



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Drug Related Deaths in Wales: Current Data 2022-23 and Emerging Concerns

Prof Rick Lines

Head of Substance Misuse & Vulnerable Populations
Communicable Disease Inclusion Health Programme

25 April 2024

Contents

- **Take Home Naloxone**
- **Drug-related Deaths**
- **Nitazenes**



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Data on Take Home Naloxone in Wales 2022-23



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

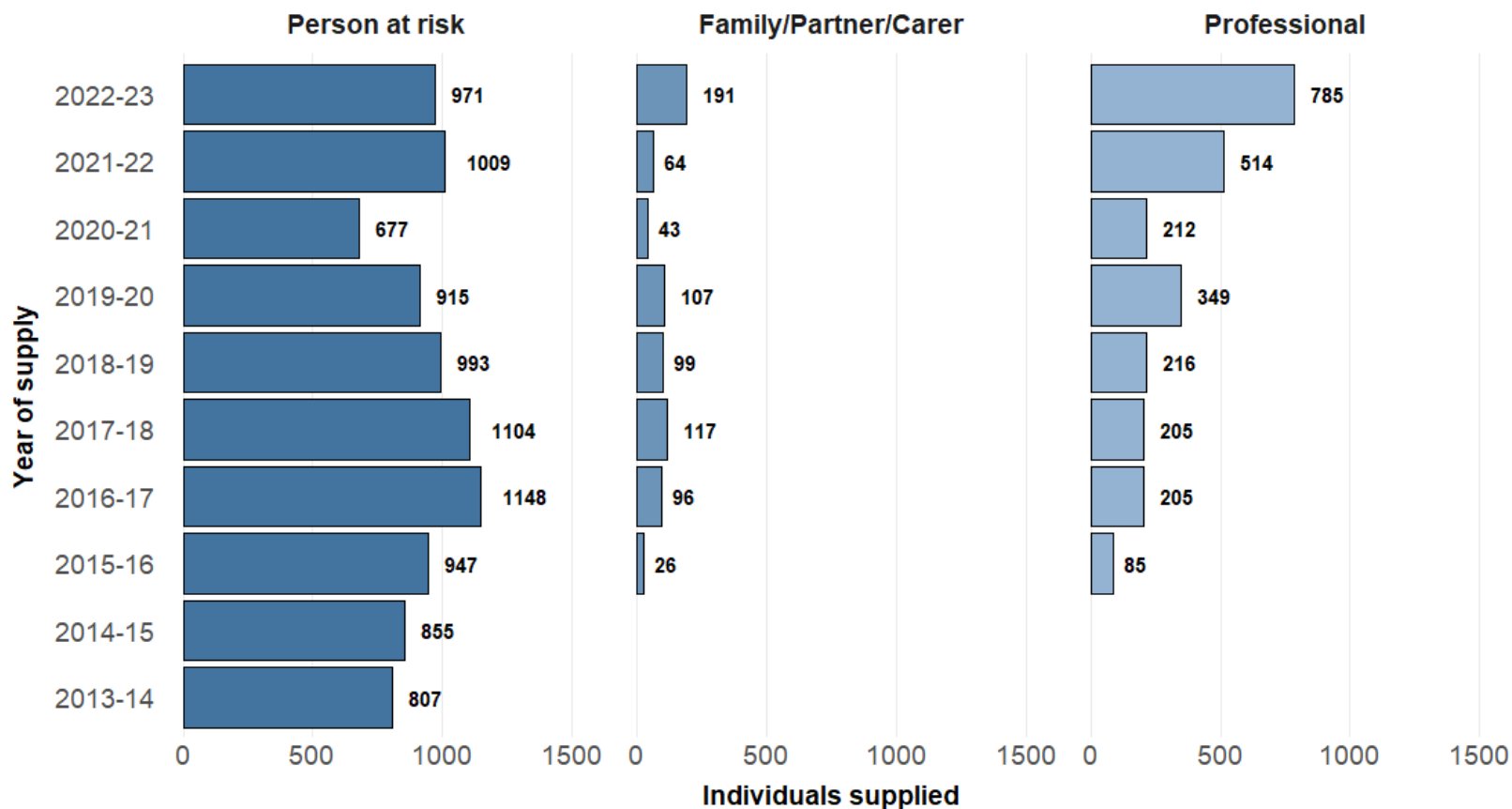
Supply rate of THN to new and existing individuals

Table 1 - Number of sites, individuals supplied and THN kits provided by year, 2013-14 to 2022-23

Year	Sites supplying THN	Individuals supplied with THN	New individuals supplied with THN	Supply events	THN kits supplied
2013-14	33	1140	807	1336	1336
2014-15	38	1345	855	1758	2754
2015-16	44	1853	1058	2436	3140
2016-17	54	2771	1449	3869	4437
2017-18	58	3020	1426	4049	4279
2018-19	58	2931	1308	3872	4224
2019-20	61	3222	1371	4286	4912
2020-21	61	2471	932	3389	4105
2021-22	66	3241	1587	4595	6052
2022-23	78	3540	1947	4949	6388



