

### WEDINOS Headlines

TOTAL number of samples received by WEDINOS October 2013 to December 2017

**7,735**

Samples received

**6,568**

Samples analysed

**1,167**  
Samples rejected

**357**

Substances identified in either combination or isolation

This quarter (October 2017 to December 2017)

**375**

Samples received

**330**

Samples analysed

**45**

Samples rejected

**77**

Substances identified in either combination or isolation

- Seven designer benzodiazepines
- Seven synthetic cathinones
- Four Synthetic Cannabinoid Receptor Agonists (SCRAs)

The WEDINOS project has been designed for the collection and testing of substances and, most importantly, dissemination via [www.wedinos.org](http://www.wedinos.org) of pragmatic evidence-based harm reduction information for users. WEDINOS aims to go beyond identification of novel substances, to address the harms associated with use of New Psychoactive Substances (NPS), new combinations of established drugs and NPS and Image and Performance Enhancing Drugs (IPEDs). For more information on IPEDs please visit:

[www.ipedinfo.co.uk](http://www.ipedinfo.co.uk).

We are pleased to announce that the WEDINOS annual report will now be published annually in June.

## Prescribed medications and benzodiazepines

During this quarter there has been a continuation in the high numbers of samples submitted, that have been found to contain prescribed medications or benzodiazepines. Six of the October to December 2017 top ten new psychoactive substances fall into these groups. These include:



**Buprenorphine (Subutex):** Buprenorphine is an opioid partial agonist, prescribed for the treatment of opioid addiction, it can relieve cravings, however, it has been found in several studies to cause euphoria and can cause similar side effects to other opioids. Several international studies have shown that the most common route of administration associated with the misuse of buprenorphine is insufflation (snort/sniffing)<sup>1</sup>.



**Mirtazapine:** An atypical antidepressant which is primarily used in the treatment of depression. Mirtazapine is misused for its sedative effects.



**Quetiapine:** A dibenzodiazepine atypical antipsychotic drug. Primarily misused by those within the criminal justice system. Its misuse is frequently related to its sedative and anxiolytic effects<sup>2</sup>. Routes of administration relating to misuse include oral, sniffing and intravenous<sup>3</sup>.



**Pregabalin:** Used to treat a range of disorders and illnesses including epilepsy, anxiety and nerve pain. Misused for its similar effects to diazepam, pregabalin is thought to possess GABA-mimetic properties, providing direct/indirect effects on the dopamine reward system<sup>4</sup>.

1. Yokell, Michael A. et al. "Buprenorphine and buprenorphine/naloxone diversion, misuse and illicit use: an international review" Current drug abuse reviews 4.1 (2011) 28-41. Print.  
2. Kim, Sean et al. "Quetiapine misuse and abuse: is it an atypical paradigm of drug seeking behaviour?" Journal of research in pharmacy practice 6.1 (2017); 12-15. PMC. Web. 13 Feb. 2018.  
3. Sansone, Randy A, and Lori A. Sansone "Is Seroquel developing an illicit reputation for misuse/abuse?" Psychiatry (Edgemont) 7.1 (2010): 13-16. Print.  
4. Schifano F "Misuse and abuse of pregabalin and gabapentin: cause for concern?" (2014).

## Prescribed medications and benzodiazepines ...continued from Page 1.



**Etizolam:** a benzodiazepine, 7 to 10 times the potency of diazepam. A prescribed medication in Italy, India and Japan. For further information please see the SDF (Scottish Drugs Forum) and UK Drugwatch Etizolam information sheet: [http://www.thedrugswheel.com/resources/Etizolam\\_Infosheet\\_SDF\\_DrugWatch1\\_1.pdf](http://www.thedrugswheel.com/resources/Etizolam_Infosheet_SDF_DrugWatch1_1.pdf)



**Alprazolam:** Alprazolam (commonly known as Xanax) is a potent benzodiazepine used to treat anxiety and panic disorders. Xanax is not available on the NHS, and can only be obtained on a private prescription in the UK<sup>6</sup>. WEDINOS has to date received 42 samples that were purchased in the belief that they were alprazolam / xanax. Following analysis 12 samples were found not to contain alprazolam; four contain no active compounds, whilst other substances identified included: Etizolam (four samples) Lorazepam (Two samples), AH-7291 (one sample) and Zopiclone (one sample).

