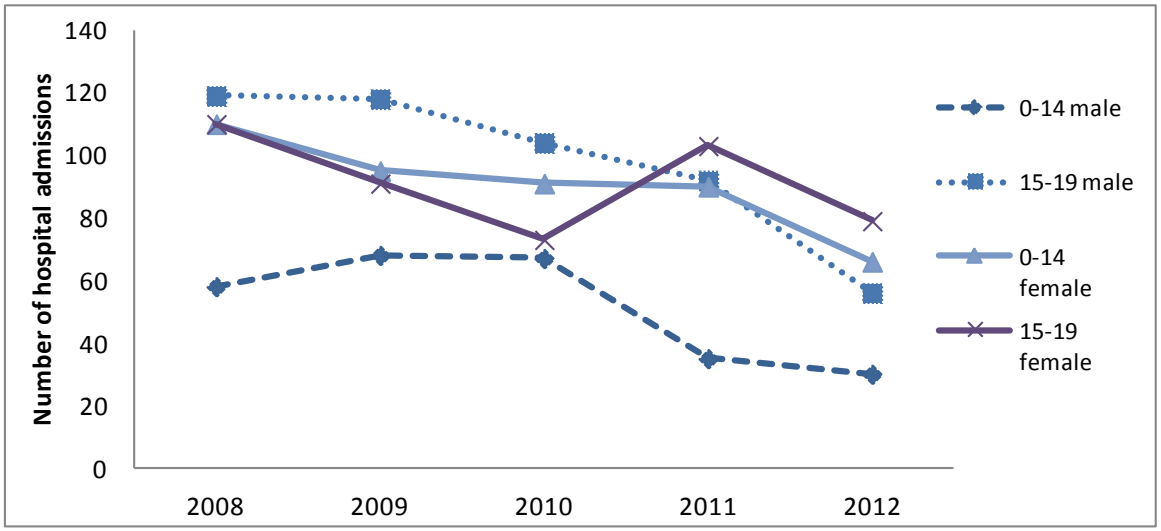
* Please see page 39 for definition of 'alcohol specific conditions'

### 4.2.1 Alcohol specific conditions in the primary position – young people (aged 0-14 and 15-19)

The vast majority of hospital admissions for alcohol specific conditions amongst young people is due to acute intoxication – this diagnosis has accounted for between 78.8 per cent and 91 per cent of admissions amongst the 0-14 and 15-19 age groups from 2008 to 2012. Over this five year period, the total number of hospital admissions for primary alcohol specific conditions amongst young people has decreased by 41.8 per cent, from 397 admissions in 2008 to a total of 231 in 2012, as indicated in Chart 4.

In relation to age groups and gender differences, there are consistently higher numbers of admissions in females aged 0-14 compared to their male cohort. Amongst the 15-19 year age group the pattern is more complex. Up to 2010, there were more male admissions within this age group, however, since 2011, females aged 15-19 have overtaken males in the numbers of hospital admissions for alcohol specific diagnoses in the primary position and now account for 58.5 per cent of admissions within this age group. This data would indicate targeted intervention for young females to reduce the incidence of acute intoxication and hospital admissions in both 0-14 and 15-19 year olds.

**Chart 4: Hospital admissions with an alcohol specific primary diagnosis in males and females aged 0-14 and 15-19 years 2008 to 2012**

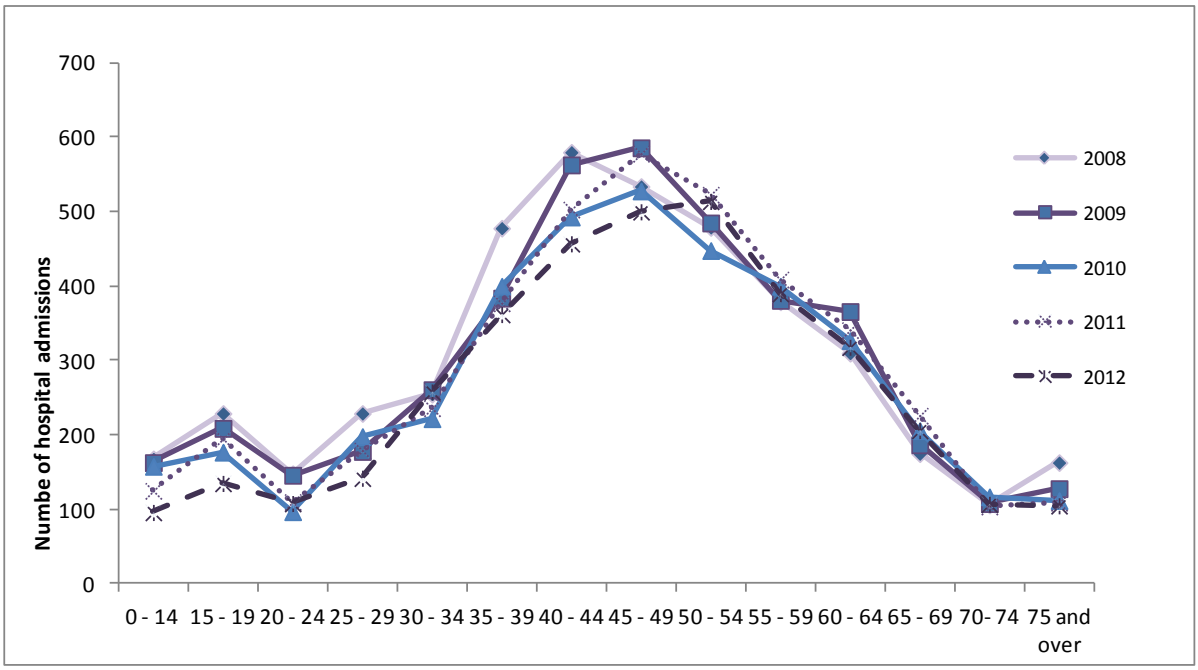



Source: PEDW – Patient Episode Database for Wales 2008 to 2012

### 4.2.2 Alcohol specific conditions in the primary position – all ages

Chart 5 indicates the total number of admissions to hospital with an alcohol specific primary diagnosis by age over the period 2008 to 2012. Over this 5 year period the total number of admissions (all ages) has decreased by 12.6 per cent (2008 total - 4,233; 2012 total - 3,698 admissions). No geographical differences in this trend were observed. From 2011 to 2012, decreases in admissions are seen in all ages with the exception of the 30-34 year age band. The increase within this age band is primarily due to increases in female admissions. As indicated in Chart 5, amongst young people there is a slight peak in admissions in those aged 15-19 dropping again before rising to the highest number of admissions amongst those aged 40-49. This data suggests that early intervention for reducing alcohol consumption amongst those aged 25-35 years may have a positive impact on reducing future hospital admissions for alcohol specific disease.

**Chart 5: Hospital admissions with a primary alcohol specific diagnosis by age, 2008 to 2012**

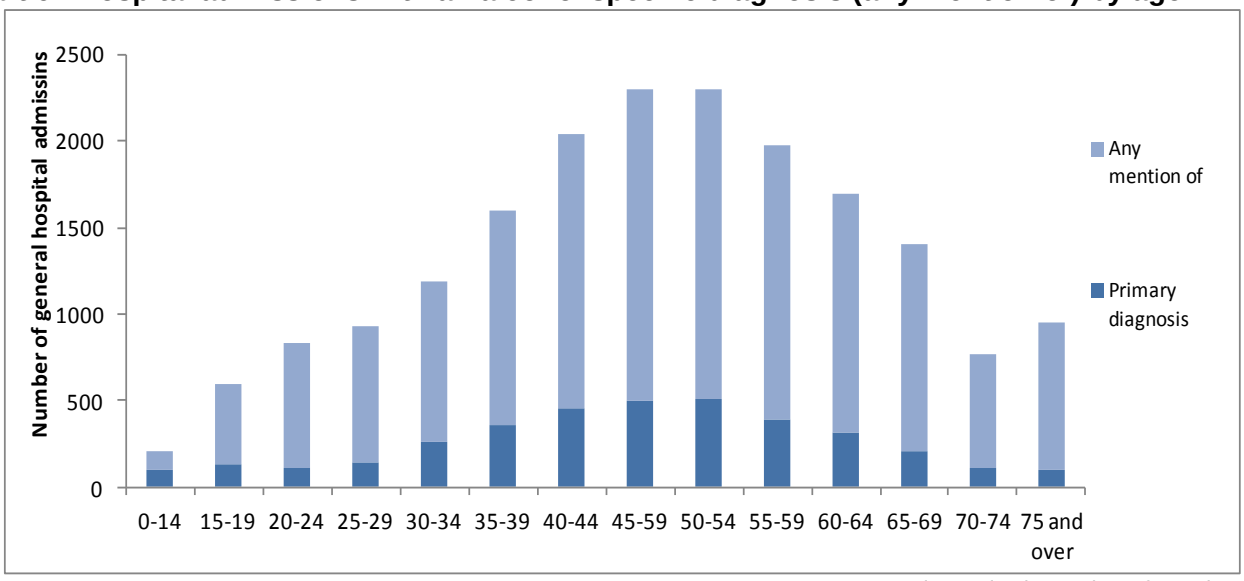



Source: PEDW – Patient Episode Database for Wales 2008 to 2012

## 4.2.3 Alcohol specific conditions –Any mention of – all ages

The number of primary alcohol specific admissions represents around a quarter to a third of overall alcohol specific hospital admissions, depending on age, as indicated in Chart 6. The overall number of hospital admissions with an alcohol specific diagnosis (any mention of) have decreased by 4.6 per cent in the last year (from 15,789 in 2011 to 15,071 in 2012).

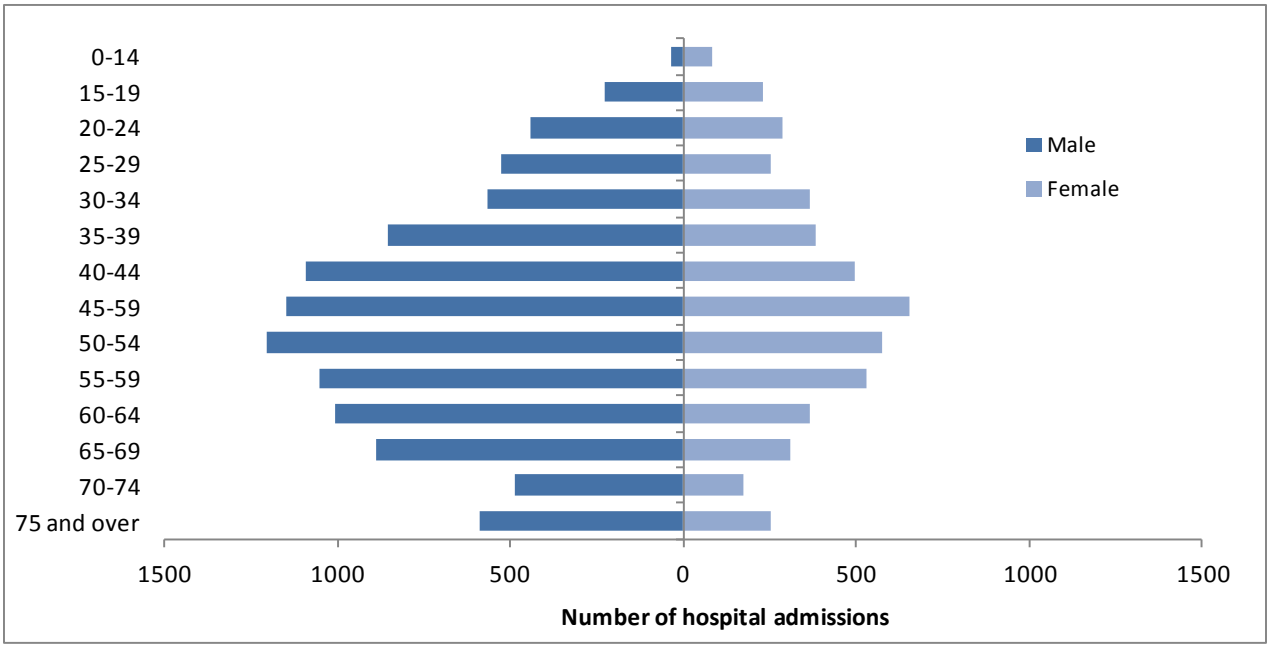
**Chart 6: Hospital admissions with an alcohol specific diagnosis (any mention of) by age in 2012**




Source: PEDW – Patient Episode Database for Wales 2012

With the exception of those aged under 15 years, higher rates of admissions are seen in males. Chart 7 indicates the age and gender profile of alcohol specific admissions (any position) for 2012. The proportion of male to female admissions has remained relatively steady over the previous five years with around half the number of female admissions (n=4,949) to male admissions (n=10,122) in 2012.

**Chart 7: Hospital admissions with an alcohol specific diagnosis (any mention of) by age and gender 2012**

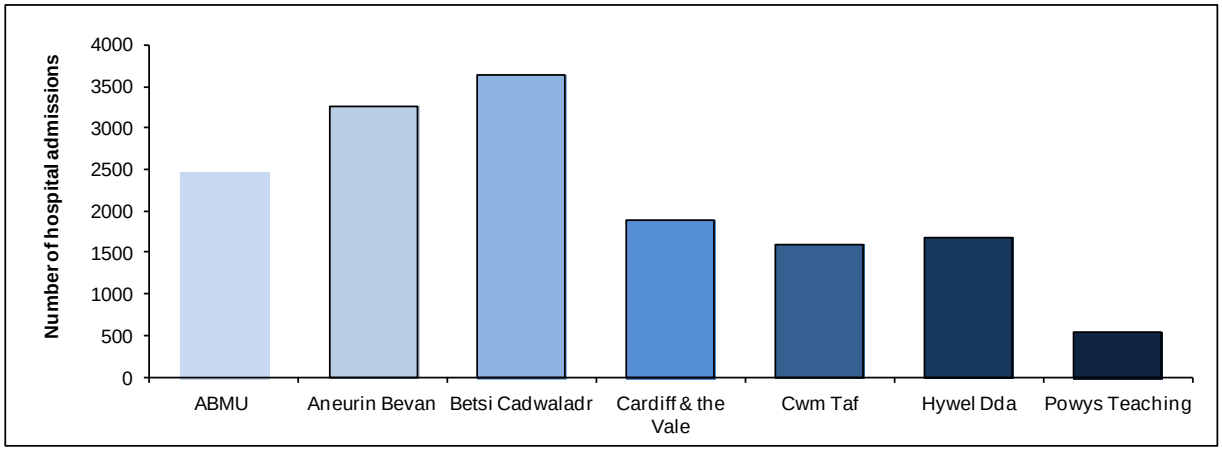



Source: PEDW – Patient Episode Database for Wales 2012

## 4.2.4 Alcohol specific conditions (any mention of) by Health Board area of residence

Regional variation is apparent in the number of hospital admissions for alcohol specific diagnosis as indicated in Chart 8.

