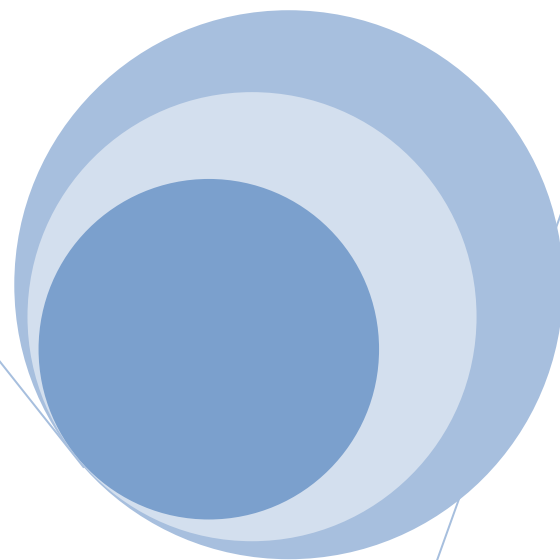




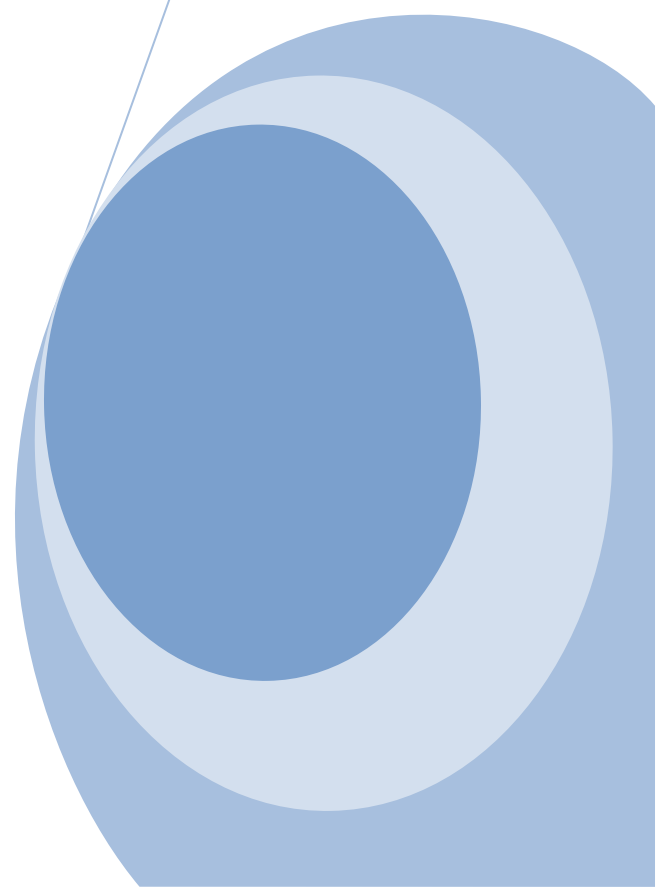
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**SUBSTANCE MISUSE PROGRAMME**



# **Harm Reduction Database Wales: Take Home Naloxone 2016-17**



# About Public Health Wales

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

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

Substance Misuse Programme

Public Health Wales

Number 2 Capital Quarter

Tyndall Street

Cardiff

CF10 4BZ

Tel: 02920104496

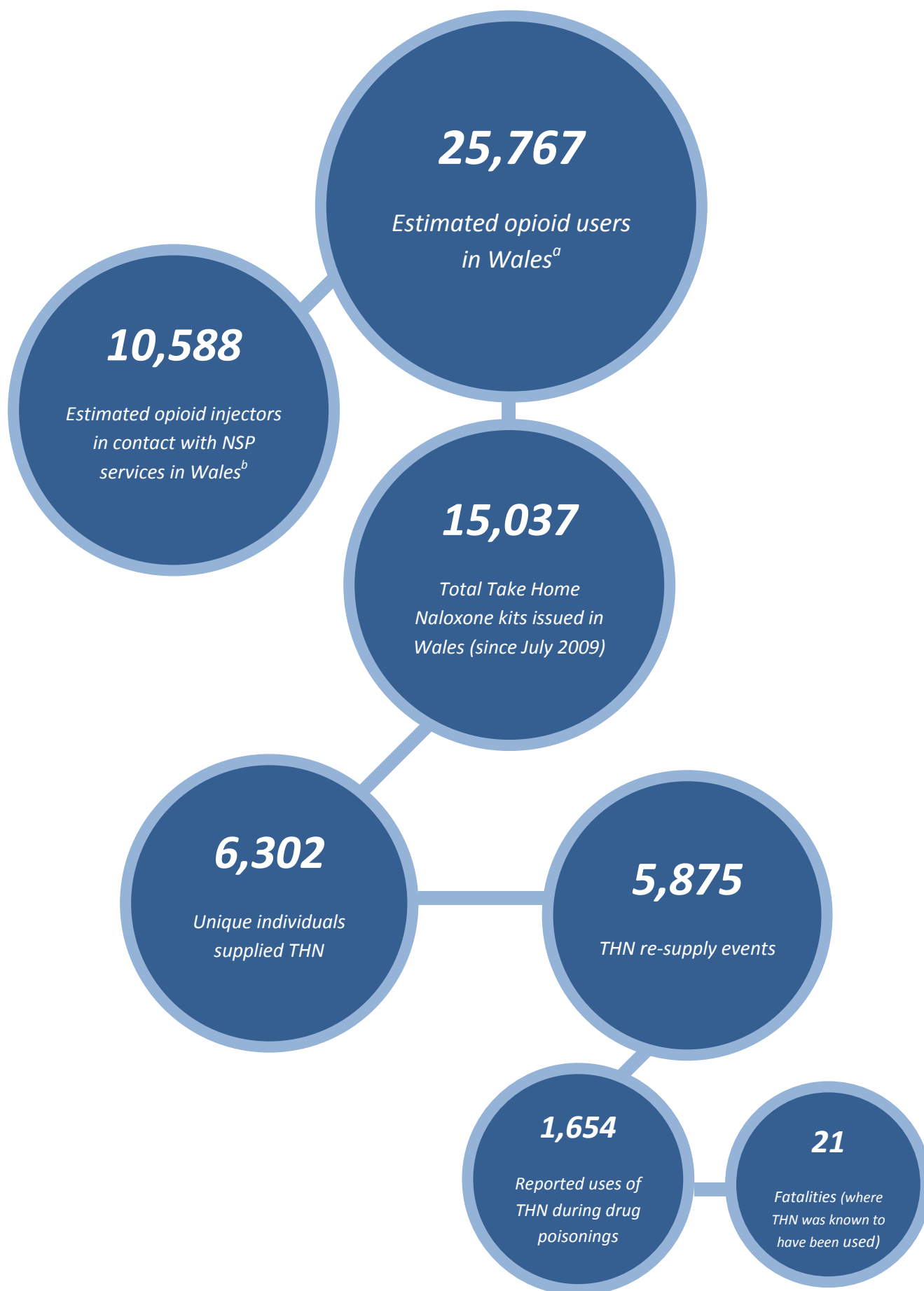
[www.publichealthwales.org/substancemisuse](http://www.publichealthwales.org/substancemisuse)

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# **HARM REDUCTION DATABASE WALES – TAKE HOME NALOXONE (THN)**

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<sup>a</sup> Reading Between the Lines: The Annual Profile of Substance Misuse in Wales, Health Protection Division, Public Health Wales (2015)

<sup>b</sup> Harm Reduction Database Wales: Needle and Syringe Programmes, Health Protection Division, Public Health Wales (2017) (In Press)

# I Executive Summary

The supply of 'Take Home Naloxone' (THN) was initiated (pilot project) in 2009 as a harm reduction tool used to prevent fatal opioid poisonings, and has since been fully implemented across all health boards in Wales. This report provides data on the training and provision of THN kits from 54 registries across Wales as recorded on the Harm Reduction Database Wales (HRD) during the period 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2017. See *Appendix 1 & 2* for further information and links to previous reports.

## **Key findings:**

- Since 1<sup>st</sup> July 2009 15,037 THN kits have been issued to 6,302 unique individuals in Wales – this includes 7,627 kits to new individuals and 7,410 kits as re-supply following the use, loss, or expiry of previous kits.
- A total of 4,487 THN kits were issued (supplied and re-supplied) in Wales during 2016-17 – an increase of over 40.8 per cent on the previous year.
- During 2016-17, a total of 1,451 new individuals were supplied with THN and 1,502 existing service users were re-supplied.
- Amongst those new individuals receiving THN, 21.9 per cent were listed as family / partner / carers or professionals working with people at risk of opioid poisoning. This marks an increase of nearly double from the previous year.

## **THN used in fatal/non-fatal drug poisoning events:**

- Since 1<sup>st</sup> July 2009 THN has reportedly been used during 1,654 drug poisoning events.
- THN was reportedly used in 589 drug poisoning events during 2016-17. The outcome was reported for 92 per cent of uses, of which fatalities occurred in less than 1 per cent of cases.
- In 86.5 per cent of cases THN was administered to a third party rather than to the owner of the kit, and 60.8 per cent of all reported drug poisoning events occurred within a private residence.
- Follow-on care (ambulance) was requested in 52.8 per cent of all cases where THN was used in a drug poisoning event, representing a 21.8 percentage point decrease on the previous year.
- As with all previous years the key demographic features of those individuals who had used THN included; living in non-secure accommodation, history of poly-drug use, and having experienced at least one previous non-fatal drug poisoning.

## **New individuals issued THN - Demographics (2016-17):**

- Of those newly issued with THN (n=1,451), 37.4 per cent were female and 62.6 per cent male.
- The mean age for new individuals receiving THN was 37 years and 7 months, ages ranged from 17-79. 7.5 per cent of THN kits were issued to 'young people' (under 25 years).

- Amongst those issued, 14.3 per cent received THN from Prisons, an increase of 0.7 per cent from the previous year.

### **Re-supply of THN:**

- There was a 74.5 per cent increase in kit re-supply events in Wales (n=2,405) when compared to the previous year. 'Kit Lost' accounted for 54 per cent of reasons for re-supply. It is not possible to evidence how many of these kits may have been used in opioid overdose events.

### **THN and fatal opioid poisoning prevention training:**

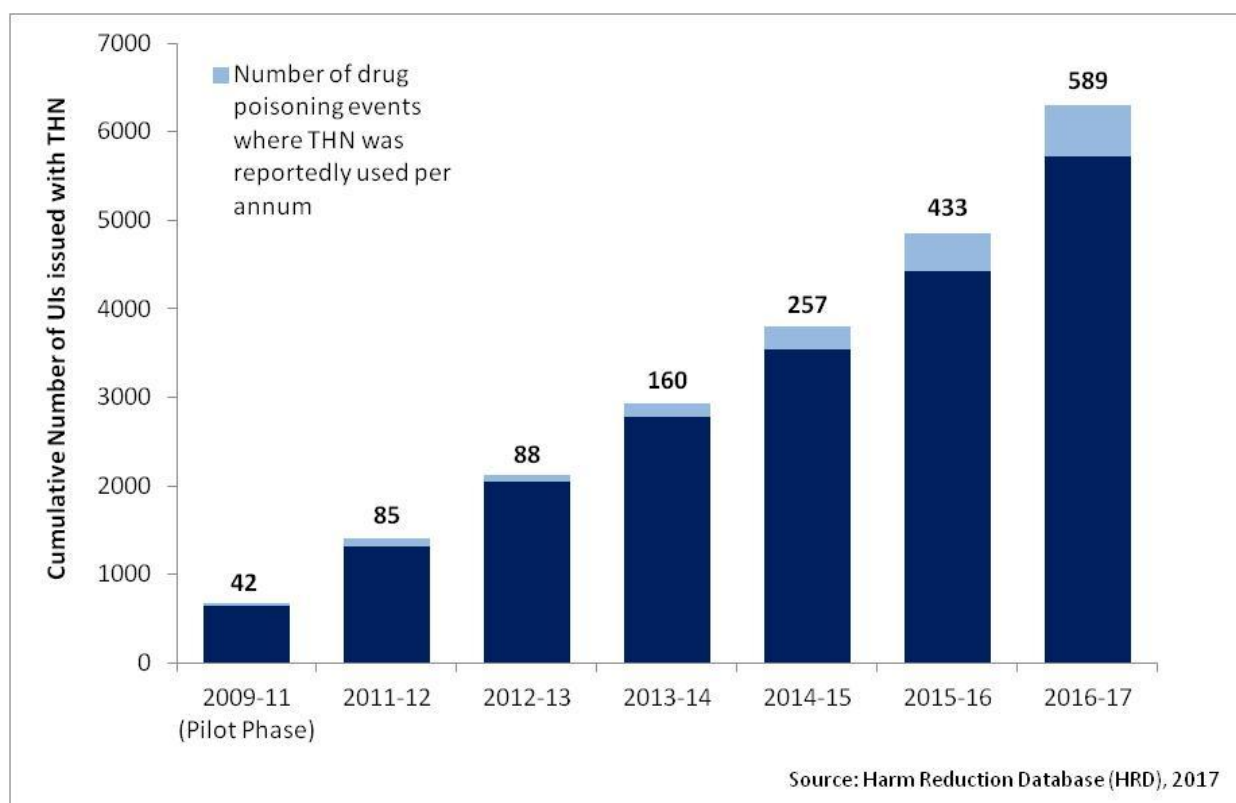
- During 2016-17, a total of 3,134 individuals in Wales were trained in the administration of THN, of which 57.5 per cent had never been trained before.
- 86.9 per cent of individuals accessing training were service users, with the remaining being Family / Partner / Carers or Professionals.