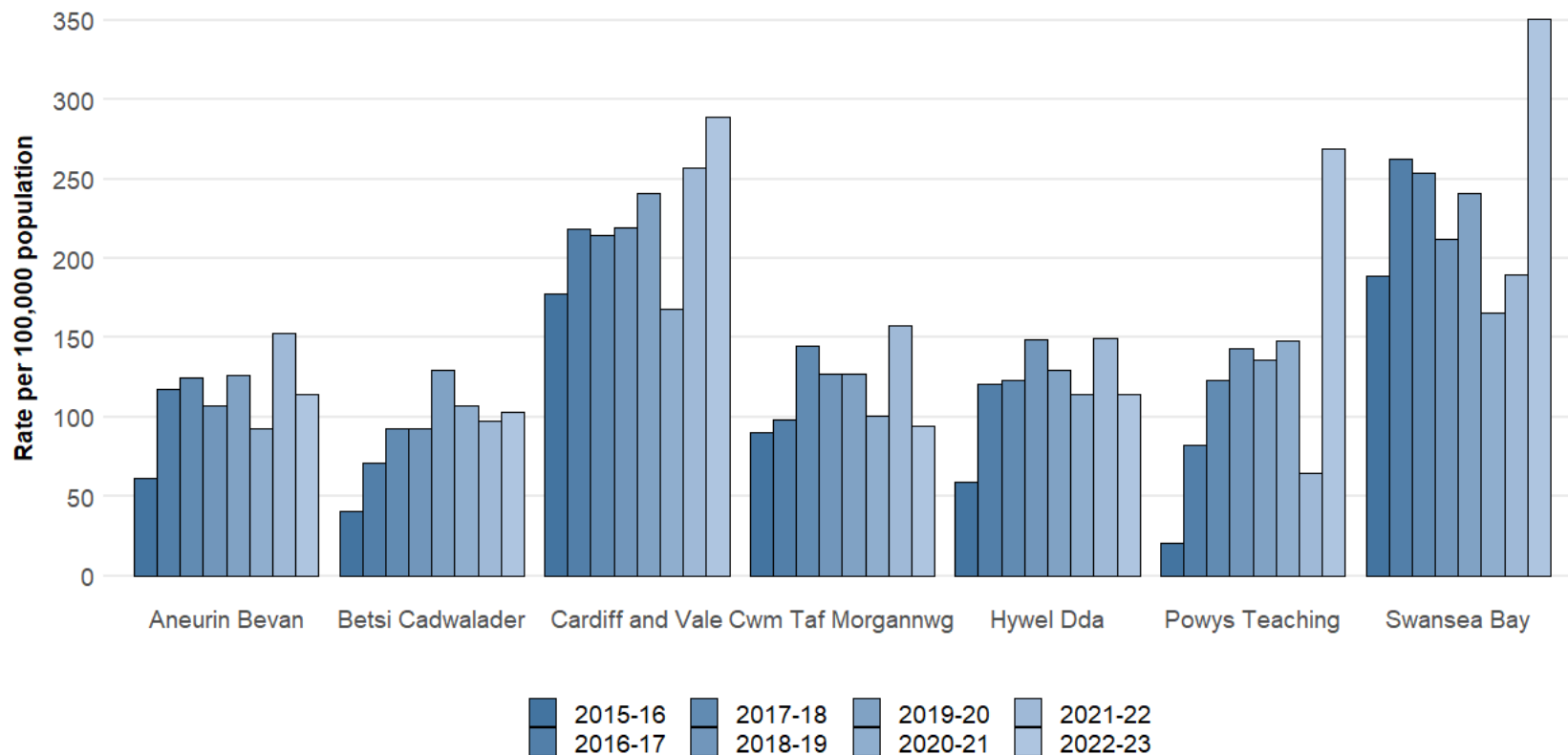
THN supply to new individuals by role



Source: Harm Reduction Database December 2023

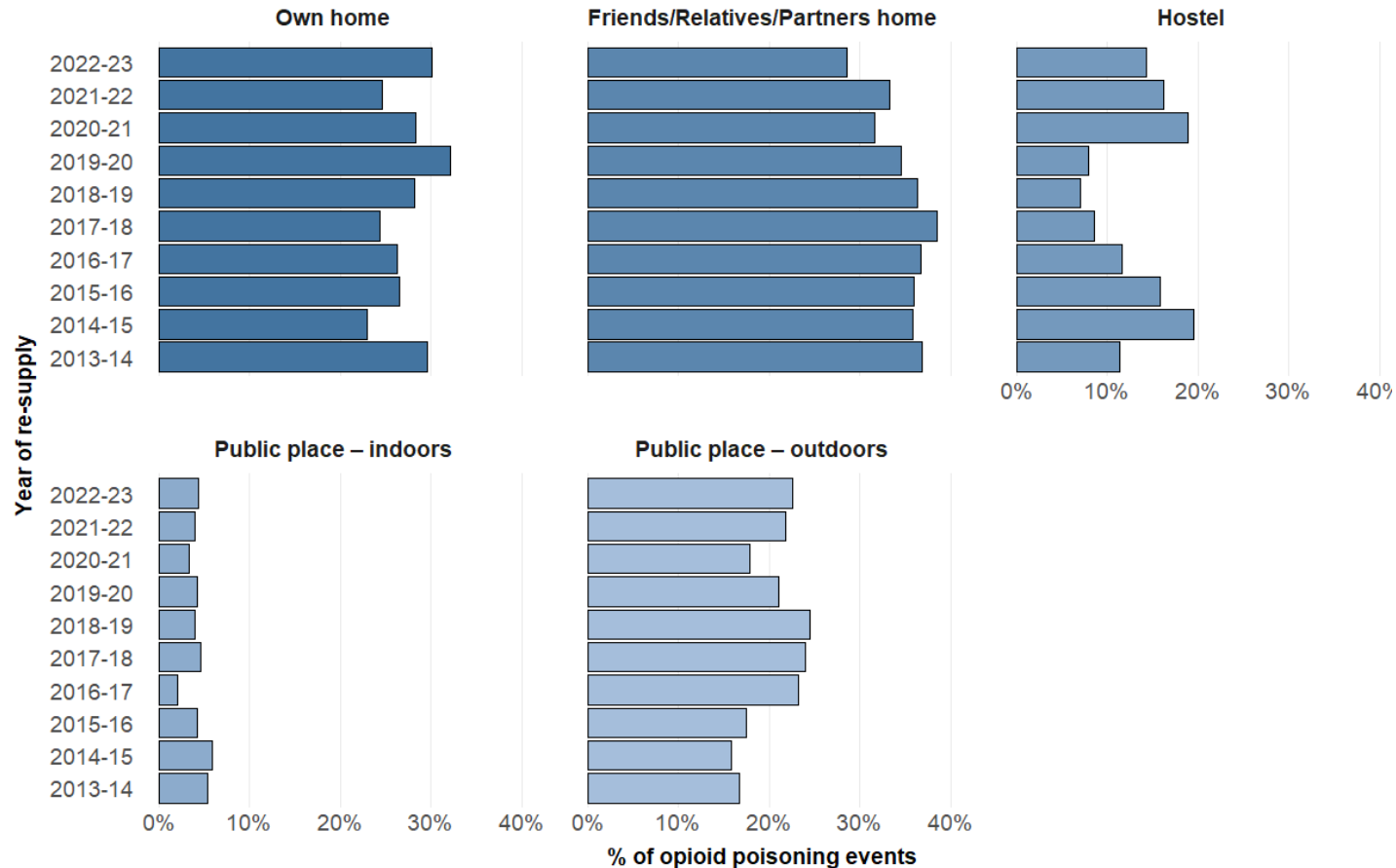


THN by health board area of residence (EASR per 100,000 population)



Source: Harm Reduction Database December 2023

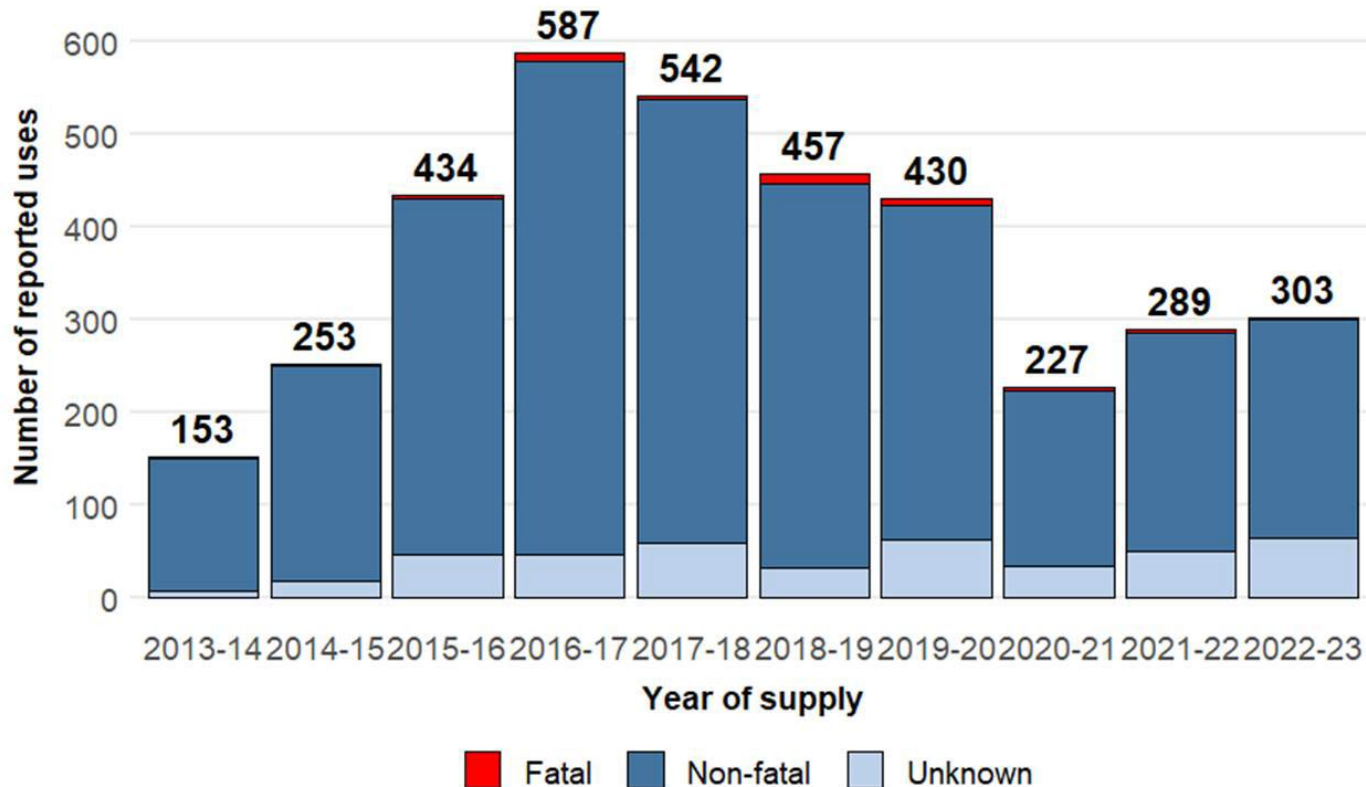
Settings in which THN was used



Source: Harm Reduction Database December 2023



Number of reported uses of THN recorded at time of re-supply by outcome and year 2013-14 to 2022-23



Drug-Related Deaths in Wales registered in 2022



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

318

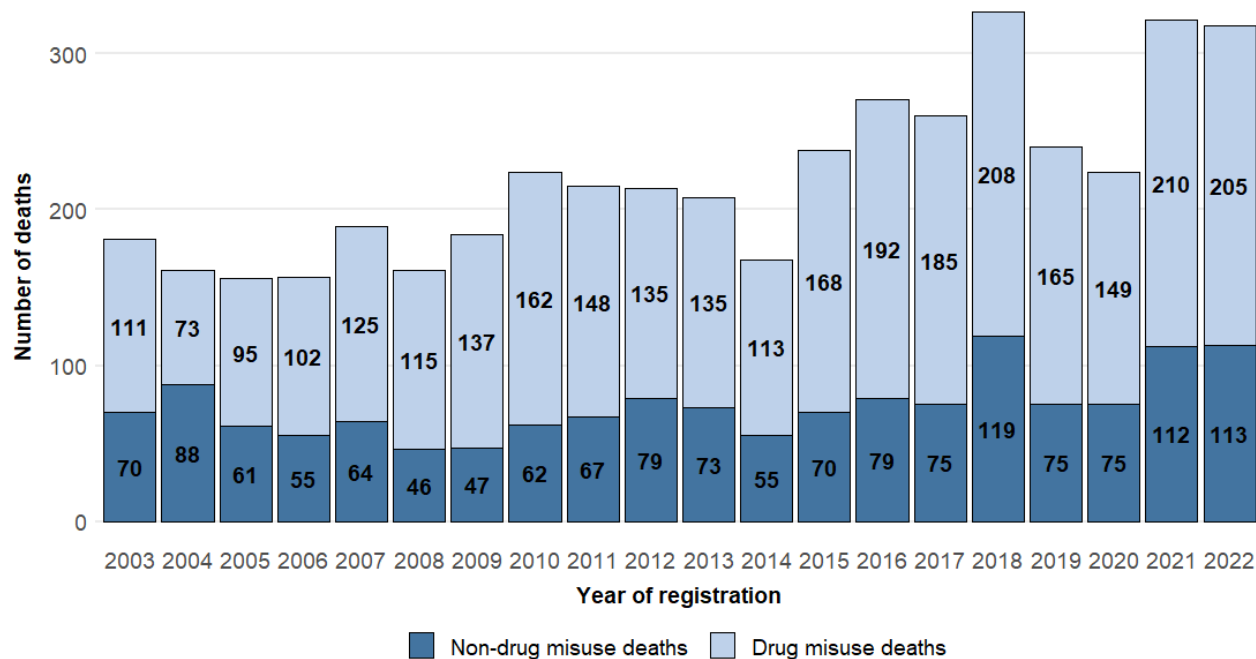
322 (2022)