**Chart 8: Hospital admissions with an alcohol specific diagnosis (any mention of) by Health Board area of residence 2012**




Source: PEDW – Patient Episode Database for Wales 2012

Table 1 provides the number of hospital admissions in 2012 and the percentage increase or decrease on the previous year. As indicated, admissions decreased in all Health Board areas with the exception of Powys Teaching Health Board in which an increase of 21 per cent was recorded. The greatest decrease in admissions was recorded in the Aneurin Bevan Health Board area.

**Table 1: Hospital admissions for alcohol specific diagnoses 2012 by Health Board area of residence and percentage change in admissions from previous year**

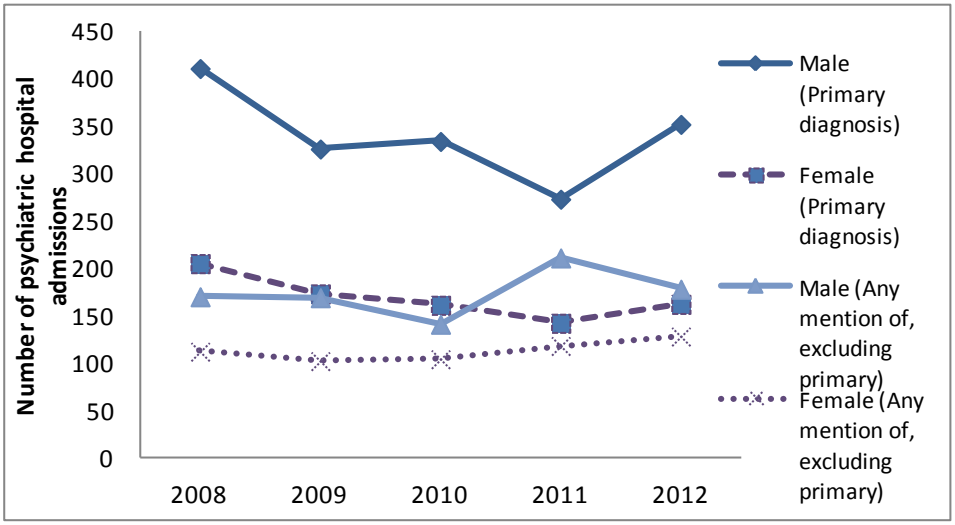
| | Number of hospital admissions 2012 | % increase or decrease on previous year |
|---|---|---|
| ABMU | 2,460 | -4.7 |
| Aneurin Bevan | 3,268 | -10.3 |
| Betsi Cadwaladr | 3,644 | -2.9 |
| Cardiff & the Vale | 1,892 | -3.8 |
| Cwm Taf | 1,601 | -4.5 |
| Hywel Dda | 1,673 | -3.4 |
| Powys Teaching | 533 | 21.4 |

Source: PEDW – Patient Episode Database for Wales 2011 and 2012

## 4.2.5 Psychiatric hospital admissions for patients with an alcohol specific diagnosis

The total number of psychiatric hospital admissions for alcohol specific diagnoses (any mention of) increased by 10.2 per cent from 2011 (n=744) to 2012 (n=820). Over the last five year period, admissions declined during 2008-2010, however, increases have been observed more recently amongst males with primary alcohol specific diagnosis and, more gradually, amongst females, diagnosis primary and any mention of, as shown in Chart 9.

**Chart 9: Psychiatric hospital admissions with an alcohol related diagnosis (primary and any position) by gender 2008 to 2012**

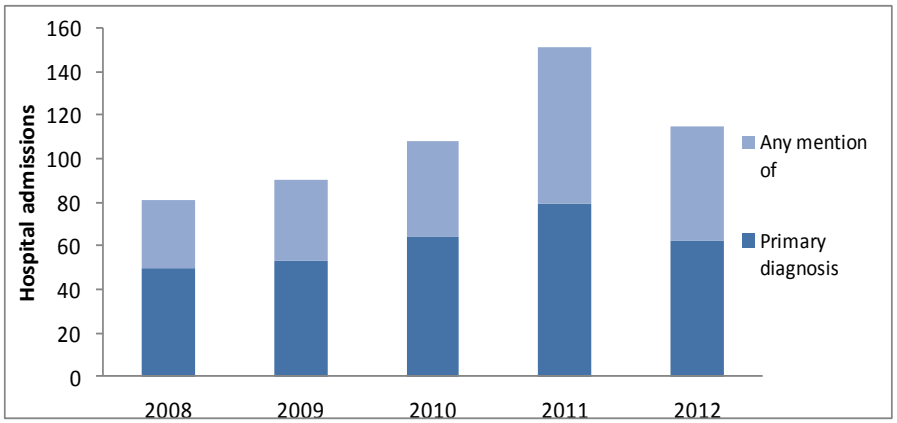



Source: PEDW – Patient Episode Database for Wales 2008 to 2012

### 4.2.6 Conditions originating in the perinatal period including foetal alcohol syndrome

The number of hospital admissions for babies born with conditions relating to maternal substance use including foetal alcohol syndrome in Wales decreased 23.8 per cent in 2012, following an increase of 39.8 per cent in the year 2010 to 2011. There were a total of 115 admissions (primary and any mention of) in 2012 as indicated in Chart 10.

**Chart 10: Hospital admissions for conditions originating in the perinatal period (primary diagnoses and any mention of) 2008 to 2012**



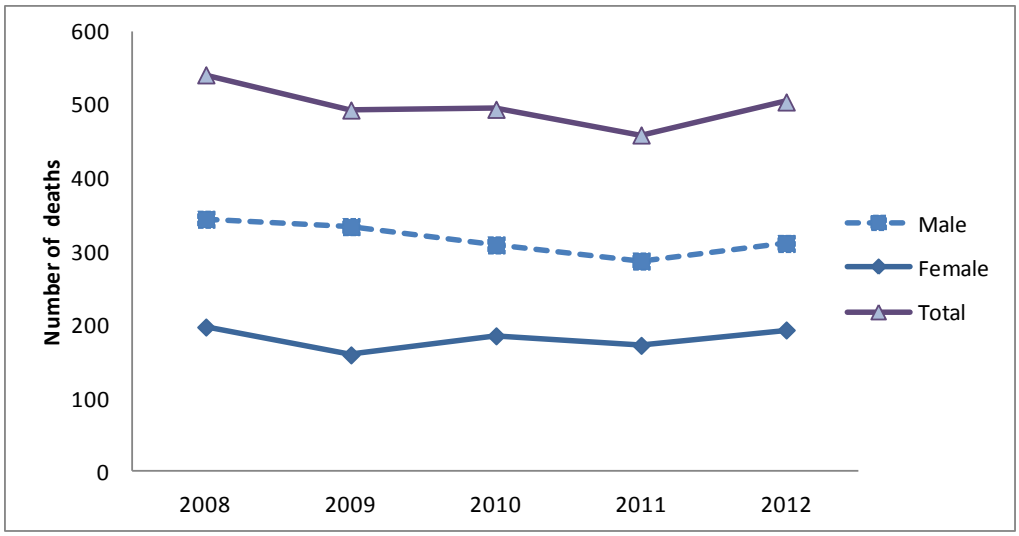

Source: PEDW – Patient Episode Database for Wales 2008 to 2012

## 4.3 Alcohol related deaths

### 4.3.1 Alcohol related deaths by gender and age

According to ONS data, in 2012 in Wales, there was an increase of 9.8 per cent in alcohol related deaths from the previous year (from 459 deaths in 2011 to 504 in 2012) as shown in Chart 11. Of the overall increase, deaths in males increased by 8.4 per cent and in females by 12.2 per cent. The overall number of alcohol related deaths over the last five years has declined from 541 in 2008 to 504 in 2012, although the year on year trend across this period is inconsistent.

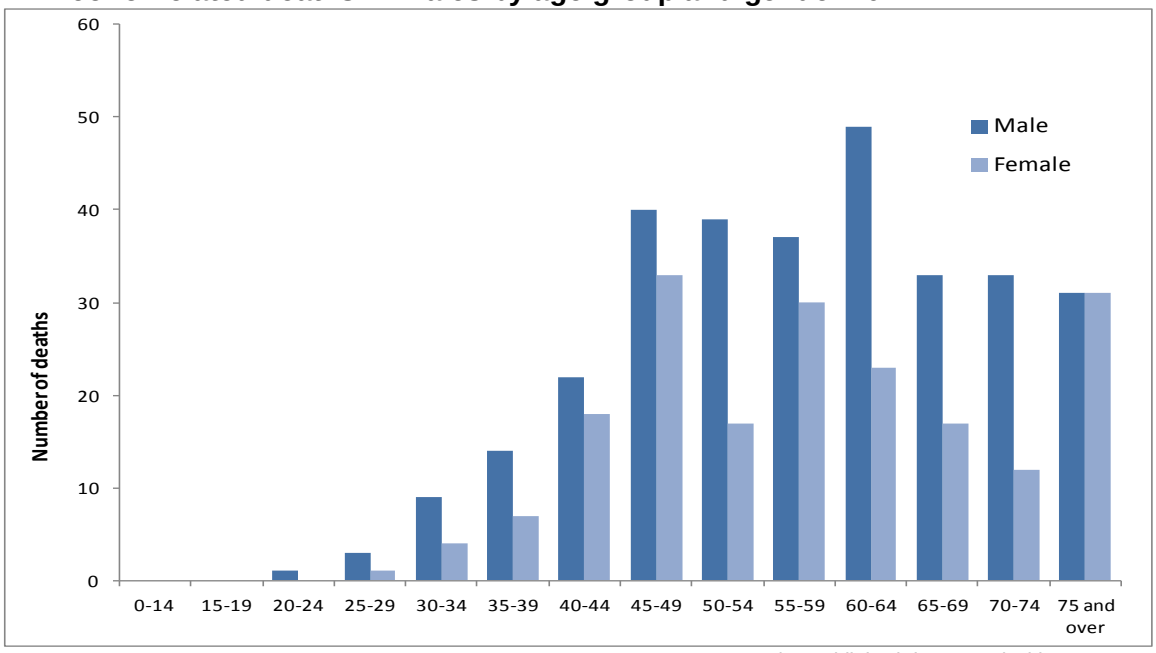
**Chart 11: Alcohol related deaths in Wales by gender 2008 to 2012**




Source: ONS, 2013 (Unpublished data, used with agreement of ONS)
ONS Alcohol related death data due for publication in January 2014*

As shown in Chart 12, overall, the highest proportion, 14.2 per cent, of alcohol related deaths in 2012 was seen in those aged 45-49 years, consistent with previous years. There is gender variation in alcohol related deaths by age group, with deaths in males highest in the 60-64 years but amongst females in the 45-49 year age group.

**Chart 12: Alcohol related deaths in Wales by age group and gender 2012**

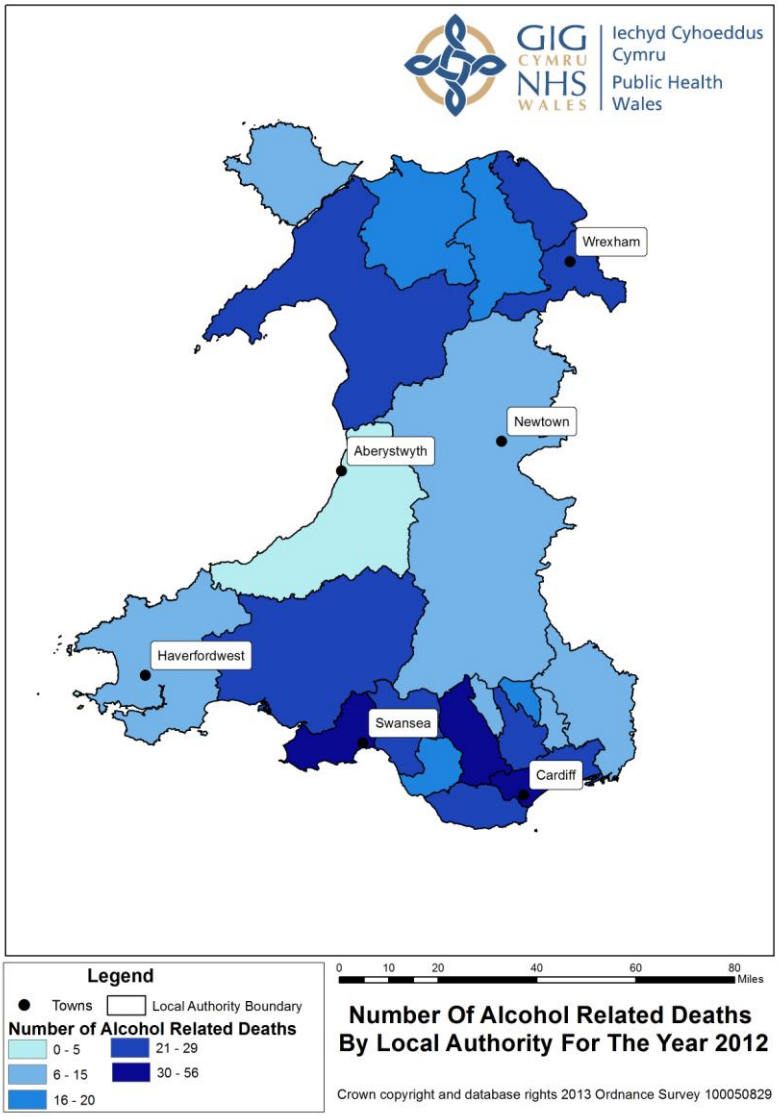



Source: ONS, 2013 (Unpublished data, used with agreement of ONS)*

## 4.3.2 Alcohol related deaths by Health Board area of residence

Across Wales, there was regional variation in the number of alcohol related deaths recorded in 2012 as shown in Map 1. The highest number of deaths overall were recorded amongst residents within the Betsi Cadwaladr University Health Board area.

**Map 1: Alcohol related deaths in Wales by Local Authority 2012**




Source: ONS, 2013 (Unpublished data, used with agreement of ONS)*

In terms of alcohol death rates per 100,000 population (European Age Standardised), Cwm Taf Health Board have the highest rate of alcohol related deaths at 18.5 per 100,000 population. This represented an increase of 6.9 deaths per 100,000 population from the previous year as shown in Table 2.