### **Recommendations**

1. Services should work to raise awareness and actively encourage all individuals taking, and especially injecting, drugs within private residences to adopt simple harm reduction steps<sup>3</sup> to prevent fatal drug poisonings (see *page 8 for details*).
2. Services should continue to promote and explain the importance of follow-on care following the administration of THN to all who've been trained to recognise a drug poisoning and carry kit. Barriers to requesting or receiving follow-on care (including ambulance call out and remaining under medical supervision) should be identified and addressed locally.
3. Area Planning Boards and specialist substance misuse services should continue to identify and train all relevant professionals coming into contact with individuals at risk of an opioid poisoning, along with their peers, and family members. Such efforts should be extended to employees/named first responders of local businesses identified as drug poisoning hotspots.
4. Given the volume of individuals at risk accessing only community pharmacy based services, Welsh Government and National Implementation Board for Drug Poisoning Prevention (NIBDPP) should explore the provision of THN via community pharmacy services in order to optimise coverage
5. Service providers should continue to work with those returning for re-supply in order to discuss and identify methods of THN safer storage to prevent erroneous reporting of 'Kit Loss', and where possible work towards reducing stigma in reporting non-fatal drug poisonings and overdose events.
6. Public Health Wales and Welsh Government to consider redefining 'reason for resupply' options on Harm Reduction Database in order to better evidence where THN has been used, and provide further definition where 'Kit Loss' is recorded.

## 2 THN used in fatal/non-fatal drug poisoning events

Since 1<sup>st</sup> July 2009 THN has been reported to have been used in at least 1,654 drug poisoning events Wales wide. Nearly a third of events (n=589) were reported during 2016-17 which involved the kits of 420 unique individuals, 97 of which used THN during multiple poisoning events. Whilst reported use of THN appears to be increasing year on year, the proportion of use appears to be consistent with the increasing availability and number of individuals carrying THN (see *Chart 1*).



**Chart 1: Annual number of THN kits reportedly used in opioid poisoning events and the cumulative total of unique individuals issued with THN by year 2009-2017**

### 2.1 Outcome of poisoning

Since implementation the outcome relating to the use of THN has been recorded in 90.4 per cent (n=1,496) of cases, of which 98.6 per cent were reported to have been non fatal drug poisonings. Death occurred in less than 2 per cent of cases in 2016-17. Where death was reported the most commonly associated factors included poly-drug use, and non adherence to follow up treatment. Furthermore, all kits administered were used within their expiry time period<sup>1</sup>.

<sup>1</sup> THN has an expiration period of approximately 24 months post-manufacture

## 2.2 The recipient of THN

In 86.5 per cent (n=492) of reported cases during 2016-17 THN was administered to a third party (friend, partner, family member). With THN only being administered to the prescribed owner in 13.5 per cent (n=77) of cases. Where used on a third party, THN was administered by the owner of the kit in 65.2 per cent of cases (n=384). This demonstrates both a confidence and willingness of those carrying THN to use it where required. Furthermore, THN was administered by a professional e.g. Substance Misuse worker, Hostel Staff on 70 occasions.

## 2.3 Location of opioid poisoning events

In order to reduce future fatal and non-fatal poisonings it is important to recognise and identify the common location of opioid poisoning events to better identify appropriate interventions and targeting of services. *Chart 2* indicates the location in which all 589 reported drug poisoning incidents occurred where THN was administered. Consistent with previous years the majority, 60.8 per cent (n=358), of all reported poisonings where THN was used occurred within a private residence.

**Whilst THN has proven to be effective where use has been reported, a large proportion of fatal drug poisonings occur within a private residence<sup>2</sup>.** Qualitative research has indicated a number of factors continue to delay life-saving actions from taking place including; using alone, using with individuals too intoxicated to respond, using in a difficult to access location<sup>3</sup>.

### Recommendation 1

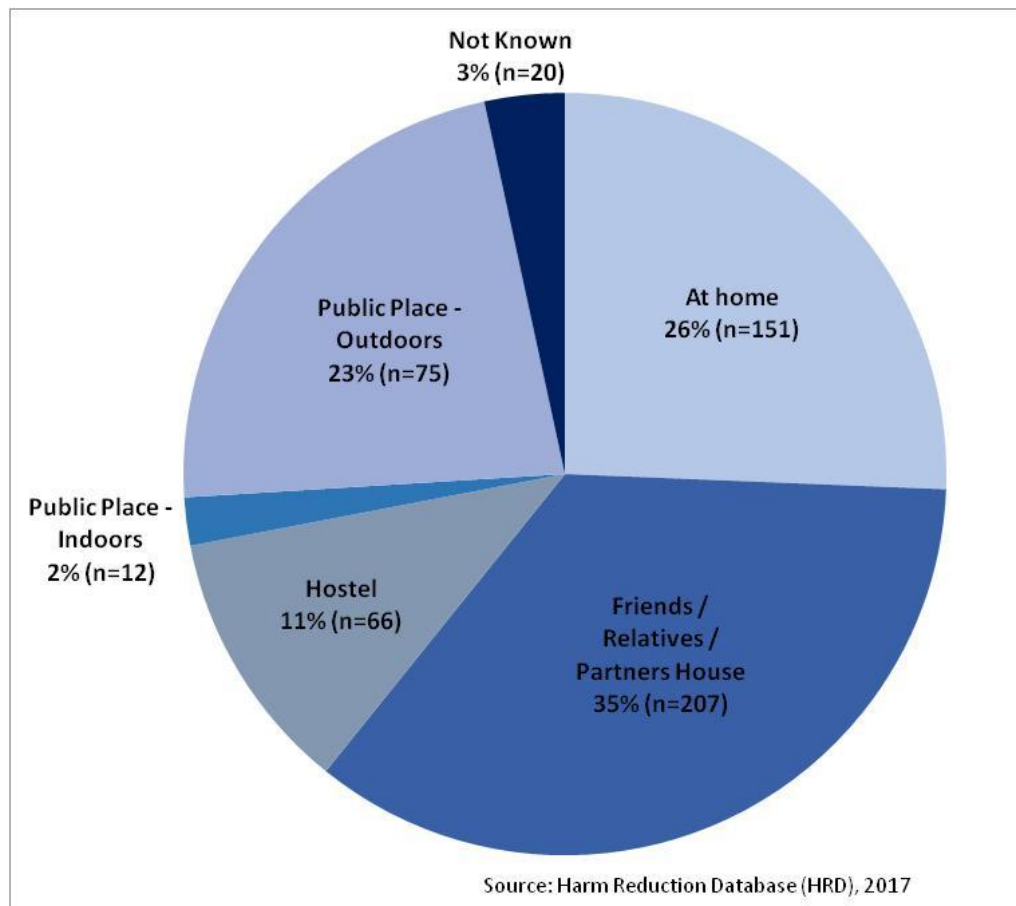
Services should work to encourage all individuals using within private residences to adopt simple harm reduction steps<sup>3</sup> to prevent fatal drug poisonings:

1. Use only when in sight of someone capable of identifying and responding to a drug poisoning.
2. Adopt a 'designated smoker' approach - where an individual smokes a small amount rather than injects so that they are better able to respond in the event of a drug poisoning.
3. If insistent on using out of sight, let someone know where you are going, leave the door unlocked and make sure the door cannot be blocked

<sup>2</sup> Public Health Wales (2016), Harm Reduction Database: Fatal and Non-Fatal Drug Poisonings 2014 and 2015. Available at: [www.publichealthwales.org/substancemisuse](http://www.publichealthwales.org/substancemisuse)

<sup>3</sup> Holloway, K. & Hills, R. (2017). A Qualitative Study of Fatal and Non-Fatal Overdose Among Opiate Users in South Wales





**Chart 2: Location of opioid poisoning events 2016-17**

## 2.4 Follow-on care

Where recorded, paramedic teams were called to attend 52.8 per cent (n=292) of cases where use of THN had been reported. **This is a decline on the previous year where in 2015-16 access to follow-on care was sought in 66.9 per cent of drug poisoning cases.** Where paramedic assistance was requested, 51.4 per cent (n=150) of individuals were taken to hospital, and the remaining 48.6 per cent (n=142) refused hospital admission.

### Recommendation 2

It is essential that services continue to promote and place emphasis upon the importance of follow-on care following the administration of THN to all who've been trained to recognise a drug poisoning and carry kit. An ambulance should be requested in all instances of drug poisoning, and the individual receiving support is actively encouraged to remain under medical supervision until advised by a health professional.

## 2.5 Demographics

The following data refers to the unique individuals (n=420) whose THN kit was used during fatal/non-fatal opioid poisoning events. As indicated in *Section 3.2*, 86.5 percent of THN kits used in a poisoning event were administered to a third party. Understanding the demographic profile of those individuals whose kit has been used supports services are better equipped in identifying potential ‘first-responders’ who may prevent future fatal drug poisonings.

### Gender profile

35.5 per cent (n=149) were female, and 64.5 per cent (n=271) male.

### Age profile

The mean age of those reporting kit use was 37 years and 5 months, and ranged from 21-59 years. The most common age group was 30-34 years, accounting for 23.6 per cent (n=99) of all individuals. Less than 5 per cent (n=16) of individuals were under the age of 25.

### Ethnicity

Ethnicity was reported by 71 per cent of individuals who had used THN during a drug poisoning event, where 96.3 per cent (n=287) were White Welsh or White British.

### Housing status

Housing status was recorded for 61.2 per cent of individuals who had used THN during a drug poisoning event. Over 49.8 per cent (n=113) of individuals lived in secure accommodation (see *Table 1*). The remaining 50.2 per cent were reported as living in non-secure / non fixed accommodation.

As with previous reports<sup>4</sup> an increased representation of individuals living in non-secure accommodation was observed when use of THN is reported compared to the number of new clients issued with kits (see *section 3.4 – Demographics of new clients*). Recent reports have indicated that this trend is likely to reflect the level of training, and exposure to THN awareness raising materials found within non-secure accommodation environments (such as hostels) where clients are routinely encouraged to present for re-supply especially in instances where a drug poisoning and use of kit is observed.