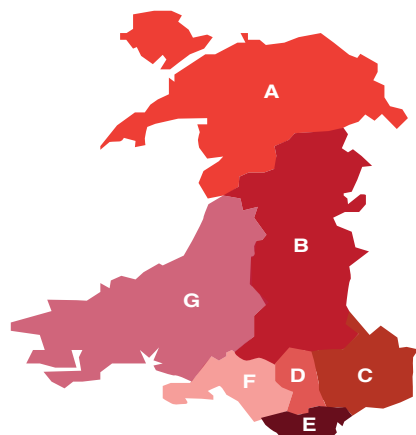
Following concerns from substance misuse services within the UK, UK and Ireland Drug Watch have produced the following Alprazolam fact sheet:

[http://www.thedrugswheel.com/drugwatch/Alprazolam\\_Infosheet\\_DrugWatch\\_1\\_0.pdf](http://www.thedrugswheel.com/drugwatch/Alprazolam_Infosheet_DrugWatch_1_0.pdf)

## FINDINGS...

### WHERE...

Samples were submitted from all seven Welsh Health Boards.



### Breakdown of sample submissions by Health Board areas

- A** - Betsi Cadwaladr University Health Board – 14 samples.
- B** - Powys Teaching Health Board – 1 sample.
- C** - Aneurin Bevan University Health Board – 71 samples.
- D** - Cwm Taf University Health Board – 6 samples.
- E** - Cardiff & Vale University Health Board – 80 samples.
- F** - Abertawe Bro Morgannwg University Health Board – 53 samples.
- G** - Hywel Dda University Health Board – 9 samples.

84 samples were received from England, five from Northern Ireland, and four from Scotland.

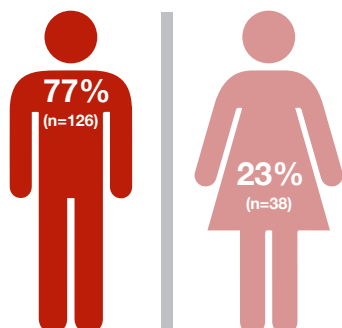
**WEDINOS does not analyse samples received from outside of the United Kingdom.**

In relation to Welsh Health Board areas, the highest proportion of samples came from Cardiff & Vale University Health Board, 80 samples were received and analysed, accounting for 24 per cent of all samples analysed.

## Psychoactive Substances

### WHO...

Where a WEDINOS Effects Record was submitted and gender completed:

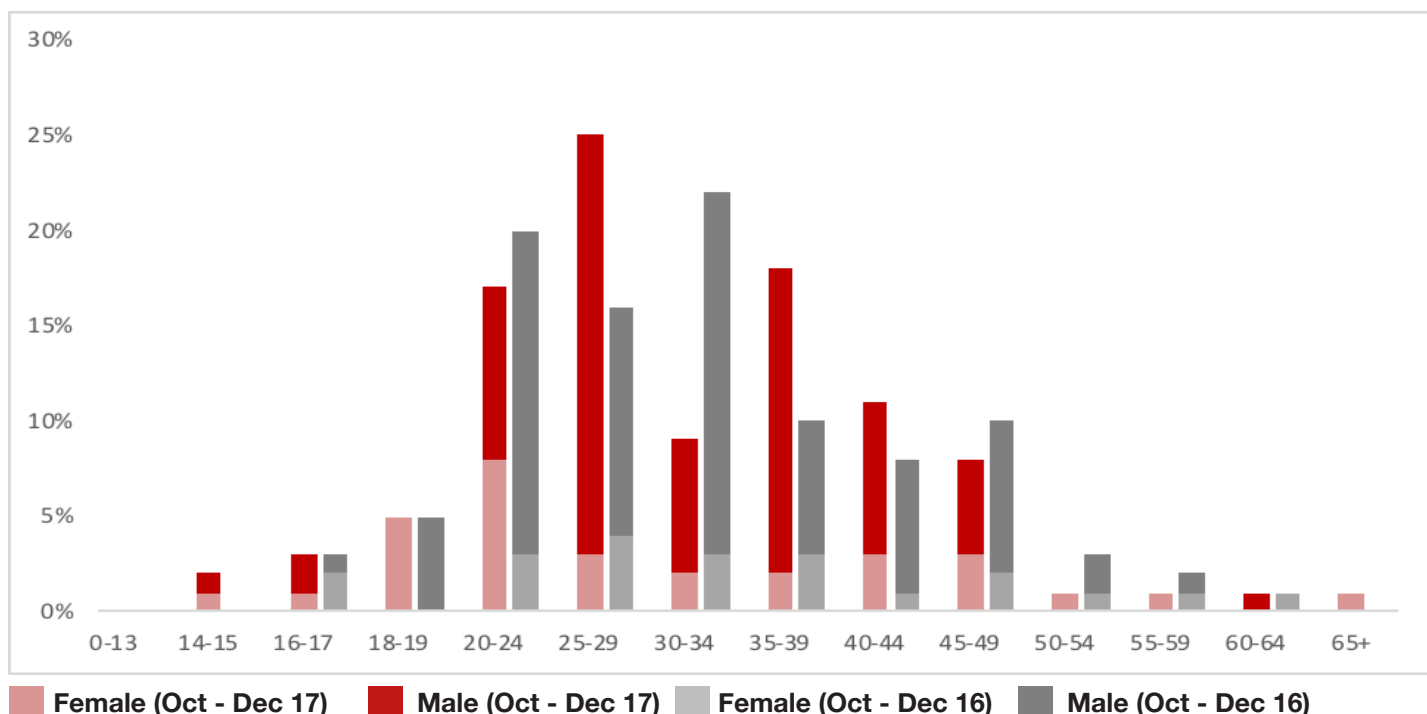


The median age for all mind altering / psychoactive sample providers (Wales and wider UK) was 33 years (average age was 32 years old); with an age range of 15-74 years.

- Females - median age was 34 years and an average age of 31 years (range: 15-74)
- Males - median age was 33 years, with an average age of 32 years (range 15-60 years)

5. What you need to know about Xanax, BBC, 10th May 2017, <http://www.bbc.co.uk/newsbeat/article/39870899/what-you-need-to-know-about-xanax> [accessed 14th February 2018]

## Gender / Age profile of samples providers – Psychoactive Samples (This quarter compared to the same quarter last year)



### Reason for purchase All samples

322 Mind Altering / Psychoactive samples were submitted for analysis during this quarter. Eight samples of Image and Performance Enhancing Drugs (IPEDs) were submitted via Public Health Wales agreed sentinel providers.

### Samples Submitted from Wales

92 per cent of Welsh samples were submitted via 31 services / organisations; with the remaining 8 per cent being submitted anonymously. Services providing samples included Accident and Emergency Departments, Substance Misuse Services, Education and Training providers, Housing and Homelessness, Young persons' services, nightclub amnesty bins and criminal justice services.

## WHAT...

Of the 322 Mind Altering/Psychoactive samples:

- 37 samples were purchased in the belief that they were Class A substances
- 39 Class B
- 32 Class C
- 4 were believed to be controlled by the Psychoactive Substances Act 2016 (PSA 2016)
- 14 were believed not to be controlled
- A further 195 were submitted without any information relating to purchase intent, or perceived legal status. This number includes samples submitted by criminal justice services for trend analysis, that do not have any forensic or evidential values.

Post analysis we see that Class A increased from 37 samples to 90. Class B increased from 39 to 56, Class C increased from 32 to 54. The number of substances controlled by the PSA 2016 rose from 4 to 13. Pre-analysis one sample was perceived to be subject to a TCDO, this rose to 2. Substances that are not controlled increased from 14 to 75 (many of these substances were found to prescription only medications). It must be noted that although the majority of groups increased with the post analysis categorisation of the "unknown" substances, several samples moved between classifications. Examples of this include:

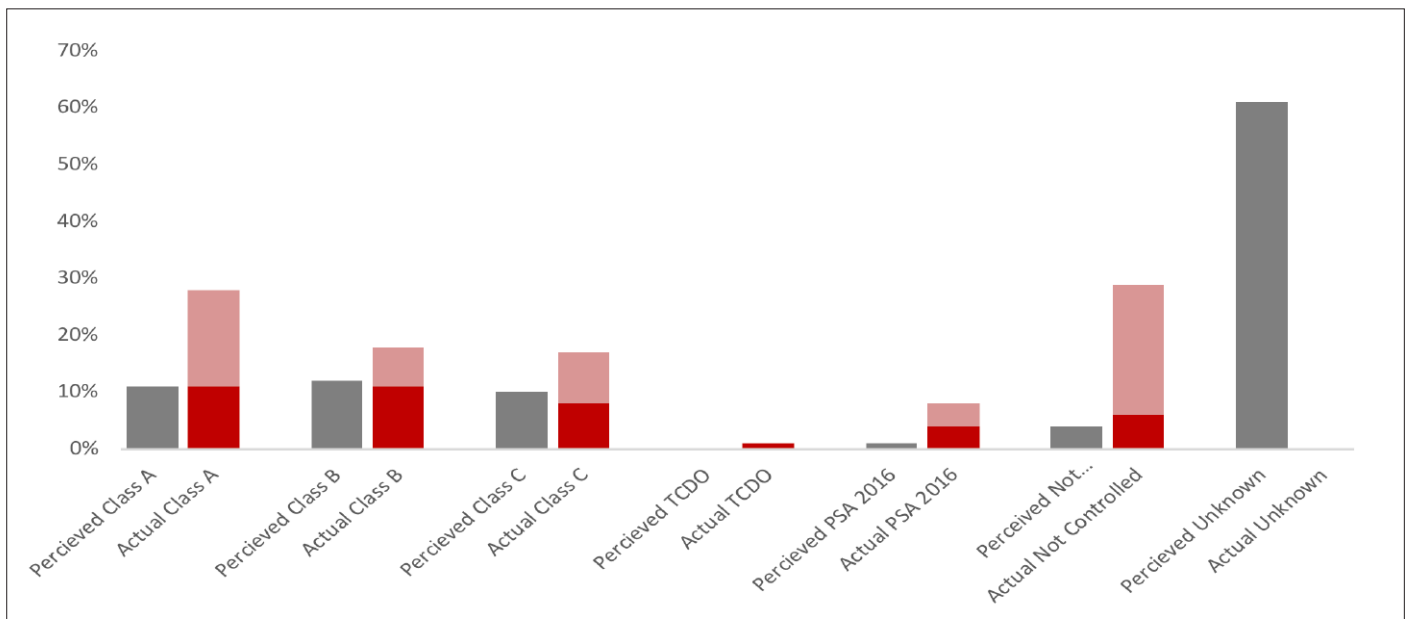
#### Sample believed to be...

#### Found to contain...

Four samples submitted as Diazepam	Etizolam (Similar finds to prev. quarters)
Diazepam	Diclozepam
Diazepam	Alprazolam
Mephedrone	Ethylphenidate
Mephedrone	N-ethyl hexedrone and Camfetamine
Cocaine	Amphetamine
Cocaine	Ethylphenidate
Two samples submitted as MDMA	Alpha-PVP
Two samples submitted as Amphetamine	MDMA
2C-B	Cocaine
3-FPM	Fluoroamphetamine
O-CPE	Alpha-PBP
Acetyl Fentanyl	Furanylfentanyl
Acetyl Fentanyl	Beta-hydroxyfentanyl

**Reminder as of Monday 4th April 2016: WEDINOS stopped analysing individual samples that, on the effects sheet only provide details of purchase intent stated as 'legal high' or 'research chemicals'.** It is an important element of WEDINOS that we are able to provide information both on what individuals intended to purchase and the actual content of the sample substance. When submitting a sample, please ensure that you include as much information as possible around what you intended to buy on the sample and effects record as well as effects experienced if the sample was consumed. If the sample was not consumed include your reason for submission. Many thanks.

## Proportion of controlled and not controlled / legal – Perceived and Actual (Psychoactive Substances)



■ Perceived legal status ■ Actual legal status (Perceived) ■ Actual legal status (Unknown)

NB. Following analysis samples were categorised based on the highest classified substance present. Order of classification / control – Class A, B, C, Temporary Class Drugs Order, Controlled under the PSA 2016, Not controlled.