Drug poisoning deaths in Wales

205

210 (2022)

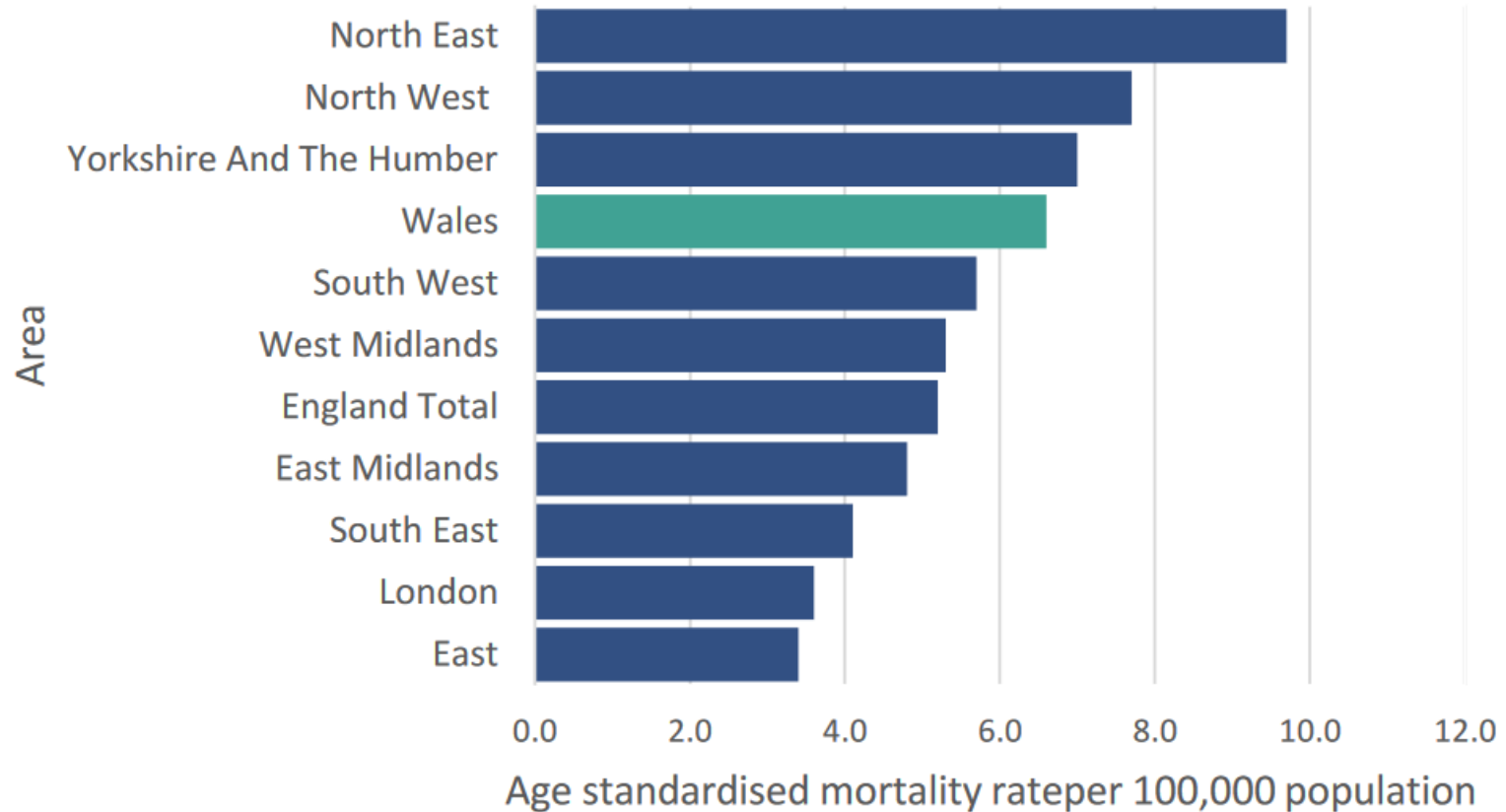
Drug misuse deaths



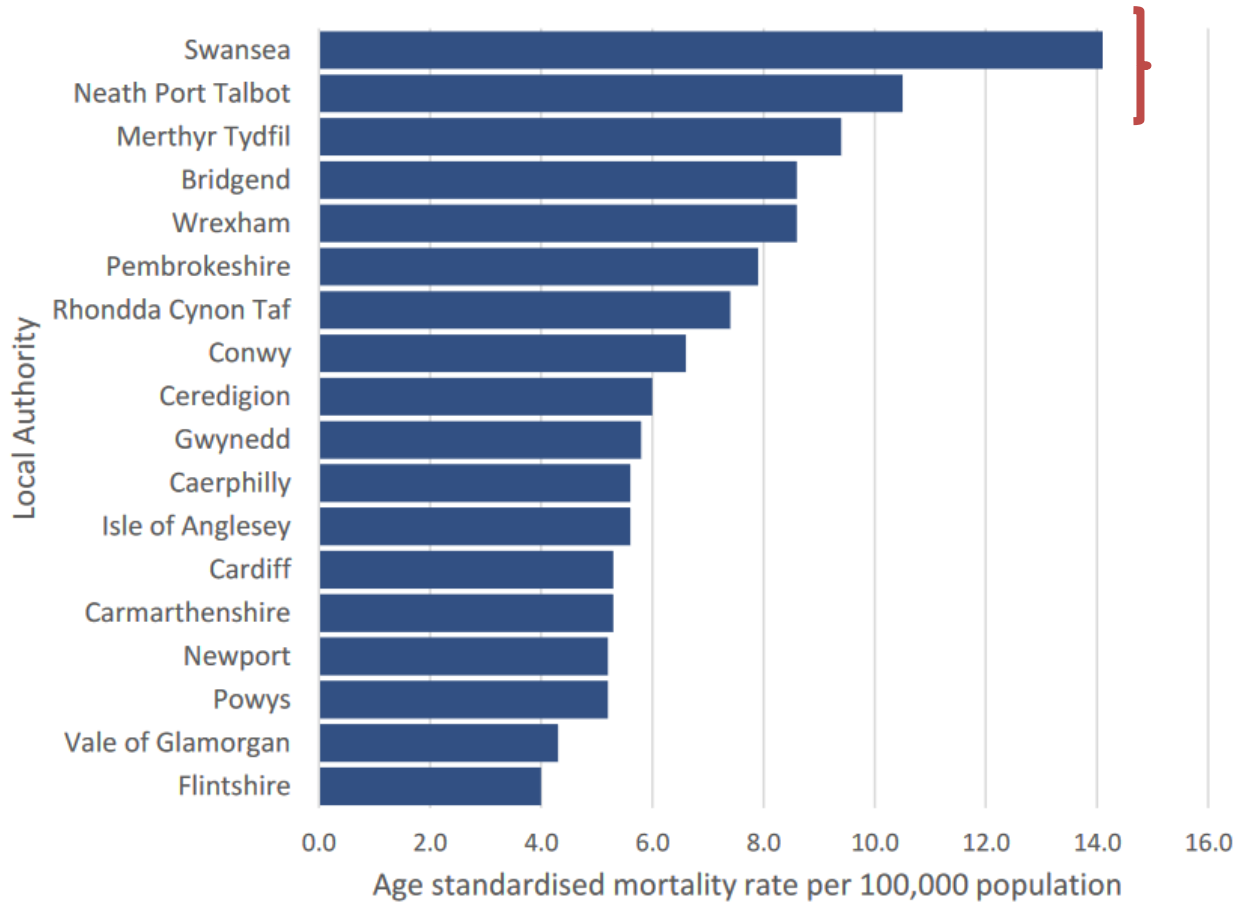
Source : ONS 2023



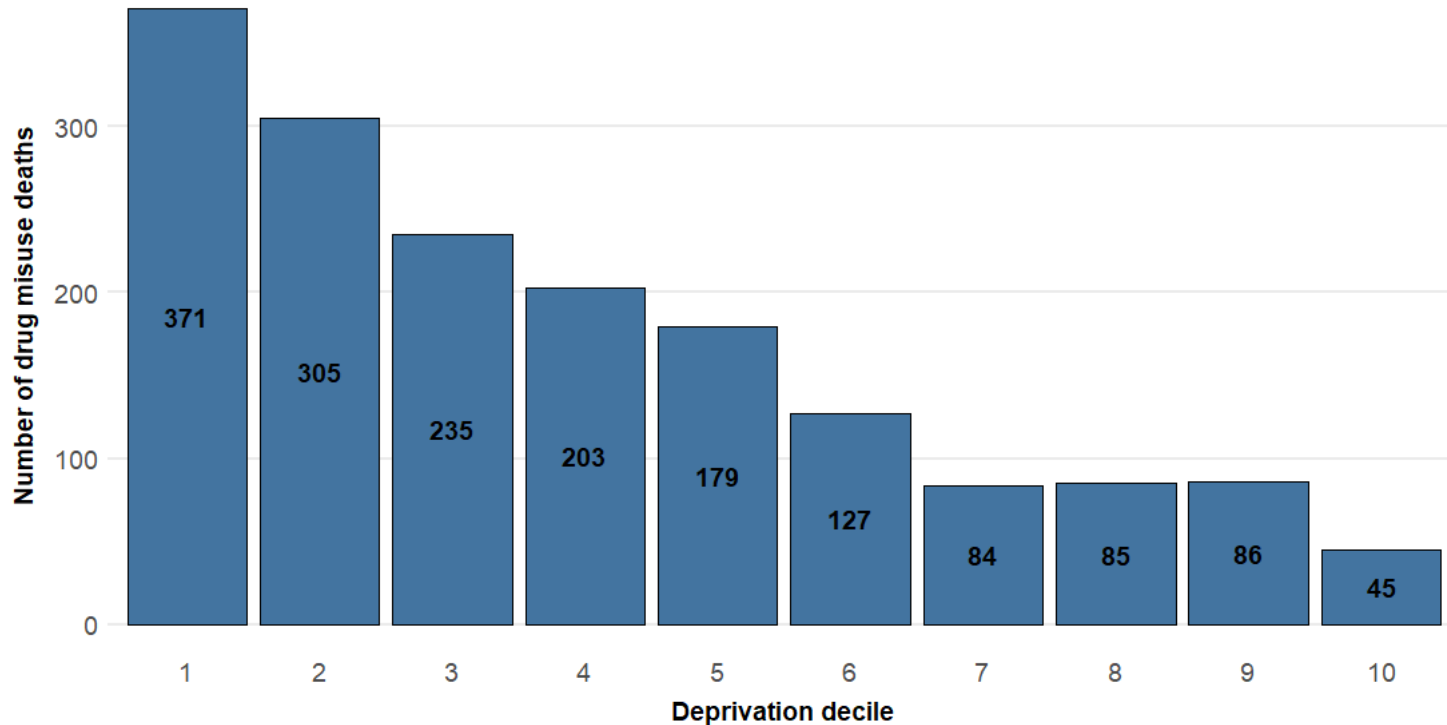
DRDs by Area – England & Wales