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<sup>4</sup> Harm Reduction Database Wales: Take Home Naloxone 2015-16, Health Protection Division, Public Health Wales (2016)

**Table 1: Self-reported housing status of unique individuals who used THN during fatal/non-fatal opioid poisonings (1<sup>st</sup> April 2016 – 31<sup>st</sup> March 2017)**

Housing Status	Total	% by housing type
Owner	4	49.8% in secure accommodation
Private rented	43	
Council rented	46	
Housing Association rented	17	
Live with family	18	
B & B	4	10.1% in non-secure accommodation
Hostel (inc probation)	19	
Live with friends	3	
NFA – Friends / Relatives House	22	40.1% with no fixed accommodation
NFA – Mixed	34	
NFA – Street Homeless / Squat	47	

### **Risk behaviour & non-fatal opioid poisoning history**

Poly-drug use was reported as the primary risk factor by 78.9 per cent (n=232) of individuals who used THN during a drug poisoning event. Recent release from prison was reported as the primary risk factor by 11.6 per cent of individuals.

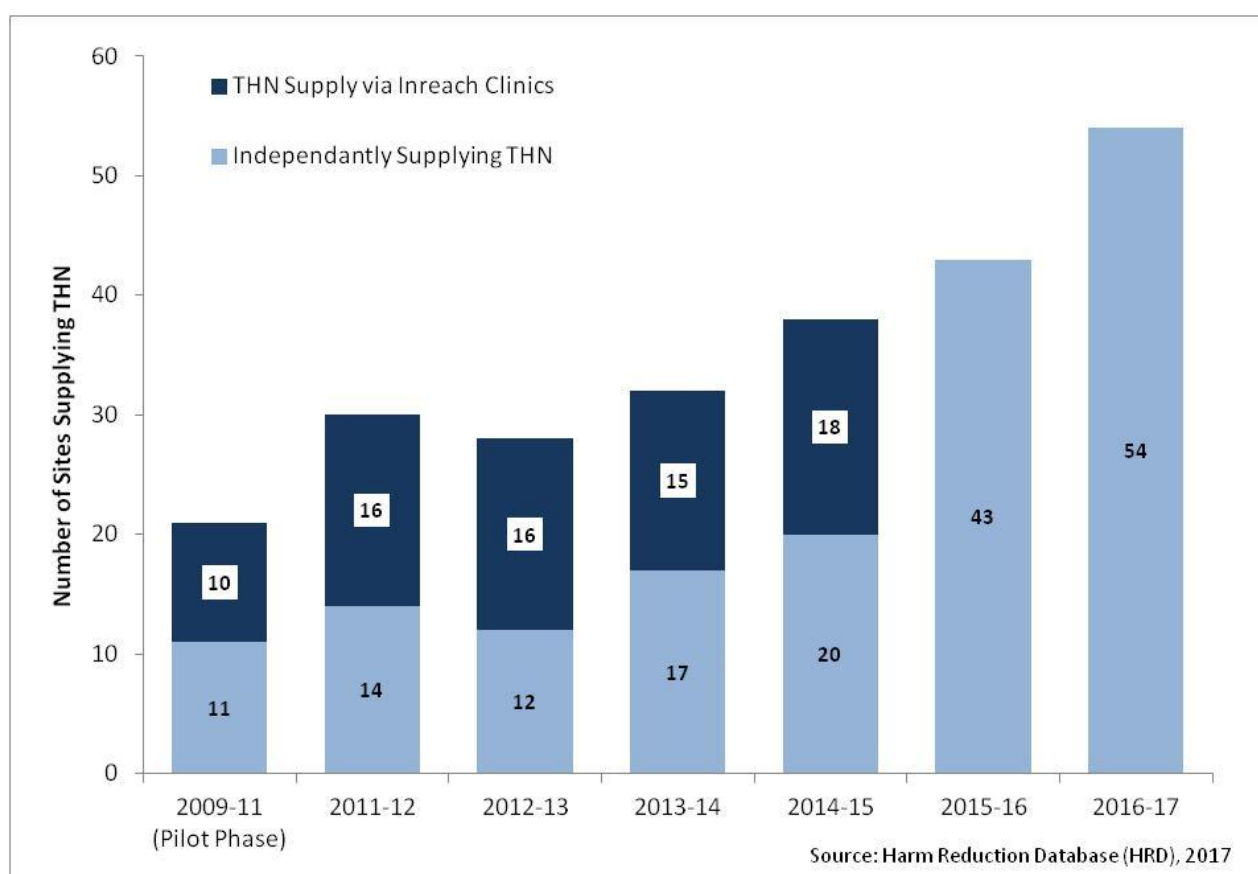
Self-reported lifetime history of at least one non-fatal opioid poisoning was reported by 67.3 per cent (n=231) of individuals who had used THN and were identified at risk of opioid drug poisoning. Comparisons with the overall profile of individuals issued with THN (see section 3.4 – *Demographics*) shows that individuals reporting use of THN were more likely to have experienced a non-fatal opioid poisoning prior to being issued a kit. Of those who had experienced lifetime history of non-fatal opioid poisoning, 19.9 per cent (n=46) had experienced 2 or more poisonings within the last year.

## 3 THN distribution Wales-wide

### 3.1 Sites Supplying THN

Since the introduction of THN within Wales the number of distribution sites has increase year on year (see *Chart 3*). Prior to October 2015 the Medicines Act stipulated THN could only be supplied by a medical doctor or by named qualified medical professionals under a patient group directive (PGD) e.g. registered nurse. Thus limiting the number of sites in which THN could be supplied, and resulting in many Substance Misuse Services in Wales relying upon in-reach support and satellite clinics.

In response to a public consultation undertaken by the Medicines and Healthcare Products Regulatory Agency (MHRA) in 2014 and ACMD's recommendations<sup>5</sup> a legislative change was passed at the beginning of October 2015 to ensure THN is more widely available<sup>6</sup>. As such THN can now be supplied by services commissioned in the provision of drug treatment services provided by, on behalf of or under arrangements made by an NHS body; a local authority; or Public Health Agency. This legislative change has resulted in not only an increase the in services in which THN can be obtained, but also the number of sites in Wales who are able to supply independently of in-reach support.



**Chart 3: Total number of sites supplying THN in Wales by year 2009-2017**

<sup>5</sup> Consideration of naloxone, ACMD (2012). Available at: [www.gov.uk/government/publications/naloxone-a-review](http://www.gov.uk/government/publications/naloxone-a-review)

<sup>6</sup> The Human Medicines Act (Amendment) (No.3) Regulations (2015) [www.legislation.gov.uk/uksi/2015/1503/made](http://www.legislation.gov.uk/uksi/2015/1503/made)

## 3.2 Number of THN kits issued

From 1<sup>st</sup> July 2009 until 31<sup>st</sup> March 2017, 15,037 THN kits were issued Wales wide. *Chart 4* indicates this level of kit distribution to new clients compared to re-supplies. The number of kits issued (new clients and as re-supply) within Wales in 2016-17 increased by 40.8 per cent on the previous year.



**Chart 4: Total number of THN kits issued and re-supplied in Wales by year 2009-2017**

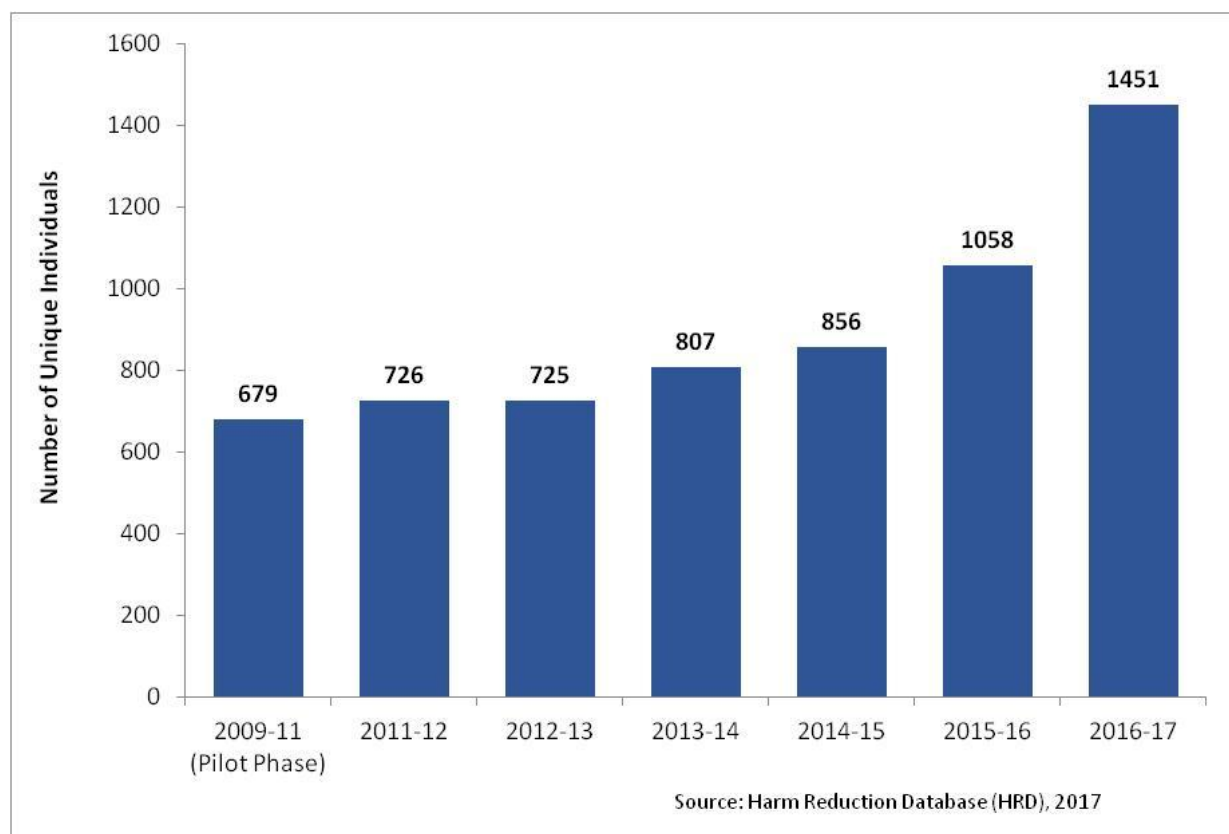
At the beginning of the 2016-17 reporting period work was undertaken throughout Wales to move from the distribution of single dose THN kits ('Welsh Kit') to the prefilled five dose THN kit (Prenoxad®). The design of the prefilled kit offers users the ability to administer THN with minimal assembly, thus speeding up and simplifying the process of reversing an overdose. Furthermore, the five doses contained within provides users with the facility to re-dose where required e.g. where one dose does not reverse the opioid effects, where more time is required for arrival of follow on care. Prior to the availability of a prefilled five dose kit, individuals were often supplied by services multiple kits as a means of ensuring an additional dose of THN was available when required.

Prenoxad® is now available from all sites throughout Wales, with 2,652 kits issued during 2016-17. The remaining kits issued during this time period (n=1835) were existing stocks of 'Welsh Kits'.

The remainder of this report will focus upon the individuals to whom THN was supplied and the events in which THN was re-supplied in 2016-17.

### 3.3 New individuals issued THN (2016-17)

The number of new unique individuals supplied with THN in Wales increased in 2016-17 by 37.1 per cent compared to the previous year. Since the introduction of THN in Wales in July 2009, over 6,300 unique individuals have received THN (see *Chart 5* for figures). Of which a third received their first kit after 1<sup>st</sup> October 2015 following the amendment to the Medicines Act, supporting wider distribution of THN.



**Chart 5: Number of new unique individuals issued THN kits in Wales by year 2009-2016**

In addition to improving the supply base in which THN could be obtained, the changes in legislation<sup>5</sup> also provide opportunity for a wider range of individuals to receive kits. Under the new amendments services are now eligible to supply THN to family / partner / carers of those at risk and likely to be at hand in the event of an opioid poisoning, or professional working in a hostel or project where opioid users may gather.

Of those new unique individuals supplied with THN, 21.9 per cent (n=318) were listed as family / partner / carers or professionals, increasing provision by almost double of what was provided the previous year. This provides further evidence concerning the effectiveness legislative change has upon broadening the distribution of THN throughout Wales.