When focussing on differences in alcohol related deaths by gender, there is a greater variance amongst male death rates by area than amongst females as indicated in Table 2. The highest rates in males are

seen in the Cwm Taf Health Board area, with 25.4 alcohol related deaths per 100,000 population and the lowest in Powys at 6.6 per 100,000 population. The highest rates for females are seen in the Betsi Cadwaladr University Health Board area at 12.3 deaths per 100,000 population and the lowest again in Powys at 6.9 per 100,000.

**Table 2: Alcohol related deaths by gender and area of residence 2012**

| | Number | | Rate (a) | Rate (b) | Rate (a) | Rate (b) |
|---|---|---|---|---|---|---|
| Health Board of residence | Male | Female | Male | | Female | |
| Abertawe Bro Morgannwg University | 58 | 29 | 19.0 | 3.7 | 9.7 | 0.7 |
| Aneurin Bevan | 56 | 34 | 17.1 | -0.1 | 9.4 | 0.8 |
| Betsi Cadwaldr | 66 | 51 | 16.4 | -0.8 | 12.3 | 3.2 |
| Cardiff & Vale University | 49 | 31 | 21.1 | 3.2 | 11.3 | 2.2 |
| Cwm Taf | 43 | 21 | 25.4 | 6.9 | 11.8 | 1.4 |
| Hywel Dda | 34 | 22 | 14.8 | -2.3 | 8.7 | -1.7 |
| Powys Teaching | 5 | 5 | 6.6 | -9.2 | 6.9 | -3.1 |

Source: ONS, 2013 (Unpublished data, used with agreement of ONS)*

Rate (a): European age standardised rate per 100,000 population based on 2012 mid-year population estimates for Wales

Rate (b): Rate increase or decrease from previous year, 2011

# 5.0 Drugs

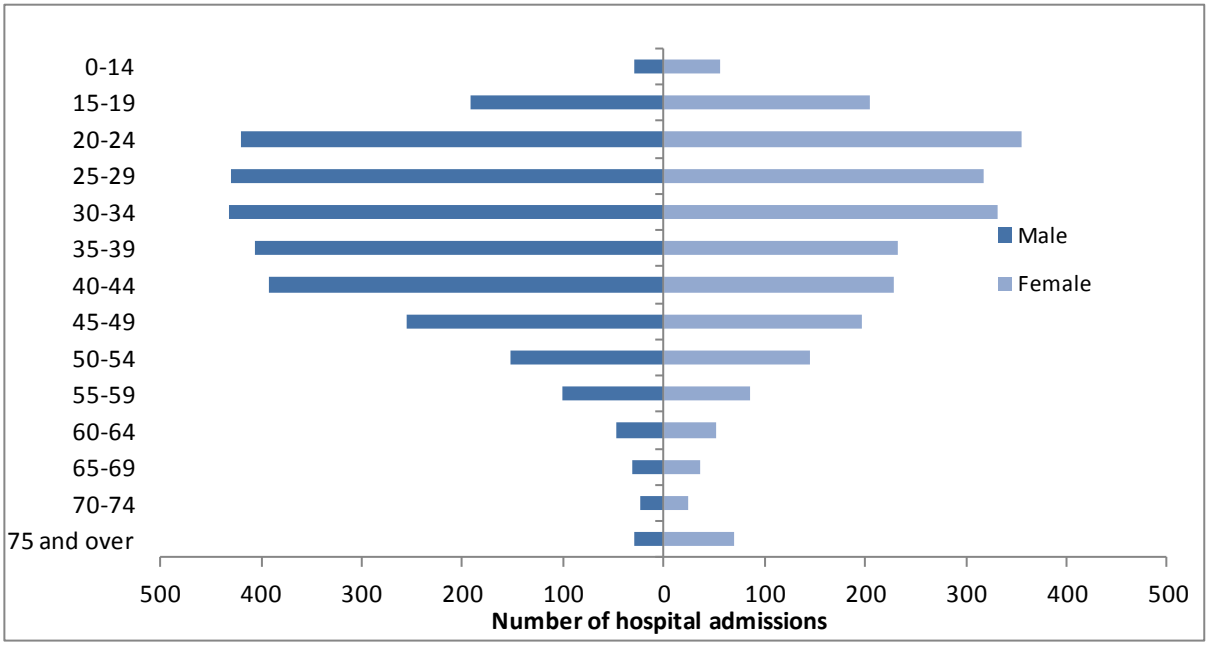
## 5.1 Hospital admissions due to drugs

### 5.1.1 Poisonings with named illicit drugs diagnoses – all ages

Hospital admissions for illicit drugs include mental and behavioural disorders or poisonings with named illicit drugs including narcotics (opium, heroin, other opioids, cocaine), psychodysleptics (hallucinogens), antiepileptics, sedative-hypnotics (including benzodiazepines) and psychotropic drugs not elsewhere mentioned.**

In 2012, there were a total 5,283 hospital admissions for poisonings with illicit drugs (any mention of), of which 1,846 admissions were for primary diagnosis, an increase of 2.5 per cent on the previous year. As indicated in Chart 13, the highest number of admissions were in the 20-24 year age group but admissions remain elevated in the 25-29 and 30-34 year age groups.

**Chart 13: Hospital admissions for poisoning with named illicit drugs diagnoses (any mention of) by age and gender 2012**

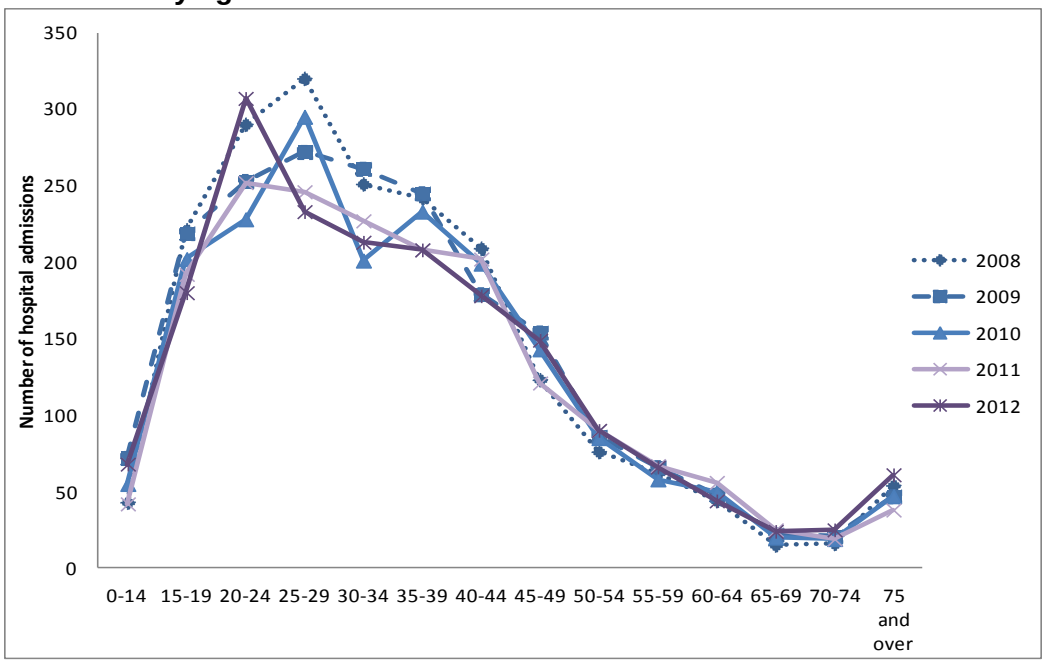



Source: PEDW – Patient Episode Database for Wales 2013

There is an increasing trend in admissions amongst younger people. In 2011, the highest number of admissions was seen in the 25-29 age group (n=761) whereas in 2012 the highest number of admissions was seen in the 20-24 age group (n=776). This data indicates that interventions aimed at increasingly younger individuals may impact on reducing hospital admissions. Focussing in on age with illicit drug diagnoses in the primary position, the impact of age is more clearly visible in the 2012 admissions data as indicated in Chart 14 with a 21.8 per cent increase in admissions (n=307) amongst 20-24 year olds in 2012.

** Please see page 41 for definition of 'poisonings with named illicit drugs diagnoses'

**Chart 14: Hospital admissions for poisoning with named illicit drugs diagnoses in the primary position 2008 to 2012 by age**



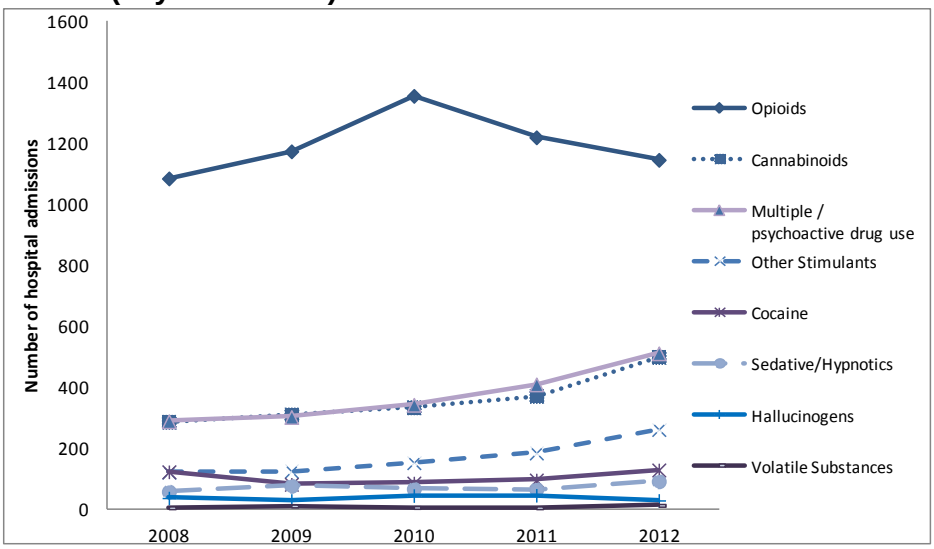

Source: PEDW – Patient Episode Database for Wales 2008-2012

Over the five year period, the highest number of admissions occurred in the 20-24 year and 25-29 year age groups, although admission rates remain elevated in the 30-34 and 35-39 age groups.

In 2012, poisonings with named illicit drugs account for 98 per cent of all drug-related admissions in the 75 and over age group. This is a consistent trend over time. In the younger age groups (15-19 years up to 40-44 years) poisonings accounted for between 64 and 79 per cent of admissions with the remaining percent diagnosed as 'mental and behavioural disorders due to drug use'.

Chart 15 shows the number of hospital admissions for mental and behavioural disorders with named illicit drugs diagnoses (any mention of) indicating a decrease in the number of admissions for mental and behavioural disorders due to opioids in the last two years following a consistent upward trend in previous years. Admissions in 2012 fell by 6.1 per cent (n=1,146) for opioids and for hallucinogens by 37.8 per cent although numbers are small (n=28).

**Chart 15: Hospital admissions for mental and behavioural disorders due to named illicit drugs 2008 to 2012 (any mention of)**




Source: PEDW – Patient Episode Database for Wales 2008 to 2012

However, in 2012, hospital admissions due to multiple/psychoactive drug use have increased by 24.9 per cent (n=511) in the last year and admissions are at the highest level seen the last 5 years. Likewise, admissions increased for:

- 'other stimulant' – 41.8 per cent (n=261)
- 'cannabinoids' – 34.5 per cent (n=499)
- 'cocaine' – 34.7 per cent (n=128)
- 'sedatives /hypnotics' – 40 per cent (n=91)
- 'Volatile substances' admissions increased from 4 to 12.

### 5.1.2 Foetus and Newborn affected by noxious influences transmitted via placenta or breast milk diagnoses

The number of foetuses and newborns affected by maternal use of drugs of addiction decreased in 2012 as indicated in Chart 16. The number of cases per year does not appear to be following a consistent trend; however, numbers remain relatively low.

**Chart 16: Foetus and newborn affected by maternal use of drugs of addiction in Wales 2008 to 2012**

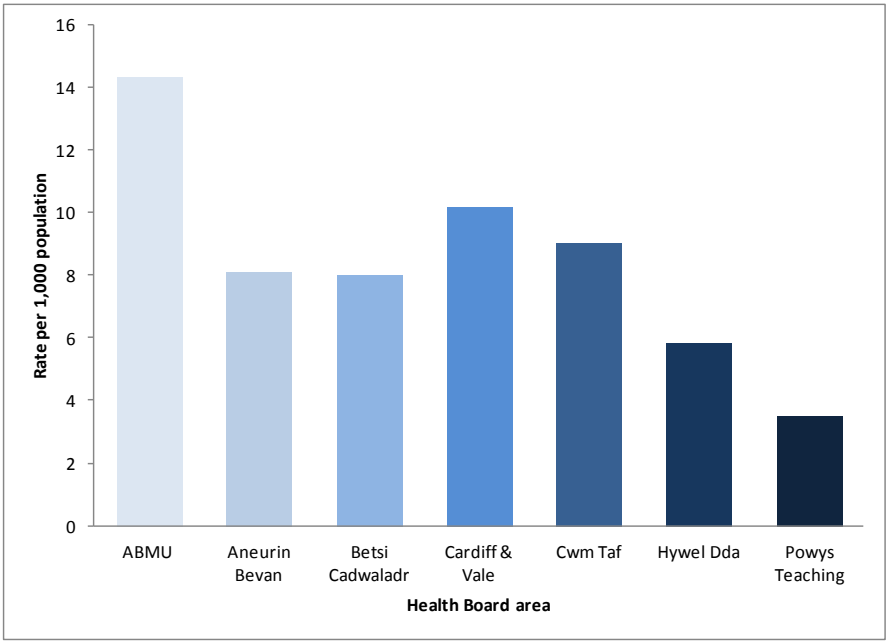

Source: PEDW – Patient Episode Database for Wales 2008 to 2012

## 5.2 Prevalence estimate of problematic drug use in Wales 2009-10

Public Health Wales (PHW) undertook a capture-recapture study designed to provide an estimate of the prevalence of problematic drug use in Wales. Capture-recapture is a technique that is used with epidemiological studies of hard to reach populations e.g. problematic drug users. By comparing data from several independent overlapping samples, it is possible to adjust for missing cases (or individuals who are not represented on the existing datasets) and to generate estimates of prevalence.[4] Chart 17 indicates the estimated rates of problematic drug use per 1,000 population by Health Board area in Wales. Full data relating to age and gender profiles of the estimate of problematic drug use are provided in Appendix 1.

**Problematic drug use in this context refers to injecting drug use or long duration or regular use of heroin, other opioids, cocaine and crack cocaine**.[4] Datasets were drawn from the Police Forces and Probation Services in Wales and the Welsh National Database for Substance Misuse Wales (including DIP referrals). The prevalence estimates are based on the 15 – 64 year old population of Wales. It should be noted that an estimate of injecting drug use could not be provided as this information is not routinely recorded within the datasets used.