DRDs by Local Authority – Wales



DRDs by Welsh Index of Multiple Deprivation (WIMD)

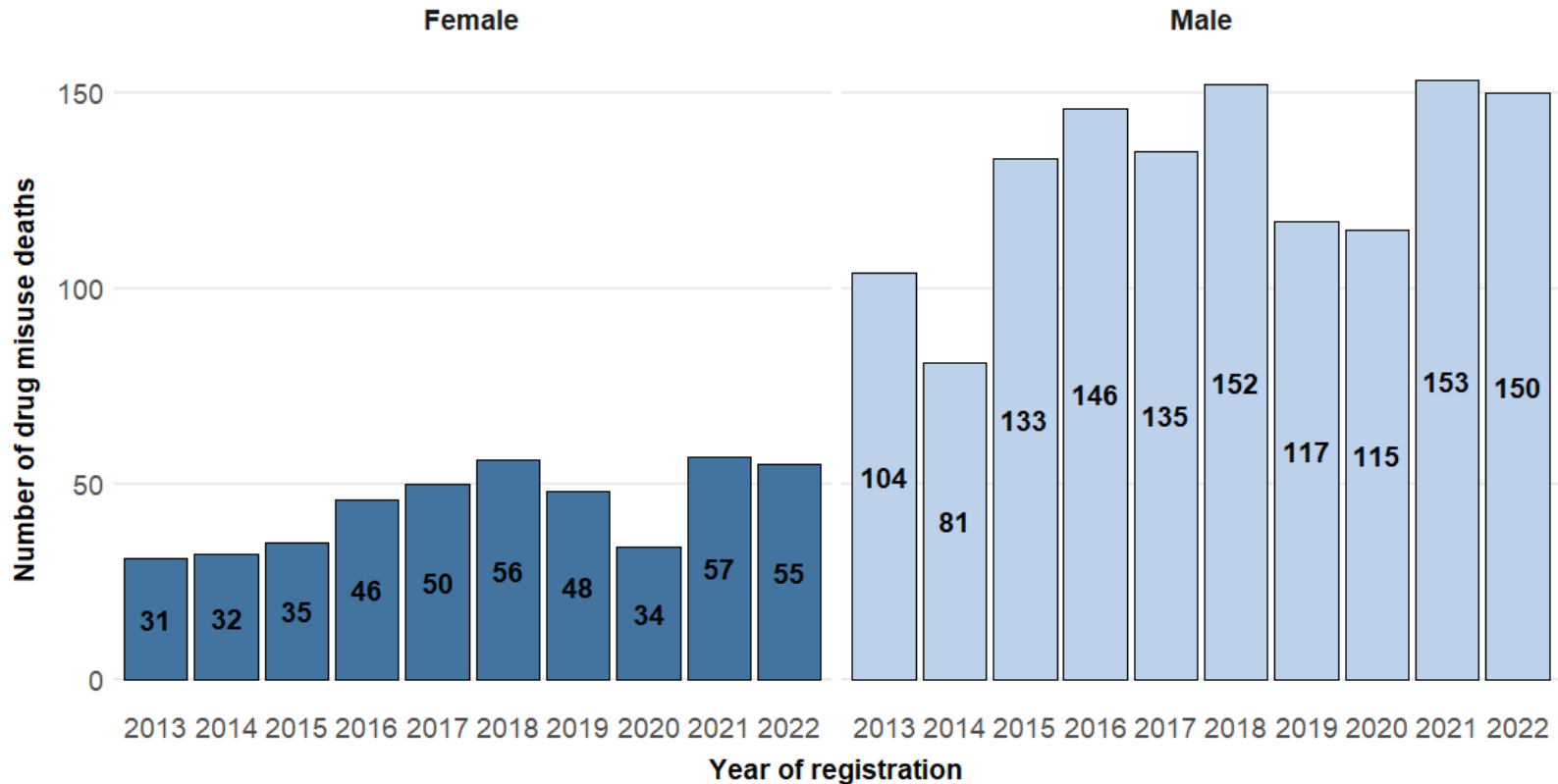


Source : ONS 2023

Drug misuse deaths were five times higher in those living in the most deprived quintile compared with the least deprived quintile.