### **Recommendation 3**

Area Planning Boards and Specialist Substance Misuse Services should continue in the identification and training of all professionals coming into contact with individuals at risk of an opioid poisoning, along with their peers, and family members. Such efforts should be extended to employees/named first responders of local businesses identified drug poisoning hotspots. Where training and/or provision is provided service providers should ensure training completion logs are recorded as evidence on the HRD.

Whilst provision of THN throughout Wales continues to grow, prevalence estimates of populations at risk of an opioid poisoning highlight that saturation still hasn't been achieved. Estimates of problem drug use indicate that there are approximately 25,767 opioid users<sup>7</sup> in Wales (including all methods of use i.e. smoking, injecting etc.). The HRD Wales: Needle and Syringe Programme (NSP) module indicates that for 2016-17 there were 10,588 unique individuals reporting use of opioid based substances accessing NSP services<sup>8</sup>. This includes both Specialist Substance Misuse and Community Pharmacy based services. Data currently indicates that of those opioid users accessing NSP services in Wales over 55.1 per cent only access Community Pharmacy based services. Although THN has been made available from all Specialist Substance Misuse Service NSPs in Wales, provision is currently not available from within Community Pharmacy based NSP services. This will be explored in further detail later in the report (see *Section 3.5 – New Individuals Issued THN by APB*).

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<sup>7</sup> Reading Between the Lines: The Annual Profile of Substance Misuse in Wales, Health Protection Division, Public Health Wales (2015)

<sup>8</sup> Harm Reduction Database Wales, Health Protection Division, Public Health Wales (2017)

### 3.4 Demographics of new individuals

#### Gender profile:

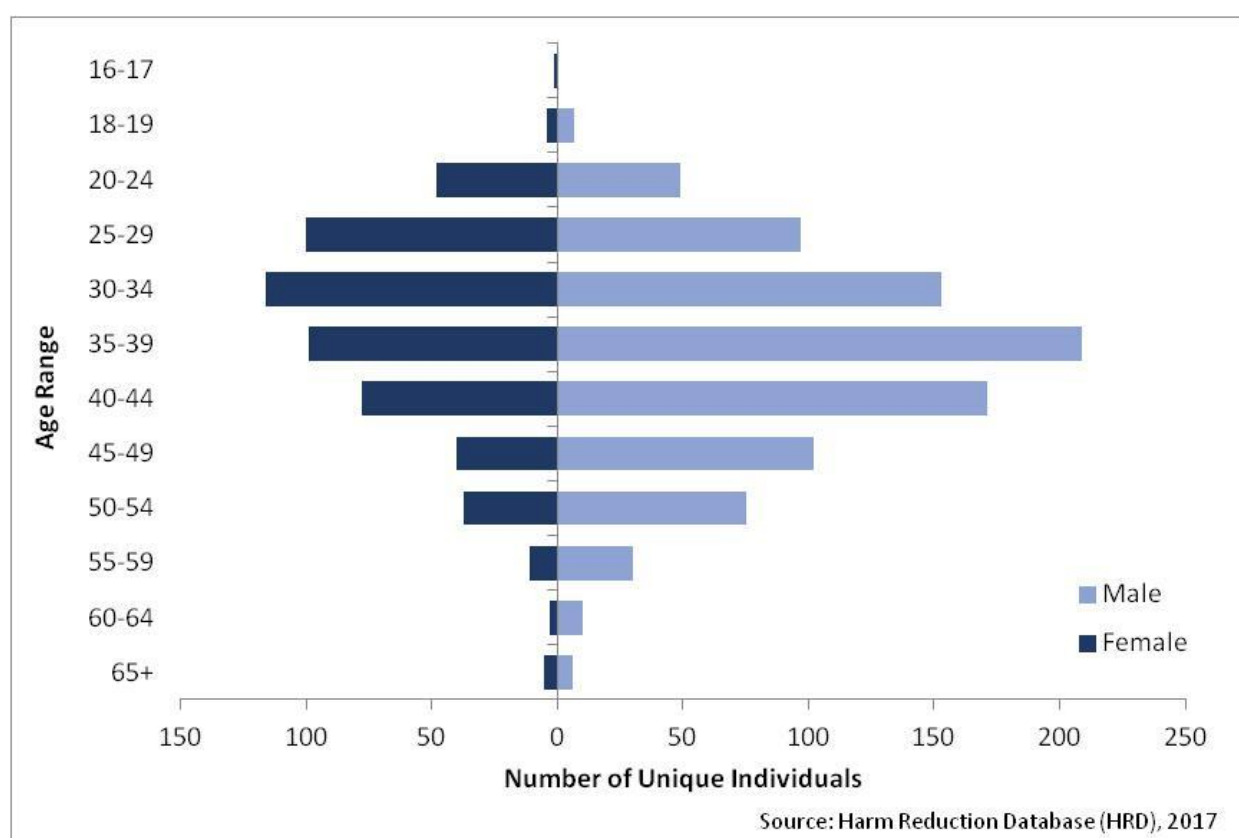
Of the 1,451 unique individuals newly issued with THN, 37.4 per cent were female (n=542) and 62.6 per cent male (n=909).

#### Age profile

The mean age for new individuals receiving THN was 37 years and 7 months, where ages ranged from 17-79 years. The most common age group, 35-39 years, accounted for 21.2 per cent (n=308) of individuals. See *Chart 6* for age/gender differences.

**Young people:** Those under 25 years of age accounted for 7.5 per cent of the total issued with THN. There were eleven individuals aged 18 to 19 years, and a further 97 aged 20-24 years. Less than one per cent of individuals supplied with THN were under the age of 18 years.

**Older people:** Those aged 50+ years accounted for 12.2 per cent (n=177) of the overall population. Less than two per cent of individuals were aged 60 or above.



**Chart 6: Age and gender profile of new unique individuals issued THN across Wales 2016-17**



## Ethnicity

Where reported, 92.3 per cent (n=385) of individuals issued with THN were White Welsh or White British. Of the remaining 7.7 per cent (n=32) the largest group were recorded as White Other. Such patterns in ethnic representation have been consistent since implementation of THN across Wales. As such further considerations should be made surrounding accessibility and potential barriers for ethnic and hard to reach groups in accessing current THN services, including training.

## Housing status

Since the amendment made to the Human Medicines Act (No.3) Regulations (2015) data quality for this data item has substantially declined. Services supplying THN are strongly encouraged to collect this information in order to gain insight in relation to the amount of help and assistance available during the event of a drug poisoning and potential access barriers to emergency services.

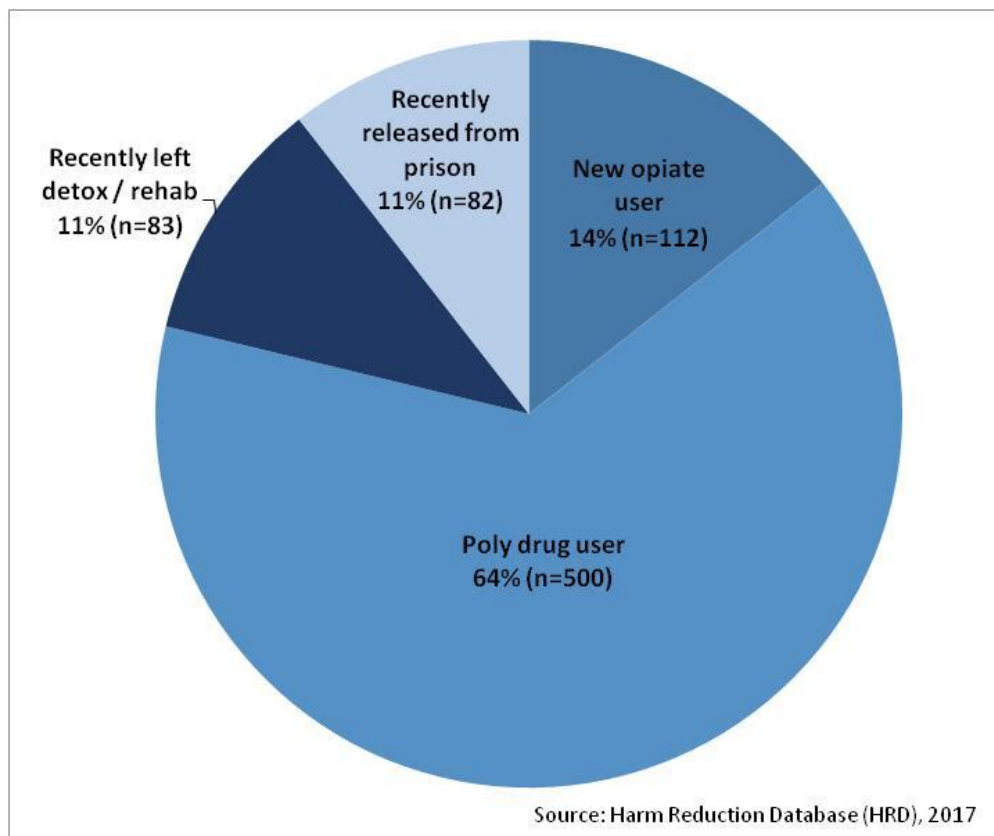
For those new individuals issued and identified as 'person at risk' (n=1133), housing status was recorded for 32.7 per cent of cases (n=370). Detail of which is presented in *Table 2*. Whilst the majority of individuals, 64.3 per cent, reported living within secure accommodation, over 35.7 percent reported having no fixed accommodation and as such were likely to experience barriers in obtaining rapid medical support in the event of an emergency.

**Table 2: Self-reported housing status of new unique individuals issued THN (2016-17)**

Housing Status	Total	% by housing type
Owner	9	64.3% in secure accommodation
Private rented	78	
Council rented	75	
Housing Association rented	28	
Live with family	48	
B & B	5	11.4% in non-secure accommodation
Hostel (inc probation)	29	
Live with friends	8	
NFA – Friends / Relatives House	22	24.3% with no-fixed accommodation
NFA – Mixed	33	
NFA – Street Homeless / Squat	35	

## Risk behaviour

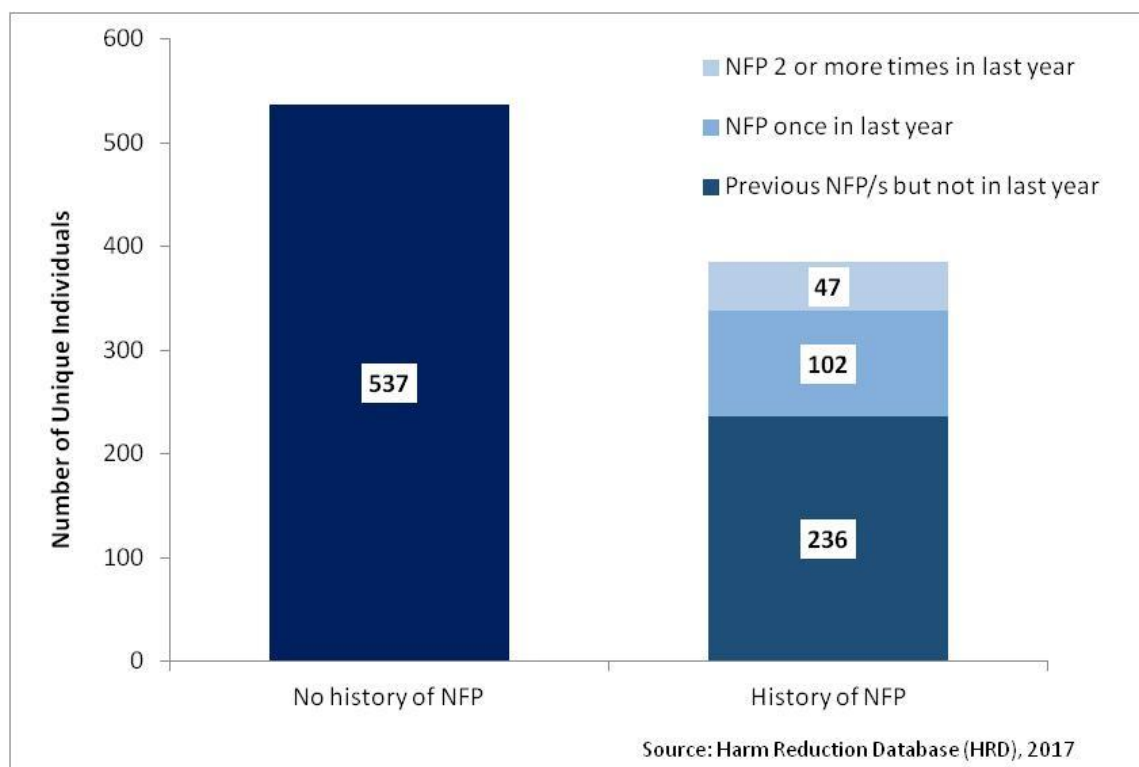
Amongst those new individuals identified as a 'person at risk' (n=1133), risk behaviour was recorded for 68.6 per cent (n=777) of cases. Of which the majority, 64.3 per cent, reported poly-drug use as their primary risk behaviour (see *Chart 7*).