## Most commonly identified substances in all Mind Altering / Psychoactive Substance samples.

Top 10	Oct - Dec 17	Oct - Dec 16
Number 1	Cocaine	Cocaine
Number 2	No Active Component Identified	Caffeine
Number 3	Cannabis	Diazepam
Number 4	Caffeine	Amphetamine
Number 5	MDMA	Benzocaine
Number 6	Diazepam	Heroin
Number 7	Buprenorphine	Paracetamol
Number 8	Levamisole	Buprenorphine
Number 9	Paracetamol	Levamisole
Number 10	Benzocaine	5F-ADB

■ Controlled substances ■ Controlled under PSA 2016 ■ Substances currently not controlled ■ Bulking/Cutting agent

## New Psychoactive Substances Top Ten

Top 10	Oct - Dec 17	Oct - Dec 16
Number 1	Buprenorphine	5F-ADB
Number 2	AMB-FUBINACA	Mephedrone
Number 3	Mirtazapine	MDMB-CHMICA
Number 4	5F-ADB	Ketamine
Number 5	Quetiapine	AMB-FUBINACA
Number 6	Alprazolam	Ephylone
Number 7	Etizolam	Methylhexamine
Number 8	BZP	Dibutylone
Number 9	Pregabalin	Methylone
Number 10	MDMB-CHMICA	Diclozepam

This quarter to Ten NPS is different in make up to what we saw a year ago. At that time the top ten was primarily stimulants and SCRA's with a dissociative (ketamine) and a benzodiazepine (diclozepam). Now, the chart is made up of prescribed medications, SCRA's, benzodiazepines and a piperazine; although BZP is only present due to it being found in combination with amphetamine – it was not been identified in isolation during the period October to December 2017. The presence of benzodiazepines follows an increase in the groups overall prevalence amongst samples submitted to WEDINOS, diazepam is consistently in the top ten of all substances identified (currently number 6). It is worth noting that none of the samples found upon analysis to contain etizolam were purchased with that as the perceived substance. In total six benzodiazepines were submitted: diazepam, etizolam, alprazolam, diclozepam, clonazepam and lorazepam

Further information alprazolam is available at the front of this report.

# HOW...

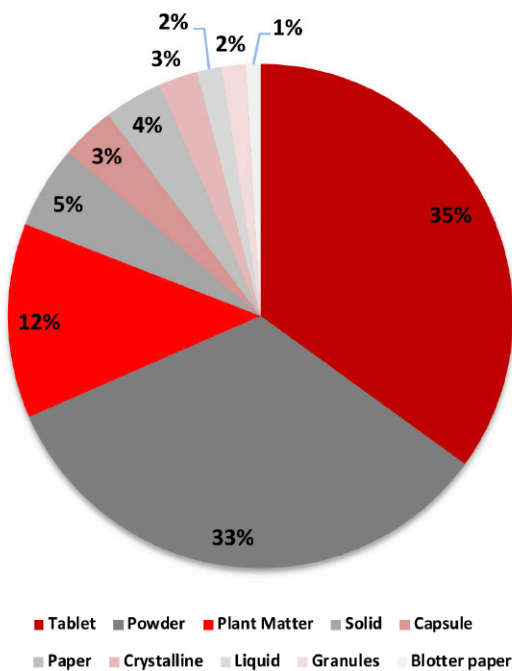
## Form of Sample & Method of Consumption

### Mind Altering/Psychoactive

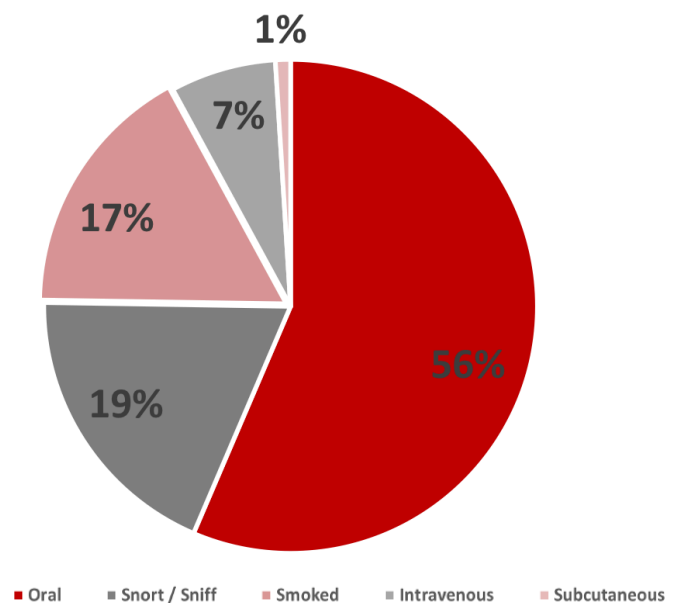
#### Powder remains the most prevalent sample form

As has been the case in January to March 2017, tablets were the most commonly identified sample form this quarter. This appears to be due to the continued high prevalence of medications, such as buprenorphine, mirtazapine and quetiapine, benzodiazepines, and stable submissions of MDMA pills. This quarter we have seen an increase in samples in paper form from criminal justice services (samples have no forensic or evidential value); it is believed that these samples had been coated with SCRA's. For samples received this quarter the majority were found to contain no active compound, however, one did contain the SCRA 5F-ADB.

#### Mind Altering/Psychoactive - Form of Sample



#### Mind Altering/Psychoactive - Method of Consumption



Where samples were purchased as Mind Altering/Psychoactive & a method of consumption was recorded, and assuming that all plant matter and plant matter Synthetic Cannabinoid Receptor Agonists are smoked, samples were consumed through a variety of methods, the most common was oral consumption (56% per cent), this is comparable to previous quarters in 2017. This is followed by smoking 19 per cent, these represents a decrease in the proportion of individuals reporting smoking substances. Snorting / sniffing as a route of administration made up 17 per cent of responses, with 7 per cent stating they used their substance via intravenous injection and 1 per cent subcutaneous injecting. Substances injected include: heroin, amphetamine, and combination of n-ethyl hexedrone and amphetamine (purchased as mephedrone).

- Abertawe Bro Morgannwg University Health Board – 53 samples
- Aneurin Bevan University Health Board – 71 samples
- Betsi Cadwaladr University Health Board - 14
- Cardiff & Vale University Health Board – 80 samples
- Cwm Taf University Health Board – 6 samples
- Hywel Dda University Health Board – 9 samples

# GEOGRAPHIC PROFILES / LOCAL TRENDS

## Abertawe Bro Morgannwg University Health Board (ABMU)

- 53 samples were received from ABMU this quarter
  - During analysis 25 substances were identified in isolation or combination. Eight samples contained no active compound.
  - Mirtazapine was the most commonly identified substance
  - Two SCRA's were identified, high potency substances 5F-ADB and MDMB-CHMICA

## Aneurin Bevan University Health Board (ABU)

- 71 samples were received ABU this quarter
- During analysis of those samples, 25 substances were identified either in combination or in isolation, with five samples having no active compound identified
- Cocaine was the most commonly identified substance within the in ABU. This was followed by MDMA. No SCRA's have been received from ABU in 2017
- Two samples were submitted via substance misuse services purchased in the belief that they contained Acetyl Fentanyl, one was found to contain Furanylfentanyl and the other Beta-hydroxyfentanyl upon analysis
- Samples containing amphetamine, also contained the piperazine BZP

## Betsi Cadwaladr University Health Board (BCU)

- 14 samples were received from BCU this quarter
- During analysis of those samples, six substances were identified either in combination or in isolation, with three samples having no active compound identified
- Cannabis was the most commonly identified substance.
- One sample submitted as diazepam was found to contain diclazepam upon analysis

## Cardiff & Vale University Health Board (CVU)

- 80 samples were received from CVU this quarter
- During analysis 33 substances were identified either in combination or in isolation. 16 samples had no active compound identified. One sample had an insufficient amount of substance to conduct further analysis.
- The SCRA AMB-FUBINACA was the most commonly identified substance
- A sample submitted as Zolpidem, was found to contain Quetiapine. A sample submitted as diazepam was found to contain Etizolam

## Cwm Taf University Health Board (CTU)

- 6 samples were received from CTU this quarter
- During analysis 7 substances were identified either in isolation or combination.
- Benzodiazepines' accounted for half of samples. Two samples submitted as 'sleeping tablets' were found to contain etizolam.

## Hywel Dda University Health Board (HDU)

- 9 samples were received from HDU this quarter
- During analysis 12 substances were identified in combination or isolation
- MDMA and Diazepam were the most commonly identified substances

## Powys Teaching Health Board (PT)

- 1 sample was received from PT this quarter. Submitted as Amphetamine this samples was found to contain Caffeine.

Help us to build a better picture of substance prevalence or any trends in substance use within Wales and the wider UK. WEDINOS would happily accept an increase in samples of psychoactive substances submitted. If you require further information on submitting a sample please visit [www.wedinos.org](http://www.wedinos.org) or email [admin@wedinos.org](mailto:admin@wedinos.org)

# News from the Home Office and abroad

**25th October 2017** - Annual information on treatment data and a profile of substance misuse in Wales - <http://gov.wales/docs/dhss/publications/171025misuseen.pdf>

**October 2017** – Data Mining Wales – The annual profile for substance misuse 2016-17 - <http://gov.wales/docs/dhss/publications/171025data-miningen.pdf7th>

**November 2017** – Drugnet Europe 100 - [http://www.emcdda.europa.eu/publications/drugnet/100\\_en](http://www.emcdda.europa.eu/publications/drugnet/100_en)

**November 2017** - EMCDDA–Europol Joint Report on a new psychoactive substance: methyl 1-(2-phenylethyl)-4-[phenyl(propanoyl)amino]piperidine-4-carboxylate (carfentanil) - [http://www.emcdda.europa.eu/publications/joint-reports/carfentanil\\_en](http://www.emcdda.europa.eu/publications/joint-reports/carfentanil_en)

**9th November 2017** - Substance misuse treatment for adults: statistics 2016 to 2017 (Public Health England) - <https://www.gov.uk/government/statistics/substance-misuse-and-treatment-in-adults-statistics-2016-to-2017>

**9th November 2017** - Seizures of drugs in England and Wales, financial year ending 2017 - <https://www.gov.uk/government/statistics/seizures-of-drugs-in-england-and-wales-financial-year-ending-2017>

**27th November 2017** - Circular 011/2017: A change to the Misuse of Drugs Act 1971 to control Methiopropamine ('MPA'). - <https://www.gov.uk/government/publications/circular-0112017-a-change-to-the-misuse-of-drugs-act-1971-to-control-methiopropamine-mpa/circular-0112017-a-change-to-the-misuse-of-drugs-act-1971-to-control-methiopropamine-mpa>

**29th November 2017** - Shooting Up: infections among people who inject drugs in the UK - <https://www.gov.uk/government/publications/shooting-up-infections-among-people-who-inject-drugs-in-the-uk>

**7th December 2017** - Substance misuse treatment for young people: statistics 2016 to 2017 (Public Health England) - <https://www.gov.uk/government/statistics/substance-misuse-treatment-for-young-people-statistics-2016-to-2017>

**December 2017** – EMCDDA - Report on the risk assessment of N-phenyl-N-[1-(2-phenylethyl)piperidin-4-yl]furan-2-carboxamide (furanlylfentanyl) in the framework of the Council Decision on new psychoactive substances - [http://www.emcdda.europa.eu/publications/risk-assessments/furanlylfentanyl\\_en](http://www.emcdda.europa.eu/publications/risk-assessments/furanlylfentanyl_en)

**December 2017** – EMCDDA - Report on the risk assessment of N-(1-phenethylpiperidin-4-yl)-N-phenylacrylamide (acryloylfentanyl) in the framework of the Council Decision on new psychoactive substances - [http://www.emcdda.europa.eu/publications/risk-assessments/acryloylfentanyl\\_en](http://www.emcdda.europa.eu/publications/risk-assessments/acryloylfentanyl_en)

The WEDINOS project does not test food samples, biological samples, samples submitted within paraphernalia of use, samples that are submitted with an incomplete effects form. On Friday 25th July 2014 WEDINOS stopped accepting samples of Image and Performance Enhancing Drugs other than those submitted by sentinel contributors.