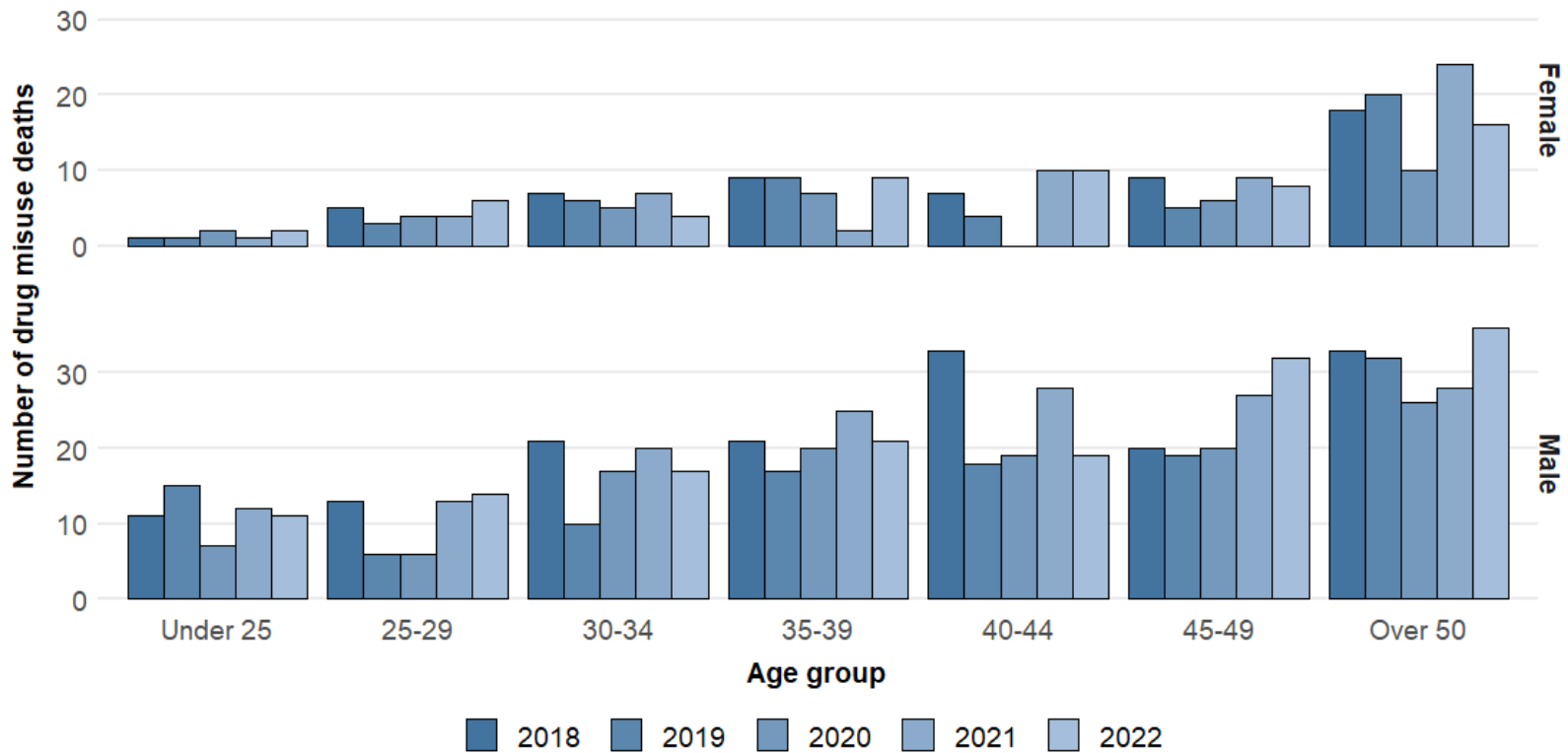
Drug misuse deaths by Gender



Source : ONS 2023



Drug misuse deaths by Age

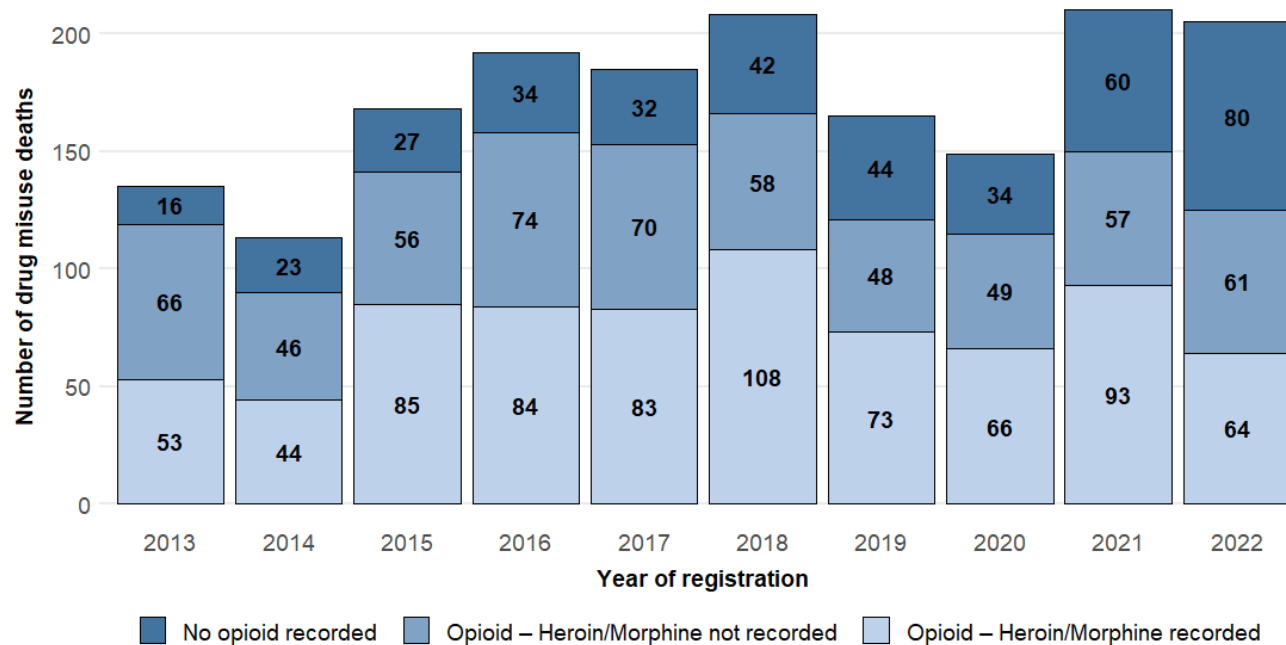


Source : ONS 2023

Figure: Drug misuse deaths by age group, gender and year of registration, 2017 to 2021

Substances - Opioids

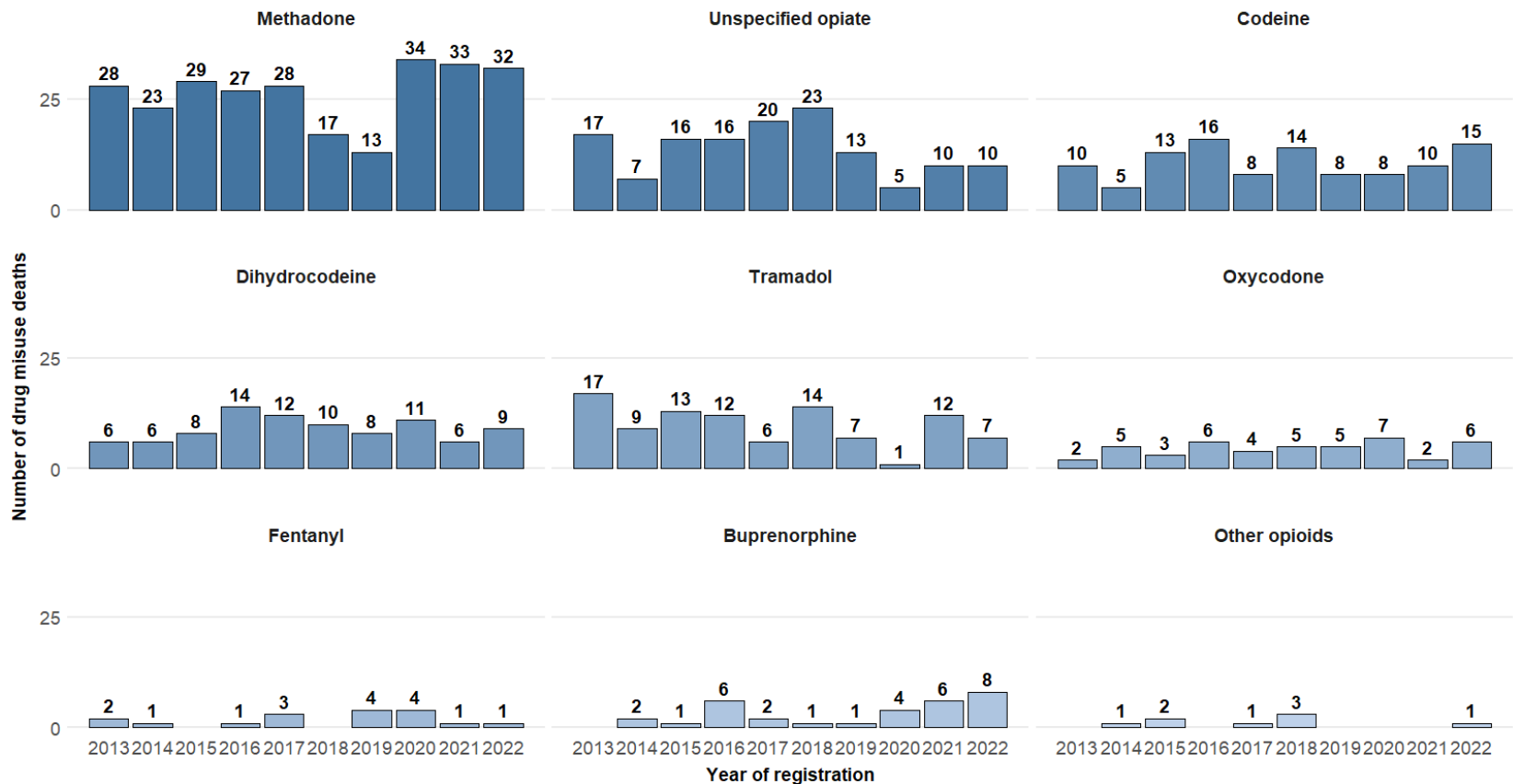
- Opioids remain the most common substances reported in Wales with **61%** (n=125) of drug poisonings deaths reporting at least one opioid.
- The most commonly reported opioid was heroin/morphine (reported in **52%** all deaths involving opioids)



Source : ONS 2023



Substances – Other Opioids

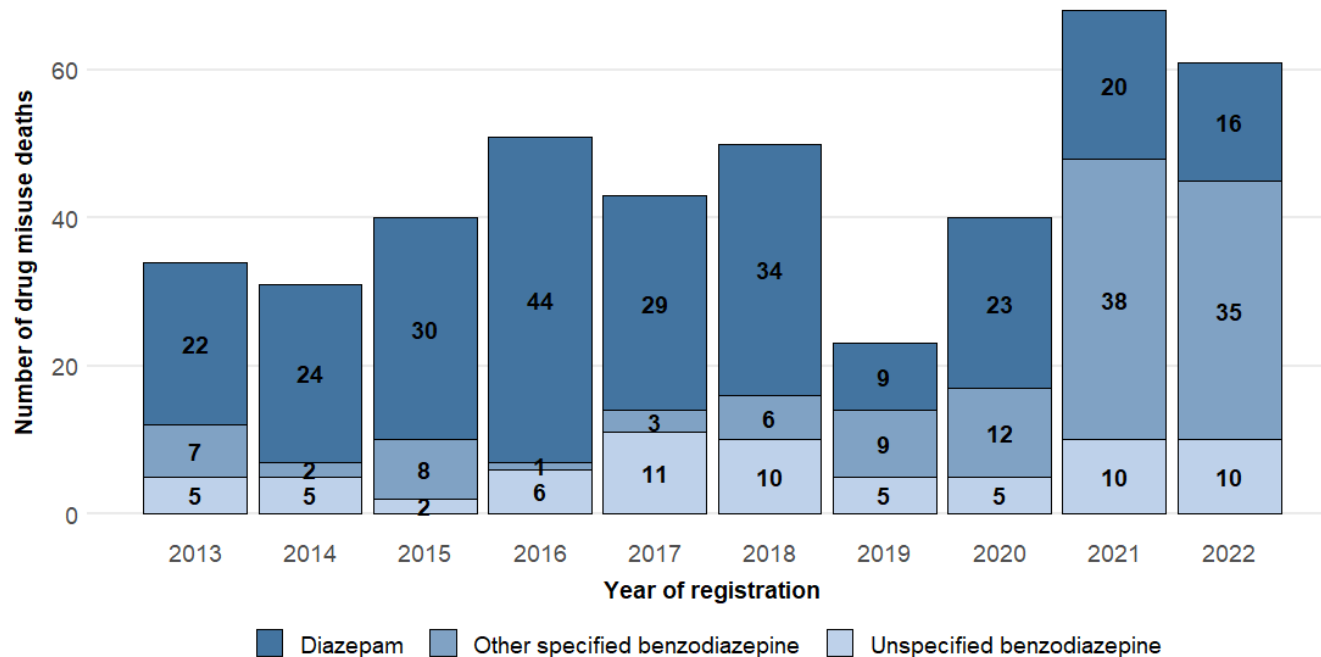


Source : ONS 2023



Substances - Benzodiazepines

- Benzodiazepines were the second most recorded substance group. **30% of deaths** (n=61) reported at least one benzodiazepine.
- The most commonly reported was Etizolam (n =20) followed by Diazepam (n= 16) and Flubromazolam (n=13).