**Chart 17: Estimated rates of problematic drug use per 1,000 population (aged 15-64) by Health Board area of residence in Wales 2009-10.**




Source: Public Health Wales, 2011

Exploration of alternative techniques for estimating the prevalence of problematic drug use in Wales, and other areas of the UK, are underway utilising the data for 2009-10 with the aim of establishing a more robust mechanism for the estimation of prevalence of both problematic drug use and injecting drug use in future years. In addition, the existing definition of problematic drug use currently used is being revised by the European Monitoring Centre for Drugs and Drug Addiction and once consensus has been reached, future prevalence estimates will adhere to the new definition.

## 5.3 Prevalence and nature of injecting drug use in Wales – Summary of the evidence

The harm reduction database (HRD) Wales is a national web-based data collection system for the recording of all needle and syringe programme (NSP) activity in statutory and voluntary sector services across Wales. Data includes the provision of sterile, and return of used, injecting equipment; substances used and injecting behaviour; and, referral and signposting to relevant health and substance misuse services. The HRD Wales has been live since September 1st 2010. Full implementation of the HRD in all pharmacy-based NSP services will begin from 1st April 2014.

The HRD Wales is currently operational in 46 statutory and voluntary sites. **NSPs in Powys Teaching and Hywel Dda Health Board areas currently rely primarily on pharmacy NSP provision, and as a result there is very low activity recorded for these areas on the HRD**.
It should also be noted that it is not possible at present to quantify the number of people who inject drugs but do not access NSP services personally; further, this report does not include individuals who only access pharmacy based NSP services.

**Overall activity 01/04/2012 – 31/03/2013:**

- A total of 44,244 NSP visits / transactions were completed
- 9,900 unique individuals attended NSP services at least once over the period
- Full data including, age, gender primary substance used and Health Board area was available for 7,904 unique individuals (79.8 per cent of those accessing NSPs)

### 5.3.1 Substance use by age, gender and primary substance

The data presented in this section is for the 7,904 unique individuals accessing NSP services for whom age, gender, primary substance used and Health Board area was available.

Primary substances have been aggregated into three categories:

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

In relation to gender 11.7 per cent (n=926) of those accessing NSPs were female; 88.3 per cent (n=6,978) were male. 17 per cent (n=1340) were under 25. These figures are presented in Table 3 alongside comparative percentages for NSP users within primary substance use categories.

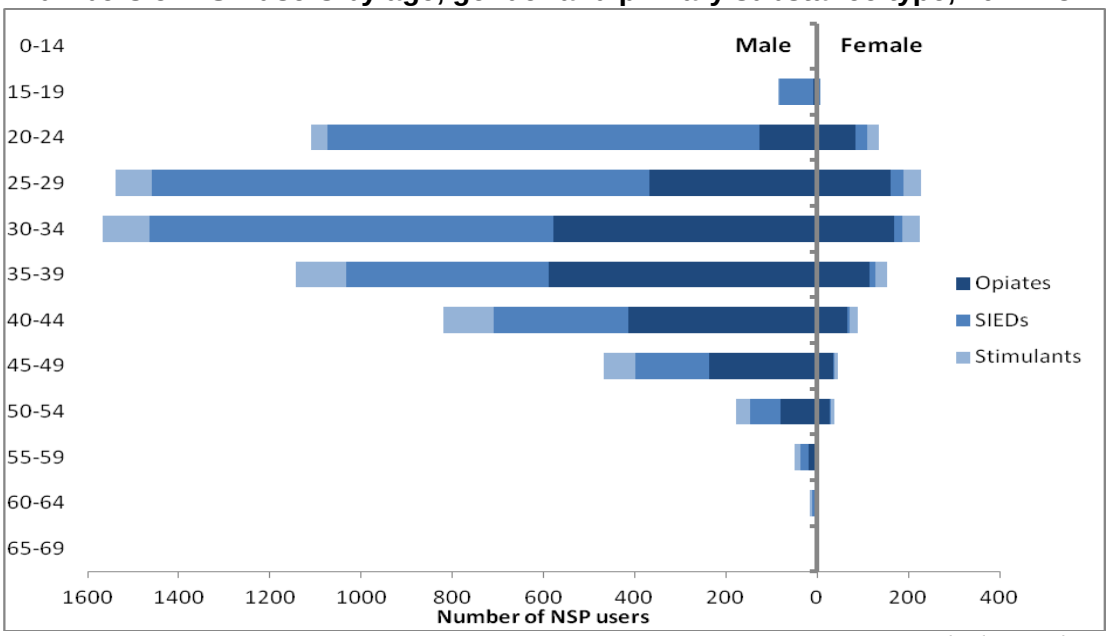
**Table 3: Profile of substance use by gender and percentage of users under 25 for all NSP users and for primary substance type, 2012-13**

| | Number | % of all NSP users | % male | % under 25 |
|---|---|---|---|---|
| **Primary Opioid users** | 3,083 | 39% | 78.6% | 7.3% |
| **Primary SIEDs users** | 4,102 | 51.9% | 97.6% | 25.7% |
| **Primary Stimulant users** | 719 | 9.1% | 76.9% | 8.6% |
| **All NSP users** | 7,904 | 100% | 88.3% | 17% |

Source: Harm Reduction Database Wales 2013

Numbers of NSP users by age, gender and primary substance type are presented in Chart 18.

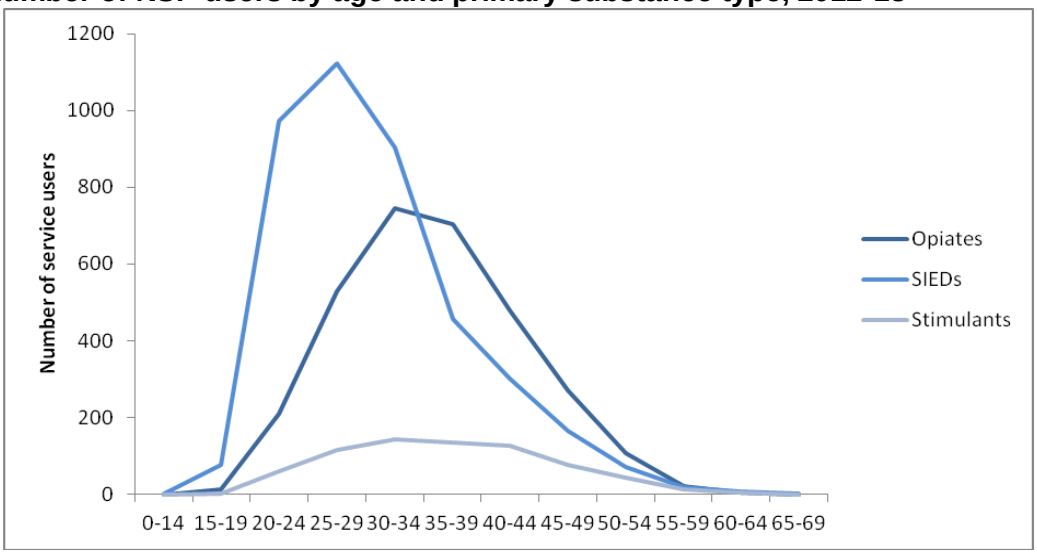
**Chart 18: Numbers of NSP users by age, gender and primary substance type, 2012-13**




Source: Harm Reduction Database Wales 2013

Across all substance categories, the 30-34 age range had the highest number of users, 22.7 per cent (n=1,792), followed by the 25-29 age range (n=1,765, 22.3 per cent). However, as table xxx and chart xxx show, SIEDs users are disproportionately likely to be younger and male compared to other substance categories. There are clear differences amongst females accessing NSPs in terms of primary substance reported, with 71.6 per cent (n=663) of females reporting primary use of opioids, a further 17.6 per cent (n=163) reporting primary stimulants use and only 10.8 per cent (n=100) reporting use of SIEDs. The differences in age profile across substances used are further described in Chart 19, which presents primary substance use across all age ranges.

**Chart 19: Number of NSP users by age and primary substance type, 2012-13**




Source: Harm Reduction Database Wales 2013

Chart 19 shows that SIED use amongst users of NSP services peaks in the 25-29 age range, whereas the highest numbers of those reporting primary opioid and stimulant use are in the 30-34 age range. This pattern changes from the 35-39 year age group, with higher numbers of primary opioid NSP users in the older age categories. These data indicate the requirement for targeted specialist NSP provision by age group and gender.

### 5.3.2 Substance use by primary substance and Health Board area

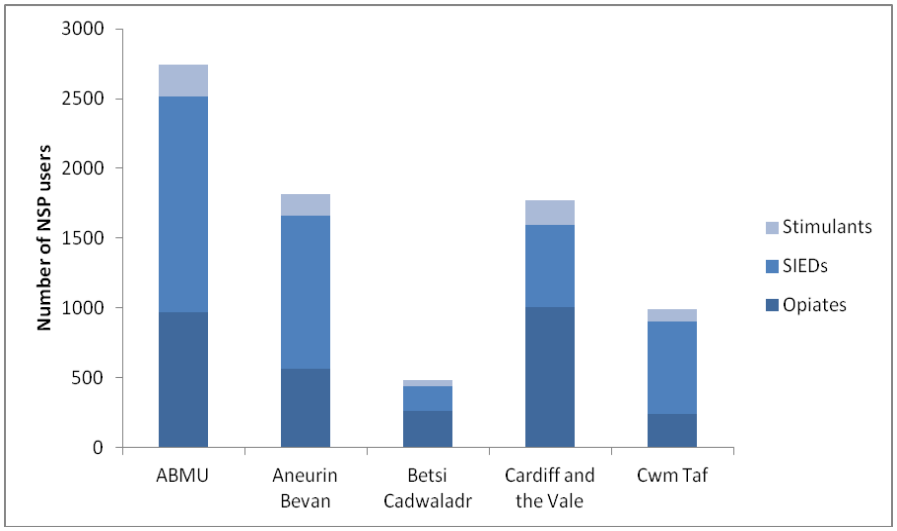
As noted above, the HRD currently has limited coverage of the Hywel Dda and Powys Teaching Health Board areas, with NSP users across the statutory and voluntary sectors in these areas accounting for 66 (0.8 per cent) and 37 (0.5 per cent) of all NSP users respectively. Given the small number of users, these Health Board areas have been excluded from analysis of substance use amongst NSP users by Health Board area.
The number of service users accessing NSP services in the remaining Health Board areas are reported in Table 4.

**Table 4: Numbers of NSP users accessing services across selected Welsh Health Board areas, 2012-13**

| Health Board area | Number of NSP users | % of NSP users across Wales |
|---|---|---|
| **AMBU** | 2,740 | 34.7 % |
| **Aneurin Bevan** | 1,813 | 22.9 % |
| **Betsi Cadwaladr** | 484 | 6.1 % |
| **Cardiff and Vale** | 1,773 | 22.4 % |
| **Cwm Taf** | 991 | 12.5 % |

Source: Harm Reduction Database Wales 2013

**Chart 20: NSP users by primary substance type across selected Welsh Health Board areas, 2012-13**




Source: Harm Reduction Database Wales 2013

As Chart 20 shows ABMU had 2,740 service users, the highest number amongst the Health Board areas (34.7 per cent of all NSP services users) across Wales. Aneurin Bevan and Cardiff and Vale

Health Boards had 22.9 per cent and 22.4 per cent of NSP service users respectively. It is important to reiterate that there exists variation in the level of pharmacy NSP services across Health Boards in Wales relative to statutory and voluntary NSP services.
NSPs in Cardiff and the Vale had the most users reporting opioids as their primary substance used, with 1,004 users (32.6 per cent of all primary opioid users), similar to the numbers see in ABMU (31.3 per cent, n=966). Of all recorded primary SIEDs users across Wales, over a third (37.8 per cent, n=1,550) were in the ABMU Health Board area.

**Further reporting**
The full 2012-13 HRD Wales annual report for NSP provision, as well as previous annual reports, are available at: www.publichealthwales.org/substancemisuse-hrd2013. The HRD Wales report for 2012-13 provides additional levels of detail in terms of NSP demographic and activity data in Wales.

### 5.3.3 Injecting drug use: Risk behaviour and blood borne viruses

In relation to the risks associated with injecting drug use, the practice of sharing injecting equipment, both direct (the sharing of needles and syringes) and indirect (the sharing of other injecting-related equipment including spoons/cookers, filters, water), have a clear impact on rates of injecting-related infections.[6] These infections may include bacterial infections as a result of with poor hygiene, poor injecting technique, or contamination of drugs injected and include:

- Staphylocccus aureus infections (including MSSA, MRSA)
- Group A streptococcal infections
- Clostridial infections including wound botulism, tetanus
- Blood borne viral infections:
  - hepatitis B
  - hepatitis C
  - HIV

**Risk behaviour**

**Direct sharing (the sharing of used needles and syringes)**
According to the Unlinked Anonymous Monitoring (UAM) survey of people who inject drugs (PWIDs) 2011, direct sharing (of used needles and syringes) in the previous four weeks was reported by 17 per cent of respondents, a reduction of 4 per cent on the previous year.[6,7] However, self-reported rates of direct sharing amongst younger PWID (aged under 25) was higher at 24 per cent.

Data from the HRD Wales in 2012-13 indicate that 10.7 per cent of respondents self-reported direct sharing.

**Indirect sharing (sharing injecting related equipment e.g. cookers, filters, water) and reuse of equipment**
In 2011, according to the UAM, 37 per cent of respondents reported sharing injecting equipment in the previous four weeks, down from 40 per cent in 2010.[6,7] Data from HRD Wales for 2012-13 indicate that 35 per cent of current PWID reported previous or ongoing reuse of injecting equipment, representing a clear risk of bacterial infection and injection site damage.

### Risks of injecting site infection

The UAM 2012 survey, for the period 2011, indicated that overall 28 per cent of current PWID respondents (injected in the previous four weeks) reported experiencing symptoms of injecting site infections in the previous year. These include having had an abscess, sore, or open wound at injection site. [6] This represents a decrease from 35 per cent from the previous year. [7] Data from HRD Wales in 2012-13 indicates that onward referral to primary care for injection site infections /wound care was made for 18.6 per cent of current NSP service users.