**Chart 7: Primary risk behaviour of new unique individuals prior to receiving THN 2016-17**

## History of non-fatal poisoning

For those new individuals receiving THN and identified as a 'person at risk' history of non-fatal poisoning was recorded on the HRD in 81.4 per cent of cases (n=922). Of which 41.8 per cent (n=385) reported at least one previous non-fatal opioid poisoning prior to issue. Demographic analysis of such individuals indicates 67.8 per cent (n=261) were male, mean age was 36 years and 8 months, 93.9 per cent were white British/Welsh, and 85.9 per cent reported current opioid use. *Chart 8* indicates the frequency of non-fatal opioid poisonings amongst all unique individuals prior to receiving THN.



**Chart 8: Frequency of self-reported non-fatal opioid poisoning (NFP) prior to issue of THN 2016-17**

### 3.5 New individuals issued THN by APB

The following section explores THN distribution by Substance Misuse Area Planning Board (APB). Comparisons between annual APB activity have been made using European Age Standardised Rate per 100,000 population (see Table 3 & Chart 9). For the first year since implementation all APBs within Wales in 2016-17 increased their provision of THN to new individuals when compared the previous year.

**Table 3: New Unique individuals (UIs) trained and issued with THN by Area Planning Board area, European Age Standardised Rate (EASR) per 100,000 population**

	UIs Issued THN 2015-16	Mid-Year Population (2015) <sup>a</sup>	EASR Rate Per 100,000 Population	UIs Issued THN 2016-17	Mid-Year Population (2016) <sup>b</sup>	EASR Rate Per 100,000 Population	Change in Rate Per 100,000 Population
<b>ABMU</b>	305	525,466	<b>61.01</b>	330	529,278	<b>65.65</b>	<b>4.64</b>
<b>Aneurin Bevan</b>	113	581,789	<b>20.90</b>	229	584,133	<b>42.09</b>	<b>21.19</b>
<b>BCU</b>	122	694,473	<b>20.18</b>	197	695,822	<b>32.58</b>	<b>12.40</b>
<b>Cardiff and Vale</b>	340	484,752	<b>70.01</b>	343	489,931	<b>70.76</b>	<b>0.75</b>
<b>Cwm Taf</b>	100	296,735	<b>35.33</b>	116	298,116	<b>40.34</b>	<b>5.01</b>
<b>Hywel Dda</b>	69	383,229	<b>21.73</b>	160	383,710	<b>49.07</b>	<b>27.34</b>
<b>Powys Teaching</b>	9	132,642	<b>7.83</b>	23	132,160	<b>22.40</b>	<b>14.57</b>
<b>Wales*</b>	1058	3,099,086	<b>37.18</b>	1451	3,113,150	<b>50.77</b>	<b>7.48</b>

\* Includes supply to Welsh residents from services outside Wales e.g. HMP Eastwood Park

<sup>a, b</sup> Calculated using on mid year population estimates (ONS, 2015 & 2016)

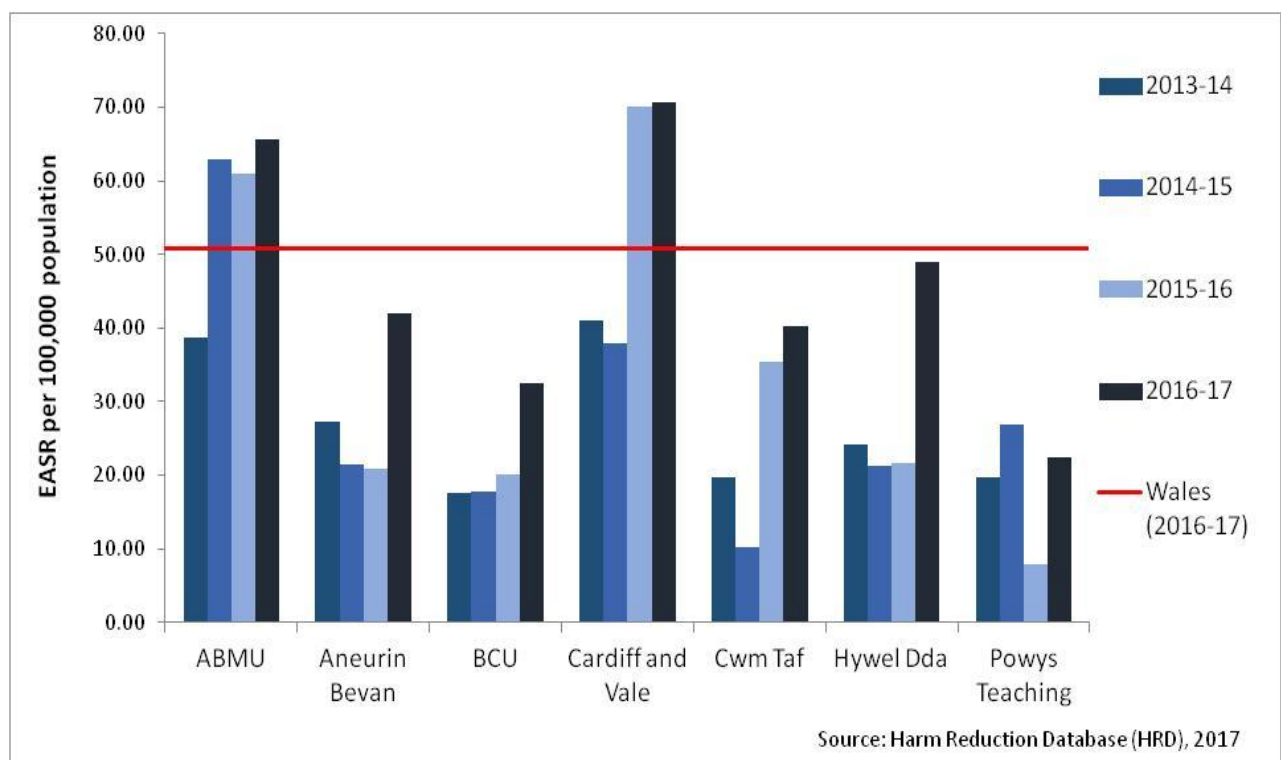
As highlighted in Section 3.3 – New Individuals Issued THN (2016-17), Needle and Syringe Programme (NSP) data indicates that a large proportion of opioid injectors in Wales are not in contact with specialist substance misuse and harm reduction services, and currently only attend community pharmacy NSP services where THN supply has not been commissioned.

Further analysis indicates that in areas where rates of THN supply and re-supply were lowest, the dependence on Community Pharmacies to provide NSP services was much greater. In areas such as BCU and Powys (where rate of THN provision was lowest), over 80 per cent of opioid injectors accessing harm reduction services only did so exclusively via Community Pharmacy based NSPs. This differs from areas with the highest recorded rate of THN supply i.e. Cardiff and Vale, and ABMU, where sole use of pharmacy based NSPs was much lower (10.8% and 48.3% of opioid injectors respectively)<sup>9</sup>. It is important to note the rurality of such regions, where concentration and accessibility of specialist substance misuse and harm reduction services is much lower compared to urbanised regions. Thus generating a reliance on Community Pharmacy based services to provide harm reduction interventions and advice.

**This indicates potential issue in relation to equity and accessibility of THN within some regions of Wales, where access to specialist substance misuse services is limited.**

#### Recommendation 4

Given the volume of individuals at risk accessing community pharmacy based settings Welsh Government and National Implementation Board for Drug Poisoning Prevention (NIBDPP) should explore the provision of THN via community pharmacy setting in order to increase provision to those living in rural regions and who are not in contact with specialist substance misuse services.



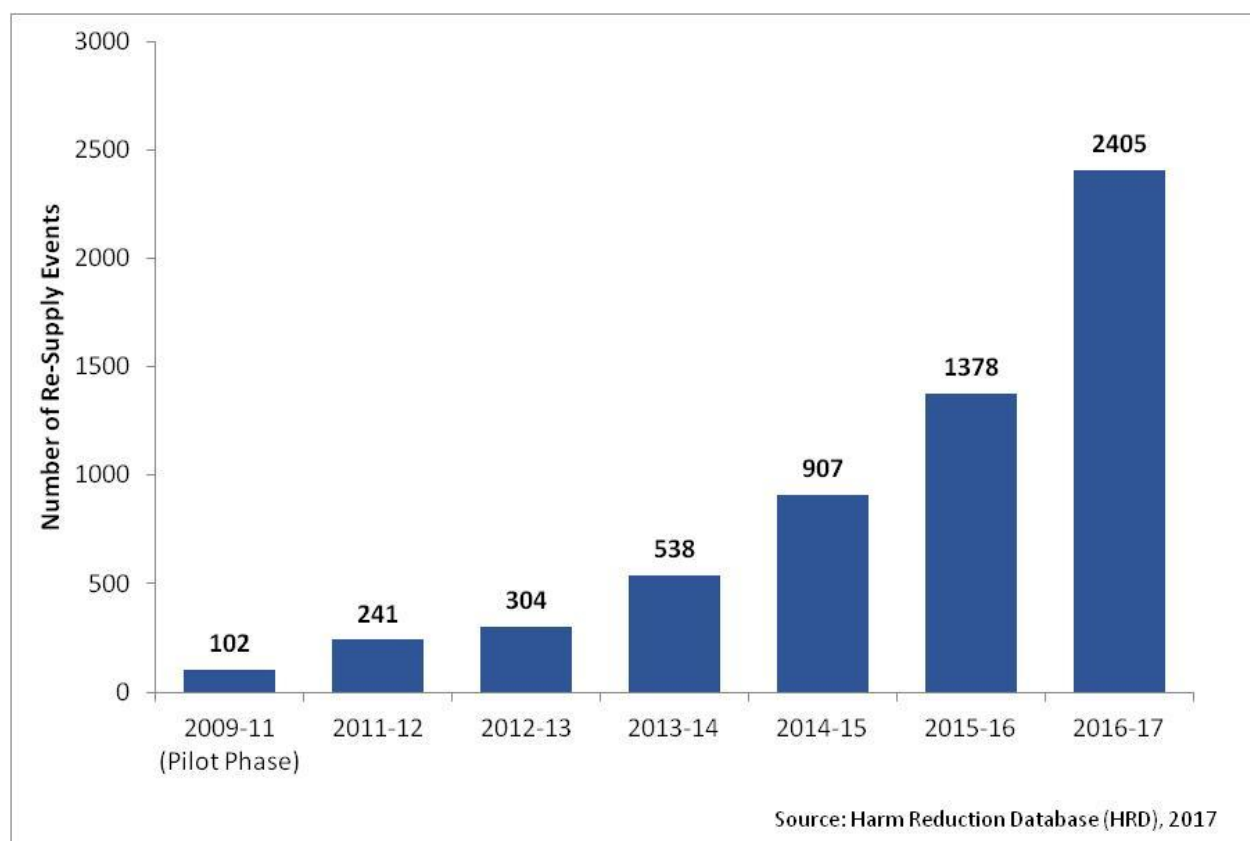
**Chart 9: New unique individuals issued THN by Area Planning Board (APB), European Age Standardised Rate per 100,000 population**

<sup>9</sup> Harm Reduction Database Wales, Health Protection Division, Public Health Wales (2017)