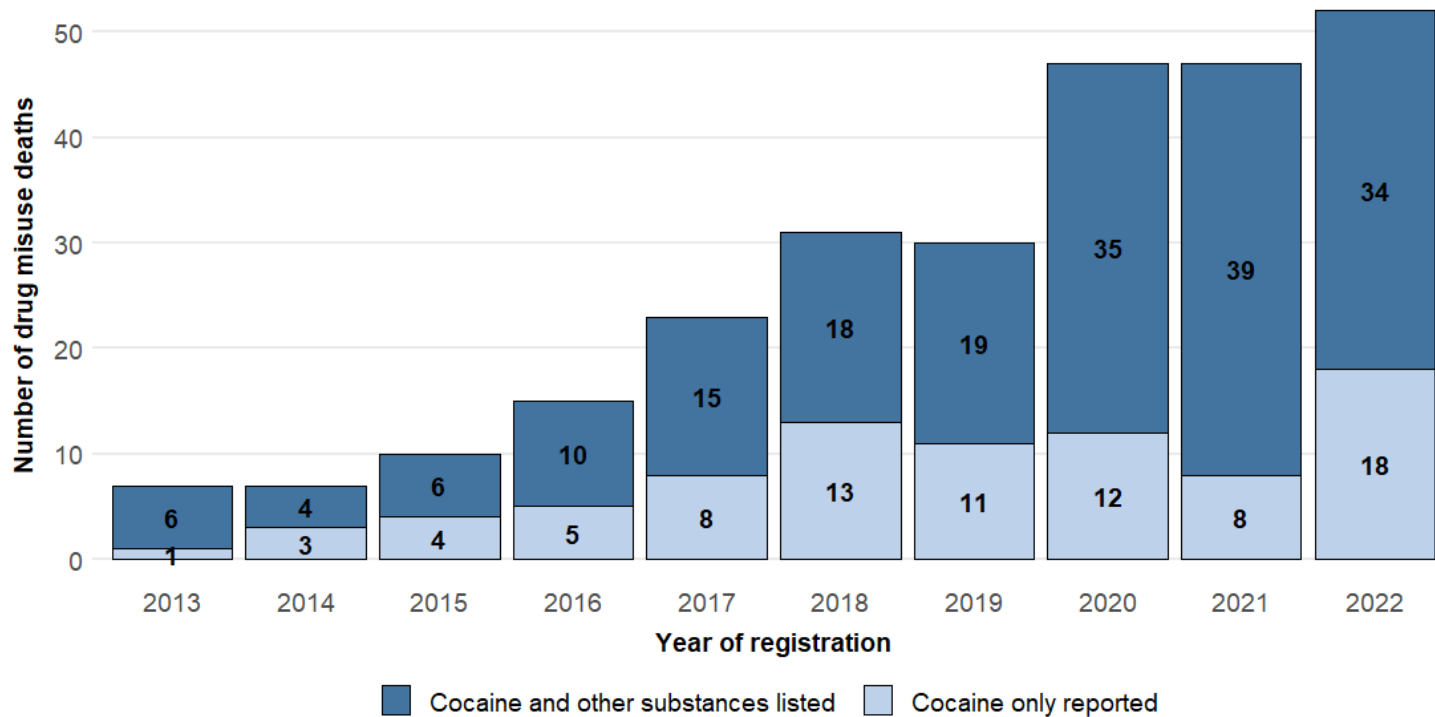


Source : ONS 2023



Substances - Cocaine

- Deaths involving Cocaine is at a new high (n = 52) increasing from 47 in the previous year.

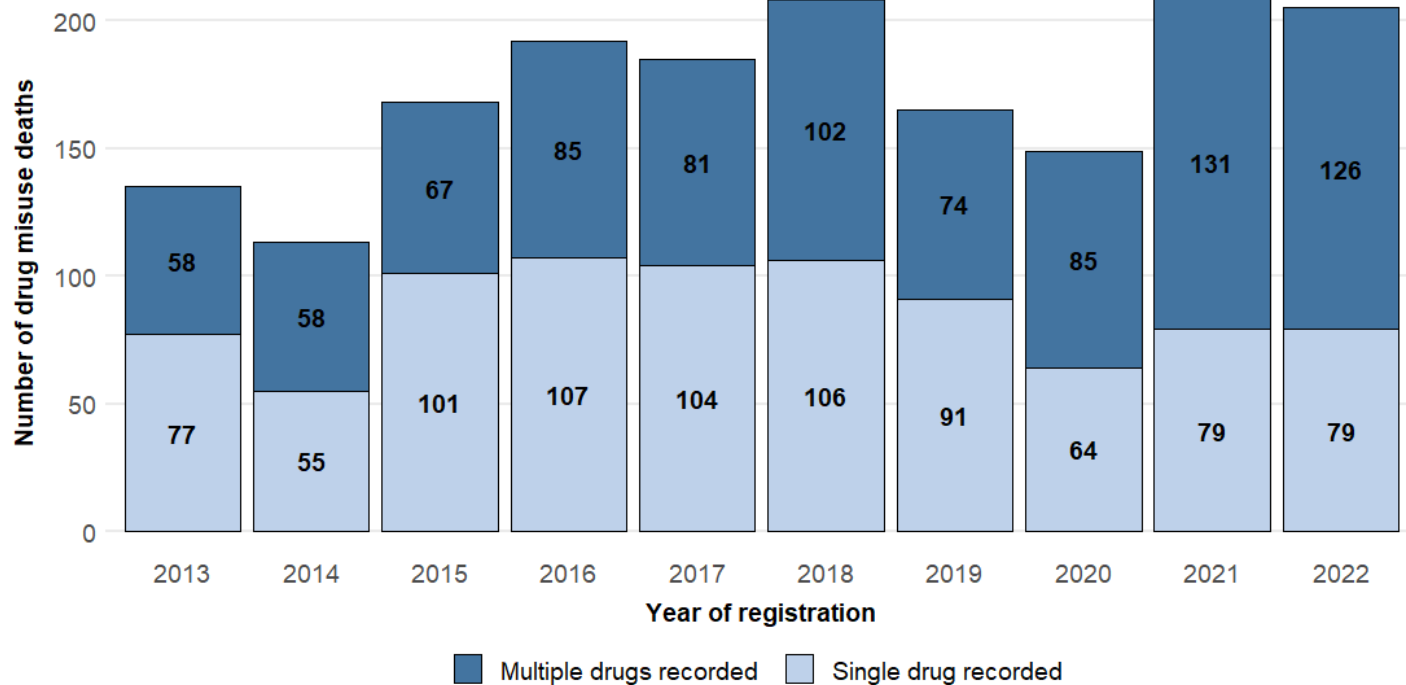


Source : ONS 2023



Drug Misuse Deaths: Polydrug Use

- In 2022, **61%** (n=126) of drug misuse deaths had more than one substance recorded, a slight decrease compared to the previous year.



Source : ONS 2023

Drug Misuse Deaths: Polydrug Use/Alcohol

- In 2022, alcohol was toxicologically evidenced in **21%** (n = 44) of drug misuse deaths, a slight increase from the 19 per cent recorded in the previous year



Source : ONS 2023

Update on Nitazenes



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Inside the tiny building in Wales where thousands of people send their illegal drugs

WEDINOS is the only lab in the UK where people can send their illegal drugs to be tested to see what's in them



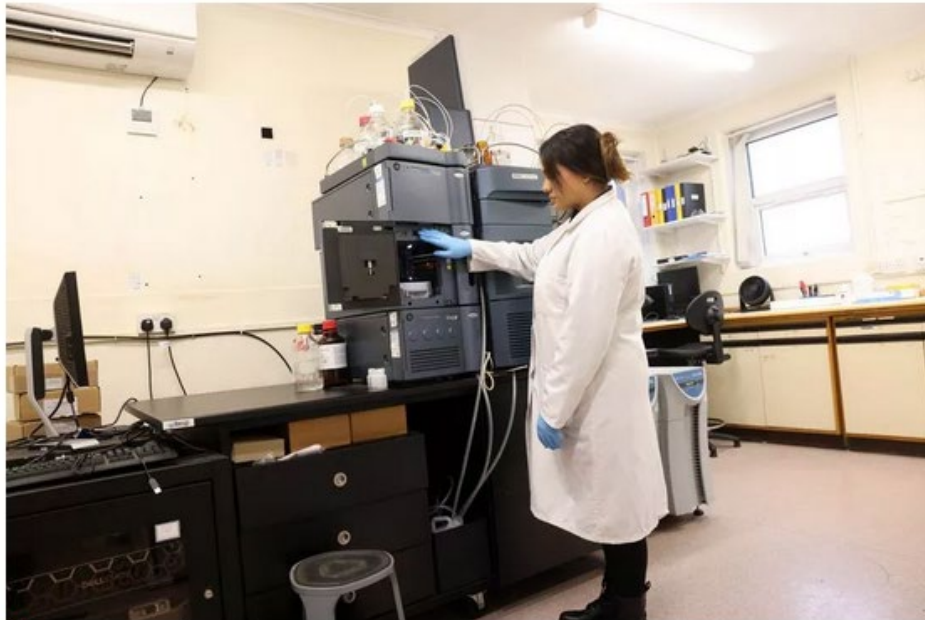
NEWS By **Ffion Lewis** Senior reporter

18:42, 8 FEB 2024 | UPDATED 09:07, 9 FEB 2024

Bookmark



▶ Enter your **postcode** for local news and info

 In YourArea

Drugs are tested in the WEDINOS lab (Image: WalesOnline/Rob Browne)



WEDINOS WEDINOS Sample & Effects Record Please enter your Reference Code here: **WXXXXXX**

Date Sample Provided:

Sample Provider Postcode:

Male Female Other Age:

Source of sample:
 Internet Friend/associate
 Social media Street dealer

What did you intend to buy?