## Blood borne viruses

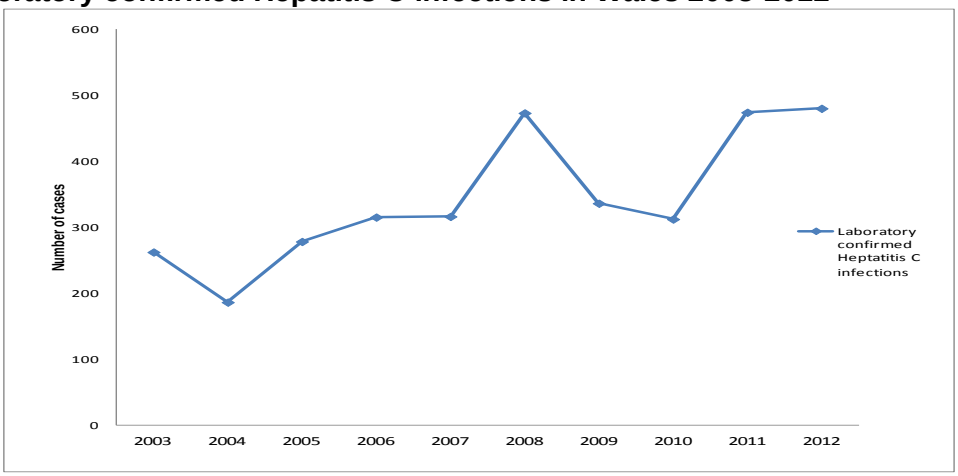
### Hepatitis C

Hepatitis C remains the most important blood borne virus in relation to injecting drug users, with around 80 per cent of those exposed becoming chronically infected. There are an estimated 14,000 individuals infected with hepatitis C in Wales. [8] Where individuals have been diagnosed and indicated a risk factor, over 93 per cent of the infections resulted from injecting drug use [9] as indicated in Table 5. In England and Wales in 2011, around 43 per cent of people who inject drugs (PWID) tested were hepatitis C antibody positive. Higher rates, around 53 per cent, were recorded in Scotland.[6] However, much hepatitis C infection remains undiagnosed. According to the UAM survey, 42 per cent of those with hepatitis C infection were unaware of their status, an improvement on the previous year's rate of 45 per cent.[6,7] In 2012, a total of 480 new laboratory confirmed hepatitis C infections were reported in Wales as indicated in Chart 21.

**Table 5: Self reported risk factor information in laboratory reports of hepatitis C infection in Wales 1996 to 2009.[9] (Risk factor was not reported in the majority of confirmed infections)**

| Risk factor (where reported) | Number of reports | Percentage % |
|---|---|---|
| Injecting drug use | 965 | 93.6 |
| Transfusion | 14 | 1.4 |
| Blood product recipient | 19 | 1.8 |
| Sexual exposure | 10 | 1 |
| Renal failure | 2 | 0.2 |
| Vertical (mother to baby) or Household | 6 | 0.6 |
| Occupational | 0 | 0 |
| Other | 15 | 1.5 |
| Total | 1,031 | 100 |

**Chart 21: Laboratory confirmed Hepatitis C infections in Wales 2003-2012**




Source: Laboratory reports 1992-2010, Public Health Wales. Data as at 28/07/13.

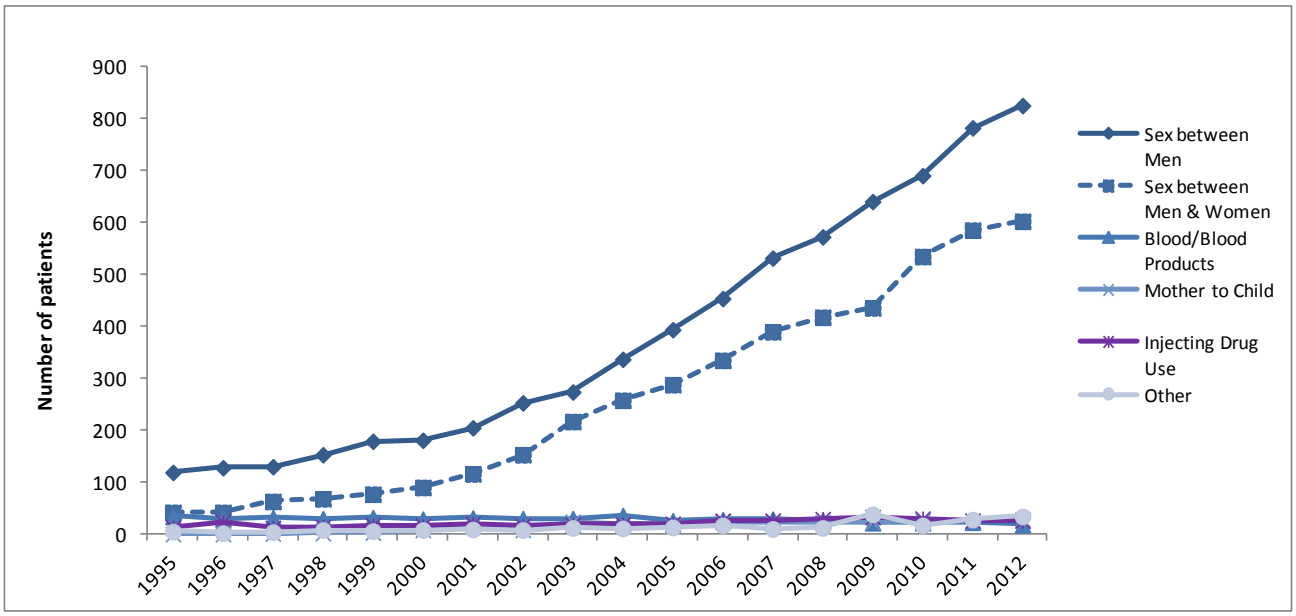
## Hepatitis B

Hepatitis B vaccination provides an effective means of preventing transmission of the hepatitis B virus and is particularly important within high-risk groups including prisoners, PWID, commercial sex workers and individuals participating in high risk sexual behaviour. According to the UAM 2011 survey data, the prevalence of Hepatitis B (previous or current hepatitis B infection) was 11 per cent amongst current and former injectors in Wales. The self-reported rate of hepatitis B vaccination amongst PWIDs (current and previous) in Wales was 79 per cent (at least one dose of vaccine). [6]

## HIV

In Wales, in 2012 there were a total of 1,535 HIV infected individuals accessing treatment, an increase of 4 per cent on the previous year. Of the patients new to treatment in 2012, 1.7 per cent (n=26) reported injecting drug use as their route of transmission.[10] Rates of HIV infection among injecting drug users in Wales and the wider UK remain low relative to other transmission routes as indicated in Chart 22. In 2012, there were a total of 125 new HIV diagnoses in Wales. [11] Where route of transmission was indicated, injecting drug use accounted for 0.8 per cent.

**Chart 22: HIV infected patients attending for treatment in Wales by route of transmission 1995 - 2012**



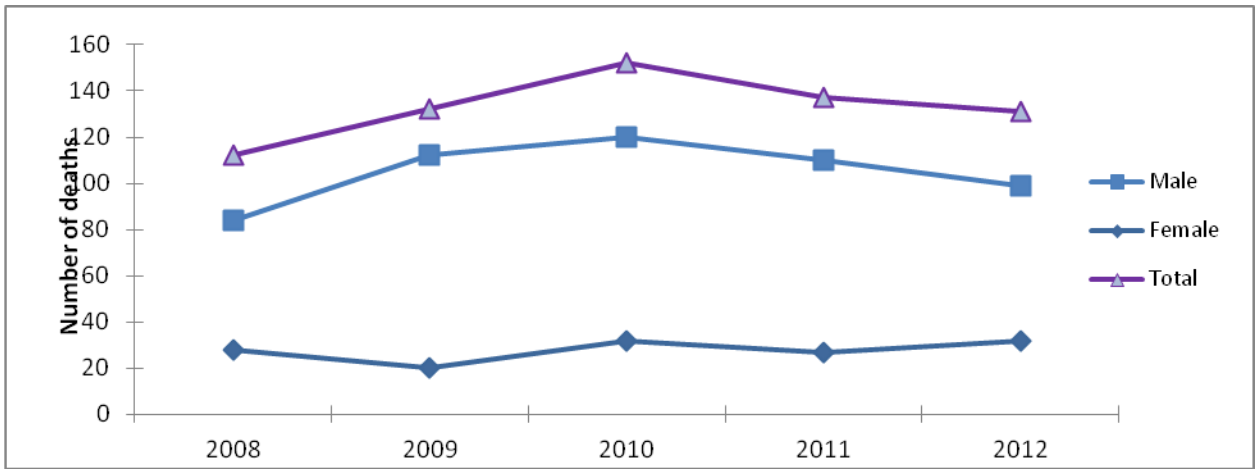

Source: Survey of prevalent HIV Infections Diagnosed (SOPHID), Public Health Wales 2013

## 5.4 Drug misuse related deaths

### 5.4.1 Trends in drug misuse related deaths

There were a total of 1,496 deaths related to drug misuse (illicit drugs) in England and Wales in 2012 (1,086 male and 410 female) representing an overall decrease of 6.8 per cent on the previous year (8.9 per cent decrease in males, 0.7 per cent decrease in females).[5] In Wales, the number of drug misuse deaths have decreased overall from a total of 137 in 2011 to 131 in 2012, a decrease of 4.4 percent, as indicated in Chart 23.

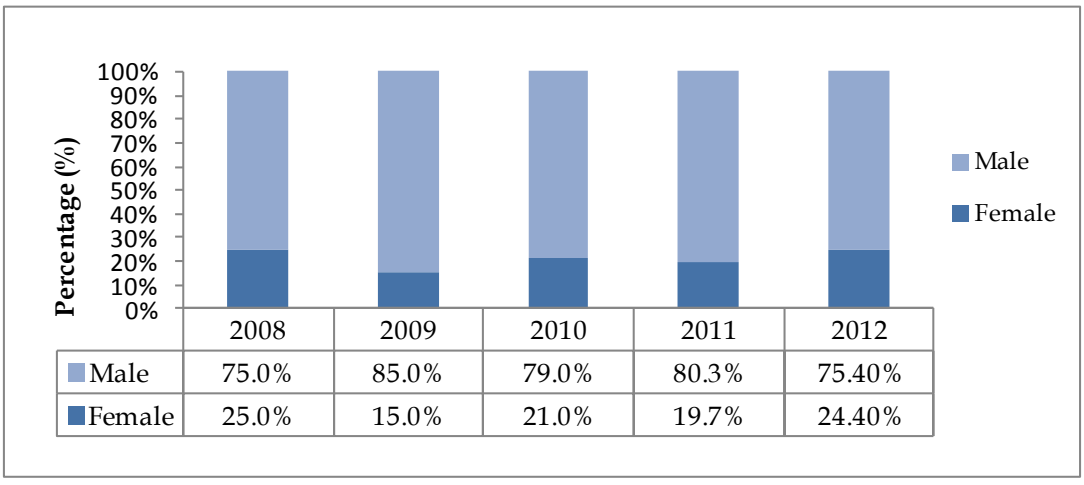
**Chart 23: Deaths misuse related deaths in Wales by gender 2008 to 2012**




Source: ONS, 2013

The proportion of drug misuse related deaths in females relative to males over the last five years is indicated in Chart 24. No clear trends may be observed from the data.

**Chart 24: Proportion of male to female deaths related to drug misuse 2008 to 2012**



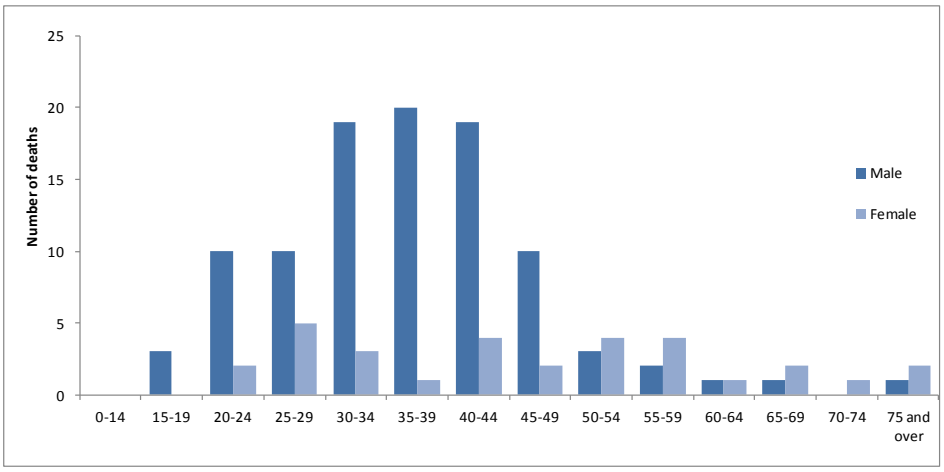

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Male | 75.0% | 85.0% | 79.0% | 80.3% | 75.40% |
| Female | 25.0% | 15.0% | 21.0% | 19.7% | 24.40% |

Source: ONS 2013

## 5.4.2 Drug misuse related deaths by age

The highest number of drug misuse related deaths in Wales in 2012 (male and female) occurred in the 40-44 year age group (n=23) as indicated in Chart 25. However, rates are elevated in the 30-34 (n=22) to 35-39 (n=21) year age groups. There were gender differences by age, the highest number of female deaths occurred in the 25-29 year age group and in males the highest number were recorded in the 35-39 age group.

**Chart 25: Drug misuse related deaths in Wales by age and gender 2012**

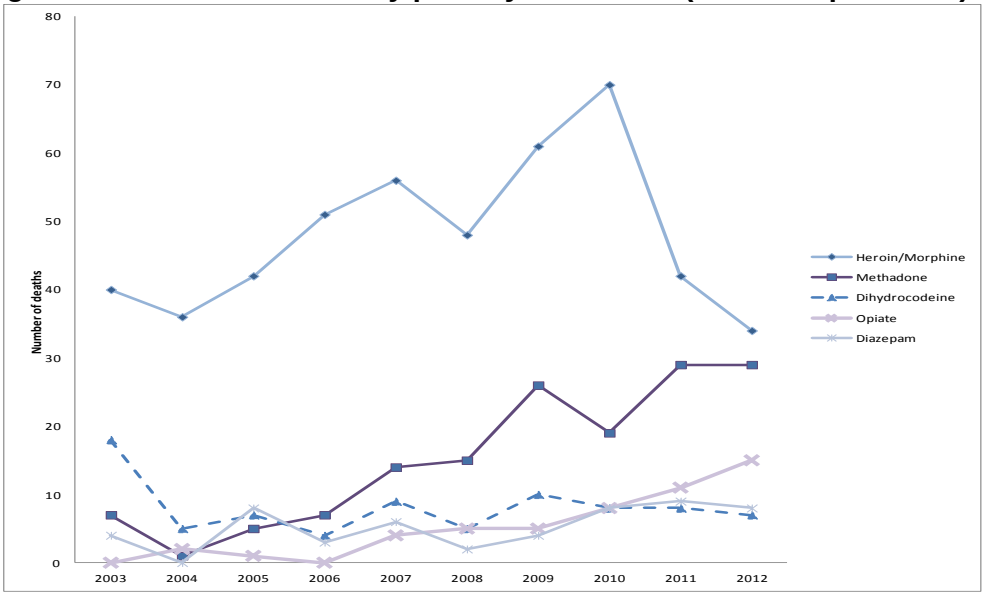



Source: ONS 2013

## 5.4.3 Drug misuse deaths by substance

Over the last two years, the proportion of drug misuse deaths due to heroin/morphine has decreased whilst the number of deaths due to methadone has risen as indicated in Chart 26.✳

**Chart 26: Drug misuse deaths in Wales by primary substance (five most prevalent) 2003-2012**



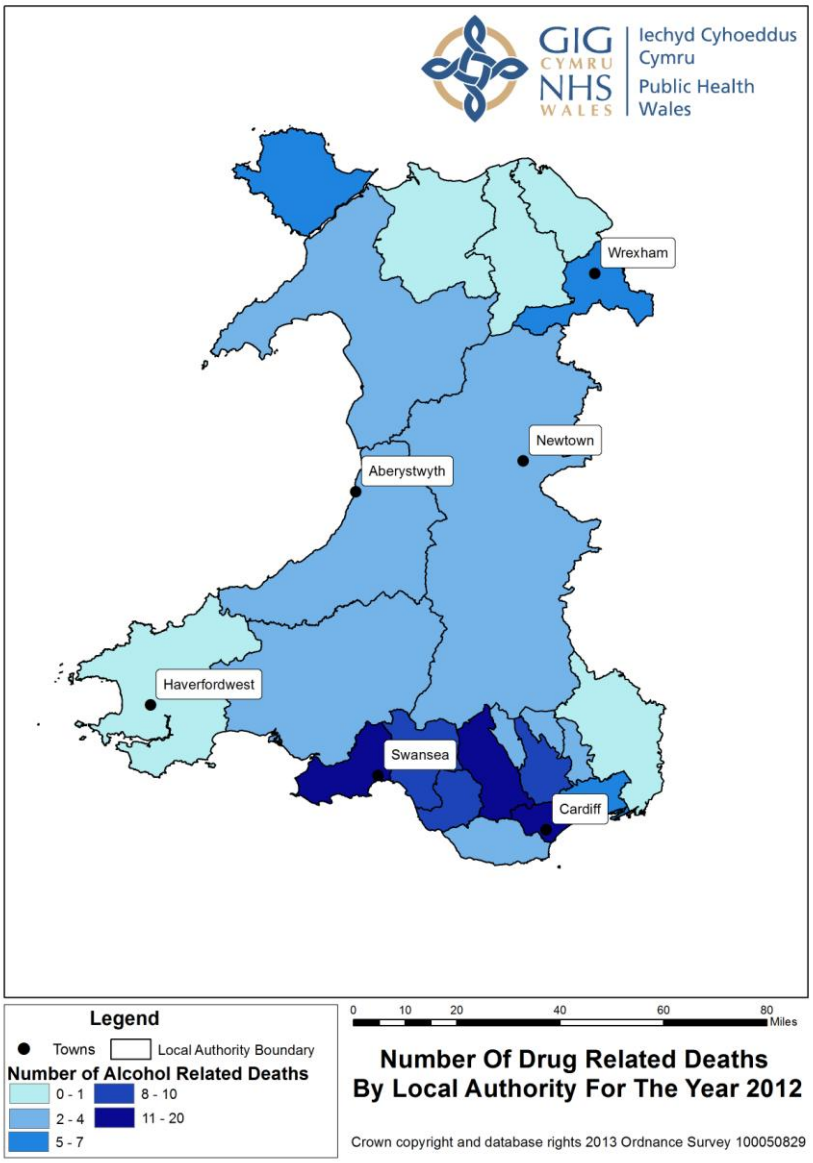

Source: ONS 2013

✳following additional analysis, a separate in-depth report on drug related deaths will be published In Spring 2014 by Public Health Wales.

### 5.4.4 Drug misuse related deaths by Health Board area of residence

Within the overall drug misuse related death data for 2012, there is marked regional variation as indicated in Map 2. 26 per cent per cent of all drug misuse related deaths in 2012 were recorded within the Abertawe Bro Morgannwg University Health Board area.

**Map 2: Drug misuse related deaths in Wales by Local Authority 2012**




Source: ONS 2013

However, a more representative measure of drug misuse related deaths by region is the rate per 100,000 population (European age standardised). The highest rates of drug misuse death per 100,000 population in 2012 were seen within Cwm Taf Health Board and the lowest within Powys Teaching Health Board as indicated in Table 6.

**Table 6: Drug related death rates per 100,000 population by Health Board area of residence 2012**

| | Number | Rate (a) | Rate (b) |
|---|---|---|---|
| Health Board of residence | | | |
| Abertawe Bro Morgannwg University | 34 | 6.90 | -1.07 |
| Aneurin Bevan | 21 | 3.90 | 0.90 |
| Betsi Cadwaldr | 15 | 2.37 | -1.39 |
| Cardiff & Vale University | 22 | 4.74 | -0.47 |
| Cwm Taf | 22 | 7.64 | 0.79 |
| Hywel Dda | 13 | 3.93 | -0.59 |
| Powys Teaching | Less than 5 | 2.19 | 0.52 |

Source: ONS 2013

Rate (a): European age standardised rate per 100,000 population based on 2012 mid-year population estimates for Wales

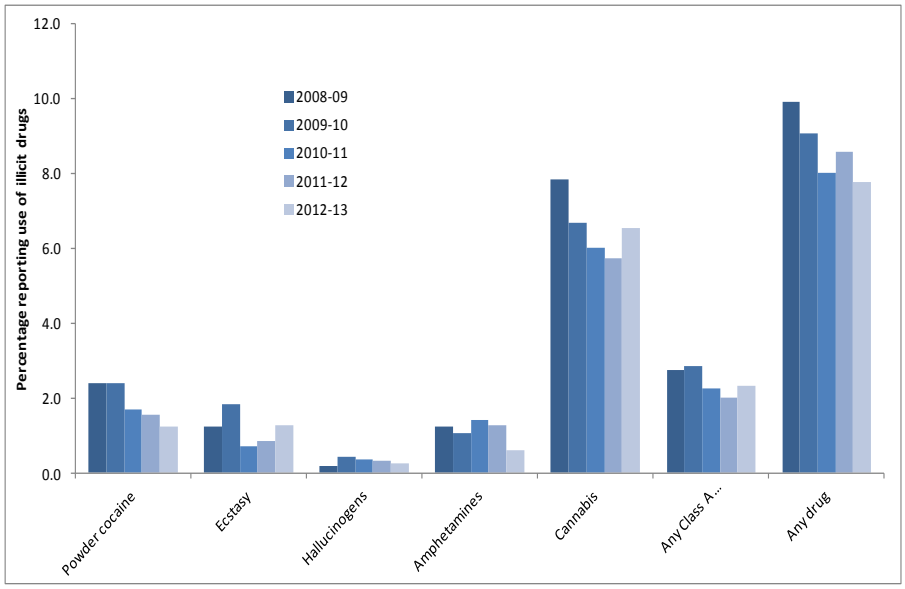
Rate (b): Rate increase or decrease from previous year (2011)

# 6.0 Criminal Justice and substance misuse

## 6.1 Self reported use of illicit drugs

According to 2012-13 Crime Survey for England and Wales, [12] a total of 7.8 per cent of adults (aged 16 – 59) in Wales self-reported using any drug in the previous year, a decrease of 0.8 per cent on the previous year as indicated in Chart 27. However, 2.3 per cent reporting use of any Class A drug, an increase of 0.3 percentage points ('Any class A' includes powder cocaine, crack cocaine, ecstasy, LSD, magic mushrooms, heroin, methadone, and methamphetamine). Extrapolating this latter data to the 16-59 year population of Wales (based on 2012 mid-year population estimates) this provides an estimate of just under 40,000 individuals in Wales using a Class A drug in the previous year, an increase of around 5,000 on the previous year

**Chart 27: Percentages of 16 to 59 year olds in Wales self-reporting use of illicit drugs 2008-09 to 2012-13 by named drug**

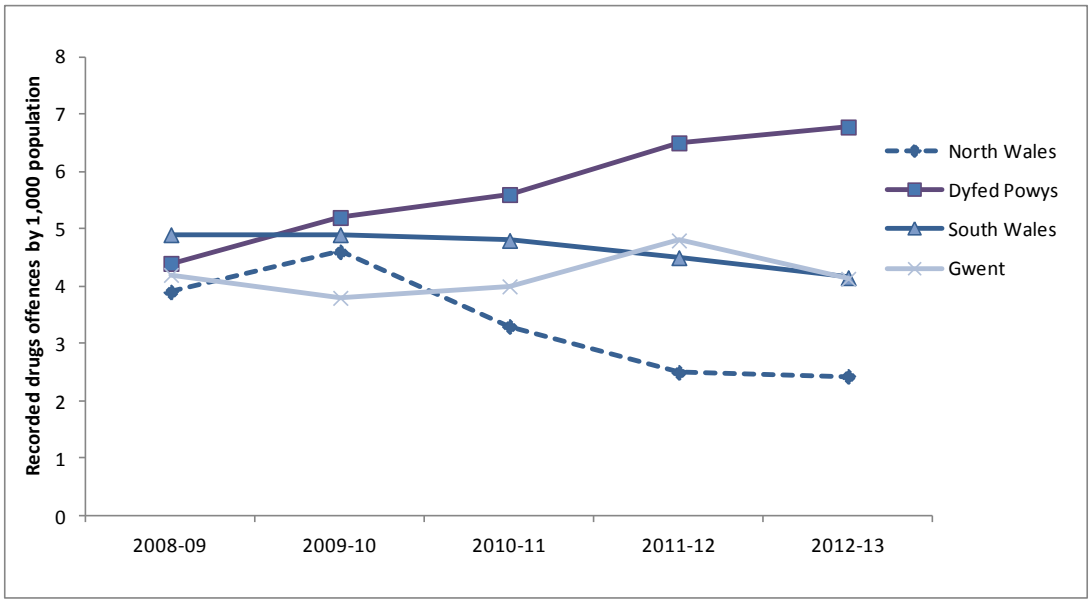



Source: Drug Misuse Declared: Findings from the 2012 Crime Survey for England and Wales 2013

## 6.2 Recorded drug offences in Wales

In 2012-13, a total of 12,919 drugs offences were reported by police forces across Wales, representing a 5.4 per cent decrease from 2011-12.[13] As a proportion of total recorded crime (including fraud) in Wales, drug offences accounted for 7.4 per cent, an increase of 0.2 percentage points on the previous year. Chart 28 indicates the rate of drugs offences per 1,000 population by police force area in Wales.

**Chart 28: Recorded drug offences by Police Force area per 1,000 population in Wales 2008/09 – 2012/13**

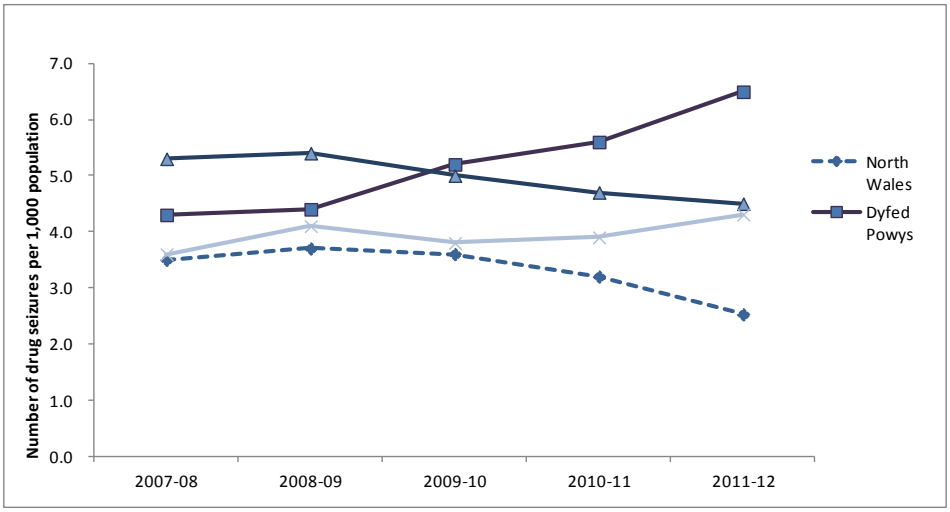



Source: ONS, 2013

## 6.3 Seizures of controlled drugs

There were 13,388 seizures of controlled drug in Wales in 2011-12 [14] representing an increase of 0.3 per cent on the previous year (n=13,354), however, variation exists in the rate of drug seizures per 1,000 population by police force area as indicated in Chart 29.

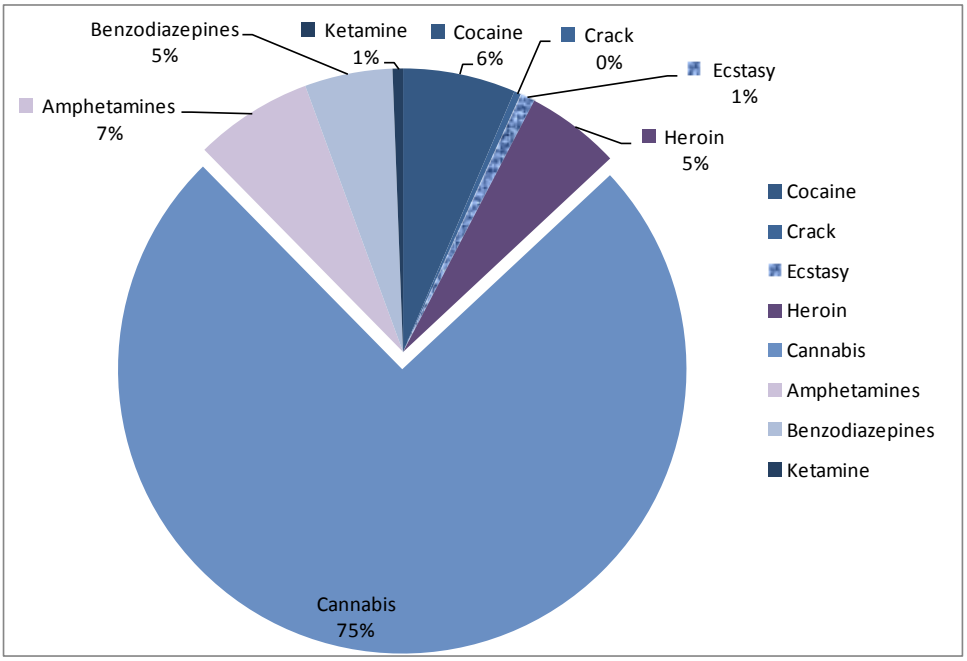
**Chart 29: Seizures of controlled drugs per 1,000 population by Police Force in Wales 2007/08 - 2011/12**




Source: Home Office, 2012

The profile of controlled drugs seized in 2010-11 by Welsh Police Forces is shown in Chart 30 highlighting that Cannabis remains the highest proportion of seizures.

**Chart 30: Profile of drugs seized by police forces in Wales 2010-11**

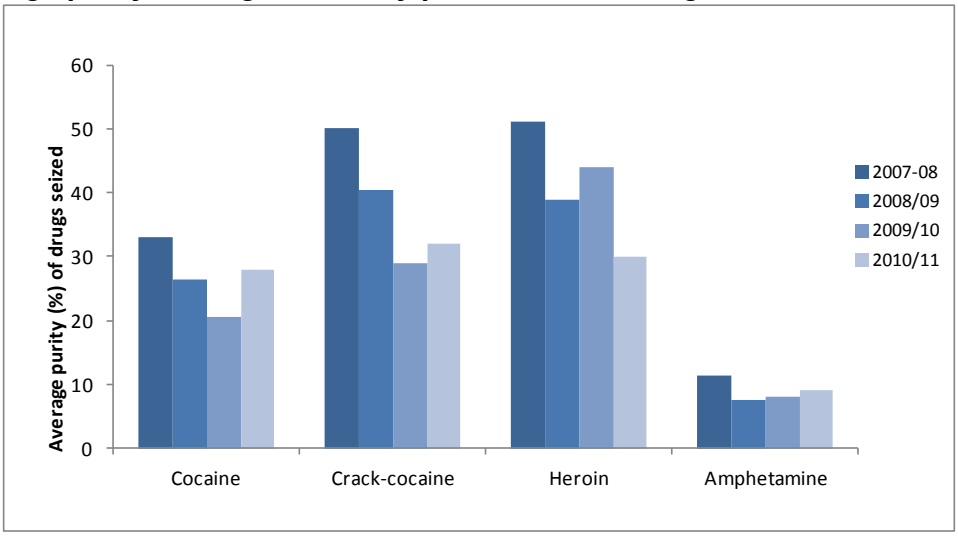



Source: Home Office, 2012

## 6.4 Purity of drugs seized

The purity of a drug describes the degree to which a quantity of the drug has remained free from other substances that may be added to increase the quantity and therefore resale value. The purity of a drug may be affected through the addition of adulterants (drugs that mimic or enhance the effects of a given drug; e.g. caffeine often found in amphetamine) or dilutants (mainly sugars such as glucose added to bulk the quantity). [15] Decreases in the purity of a drug may lead to increases in the quantity of the drug required to achieve the same effect for the user. The average purity of drugs seized by police forces in Wales from 2006-07 to 2010-11 [14] is shown in Chart 31.

**Chart 31: Average purity of drugs seized by police forces in England and Wales 2006 to 2010-11**




Source: Home Office, 2011

## 6.5 Drug Interventions Programme Wales (DIP) and South Wales Integrated Offender Interventions Service (IOIS)

The Drug Interventions Programme (DIP) is a crime reduction initiative, which provides a support structure to encourage offenders out of crime and into treatment. It aims to break the cycle of drug misuse, offending behaviour and custody by intervening at every stage of the criminal justice system to engage offenders in treatment and provide aftercare support. In South Wales DIP is part of a wider integrated CJS treatment system, the Integrated Offender Interventions Service (IOIS).

### 6.5.1 Cases Referred and Assessed

A total of 4,879 referrals were made to the DIP/IOIS programme in Wales, the majority of which (54 per cent) were in the South Wales area. Of these referrals, 3,467 were taken on to the caseload of the DIP/IOIS programme following assessment including transfers from prison and other authorities. 80 per cent of these were male and 42 per cent were aged under 30. The age and gender split for all those on the caseload in each of the police authority areas in Wales are shown in Table 7.

**Table 7: Drug intervention Programme Key Caseload Data by Police Force Area 2012-13**

| | | North Wales | Dyfed Powys | Gwent | South Wales | Total | Number on Caseload |
|---|---|---|---|---|---|---|---|
| **Gender** | Male | 87% | 82% | 81% | 78% | 80% | 2781 |
| | Female | 13% | 18% | 19% | 22% | 20% | 686 |
| | Total | 100% | 100% | 100% | 100% | 100% | 3467 |
| **Age Group** | 18-24 | 21% | 31% | 17% | 14% | 17% | 577 |
| | 25-29 | 19% | 24% | 24% | 23% | 22% | 779 |
| | 30-34 | 20% | 18% | 23% | 25% | 23% | 814 |
| | 35 & over | 40% | 28% | 36% | 38% | 37% | 1297 |
| | Total | 100% | 100% | 100% | 100% | 100% | 3467 |

**Source: IOIS, 2013**

### 6.5.2 Drug Tests

Six areas within Wales (Cardiff, Swansea, Newport, Wrexham, Carmarthenshire and Caerphilly) took part in 'Tough Choices'; a policy that gives Police custody staff the legal authority to 'drug test on arrest' for Class ‘A’ substances.

During April 2012 to March 2013, 8,244 tests were carried out following arrest. Table 8 below shows that 2,490 (30 per cent) tested positive, of these 45 per cent tested positive for cocaine, 39 per cent for opiates and 16 per cent for both cocaine and opiates. In the two areas of highest drug test on arrest activity 2012/13 saw 4,183 identified problematic individuals drug tested on arrest in Cardiff and Swansea police custody suites of which 1,508 ( 36 per cent ) tested positive for ‘Class A’ drugs ( cocaine, opiates or both opiates and cocaine)

There is a visible regional variation between the drug test results in custody between Cardiff and Swansea with cocaine only positive drug tests in Cardiff accounting for 481 or 48 per cent of positive drug tests and 149 or 37 per cent in Swansea. However, the decline in ‘opiate only’ drug dependency reported anecdotally through treatment partners, both within and external to the CJS, is reflected in the drug testing on arrest figures and poses a challenge to existing treatment frameworks within the CJS

and wider community to deliver relevant services to offenders who are increasingly using stimulants, such as cocaine, as well as the plethora of 'designer' psychoactive drugs.

**Table 8: Drug intervention Programme Wales Drug custody suite drug tests 2012-13**

| Drug Test | Number | Percentage |
|---|---|---|
| Positive | 2490 | 30% |
| Negative | 5754 | 70% |
| Total | 8244 | |
| Of positive tests | | |
| Cocaine | 1128 | 45% |
| Opiates | 975 | 39% |
| Both | 387 | 16% |

# 7.0 Additional substance misuse reports and data

This section highlights reports and other documents containing relevant substance misuse related data and information which the reader may find useful and which may not otherwise be referenced within this document.

### World Drug report 2013 – United Nations Office of Drugs and Crime

**World Drug Report**

### EMCDDA - The state of the drugs problem in Europe 2013

The European Centre for Drugs and Drug Addiction (EMCDDA) provide an annual report on drug use across Europe drawing on available data provided by EU member states and candidate countries. Useful information and perspective is provided on a range of issues relating to drug use.
**http://www.emcdda.europa.eu/edr2013**

### Shooting up – Infections among injecting drug users in the United Kingdom 2012

This annual report uses data drawn from the Unlinked Anonymous Monitoring (UAM) survey which provides evidence for current prevalence of blood borne viruses amongst injecting drug use and information of rates of bacterial infection, risk behaviour and variables associated with elevated risk amongst this population. Current and previous reports are available at:
http://www.hpa.org.uk/Publications/InfectiousDiseases/BloodBorneInfections/ShootingUp/1211Shootingup2012/

### Welsh Health Survey

The Welsh Health Survey provides estimates of health status, health related lifestyle and health service use at national level, for population sub-groups (such as age, sex and socio-economic group), and for local authorities and health boards
http://www.wales.nhs.uk/sitesplus/922/page/49840

### Drug Misuse Declared 2012-13

The annual statistical bulletin focuses on prevalence and trends in illicit drug use in the 16-59 year old population in England and Wales. The data is drawn from self-report questionnaire completed by a representative sample of the general population. The report is available at:
Drug Misuse: Findings from the 2012 to 2013 Crime Survey for England and Wales - GOV.UK

### Health Behaviour in School Aged Children (HBSC)

The HBSC survey provides information on the health and well-being of children, measuring 3 age groups: 11, 13 and 15 with currently 43 participating countries. The survey is undertaken every four years with the last being completed in 2009-10. The survey and resultant reports aim to provide information including tobacco, cannabis and alcohol use and sexual health.

The report is available in PDF format from: **http://www.hbsc.org/**

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# Definitions

The following definitions are used within this report:

**Alcohol specific conditions**
The term 'alcohol specific' conditions or diagnoses refers to conditions that are wholly related to alcohol (e.g. alcoholic liver disease or alcohol overdose). In previous years this annual report has used the measure of 'alcohol related' conditions in relation to hospital admissions. The change is methodology was implemented to ensure that rates of alcohol specific health harms could be more readily assessed with other areas across the UK. The ICD-10 codes used for alcohol specific conditions are specified below. **(ICD-10 codes).** Deaths are defined as alcohol related deaths – see page 41 for definitions.

**Prevalence**
Prevalence of a particular condition is the total number of cases of the condition in a population at a given time and is usually expressed as a rate per 100,000 population. For example if there are (say) 24,000 drug and/or alcohol users in Wales (which has a population of approximately 3m) then the prevalence rate is about 800 per 100,000. It is difficult to estimate the true prevalence rate because not all drug and/or alcohol users are known to the authorities. A prevalence rate based on the numbers of individuals on the database will therefore underestimate the true prevalence.

**European age standardised rates**
Direct standardisation removes effects due to differences in population structure and allows two areas with different demographic characteristics to be compared directly with each other. The age-standardised rate for an area is the number of events (per 100,000) that would occur in that area if the standard population lived there and the age-specific rates of the area applied.

**95% Confidence Intervals (95% CI)**
When an estimate of a particular characteristic for a population is based on a sample there is a degree of uncertainty about the estimate which depends on both the underlying variability of the characteristics and on the sample size. The 95% confidence interval is a measure of this uncertainty and gives the limits within which the "true" value will lie with a probability of 95 per cent. For example, an estimate of (say) 30 per cent for the prevalence of blue eyes in the population with 95% confidence limits of 25 per cent to 35 per cent means that the "true" prevalence lies between these two figures with a probability of 95 per cent. A more precise estimate can be obtained by increasing the sample size.

**Rate**
Rate per 100,000 population (based on ONS 2012 mid year estimates).

**Routinely collected data**

**Methodology, definitions and ICD-10 codes**

The following acronyms and definitions are used in Section 2 of this report.

**List of abbreviations**

| | |
|---|---|
| DBS | Dried blood spot test |
| HBV | Hepatitis B |
| HCV | Hepatitis C |
| HIV | Human immunodeficiency Virus |
| IDUs | Injecting drug users |
| SMHNA | Substance misuse and health needs assessment |
| UAPMP | Unlinked anonymous prevalence monitoring programme |
| WNDSM | Welsh National Database for Substance Misuse |

**ICD-10 Codes**

**Drug related deaths (ONS 2010)**

| **ICD-10 code** | **Cause** |
|---|---|
| F11-F16, F18-F19 | Mental and behavioural disorders due to drug use (excluding alcohol and tobacco). |
| X40-X44 | Accidental poisoning by drugs, medicaments and biological substances. |
| X60-X64 | Intentional self-poisoning by drugs, medicaments and biological substances. |
| Y10-Y14 | Poisoning by drugs, medicaments and biological substances, undetermined intent |
| X85 | Assault by drugs, medicaments and biological substances. |

**Alcohol related deaths**

| | |
|---|---|
| F10 | Mental and behavioural disorders due to use of alcohol |
| G31.2 | Degeneration of nervous system due to alcohol |
| G62.1 | Alcoholic polyneuropathy |
| I42.6 | Alcoholic cardiomyopathy |
| K29.2 | Alcoholic gastritis |
| K70 | Alcoholic liver disease |
| K73 | Chronic hepatitis, not elsewhere classified |
| K74 (Excluding K74.3-K74.5 | Fibrosis and cirrhosis of liver |
| K86.0 | Alcohol induced chronic pancreatitis |
| X45 | Accidental poisoning by and exposure to alcohol |
| X65 | Intentional self-poisoning by and exposure to alcohol |
| Y15 | Poisoning by and exposure to alcohol, undetermined intent |

All Hospital admissions data is based on Calendar Episode End Year for Welsh residents

**Alcohol specific hospital admissions uses the following ICD-10 codes:**

| | |
|---|---|
| E24.4 | Alcohol-induced pseudo Cushings syndrome |
| F10* | Mental and behavioural disorders due to use of alcohol |
| G31.2 | Degeneration of nervous system due to alcohol |
| G62.1 | Alcoholic polyneuropathy |
| G72.1 | Alcoholic myopathy |
| I42.6 | Alcoholic cardiomyopathy |
| K29.2 | Alcoholic gastritis |
| K70* | Alcoholic liver disease |
| K86.0 | Alcohol induced chronic pancreatitis |
| T51.0 | Ethanol poisoning |
| T51.1 | Methanol poisoning |
| T51. 9 | Toxic effect of alcohol, unspecified |
| X45* | Accidental poisoning by and exposure to alcohol |

*indicates that any fourth-character classification can be added to the first three characters

**Drug related hospital admissions use the following ICD-10 codes:**

| | |
|---|---|
| F11*: | Mental and behavioural disorders due to use of opioids |
| F12* | Mental and behavioural disorders due to use of cannabinoids |
| F13* | Mental and behavioural disorders due to use of sedatives or hypnotics |
| F14* | Mental and behavioural disorders due to use of cocaine |
| F15* | Mental and behavioural disorders due to use of other stimulants |
| F16* | Mental and behavioural disorders due to use of hallucinogens |
| F18* | Mental and behavioural disorders due to use of volatile solvents |
| F19* | Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances |
| T40* | Poisoning by narcotics and psychodysleptics (hallucinogens) |
| T42* | Poisoning by antiepileptic, sedative-hypnotic and antiparkinsonism drugs |
| T43* | Poisoning by psychotropic drugs, not elsewhere classified |

ONS definition 2010

*indicates that any fourth-character classification can be added to the first three characters

The fourth-character subdivisions for use with categories F10-F19 are:

**.0 Acute intoxication**

A condition that follows the administration of a psychoactive substance resulting in disturbances in level of consciousness, cognition, perception, affect or behaviour, or other psycho-physiological functions and responses. The disturbances are directly related to the acute pharmacological effects of the substance and resolve with time, with complete recovery, except where tissue damage or other complications have arisen. Complications may include trauma, inhalation of vomitus, delirium, coma, convulsions, and other medical complications. The nature of these complications depends on the pharmacological class of substance and mode of administration.

Acute drunkenness in alcoholism
"Bad trips" (drugs)
Drunkenness NOS
Pathological intoxication
Trance and possession disorders in psychoactive substance intoxication

***Excludes:*** intoxication meaning poisoning

**.1 Harmful use**

A pattern of psychoactive substance use that is causing damage to health. The damage may be physical (as in cases of hepatitis from the self-administration of injected psychoactive substances) or mental (e.g. episodes of depressive disorder secondary to heavy consumption of alcohol).

Psychoactive substance abuse

**.2 Dependence syndrome**

A cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

The dependence syndrome may be present for a specific psychoactive substance (e.g. tobacco, alcohol, or diazepam), for a class of substances (e.g. opioid drugs), or for a wider range of pharmacologically different psychoactive substances.

Chronic alcoholism
Dipsomania
Drug addiction

**.3 Withdrawal state**

A group of symptoms of variable clustering and severity occurring on absolute or relative withdrawal of a psychoactive substance after persistent use of that substance. The onset and course of the withdrawal state are time-limited and are related to the type of psychoactive substance and dose being used immediately before cessation or reduction of use. The withdrawal state may be complicated by convulsions.

**.4 Withdrawal state with delirium**

A condition where the withdrawal state as defined in the common fourth character .3 is complicated by delirium as defined in F05.-. Convulsions may also occur. When organic factors are also considered to play a role in the etiology, the condition should be classified to F05.8.

Delirium tremens (alcohol-induced)

**.5 Psychotic disorder**

A cluster of psychotic phenomena that occur during or following psychoactive substance use but that are not explained on the basis of acute intoxication alone and do not form part of a withdrawal state. The disorder is characterized by hallucinations (typically auditory, but often in more than one sensory modality), perceptual distortions, delusions (often of a paranoid or persecutory nature), psychomotor disturbances (excitement or stupor), and an abnormal affect, which may range from intense fear to ecstasy. The sensorium is usually clear but some degree of clouding of consciousness, though not severe confusion, may be present.

Alcoholic:
· hallucinosis
· jealousy
· paranoia
· psychosis NOS

***Excludes:*** alcohol- or other psychoactive substance-induced residual and late-onset psychotic disorder ( F10-F19 with common fourth character .7)

**.6 Amnesic syndrome**

A syndrome associated with chronic prominent impairment of recent and remote memory. Immediate recall is usually preserved and recent memory is characteristically more disturbed than remote memory. Disturbances of time sense and ordering of events are usually evident, as are difficulties in learning new material. Confabulation may be marked but is not invariably present.

Other cognitive functions are usually relatively well preserved and amnesic defects are out of proportion to other disturbances.

Amnestic disorder, alcohol- or drug-induced
Korsakov's psychosis or syndrome, alcohol- or other psychoactive substance-induced or unspecified

***Excludes:*** nonalcoholic Korsakov's psychosis or syndrome ( F04 )

**.7 Residual and late-onset psychotic disorder**

A disorder in which alcohol- or psychoactive substance-induced changes of cognition, affect, personality, or behaviour persist beyond the period during which a direct psychoactive substance-related effect might reasonably be assumed to be operating. Onset of the disorder should be directly related to the use of the psychoactive substance. Cases in which initial onset of the state occurs later than episode(s) of such substance use should be coded here only where clear and strong evidence is available to attribute the state to the residual effect of the psychoactive substance. Flashbacks may be distinguished from psychotic state partly by their episodic nature, frequently of very short duration, and by their duplication of previous alcohol- or other psychoactive substance-related experiences.

Alcoholic dementia NOS
Chronic alcoholic brain syndrome
Dementia and other milder forms of persisting impairment of cognitive functions
Flashbacks
Late-onset psychoactive substance-induced psychotic disorder
Posthallucinogen perception disorder
Residual:
· affective disorder
· disorder of personality and behaviour

***Excludes:*** alcohol- or psychoactive substance-induced:
· Korsakov's syndrome ( F10-F19 with common fourth character .6)
· psychotic state ( F10-F19 with common fourth character .5)

**.8 Other mental and behavioural disorders**

**.9 Unspecified mental and behavioural disorder**

# Appendices - Appendix 1: Estimate of problem drug use 2009-10

| Estimate of problem drug use 2009/10 | Observed | Assumed | Total | population | Rate per 1000 | Profile of primary drug type – rate per 1,000 population | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Stimulant | Opioid | Both |
| | | | | | | | | |
| **BCU Trust** | | | | | | | | |
| Males 15 - 29 | 498 | 953 | 1,451 (1,163-1,862) | 6,1771 | 23.5 (18.8-30.1) | 11.6(9.3-14.9) | 10.1(8.1-13.0) | 1.7(1.4-2.2) |
| Males 30-64 | 765 | 545 | 1,310 (1,080-1,304) | 150,982 | 8.7 (7.2 – 10.2) | 1.1(0.9-1.3) | 6.8(5.6-8.0) | 0.8(0.6-0.9) |
| Females 15-29 | 134 | 196 | 330 (215-610) | 57,239 | 5.8 (3.8 – 10.7) | 1.2(0.8-2.1) | 4.2(2.7-7.8) | 0.4(0.3-0.7) |
| Females 30-64 | 198 | 110 | 308 (249-436) | 157,495 | 2.0 (1.6 – 2.8) | 0.1(0.1-0.2) | 1.7(1.4-2.4) | 0.1(0.1-0.2) |
| **BCU Trust Total** | **1,595** | **1804** | **3,399 (2,707-4,212)** | **427,487** | **8.0 (6.3 – 10.4)** | **1.9(1.5-2.5)** | **5.4(4.3-7.1)** | **0.6(0.5-0.8)** |
| | | | | | | | | |
| **POWYS** | | | | | | | | |
| Males 15 - 29 | 58 | 59 | 117 (73-234) | 10,202 | 11.5 (7.2 – 22.9) | 5.9(3.7-11.9) | 4.9(3.1-9.9) | 0.6(0.4-1.2) |
| Males 30-64 | 75 | 27 | 102 (79-242) | 29,979 | 3.4 (2.6 – 8.1) | 0.4(0.3-1.0) | 2.7(2.1-6.4) | 0.3(0.2-0.8) |
| Females 15-29 | 22 | 5 | 27 ( 23-50) | 9,023 | 3.0 (2.5 – 5.5) | 0.5(0.5-1.0) | 2.2(1.9-4.0) | 0.3(0.2-0.5) |
| Females 30-64 | 12 | 10 | 31 (14-243) | 30,876 | 1.0 (0.5 – 7.9) | 0.1(0.0-0.7) | 0.8(0.4-6.6) | 0.1(0.0-0.7) |
| **Powys Totals** | **167** | **110** | **277 (189-769)** | **80,080** | **3.5 (2.4 – 9.6)** | **0.9(0.6-2.5)** | **2.3(1.6-6.3)** | **0.3(0.2-0.7)** |
| | | | | | | | | |
| **HYWEL DDA** | | | | | | | | |
| Males 15 - 29 | 278 | 277 | 555 (469-617) | 34,770 | 16.0 (13.5 – 17.7) | 6.1(5.2-6.8) | 8.3(7.0-9.2) | 1.6(1.3-1.7_ |
| Males 30-64 | 290 | 200 | 490 (419-599) | 80,068 | 6.1 (5.2 – 7.5) | 1.4(1.2-1.7) | 4.4(3.8-5.4) | 0.3(0.3-0.4) |
| Females 15-29 | 83 | 63 | 146 (106-242) | 33,175 | 4.4 (3.2 – 7.3) | 0.5(0.4-0.9) | 3.6(2.6-6.0) | 0.3(0.2-0.4) |
| Females 30-64 | 77 | 84 | 161 (115-249) | 86,216 | 1.9 (1.3 – 2.9) | 0.3(0.2-0.4) | 1.5(1.1-2.4) | 0.1(0.1-0.1) |
| **Hywel Dda Totals** | **728** | **624** | **1,352 (1,109-1,707)** | **234,229** | **5.8 (4.7 – 7.3)** | **1.5(1.3-1.9)** | **3.8(3.1-4.8)** | **0.4(0.3-0.5)** |
| | | | | | | | | |
| **ABMU Trust** | | | | | | | | |
| Males 15 - 29 | 705 | 998 | 1,703 (1,379-2,183) | 52,717 | 32.3(26.2 – 41.4) | 7.1(5.7-9.0) | 23.5(19.0-30.1) | 1.8(1.4-2.3) |
| Males 30-64 | 874 | 708 | 1,582 (1,369-1,885) | 110,974 | 14.3(12.3 – 17.0) | 1.5(1.3-1.8) | 12.1(10.5-14.4) | 0.6(0.5-0.7) |
| Females 15-29 | 298 | 246 | 544 (425-774) | 48,445 | 11.2(3.7 – 11.8) | 0.7(0.5-1.0) | 10.1(7.9-14.3) | 0.5(0.4-0.7) |
| Females 30-64 | 225 | 627 | 852 (426-1359) | 115,004 | 7.4(3.7 – 11.8) | 0.3(0.1-0.5) | 6.9(3.5-11.1) | 0.2(0.1-0.3) |
| **ABMU Total** | **2,102** | **2579** | **4,681 (3,599-6,201)** | **327,140** | **14.3 (11.0 – 19.0)** | **1.9(1.4-2.5)** | **11.8(9.1-15.6)** | **0.6(0.5-0.9)** |
| | | | | | | | | |
| **Cwm Taf** | | | | | | | | |
| Males 15 - 29 | 256 | 257 | 513 (416-669) | 29,736 | 17.3 (14.0 – 22.5) | 5.7(4.6-7.4) | 11.0(8.9-14.3) | 0.6(0.5-0.8) |
| Males 30-64 | 343 | 401 | 744 (549-1,122) | 63,817 | 11.7 (8.6 – 17.6) | 1.0(0.7-1.4) | 10.2(7.5-15.3) | 0.5(0.4-0.8) |
| Females 15-29 | 120 | 78 | 198 (162-266) | 28,592 | 6.9 (5.7 – 9.3) | 0.4(0.3-0.5) | 6.3(5.1-8.5) | 0.2(0.2-0.3) |
| Females 30-64 | 113 | 141 | 254 (177-423) | 66,978 | 3.8 (2.6 – 6.3) | 0.1(0.1-0.2) | 3.6(2.5-6.0) | 0.0 (0.0-0.1) |
| **Cwm Taf Total** | **832** | **877** | **1,709 (1,304-2,480)** | **189,123** | **9.0 (6.9 – 13.1)** | **1.3(1.0-1.9)** | **7.4(5.6-10.7)** | **0.3(0.2-0.5)** |
| | | | | | | | | |
| | | | | | | | | |

**Estimate of problem drug use 2009-10**

| Estimate of problem drug use 2009/10 | Observed | Assumed | Total | population | Rate per 1000 | Profile of primary drug type – rate per 1,000 population | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Stimulant | Opioid | Both |
| | | | | | | | | |
| **Cardiff and the Vale** | | | | | | | | |
| Males 15 - 29 | 612 | 1020 | 1,632 (1,349-2,024) | 60,973 | 26.8 (22.1 – 33.2) | 9.7(8.0-12.0) | 14.7(12.1-18.2) | 2.4(2.0-2.9) |
| Males 30-64 | 677 | 369 | 1,046 (967-1,145) | 96,814 | 10.8 (10.0 – 11.8) | 1.6(1.5-1.7) | 8.2(7.6-8.9) | 1.0(1.0-1.1) |
| Females 15-29 | 179 | 149 | 328 (251-489) | 61,428 | 5.3 (4.1 – 8.0) | 0.6(0.5-0.9) | 4.1(3.2-6.1) | 0.6(0.5-0.9) |
| Females 30-64 | 175 | 78 | 253 (221-307) | 99,546 | 2.5 (2.2 – 3.1) | 0.3(0.3-0.4) | 2.0(1.7-2.4) | 0.3(0.2-0.3) |
| **Cardiff and the Vale Total** | **1,643** | **1,616** | **3,259 (2,788-3,965)** | **318,761** | **10.2 (8.7 – 12.4)** | **2.3(1.9-2.7)** | **7.0(6.0-8.5)** | **1.0(0.8-1.2)** |
| | | | | | | | | |
| **Aneurin Bevan** | | | | | | | | |
| Males 15 - 29 | 450 | 1,083 | 1,533 (1,067-2,351) | 53,739 | 28.5 (19.9 – 43.7) | 13.0(9.0-19.9) | 12.4(8.6-19.0) | 3.2(2.2-4.9) |
| Males 30-64 | 458 | 445 | 903 (723-1207) | 124,565 | 7.2 (5.8 – 9.7) | 0.9(0.7-1.2) | 5.6(4.5-7.5) | 0.7(0.6-1.0) |
| Females 15-29 | 130 | 132 | 262 (196-393) | 51,489 | 5.1 (3.8 – 7.6) | 0.9(00.6-1.3) | 3.8(2.9-5.8) | 0.4(0.3-0.6) |
| Females 30-64 | 112 | 102 | 214 (168-295) | 130,450 | 1.6 (1.3 – 2.3) | 0.1(0.1-0.2) | 1.3(1.0-1.8) | 0.2(0.1-0.3) |
| **Aneurin Bevan Total** | **1,150** | **1,762** | **2,912 (2,154-4,246)** | **360,243** | **8.1 (6.0 – 11.8)** | **2.1(1.5-3.0)** | **5.2(3.8-7.5)** | **0.8(0.6-1.2)** |
| | | | | | | | | |

**Authors: Josie Smith, Simon Cottrell and Dr Mark Temple**

Notes:

1. It was not possible to report a separate estimate of injecting drug use as this item was not routinely recorded within the datasets.

2. Some of the underlying assumptions of the model may have been violated and led to biased results – e.g. different case definitions between the data sources, lack of independence between datasets

3. The lack of independence between data sets for particular areas in Wales impacted on the application of best fitting models to assess the estimate of the unobserved population of problematic drug users (those not represented on the databases from police, probation or treatment services). As indicated in the table above, the models were particularly poor fitting for males and females15 – 29 years in the BCU Health Board area, males 15 – 29 years in ABMU area and Powys all ages