### 3.6 Re-supply of THN – any reason

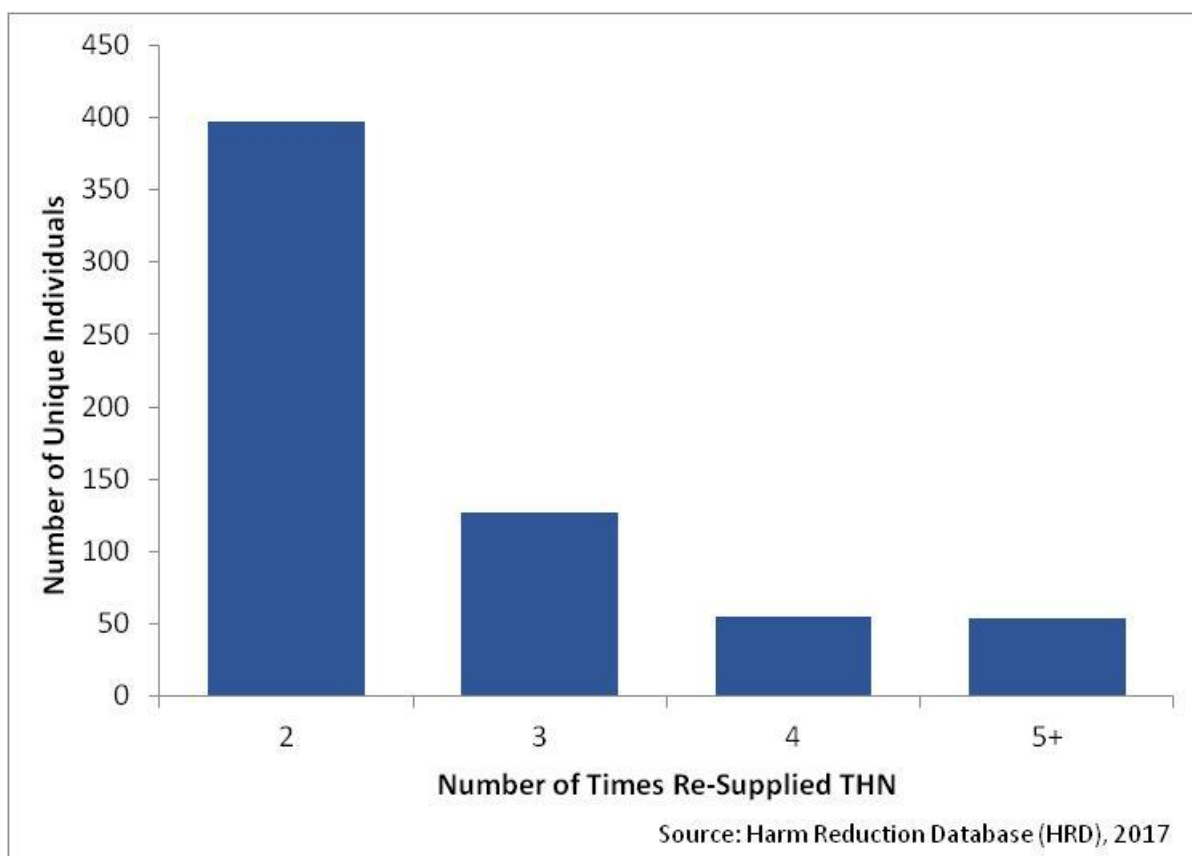
In addition to the supply of THN to new individuals, 2,405 re-supply events took place across Wales from 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2017 involving 1,520 unique individuals. 71.5 per cent were male (n=1,087), mean age; 36 years and 5 months, 5 per cent (n=79) were aged under 25 years (none younger than 18 years), and of those reporting their ethnicity, 95 per cent (n=1,042) were White Welsh or White British.

Since implementation of the THN pilot in Wales, re-supply of THN has increased annually (see *Chart 10*). When compared to the previous year re-supply events during 2016-17 increased by 74.5 per cent. This is representative of increases in the number of new individuals receiving THN year on year and sites in which re-supply can be conducted.



**Chart 10: Number of re-supply events across Wales by year 2009-2017**

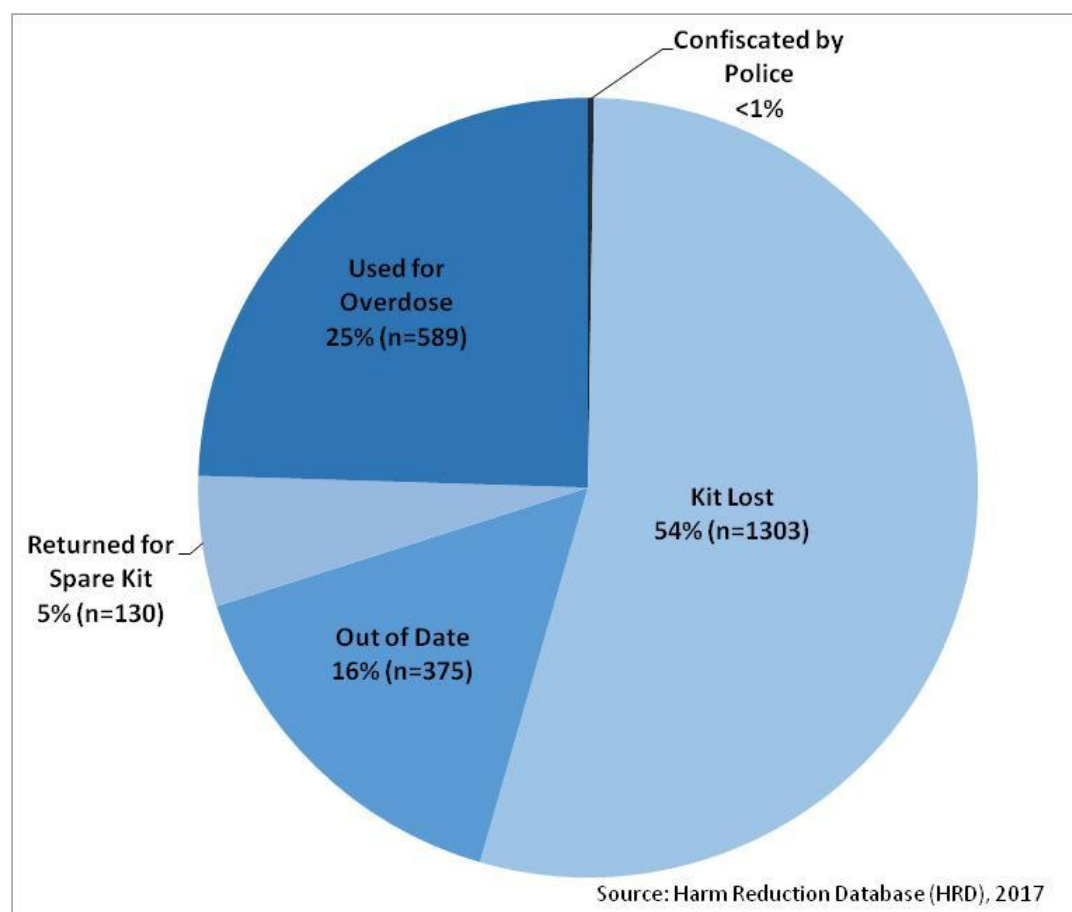
Of those unique individuals whom were re-supplied, *Chart 11* indicates the number of individuals who were re-supplied THN throughout 2016-17 on multiple occasions (n=633) for any reason.



**Chart 11: Number of unique individuals who were re-supplied THN on multiple occasions for any reason 2016-17**

### 3.7 Reasons for re-supply

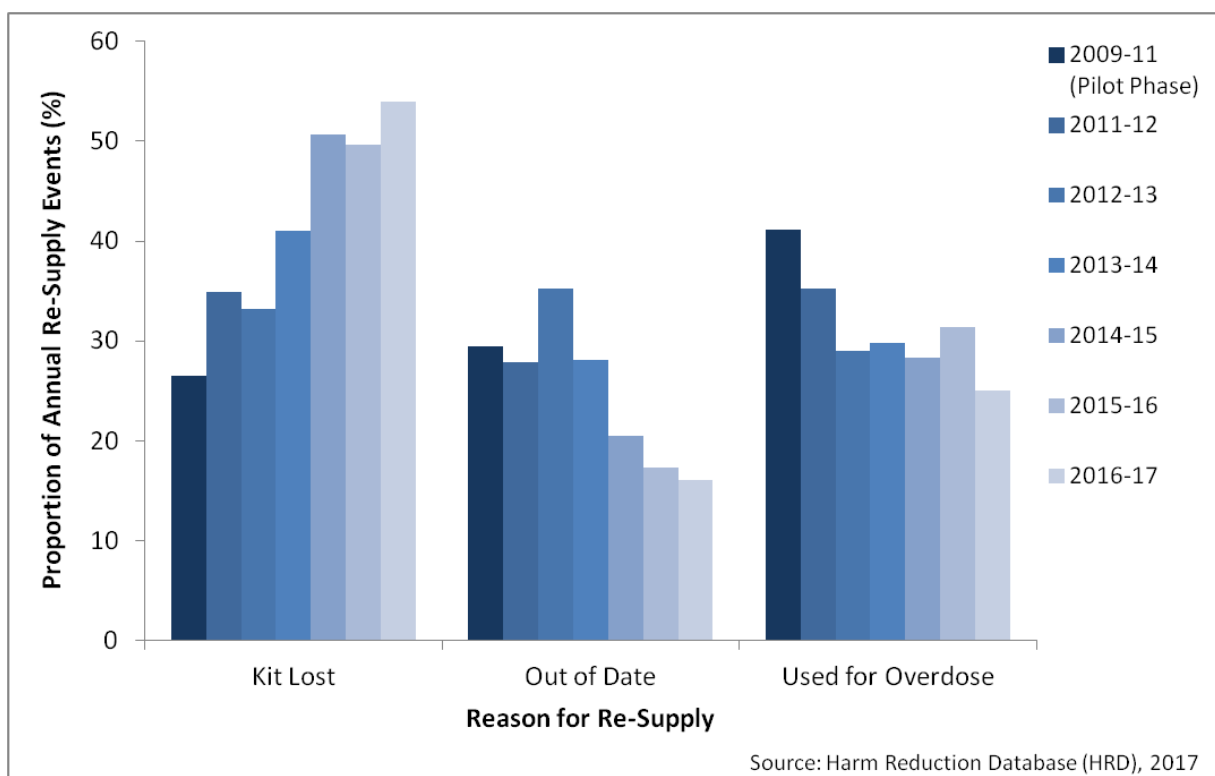
Reason for re-supply is indicated in *Chart 12* for all 2,405 re-supply events that took place across Wales between 1<sup>st</sup> April 2016 and 31<sup>st</sup> March 2017. As indicated 'Kit Loss' is represented the largest proportion of reasons presented for re-supply. **Due to the self-report nature of this question it is currently not possible to evidence how many of these kits may have been used in opioid overdose events and not reported as such. As such this data should be treated with caution.**



**Chart 12: Reasons for re-supply of THN across Wales (1<sup>st</sup> April 2016 – 31<sup>st</sup> March 2017)**

Since implementation of THN in Wales there has been an increase in the proportion of re-supply events where 'Kit Loss' was reported (see *Chart 13*). Furthermore, the proportion of individuals returning to replace 'Out of Date' kits and report 'Use for Overdose' has declined over the last 4 years.





**Chart 13: Proportion of Reported Reasons for THN Re-supply by Year of Re-supply**

#### **Recommendation 5**

Service providers should continue to work with those returning for re-supply in order to discuss and identify methods of THN safer storage to prevent 'Kit Loss', and where possible work towards reducing stigma and encourage open discussions surrounding potential uses of THN.

Where use of THN is identified, services should work alongside Area Planning Board Harm Reduction and Drug Poisoning Prevention Teams to support those at future risk of drug poisoning and offer continued harm reduction advice.

#### **Recommendation 6**

Public Health Wales and Welsh Government to explore the possibility of redefining 'reason for resupply' options on Harm Reduction Database in order to better evidence where THN has been used, and provide further definition where 'Kit Loss' is recorded.

### 3.8 Re-supply of THN by APB

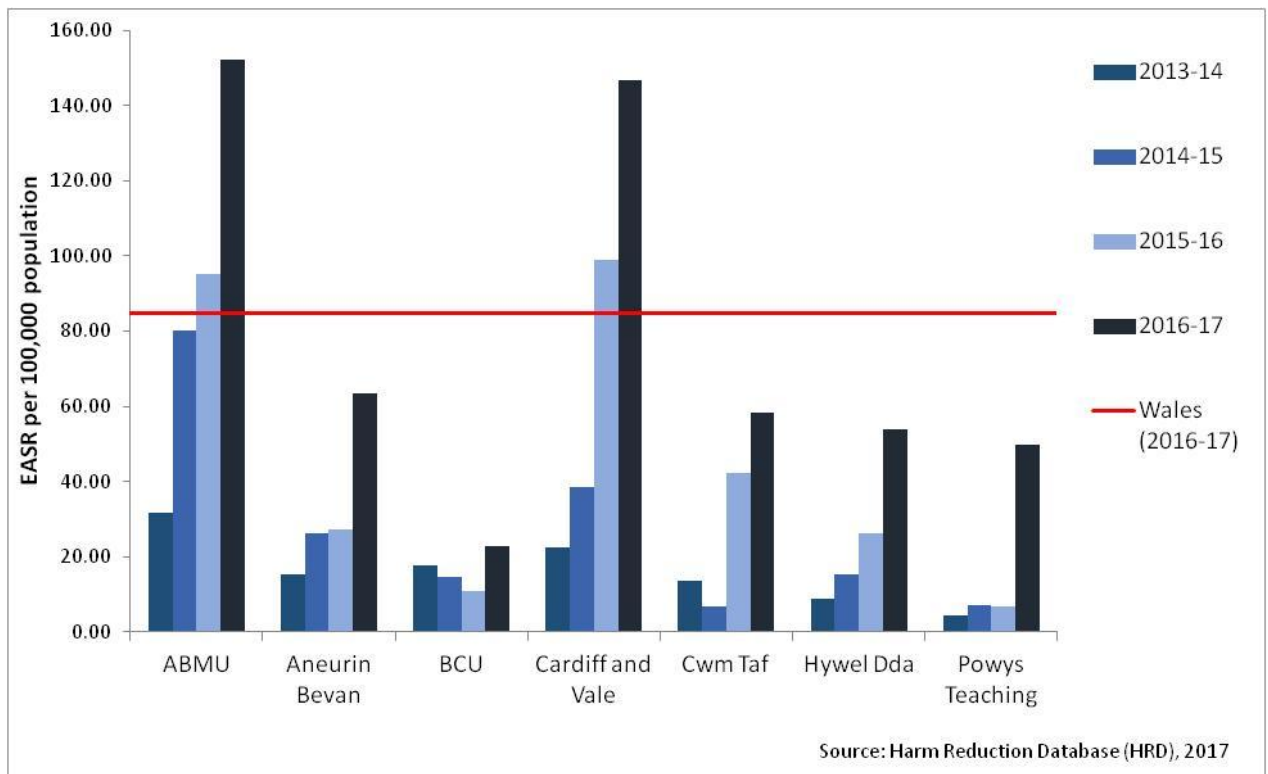
Similarly, to 'Section 4.4 – New Clients Issued THN by APB', comparisons between APB re-supply activity have been made using European Age Standardised Rate per 100,000 population. As per supply of THN to new clients, re-supply rates of THN in 2016/17 increased across all APBs in Wales. Currently the APB providing the highest rate of THN as re-supply is ABMU, with rate of 152.13 THN re-supply events per 100,000 population.

**Table 4: Number of THN re-supply events by by Area Planning Board area, European Age Standardised Rate (EASR) per 100,000 population**

	Uls Issued THN 2015-16	Mid-Year Population (2015) <sup>a</sup>	EASR Rate Per 100,000 Population	Uls Issued THN 2016-17	Mid-Year Population (2016) <sup>b</sup>	EASR Rate Per 100,000 Population	Change in Rate Per 100,000 Population
<b>ABMU</b>	478	525,466	<b>95.22</b>	767	529,278	<b>152.13</b>	<b>56.91</b>
<b>Aneurin Bevan</b>	148	581,789	<b>27.32</b>	342	584,133	<b>63.53</b>	<b>36.23</b>
<b>BCU</b>	67	694,473	<b>10.89</b>	136	695,822	<b>22.66</b>	<b>11.77</b>
<b>Cardiff and Vale</b>	482	484,752	<b>98.79</b>	723	489,931	<b>146.70</b>	<b>47.91</b>
<b>Cwm Taf</b>	120	296,735	<b>42.37</b>	163	298,116	<b>58.14</b>	<b>15.77</b>
<b>Hywel Dda</b>	77	383,229	<b>26.14</b>	161	383,710	<b>53.70</b>	<b>27.56</b>
<b>Powys Teaching</b>	6	132,642	<b>6.69</b>	50	132,160	<b>49.85</b>	<b>43.16</b>
<b>Wales*</b>	1378	3,099,086	<b>48.80</b>	2405	3,113,150	<b>84.70</b>	<b>35.9</b>

\* Includes supply to Welsh residents from services outside Wales e.g. HMP Eastwood Park

<sup>a, b</sup> Calculated using on mid year population estimates (ONS, 2015 & 2016)

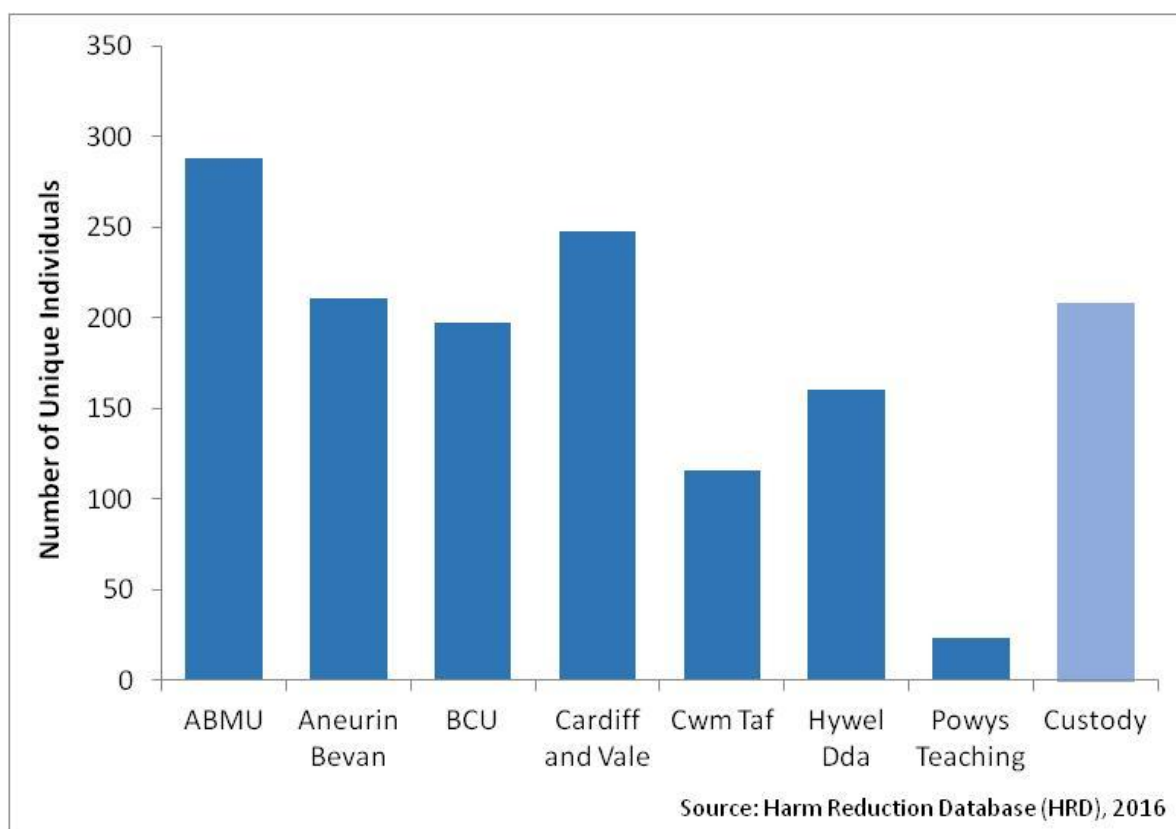


**Chart 14: THN re-supply events by Area Planning Board (APB) area, European Age Standardised Rate per 100,000 population**

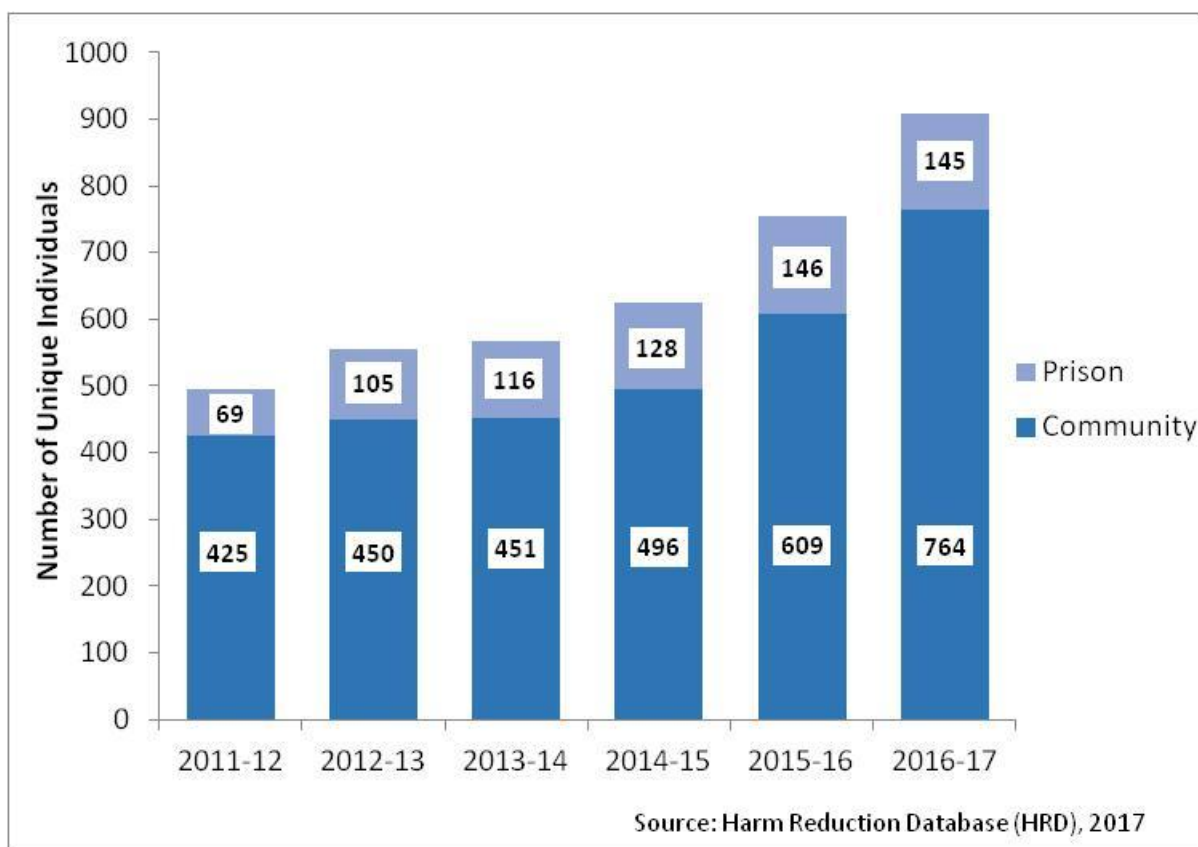
## 4 THN distribution - Prison vs. Community

Following release from prison, opioid users are at increased risk of drug poisoning. Currently there are six male-only prisons located within Wales, three of which currently providing THN to individuals identified at risk upon release. Since the last reporting period work has been undertaken to establish supply of THN to the remaining three prisons, and two located on the outskirts of Wales identified as housing a number of Welsh residents. During 2016-17 distribution of THN was successfully implemented within HMP Eastwood Park in Gloucestershire (serving as Wales' closest female prison) and police custody suites within Wales (see Table 5 for figures).

Since its implementation in Wales in 2009, THN has been supplied to either new clients or as a re-supply within a custodial setting in 1,674 instances. During this time 812 unique individuals receiving THN for the first time in custody. Within the 2016-17 reporting period, 14.3 per cent (n=208) of all new unique individuals issued with THN were issued on release from prison / police custody. When compared to national APB provision, prison supply still acts as one of the highest distributors of THN nationally (see Chart 15). The issue of THN to new individuals represents 31.8 per cent of all prison based supplies. Supply to new clients within the male prison estate in 2016-17 declined by 0.7 per cent when compared to the previous year (see Chart 16 & Table 5). However, despite this the prison estate continues to remain an important asset to ensure the supply of THN to new individuals throughout Wales.



**Chart 15: Comparisons of male THN distribution between APBs and Prison (New Clients)**



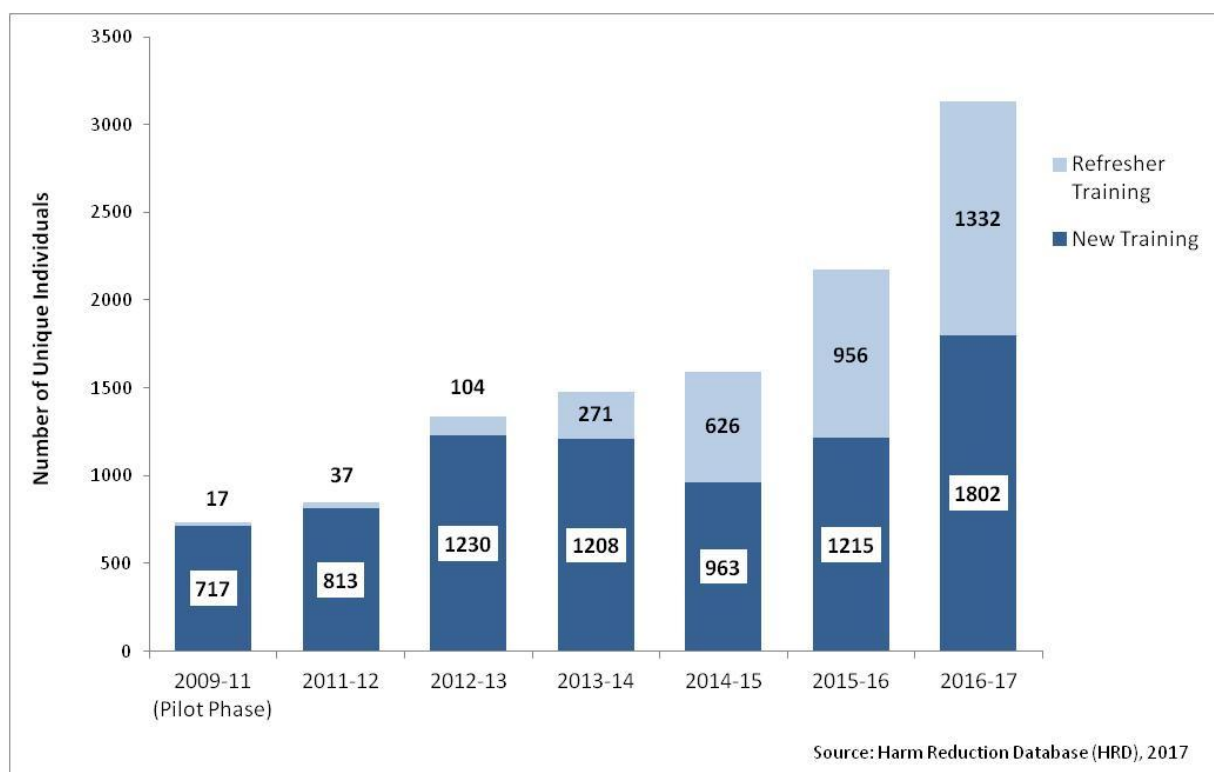
**Chart 16: Comparisons between community and prisons of THN distribution to new male clients by year**

**Table 5: Comparisons of THN distribution between prison sites 2016-17**

	New Clients Supplied with THN	Number of Re-Supply Events	Total Supply Events
<b>HMP Cardiff</b>	95	210	305
<b>HMP Eastwood Park</b>	54	63	117
<b>HMP Parc</b>	11	14	25
<b>HMP Swansea</b>	30	124	154
<b>Police Custody</b>	18	36	54
<b>Grand Total</b>	<b>208</b>	<b>447</b>	<b>655</b>

## 5 THN & fatal poisoning prevention training

Since 1<sup>st</sup> July 2009, 7,879 unique individuals have been trained in the administration of THN and fatal poisoning prevention. *Chart 17* indicates an increase of 48.3 per cent in the number of unique individuals newly trained in the administration of THN and fatal poisoning prevention in 2016-17 than in the previous year. These individuals include service users, their families / partners / carers, and professionals.



**Chart 17: Number of unique individuals in Wales trained in the administration of THN and the prevention of fatal poisoning by year 2009-2017**

Current records on the HRD indicate that 52.3 per cent (n=4,290) of individuals who have been trained are overdue follow-up training. Training requirements indicate that individuals should receive follow-up training on an annual basis to ensure maintained knowledge of THN administration and drug poisoning recognition.

Of those attending training 2016-17 approximately 13.1 per cent of individuals were registered as family / partner / carers or professionals working with those at risk of an opioid poisoning. Training of such individuals nearly quadrupled from the previous year. With 391 unique individuals trained in 2016-17 compared to 118 in 2015-16. This demonstrates an expansion of THN programme beyond those directly at risk of opioid poisoning in Wales.

## **6 Appendix I: Background**

In July 2009 the Take Home Naloxone (THN) pilot project was launched by Welsh Government (WG) in selected areas of Wales. The key aim of the project was to reduce drug-related deaths in Wales. In addition, the project aimed to promote harm reduction and to improve the health and social wellbeing of drug users. The evaluation report is available at:

<http://wales.gov.uk/about/aboutresearch/social/latestresearch/naloxoneproject/?lang=en>

Full national implementation of THN projects throughout Wales was approved by WG in May 2011. Full reports indicating the provision of THN throughout Wales from 1<sup>st</sup> July 2009 – 31<sup>st</sup> March 2016 can be obtained from:

[www.publichealthwales.org/substancemisuse](http://www.publichealthwales.org/substancemisuse)

### **6.1 What is THN?**

Naloxone is a competitive opioid antagonist and has been commonly named a 'Heroin Antidote'. It works by temporarily binding to opioid receptors in the brain and body and counteracting the effects of opioids. This has been proven to bring a patient experiencing poisoning through opioid use to consciousness in minutes following administration, thus restoring breathing and preventing fatal poisoning. The effects of Naloxone last approximately 20 minutes following administration and follow-on care is vital to ensure the prevention of subsequent poisoning. What Naloxone does is provide time prior to the arrival of emergency services and follow-on care.

Further information and publications available at: [www.naloxonesaveslives.co.uk](http://www.naloxonesaveslives.co.uk).

### **6.2 Harm Reduction Database Wales (HRD)**

HRD Wales is a web-based data collection system used to record a range of activity related to harm reduction interventions, including needle and syringe provision and reduction of opioid deaths through THN.

From 1<sup>st</sup> April 2012 the 'HRD – Naloxone' module was implemented to record THN-related activity. A back population exercise was also completed to ensure that all of the data from the pilot project and first year of implementation was securely stored on the HRD. This development allows the recording of all unique individual activity relating to the training and issue of THN, and provides clinicians with the ability to obtain live data relating to THN activity. For each individual accessing services, the database allows the recording of: referral to THN services, completion of training sessions (recognising overdose and how to use THN) and details relating to the supply and re-supply of THN. Details surrounding the type of information recorded are outlined in Appendix I.

## 6.3 Data definition

This report details the THN activity data recorded on the HRD from 1<sup>st</sup> April 2016 until 31<sup>st</sup> March 2017. During this time period THN training and distribution was recorded on the HRD by 54 registries throughout Wales. This includes statutory/voluntary substance misuse services, homelessness hostels, and public/private sector prisons (see *Table 7* for details).

**Table 7: List of sites where THN training and/or supply has been recorded since 1<sup>st</sup> April 2016 – 31<sup>st</sup> March 2017**

<b>ABMU</b>	GDAS - Monmouthshire	<b>Cwm Taf</b>
Caer Las – Access Point	GDAS - Rhymney	CDAT – Mountain Ash
CDAT - Bridgend	GDAS - Newport	CDAT - Pontypridd
CDAT - Swansea	GDAS – Torfaen	Drugaid – Merthyr Tydfil
DASH	GSSMS	IOIS – Merthyr Tydfil
Drugaid - Swansea		RISMS
HMP Parc	<b>BCU</b>	TEDS
HMP Swansea	BCUHRT – Mobile Unit (x 3)	
OIS – Bridgend	SMS – Denbighshire	<b>Hywel Dda</b>
OIS - Neath	SMS - Wrexham	CDAT – Aberystwyth
OIS - Swansea		CDAT – Carmarthen
WCADA – Bridgend	<b>Cardiff and Vale</b>	CDAT – Pembroke Dock
WCADA - Neath	CAU – Barry	DDAS - Carmarthenshire
WCADA - Port Talbot	CAU – Cardiff	DDAS - Ceredigion
WCADA - Swansea	IOIS – Cardiff and Vale	DDAS - Pembrokeshire
	HMP Cardiff	
<b>Aneurin Bevan</b>	The Huggard	<b>Powys Teaching</b>
GDAS – Blackwood	Solas - Cardiff	Kaleidoscope - Brecon
GDAS – Blaenau Gwent	Taith – Barry	Kaleidoscope - Newtown
GDAS – Caerphilly	Taith - Cardiff	Kaleidoscope – Welshpool
GDAS - Citadel	Wallich Hostel	Kaleidoscope – Ystradgynlais



### **Data relating to re-supply and poisonings**

The data contained within the subsequent section 3 - *THN used in fatal/non-fatal opioid poisoning events* reflects only the information provided by those individuals who have returned for THN re-supply. Currently there is no method of recording data relating to the use of THN should the client not present for re-supply.

## 7 Appendix II: Data recorded on HRD – Naloxone

### Client Details

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

- **Demographics** *including – ethnicity, housing status*
- **Referral details** *including – non fatal poisoning (NFP) history, risk behaviour that lead to referral, current engagement in substance misuse services*
- **Onward referrals** *– details of referrals to other specialist health and social care services offered to the client by staff issuing THN and training. This section allows the recording of referrals declined as well as accepted by the client.*

### Naloxone training:

This section records information relating to the training provided to the client in administering THN, recognising opioid poisoning, and basic life support/CPR. Training is delivered to every client prior to the initial issue of THN, and a refresher session is delivered on a yearly basis. The training section is completed during every event where training is delivered to a service user, their family/friends, or a working professional. This enables service users to evidence completion of training prior to being administered THN. Details contained within this section include date of training, date of next training due, trainer's details and training elements provided.

### Consent:

Prior to the issue of THN, every client is required to complete an online consent form where they declare no knowledge of adverse effects to THN, that satisfactory information and training was provided in the use of THN, that they will adhere to appropriate use of THN and the equipment issued and that their information may be stored on the HRD.

### Naloxone supply/re-supply:

The supply/re-supply section contains details for all kits issued to the client, and is split into the following sections:

- **Supply/re-supply** *including – date of supply, batch number, expiry date, name of prescriber*
- **Reason for re-supply** *including – batch recall, confiscated by the police, kit lost, out of date, used for poisoning*
- **Who was supplied & additional detail** *including – individual THN was supplied to, details of follow-on care, outcome of poisoning (if applicable), free text box to record additional information.*