Length of use of this substance, prior to the event?
 First Time Less than 6 months 6 to 12 months More than 12 months

What was the sample labelled as (if applicable)?

Form of Sample (tick one only)
 Liquid Capsule Crystalline
 Tablet Granules Powder
 Solid Plant Matter Other

What colour is the sample (maximum of two)?
 Colourless White Pink Grey
 Orange Yellow Red Brown
 Green Purple Blue Black

Was the sample tested? Yes No
 If NOT then skip the grey section of the form.

Approximate initial dose. Please indicate any re-dose.
 Length of time between consumption and effect?
 Onset: Seconds Minutes Hours
 Duration: Seconds Minutes Hours

Consumption of other substances at the same time the submitted substance was tested (please tick all that apply)
 Amphetamine Alcohol
 Cocaine Ecstasy
 Heroin Cannabis
 Other
 If other, please specify:

Method of consumption (please tick all that apply)
 Oral Snort/Sniff Smoked Intravenous Intramuscular Subcutaneous Vapourised

Effects experienced (please tick all that apply)

No Effect	Expected	Unexpected	No effect	Expected	Unexpected
Euphoria	<input type="checkbox"/>	<input type="checkbox"/>	Nausea	<input type="checkbox"/>	<input type="checkbox"/>
Increased Energy	<input type="checkbox"/>	<input type="checkbox"/>	Vomiting	<input type="checkbox"/>	<input type="checkbox"/>
Increased Confidence	<input type="checkbox"/>	<input type="checkbox"/>	Fatigue	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced Senses	<input type="checkbox"/>	<input type="checkbox"/>	Memory Loss	<input type="checkbox"/>	<input type="checkbox"/>
Increased Stamina	<input type="checkbox"/>	<input type="checkbox"/>	Confusion	<input type="checkbox"/>	<input type="checkbox"/>
Increased Alertness	<input type="checkbox"/>	<input type="checkbox"/>	Parity Attack	<input type="checkbox"/>	<input type="checkbox"/>
Increased Strength	<input type="checkbox"/>	<input type="checkbox"/>	Loss of Consciousness	<input type="checkbox"/>	<input type="checkbox"/>
Empathy	<input type="checkbox"/>	<input type="checkbox"/>	Agitation	<input type="checkbox"/>	<input type="checkbox"/>
Visual Hallucinations	<input type="checkbox"/>	<input type="checkbox"/>	Violence/Aggression	<input type="checkbox"/>	<input type="checkbox"/>
Reduced	<input type="checkbox"/>	<input type="checkbox"/>	Incoherence	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty Breathing	<input type="checkbox"/>	<input type="checkbox"/>	Depression	<input type="checkbox"/>	<input type="checkbox"/>
Clear Pains	<input type="checkbox"/>	<input type="checkbox"/>	Suicidal Ideation	<input type="checkbox"/>	<input type="checkbox"/>
Irregular Heartbeat	<input type="checkbox"/>	<input type="checkbox"/>	If other, please specify:	<input type="text"/>	<input type="text"/>

Any other comments e.g. Did you seek medical help? (Please use the back of the form if required)


Consenting Form	Processing Sample	Received at (Strength)
Organisation (if relevant): <input type="text"/>	Name: <input type="text"/>	Name: <input type="text"/>
Signature: <input type="text"/>	Signature: <input type="text"/>	Signature: <input type="text"/>
Date: <input type="text"/>	Date: <input type="text"/>	Date Tested: <input type="text"/>

By submitting this sample to WEDINOS, you are confirming full ownership of this substance in your possession.


WELCOME

"Legal highs, club drugs, designer drugs, psychoactives..."
Drug markets are changing.
It can be hard to get accurate information and stay safe.
WEDINOS tests substances to give individual users and others rapid and accurate information to reduce harms.


COLLECTING, TESTING, INFORMING



Sample Testing
Click here to complete a Substance Sample & Effect Record form.



Sample Results
Find your sample results here and results of other WEDINOS tests.



Substance Information
Click here for more information on a range of substances.

Following a review by the WEDINOS Programme Board, it has been decided that as of 25th July 2014, no further samples of Steroids and/or Image Enhancing drugs (SIEDs) will be tested by WEDINOS. For further information please [click here](#).

WEDINOS is a harm reduction project, providing an anonymous service, and reflects trends in substance use. It is therefore important that samples are submitted with a completed 'Effects Record' and correct postcode information, including samples from outside of Wales.
This does not affect your anonymity.

WEDINOS will not analyse samples that have any evidentiary or forensic value.

Any samples with web generated reference numbers (WXXXXXX) that do not have a completed 'Effects Record' or conflicting information re: correct postcode will not have their results published.

- Home
- Sample Testing
- Sample Results
- Substance Information
- Harm Reduction Advice
- Reports & Publications
- Register for Updates
- About Us

www.wedinos.org

1 2 3 4 5 NEXT

W050424
 Date Received: 15 Apr 2024
 Postcode: IG1 -
 Purchase Intent: Ritalin (methylphenidate)
 Package Label: Methylphenidate (Sandoz brand)
 Sample Colour: White
 Sample Form: Tablet
 Consumption Method: Oral
 Self-Reported Effects: Euphoria, Increased Energy, Increased Confidence, Enhanced Senses, Increased Stamina, Irregular Heartbeat
 Sample Upon Analysis (Major): [Methylphenidate](#)
 Sample Upon Analysis (Minor):



[Click to Enlarge](#)

W050247
 Date Received: 15 Apr 2024
 Postcode: ZE10 -
 Purchase Intent: Nitrazepam
 Package Label: Nitrazpm
 Sample Colour: White
 Sample Form: Tablet
 Consumption Method: Oral
 Self-Reported Effects: Euphoria, Increased Strength, Relaxed
 Sample Upon Analysis (Major): [Nitrazepam](#)
 Sample Upon Analysis (Minor):



[Click to Enlarge](#)

W050398
 The sample was not analysed for the following reason : Incomplete effects form

W050256
 Date Received: 15 Apr 2024
 Postcode: B26 -
 Purchase Intent: Diazepam
 Package Label: Accord Diazepam
 Sample Colour: Blue
 Sample Form: Tablet
 Consumption Method: Not Stated
 Self-Reported Effects: Not Stated
 Sample Upon Analysis (Major): [Diazepam](#)
 Sample Upon Analysis (Minor):



[Click to Enlarge](#)

Nitazenes

- WEDINOS received our first sample containing a nitazene in April 2021
- Between January – October 2023 we received 37 samples containing 1 or more nitazene
- Submitted in a variety of forms (powder, tablet, e-liquid, plant matter)
- Submitted as a variety of different substances: As a nitazene, oxycodone, diazepam, alprazolam, heroin, flubromazolam, cannabis, THC vape liquids
- Metonitazene, Isontonitazene, Etonitazepyne (N-Pyrrolidino Etonitazene), Protonitazene, Butonitazene

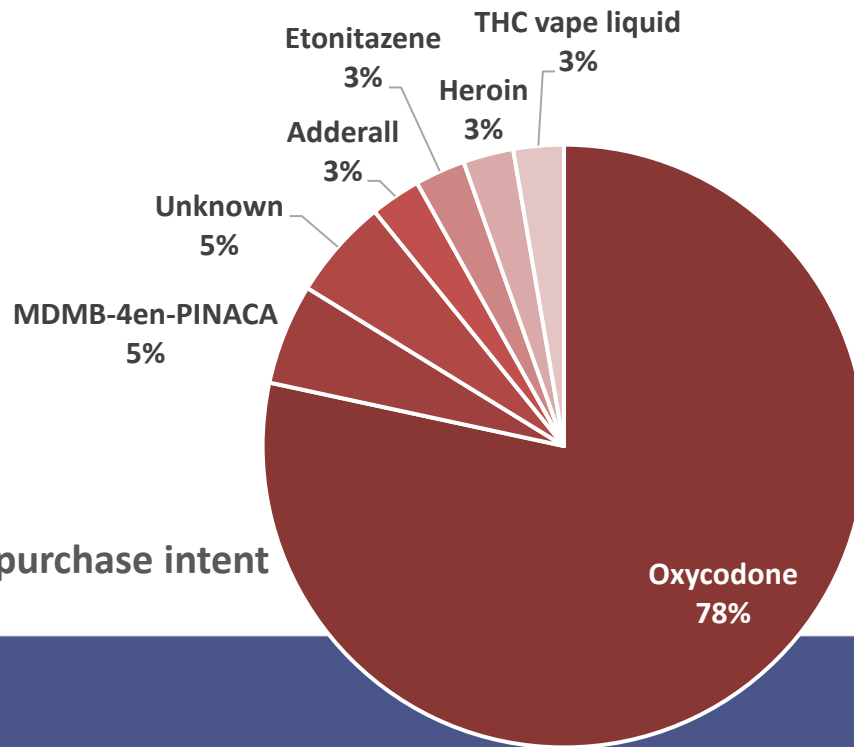


GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Nitazenes

- From the receipt of the first sample to the end of 2022
 - 37 samples profiled as containing a nitazene
 - 29 of the samples were submitted as **oxycodone**

