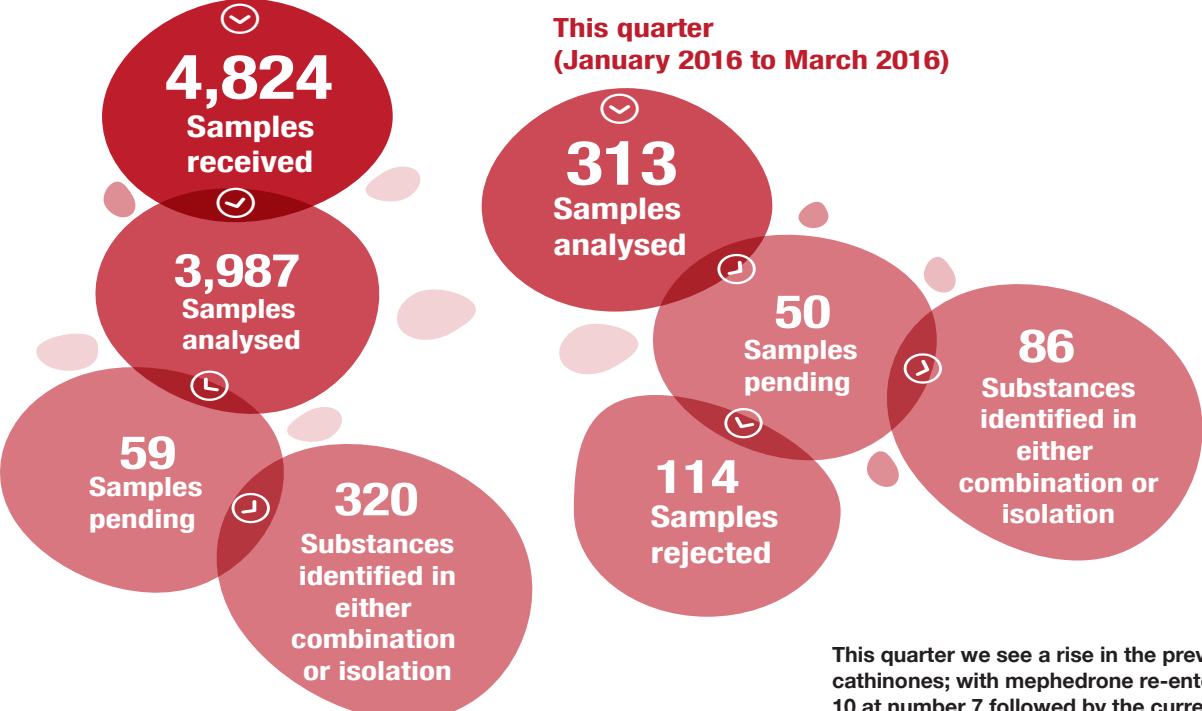


WEDINOS Headlines

TOTAL number of samples received by WEDINOS October 2013 to March 2016



The WEDINOS project has been designed for the collection and testing of substances and, most importantly, dissemination via 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 Steroids & Image Enhancing Drugs (SIEDs).

This quarter we see a rise in the prevalence of cathinones; with mephedrone re-entering the top 10 at number 7 followed by the currently non-controlled mexedrone.

The law is changing



The law relating to new psychoactive substances (often called 'legal highs') is changing in the UK. On **26th May 2016** the Psychoactive Substances Act (PSA) will come into force.

This act makes it an offence to produce, supply, offer to supply, possess with intent to supply, possess on custodial premises, import or export psychoactive substances.

The maximum sentence in relation to the aforementioned offences will be 7 years' imprisonment.

Continued overleaf...

The law is changing continued...

The PSA excludes substances, such as food, alcohol, tobacco, nicotine, caffeine and medical products from the scope of the offence, as well as controlled drugs.

Under the PSA there is no offence for personal possession of psychoactive substances included in this Act except for possession in a custodial setting. However, substances that are already controlled under the MDA 1971 (e.g. amphetamine, cannabis, cocaine, heroin and MDMA/Ecstasy) will continue to be regulated by the MDA 1971 and relevant punitive measures will still apply.

WEDINOS does not fall under the scope of the PSA, as such; no offence would be committed by individuals participating in the programme. For further information visit:

<https://www.gov.uk/government/collections/psychoactive-substances-bill-2015>

Designer Benzodiazepines



Moosman, B (2015) Designer Benzodiazepines - metabolism and detection. Munich: NPS Symposium. Available at: <http://www.munich2015.com/data/uploads/presentations/s4-01-bjoern-moosmann-nps-nov-2015.pdf> [Accessed 11th May 2016]

Benzodiazepines are a class of gabaminergic psychoactive chemicals, which act as depressants on the central nervous system.

They widely used in the treatment of anxiety and sleep disorders. Benzodiazepines are agonists at the benzodiazepine site on the GABA-A receptor, resulting in an increase in gamma-aminobutyric acid (GABA). GABA contributes to motor control, vision, and many other cortical functions as well as regulating anxiety.

Chlordiazepoxide (Librium®) was the first to be synthesised in 1957 and introduced into medicine in 1961. As pharmaceutically manufactured products they are normally seen as tablets and capsules, and occasionally as injectables.

Designer benzodiazepines, such as **etizolam**, have become a rapidly growing class of drugs that are readily available via the internet, which began with the online availability of diclazepam, flubromazepam and pyrazolam in 2012.

None of these substances are licenced for medical use in the United Kingdom, nor are they controlled by the Misuse of Drugs Act 1971. They are highly potent with substances such as flubromazolam causing sedation and amnesia at oral doses as low as 0.5mg. Benzodiazepines have a high potential for dependence.

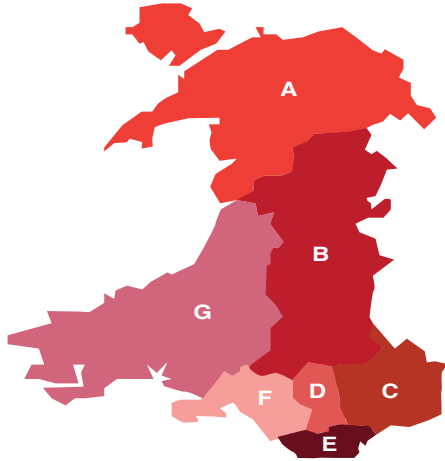
Etizolam is a thienodiazepine drug which is a benzodiazepine analogue. It is used for therapeutic purposes in Italy, Japan and India for the treatment of anxiety, insomnia and panic attacks. It is not a licensed medicine in the United Kingdom. It is a full benzodiazepine receptor agonist and has the full range of group specific benzodiazepine effects. It is 6-10 times more potent than diazepam, therefore may result in adverse effects and presents an increased danger of overdose.

2 To date WEDINOS has identified sixteen benzodiazepines.

FINDINGS...

WHERE...

Samples were submitted from all 7 of the Welsh Health Boards.



Breakdown of sample submissions by Health Board areas

- A** - Betsi Cadwaladr University Health Board – 15 samples.
- B** - Powys Teaching Health Board – 5 samples.
- C** - Aneurin Bevan University Health Board – 95 samples.
- D** - Cwm Taf University Health Board – 12 samples.
- E** - Cardiff & Vale University Health Board – 54 samples.
- F** - Abertawe Bro Morgannwg University Health Board – 13 samples.
- G** - Hywel Dda University Health Board – 7 samples.

99 samples were received from England, 2 from Scotland and 6 from Northern Ireland and 1 from outside the United Kingdom.

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 Aneurin Bevan University Health Board, 95 samples were received and analysed, accounting for 30 per cent of all samples analysed.

Psychoactive Substances

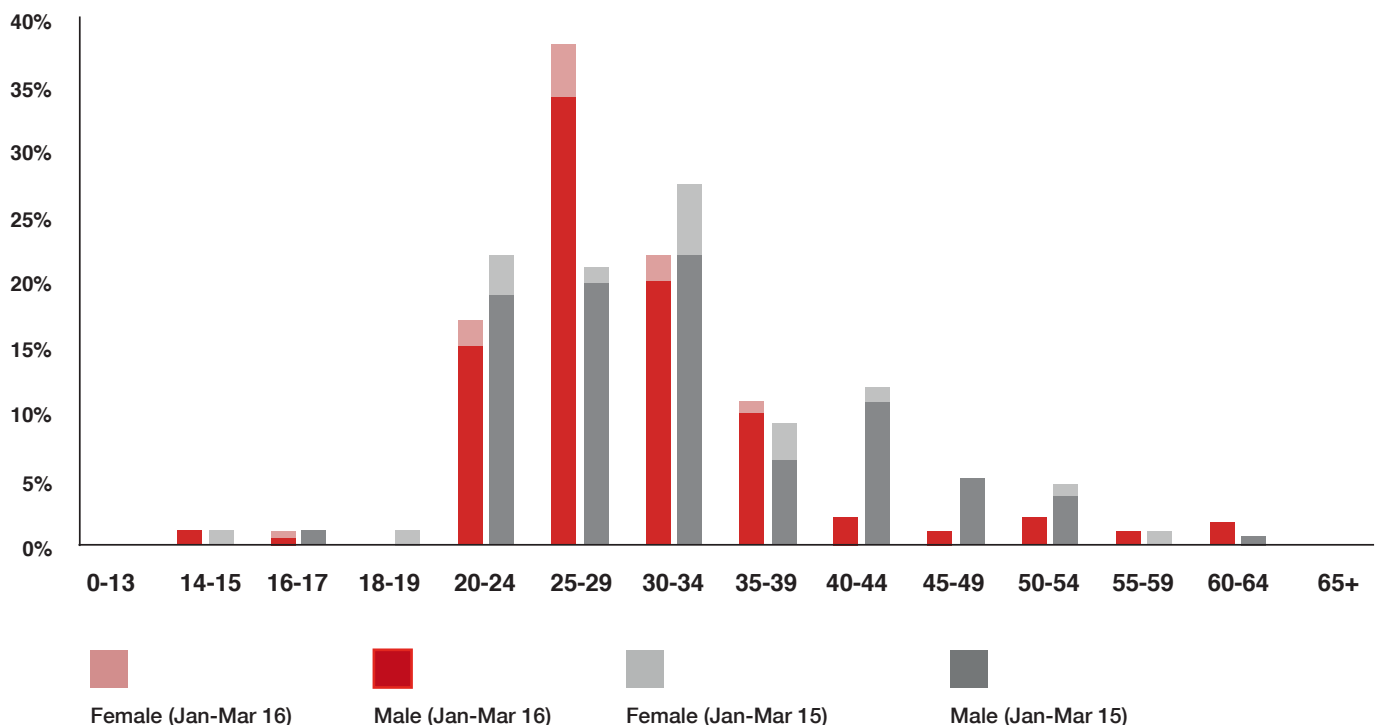
WHO...

Where a WEDINOS Effects Record was submitted and gender completed; 89 per cent (n=191) of submissions were from males. The remaining 11 per cent (n=24) were females.

The median age for all mind altering / psychoactive sample providers (Wales and wider UK) was 32 years (average age was 31 years old); with an age range of 14-63 years.

- Females - median age was 27 years and an average age of 27 years (range: 16-36 years)
- Males - median age was 32 years, with an average age of 31 years (range 14-63 years)

Gender / Age profile of samples providers – Psychoactive Samples A comparison with the same period last year



Reason for purchase

All samples

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

Samples Submitted from Wales

79 per cent of Welsh samples were submitted via 33 services / organisations; with the remaining 12 per cent being submitted anonymously.

WHAT...

Of the 304 Mind Altering/Psychoactive samples:

- 56 samples were purchased in the belief that they were Class A substances
- 33 Class B
- 23 Class C
- 1 was subject to a TCDO
- 59 were believed not to be controlled
- A further 132 were submitted without any information relating to purchase intent, or perceived legal status

Post analysis shows that Class A increased from 56 samples to 110. Class B increased from 33 to 44, Class C from 23 to 41 and samples subject to a TCDO increased from one to three. Substances that are not controlled increased from 59 to 104. Two samples remained unidentified. It must be noted that although all groups increased with the post analysis categorisation of the “unknown” substances, several samples moved between classifications.

Examples of this include:

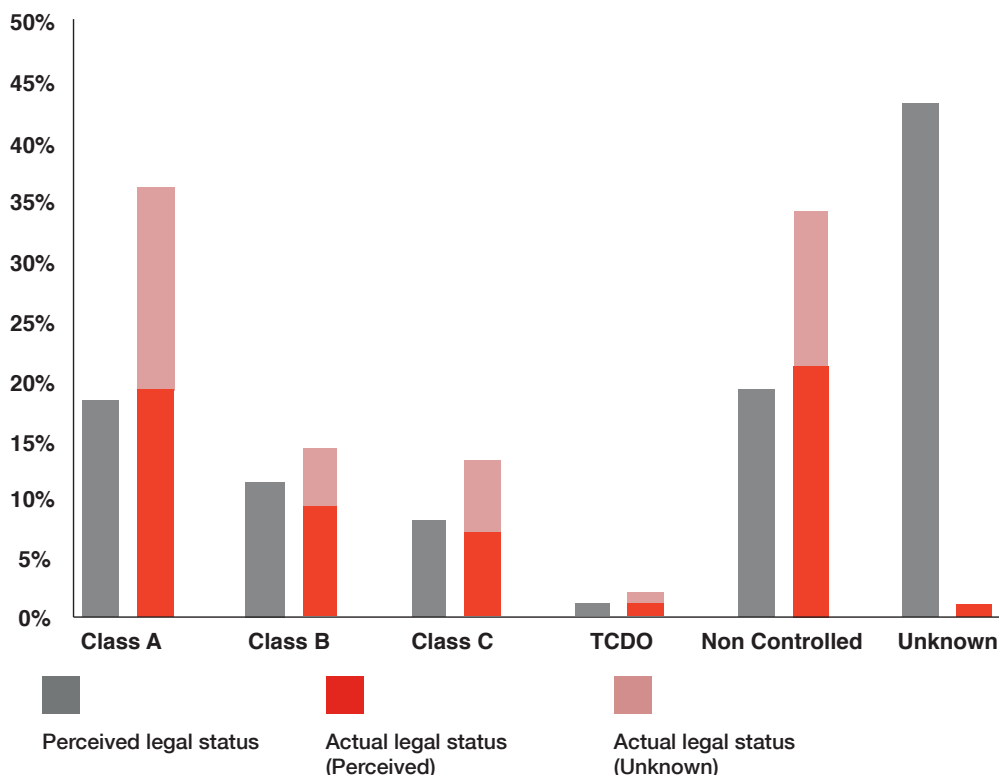
Believed to be

Found to contain on analysis

bk-2C-B	2C-B
Amphetamine	Cocaine
Mephedrone	Mexedrone
MDMA	alpha-PVP
Amphetamine	AH-7921
Heroin	AH-7921
Cocaine	Ethylphenidate
Cannabis	5F-AKB48
Amphetamine	Methiopropamine
Diazepam	Deschloroetizolam
Mephedrone	Dibutylone
Alprazolam	Etizolam

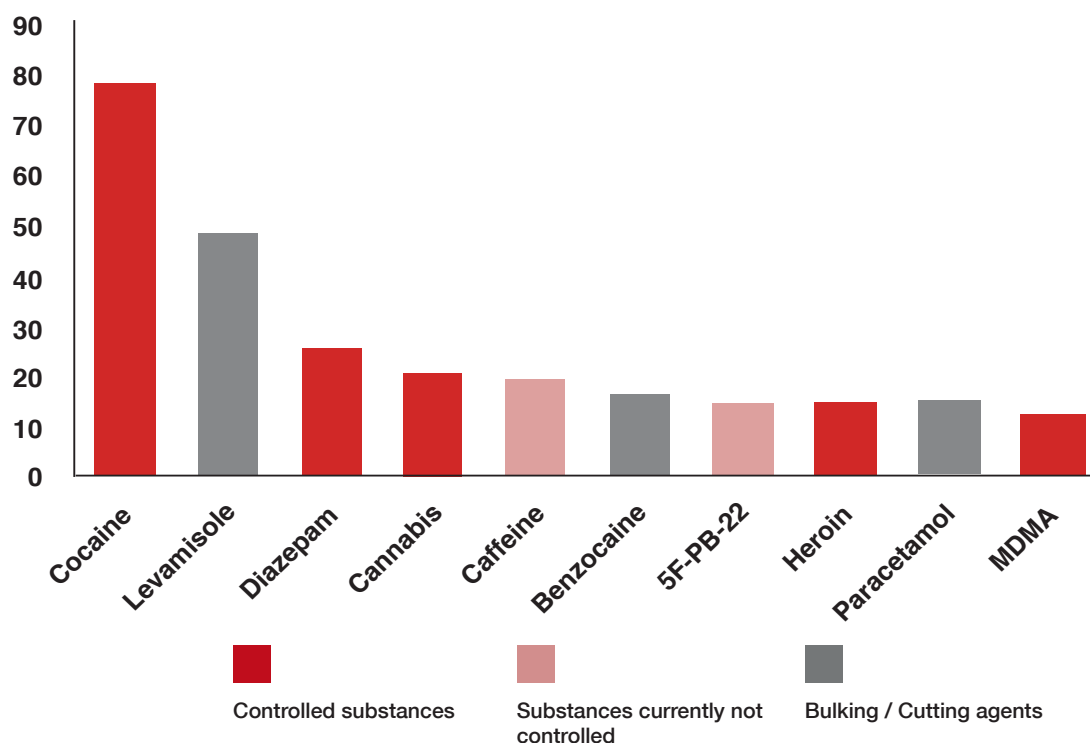
Please note that as of Monday 4th April 2016: WEDINOS will no longer be analysing individual samples that, on the effects sheet only provide details of purchase intent stated as 'legal high' or 'research chemicals'. It is an important element of WEDINOS that we are able to provide information both on 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)



Most commonly identified substances

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



The most commonly identified psychoactive substance was Cocaine. The most commonly identified psychoactive substance that is not currently controlled was the synthetic cannabinoid receptor agonist 5F-PB-22.

Levamisole was the most commonly identified bulking / cutting agent; however, this substance was found exclusively in samples that also contained cocaine.

Top Ten New Psychoactive Substances

TOP 10

Jan to Mar 2016

Oct to Dec 2015

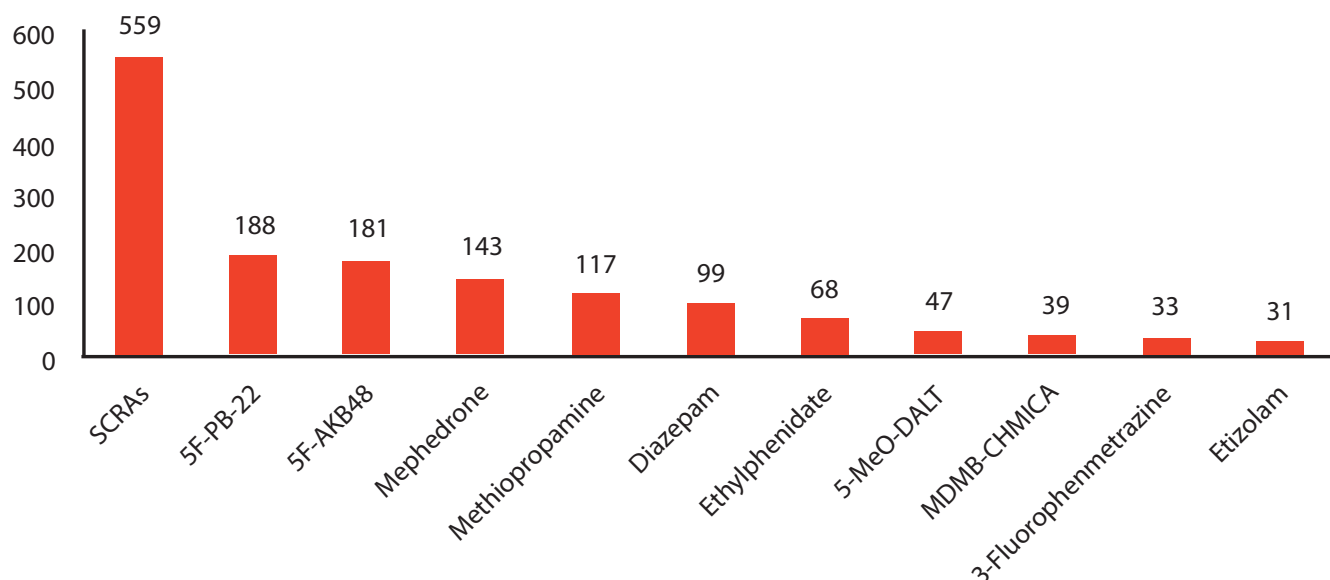
Number 1 – Up 1	5F-PB-22	MDMB-CHMICA
Number 2 – Up 1	5F-AKB48	5F-PB-22
Number 3 – New Entry	5F-ADB	5F-AKB48
Number 4 – New Entry	Alprazolam	Methiopropamine
Number 5 – Down 4	MDMB-CHMICA	Diazepam
Number 6 – Up 1	3-Fluorophenmetrazine	2C-B
Number 7 – New Entry	Mephedrone	3-Fluorophenmetrazine
Number 8 – New Entry	Mexedrone	4F-MPH
Number 9 – New Entry	AH-7921	5-MeO-MiPT
Number 10 – New Entry	Etizolam	Diclazepam

Since the launch of WEDINOS in October 2013 Synthetic Cannabinoid Receptor Agonists (SCRAs) have been the most prevalent NPS' submitted to and identified by the project. This quarter is again no different with SCRAs sitting at Numbers 1, 2, 3 and 5.

This quarter seven SCRAs were identified either in isolation or combination in 29 samples (this accounts for 10 per cent of psychoactive samples). To date WEDINOS has identified 36 SCRAs.

This quarter we see a rise in the prevalence of cathinones; with mephedrone re-entering the top 10 at number 7 followed by the currently non-controlled mexedrone. We also see another three new entries and Etizolam re-entering the chart, marking the greatest amount of change and movement in the 'NPS Top 10' since the beginning of the project (September 2013), without collating information around why individuals choose specific substances we are unable to report a reason for this. However, one suggestion may be that this quarter led up to the proposed date for implementation of the psychoactive substances act; as this piece of legislation has been delayed it will be interesting to monitor the 'top 10' up to and following implementation.

Ten most commonly identified New Psychoactive Substances (Oct 2013 – Dec 2015)



SCRAAs total 559 shows all SCRAAs as a group. 5F-AKB48, 5F-PB-22 and MDMB-CHMICA are synthetic cannabinoid receptor agonists. Methiopropamine, Ethylphenidate, Mephedrone and 3-Fluorophenmetrazine are stimulants. 5-MeO-DALT is a psychedelic tryptamine. Diazepam is a Benzodiazepine. Etizolam is a benzodiazepine analogue.

HOW...

Form of Sample & Method of Consumption

Mind Altering/Psychoactive

Powder remains the most prevalent sample form

As in previous years, mind altering/psychoactive samples came in a variety of forms. Where reported, powder form was most common.

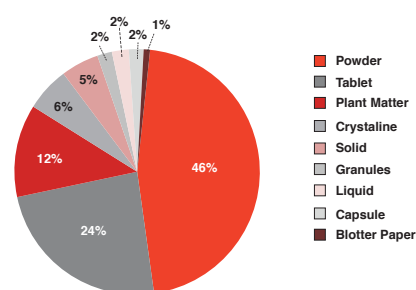
Where samples were purchased as mind/altering/psychoactive, method of consumption was recorded (52 per cent, n=157) and assuming that all plant matter and plant matter Synthetic Cannabinoid Receptor Agonists are smoked, samples were consumed through a variety of methods, the most common method of oral consumption (38 per cent) followed by smoking (31 per cent). Snorting / sniffing as a route of administration made up 29 per cent of responses, with 2% stating they used their substance via intravenous injection.

Changes to methods of consumption for powders?

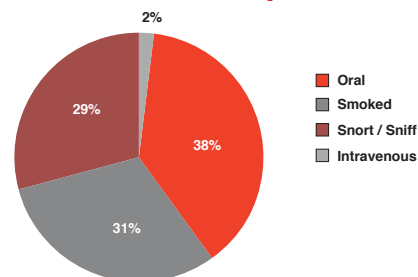
Focusing on the method of use for powders and crystalline materials we see the most common method was snorting / sniffing. Following a small decline in the prevalence of snort/sniff last quarter compared to the 2014/15 average; this quarter we see this method of consumption become more popular and rise above the 2014/15 figure.

Intravenous use has fallen this quarter compared to the previous quarter and the 2014 to 2015 average.

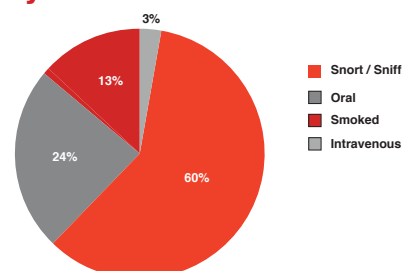
Mind Altering/Psychoactive - Form of Sample



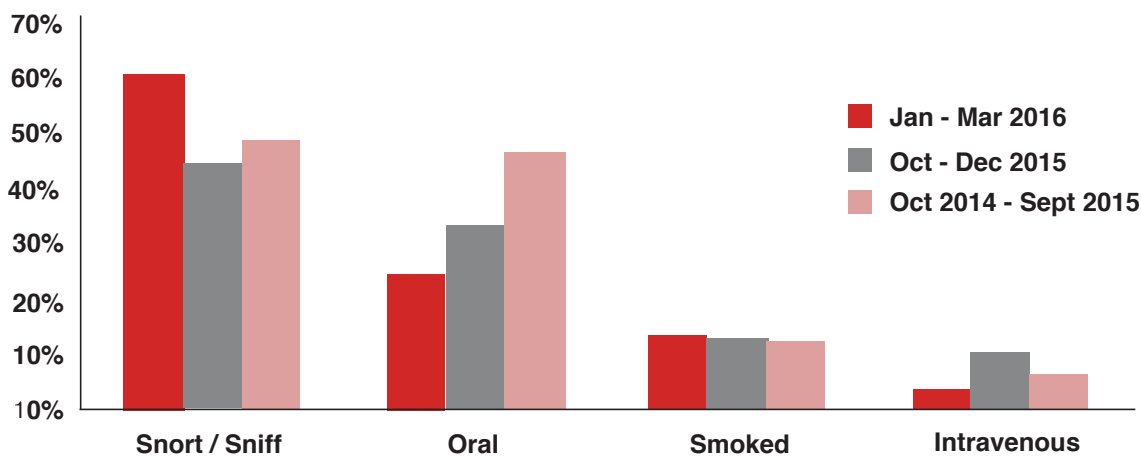
Mind Altering/Psychoactive - Method of Consumption



Method of Use for Powders and Crystalline materials



Comparison of method of use for powders and crystalline materials Reported Methods of Consumption



GEOGRAPHIC PROFILES / LOCAL TRENDS

Abertawe Bro Morgannwg University Health Board (ABMU)

- Cumulative total: 232 samples
- 13 samples were received from ABMU this quarter
 - During analysis 11 substances were identified in isolation
 - The SCRA, 5F-ADB, was identified in a plant matter product that was smoked. Effects as a result of consuming this substance included euphoria, relaxation, chest pains and irregular heartbeat

Aneurin Bevan University Health Board (ABU)

- Cumulative total: 708 samples
- 95 samples were received ABU this quarter
- During analysis of those samples, 31 substances were identified either in combination or in isolation, with eight samples having no active compound identified and one where there was not enough sample material to complete analysis
- Cocaine was the most commonly identified substance within ABU; a statistic that is influenced heavily by the analysis of night club amnesty bins from within Newport city centre. Several other stimulant substances were identified including: amphetamine, mephedrone and methamphetamine. Samples containing MDMA were also submitted. Six synthetic cannabinoid receptor agonists were also identified
 - Samples of interest include:
 - A sample submitted as amphetamine was found to contain caffeine following analysis
 - The SCRA, MDMB-CHMICA, was identified in a plant matter branded product called 'Holy Smokes' that was smoked. Effects as a result of consuming this substance included relaxation, enhanced senses, auditory and visual hallucinations, nausea, vomiting and confusion

Betsi Cadwaladr University Health Board (BCU)

- Cumulative total: 174 samples
- 15 samples were received from BCU this quarter
- During analysis of those samples, 15 substances were identified either in combination or in isolation. One sample was found to contain no active compound
- Benzodiazepines were the most commonly identified substances within BCU, with diazepam and deschloroetizolam identified
- A sample submitted as Energise Super + was found to contain Dibutylone (bk-DMBDB), this substance is of the the phenethylamine, amphetamine, and cathinone chemical classes. It is structurally related to methylone

Cardiff & Vale University Health Board (CVU)

- Cumulative total: 561 samples
- 50 samples were received from CVU this quarter
- During analysis 30 substances were identified either in combination or in isolation. One sample did not contain a sufficient amount of sample material for analysis to be completed.
- Four SCRAAs were identified; 5F-ADB, 5F-AKB48, 5F-PB-22 and MDMA-CHMICA
- A sample submitted as bk-2C-B, a non-controlled substance, was found to contain 2C-B (Class A). User reported dosages indicated a much lower dose for 2C-B (common dose: 20-35mg)¹ compared to bk-2C-B (common dose 80-100mg)²

Cwm Taf University Health Board (CTU)

- Cumulative total: 74 samples
- 12 samples were received from CTU this quarter
- During analysis 12 substances were identified either in combination or in isolation
- Diazepam was the most commonly identified substances with other tablet form samples found to contain other benzodiazepines: temazepam, lorazepam and etizolam

Hywel Dda University Health Board (HDU)

- Cumulative total: 77 samples
- 7 samples were received from HDU this quarter
- Five of the seven samples submitted this quarter were submitted by one of Public Health Wales' agreed image and performance enhancing drugs sentinel providers. The other two samples were:
 - Plant matter sample found to contain 5F-PB-22 and 5F-AKB48
 - A white powder sample found to contain 3-Fluorophenmetrazine. This sample had been smoked, with self reported effects following consumption being increased confidence and energy, confusion, agitation and depression

Powys Teaching Health Board (PT)

- Cumulative total: 27 samples
- 5 samples were received from PT this quarter
- During analysis five substances were identified in isolation, or combination. One sample contained no active compounds

News from the Home Office and abroad

- 14th January 2016 - Advice on the anticonvulsant drugs Pregabalin and Gabapentin
<https://www.gov.uk/government/publications/advice-on-the-anticonvulsant-drugs-pregabalin-and-gabapentin>
- 14th January 2016 - Chair of the ACMD, writes to Minister for Preventing Abuse and Exploitation, recommending that Estra-4,9-diene-3,17-dione be made a class C controlled substance. <https://www.gov.uk/government/publications/advice-on-the-steroid-dienedione>
- 21st January 2016 - Impact of the reduction in heroin supply between 2010 and 2011
<https://www.gov.uk/government/publications/impact-of-the-reduction-in-heroin-supply-between-2010-and-2011>
- 21st January 2016 - New opiate and crack-cocaine users: characteristics and trends
<https://www.gov.uk/government/publications/new-opiate-and-crack-cocaine-users-characteristics-and-trends>
- January 2016 – EMCDDA - Preventing opioid overdose deaths with take-home naloxone <http://www.emcdda.europa.eu/publications/insights/take-home-naloxone>
- January 2016 – EMCDDA - Emergency department-based brief interventions for individuals with substance-related problems: a review of effectiveness
<http://www.emcdda.europa.eu/publications/papers/2016/emergency-department-based-brief-interventions>
- February 2016 -EMCDDA - Drugnet Europe 93 report <http://www.emcdda.europa.eu/publications/drugnet/93>
- February 2016 -EMCDDA - The internet and drug markets <http://www.emcdda.europa.eu/publications/insights/internet-drug-markets>
- 16th March 2016 – Letter to the Home Office setting out the ACMD's review of alkyl nitrites (poppers).
<https://www.gov.uk/government/publications/acmd-review-of-alkyl-nitrites-poppers>
- 16th March 2016 – UNDOC – Afghanistan Opium Survey 2015 - Socio-economic analysis
https://www.unodc.org/documents/crop-monitoring/Afghanistan/Afghanistan_opium_survey_2015_socioeconomic.pdf

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 Steroids and Image Enhancing Drugs other than those submitted by sentinel contributors.