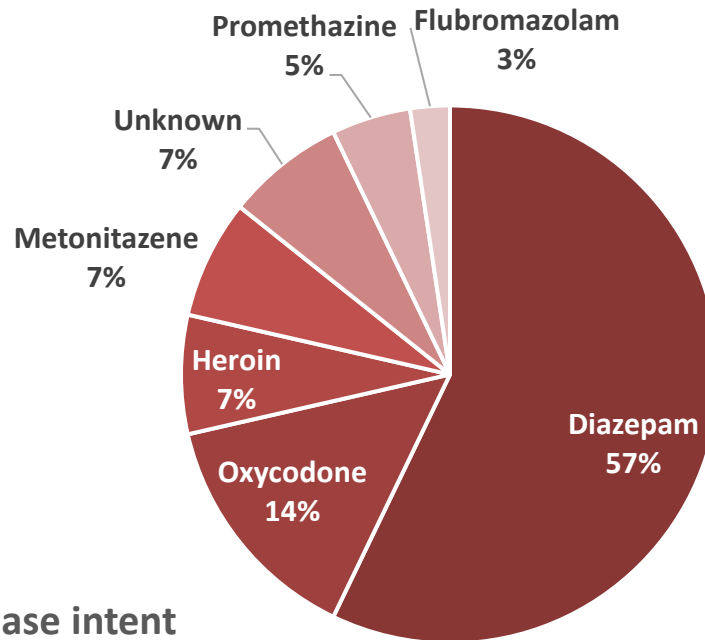


Nitazene samples - purchase intent



Nitazenes

- Oxycodone remained the most common purchase intent listed until July 2023
 - At that time **diazepam** began to appear as a purchase intent
 - By November 2023, it was the most commonly stated purchase intent



Nitazene samples - purchase intent



Are you getting what you think you're getting?

Over the past several years WEDINOS has been reporting on and highlighting concerns relating to *substitutions within the illicit benzodiazepine market*.

Primarily, these substitutions have involved other, albeit more potent, benzodiazepines.

Since September 2023, WEDINOS has seen an increase in the number of samples submitted as *benzodiazepines*, particularly diazepam, that have been profiled as containing a *nitazene*, and on occasion another benzodiazepine, but *no diazepam*.



Since September 2023, 25 samples, from across the United Kingdom, submitted in the belief, they were **diazepam**, were profiled following analysis as containing the nitazene, **metonitazene** (Sept =8, Oct=12, Nov=5), and on 23 of those occasions, this was identified alongside the benzodiazepine, **bromazolam**.

Nitazenes were originally developed in the 1950s as analgesics. Found to have potent analgesic effects, the clinical development of nitazenes was abandoned due to the increased risks of adverse events. Currently, there are no drugs of this class approved as human or veterinary medicines.

Metonitazene is a high potency synthetic opioid that exceeds the potency of fentanyl and morphine.

Benzodiazepines are a class of sedative substances. These work by increasing the effects of a naturally occurring chemical in the brain gamma aminobutyric acid (GABA). Where prescribed, they are recommended for short-term use at the lowest possible dose. This is to reduce the risks of tolerance, dependence and withdrawal symptoms

Bromazolam is a triazolobenzodiazepine, structurally related to alprazolam. Originally developed as a candidate medicine, it was never approved for use. There is currently little scientific literature available relating to bromazolam. A "common" oral dose of bromazolam, as described by users of the substance, is 1 to 3mg. The onset of effects is between 15 and 45 minutes, with a duration of action of 5 to 8 hours

With the emergence of nitazenes within the illicit benzodiazepine market, we recommend, individuals who are consuming unprescribed benzodiazepines, speak to their local drug treatment service about **Naloxone (often described as the opioid antidote) or visit **DAN 24/7** and see their click and collect service (for those living in Wales) <https://dan247.org.uk/naloxone-click-and-deliver/>**

11/12/2023

INSIGHT

Nitazenes: the powerful synthetic opioids adding 'severe concern' to Wales' drugs crisis

WALES | DRUG AWARENESS | DRUGS | OPIOIDS | Thursday 21 March 2024 at 8:13pm



Megan Boot

megan.boot@itv.com

NEWS

Warning as high potency synthetic opioids identified in illicit benzodiazepine market

11 Dec 2023 3 minute read



Nitazenes

- **Heroin** – although WEDINOS had profiled nitazene in heroin previously from November 2024 we received increased number of samples submitted as heroin
 - Cluster of fatal and non-fatal drug poisonings in Adamstown and Roath areas of Cardiff amongst heroin users
 - Fast testing identified the presence of nitazenes
 - Cluster(s) of non-fatal drug poisonings in areas of the Anuerin Bevan Health Board area
 - Local services proactively promoting WEDINOS and obtaining heroin samples for analysis

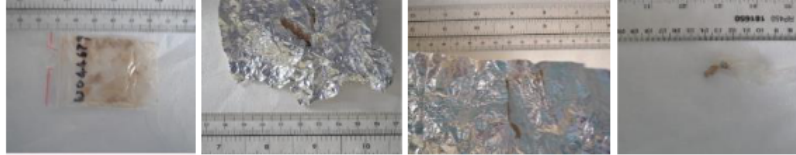


Nitazenes within the heroin market

Public Health Wales have been notified of four suspected fatal drug poisonings and several non-fatal drug poisoning events that have occurred in the Adamsdown/Roath area of Cardiff between 23rd December 2023 - 1st January 2024.

It was reported that the individuals concerned were believed to have injected heroin.

Whilst cause of death and post-mortem toxicology remain unconfirmed, South Wales Police forensic analysis of paraphernalia seized at scene of one of the incidents has detected the presence of metonitazene, monoacetylmorphine, cocaine, paracetamol, caffeine and benzocaine.



Since January 2023, WEDINOS received and analysed seven samples, five from England and two from Wales, in the belief, they were **heroin**, that were profiled following analysis as containing nitazene(s), (Jun 23=1, Sept 23=2, Nov 23=1, Dec 23=2, Jan 24=1).

Nitazenes identified were isotonitazene and metonitazene. With one sample containing an unconfirmed nitazene (the most recent sample received in January 2024 from Cardiff, Wales).

Nitazenes were originally developed in the 1950s as analgesics. Found to have potent analgesic effects, the clinical development of nitazenes was abandoned due to the increased risks of adverse events. Currently, there are no drugs of this class approved as human or veterinary medicines.

Isotonitazene has potent analgesic effects. In mice studies isotonitazene was found to be 500 times more potent than morphine. However, studies in rodents should be interpreted with caution as they do not accurately reflect opioid toxicity in humans.

Metonitazene was around 10 times more potent than morphine as an analgesic.

The import, supply, possession with the intent to supply and possession in a custodial institution of isotonitazene and metonitazene are all offences under the Psychoactive Substances Act 2016.

The Advisory Council for the Misuse of Drugs (ACMD) states individuals may be unaware of the inclusion of nitazenes, the high potency of some of these compounds provides a substantial risk of severe and potentially fatal overdose.

The ACMD report – A review of the evidence on the use and harms of 2-benzyl benzimidazole ('nitazene') and piperidine benzimidazolone ('brorphine-like') opioids can be found here: <https://www.gov.uk/government/publications/acmd-advice-on-2-benzyl-benzimidazole-and-piperidine-benzimidazolone-opioids>

Clinical management of toxicity with nitazenes recommends the use of Naloxone as an antidote. Individuals using heroin, or those concerned in the care of individuals using heroin should speak to their local drug treatment service about Naloxone or visit DAN 24/7 and see their click and collect service (for those living in Wales) <https://dan247.org.uk/naloxone-click-and-deliver/>

08/01/20

Nitazenes (Jan-March 2024)

- 58 samples were profiled as containing a nitazene post analysis (3.2% of all submissions n=1811)
- 33 were submitted as Diazepam (7.4% of all diazepam submissions n=448)
- 17 were submitted as Heroin (20.2% of all Heroin submissions n=84)
- 6 were submitted as Oxycodone (50% of all Oxycodone submissions n=12)
- 1 was submitted as a Synthetic Cannabinoid Receptor Agonist (SCRA) (8.3% of all SCRA submissions n=12)
- 1 was submitted as temazepam (16.7% of all SCRA submissions n=6)



All samples found to contain a Nitazene

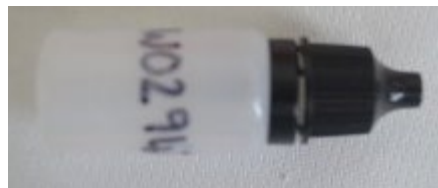
Diazepam



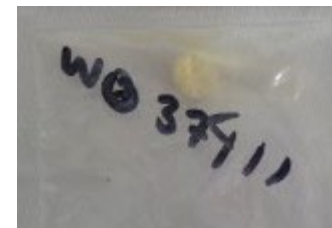
Oxycodone



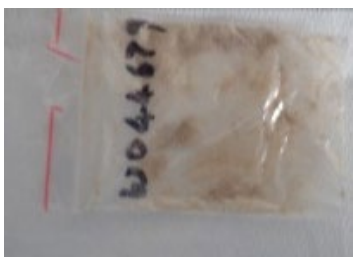
THC Vape



Flubromazolam



Heroin



Zopiclone



Alprazolam



Cannabis



MDMB-4en-PINACA

Promethazine

Carry Naloxone

- Clinical management of toxicity with nitazenes recommends the use of Naloxone



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Diolch yn Fawr

Savannah King

Dean Acreman

Dan Harman

For further information contact:

Rick Lines – rick.lines@wales.nhs.uk



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales