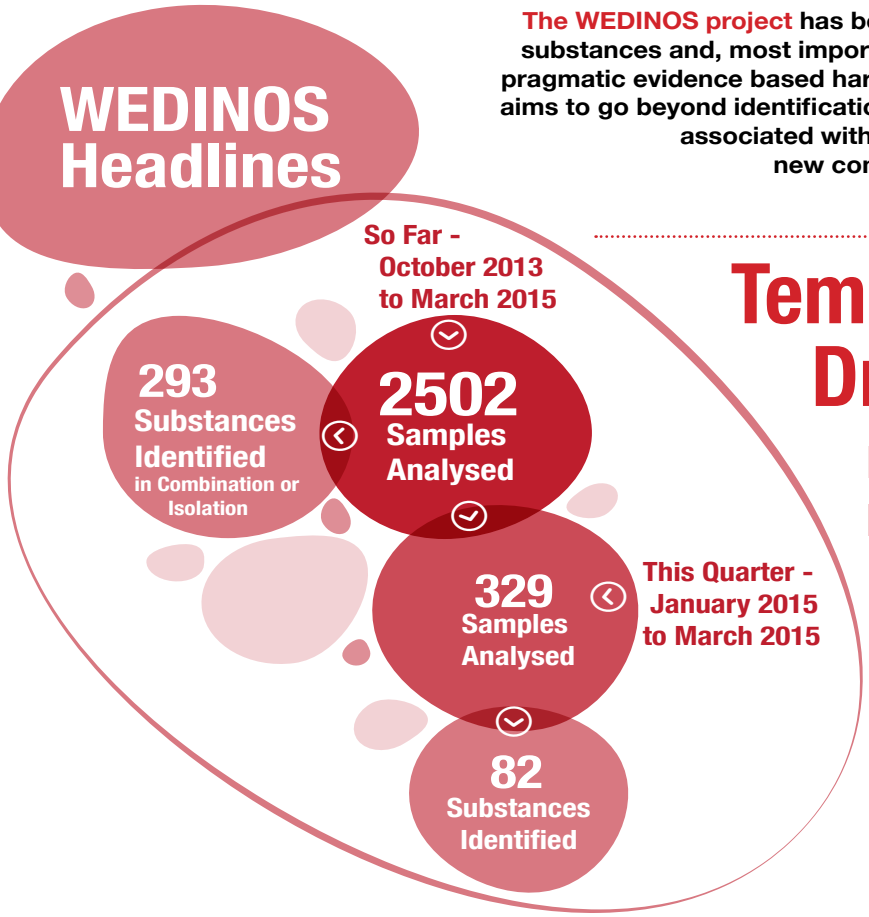
PHILTRE BULLETIN
Issue 5 Jan-Mar 2015
WEDINOS Quarterly Newsletter
Collecting, Testing, Informing
wedinos.org

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).

WEDINOS Headlines



Temporary Class Drug Order (TCDO)

Methylphenidate related New Psychoactive Substances (NPS)

A TCDO is the result of an amendment to the Misuse of Drugs Act 1971 and enables the Home Secretary to place a new psychoactive substance causing sufficient concern about its potential harms under temporary control by invoking a temporary class drug order. With the exception of the possession offence, all the offences under the Misuse of Drugs Act 1971 will apply for substances controlled by this measure. This new power became available on 15 November 2011.

At 00:01hrs on Friday 10th April 2014 the UK government imposed a TCDO under section 2A of the Misuse of Drugs Act 1971 on a number of methylphenidate-based NPS: **ethylphenidate**, **3,4-dichloromethylphenidate ('3,4-DCMP')**, **methylnaphthidate ('HDMP-28')**, **isopropylphenidate ('IPP' or 'IPPD')** and **propylphenidate**.

Offences committed under the 1971 Act in relation to a temporary class drug are subject to the following maximum penalties -

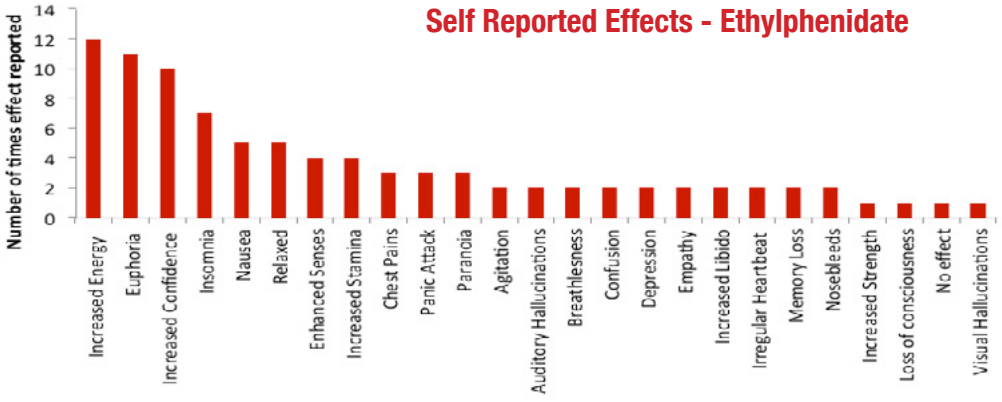
- **14 years' imprisonment and an unlimited fine on indictment, and**
- **6 months' imprisonment and a £5,000 fine on summary conviction.**

Methylphenidate is a licensed stimulant pharmaceutical and is controlled in the UK as a Class B controlled drug. This central nervous system (CNS) stimulant is a commonly prescribed psycho stimulant for the treatment of attention deficit hyperactivity disorder and other similar conditions. You may be more aware of this substance by its trade name Ritalin.

Ethylphenidate belongs to the piperidine chemical class. It is a methyl analogue of methylphenidate. Ethylphenidate is a CNS stimulant which acts as a dopamine reuptake inhibitor and norepinephrine reuptake inhibitor. To 26th March 2015 WEDINOS received 58 samples that upon analysis were found to contain ethylphenidate. These samples were submitted in powder, Tablet, Crystalline and Granule form. 50 per cent of these samples contained ethylphenidate in combination with other substances. 25 samples were submitted with data relating to route of administration. The most frequent route of administration was snort/sniff - n=15, followed by oral - n=6, intravenous- n=3 and intramuscular- n=1.

20 samples were submitted by individuals with self reported effects data. The following chart evidences self-reported effects for samples that were found upon analysis to contain Ethylphenidate; the majority of individuals reported experiencing more than one effect.

Self Reported Effects - Ethylphenidate



The branded product Ocean Burst was found to contain ethylphenidate upon analysis.

TCDO article continued overleaf...

Temporary Class Drug Order (TCDO) Continued…

3,4-Dichloromethylphenidate belongs to the piperidine chemical class and it is structurally related to methylphenidate - chloro substitution at meta and para positions.
To 26th March 2015 WEDINOS has received seven samples of 3,4-Dichloromethylphenidate. All samples list the purchase intent as 3,4-CTMP. In all seven samples 3,4-Dichloromethylphenidate was identified in isolation. These samples were submitted in powder, tablet and blotter paper form. Routes of administration included 'oral' and 'snort/sniff'. Self reported effects listed by sample providers: euphoria, increased energy, increased confidence, increased stamina, enhanced senses, increased strength, agitation and insomnia.

Methylnaphthidate (HDMP-28) structurally related to methylphenidate having a naphthalene ring instead of a benzene ring. To 26th March 2015 WEDINOS has received two samples of Methylnaphthidate.

In both samples Methylnaphthidate was identified in isolation, both samples were white powder in form. The route of transmission was listed as 'snort/sniff'. Self reported effects listed by sample providers: euphoria, increased confidence, nausea, confusion.

Isopropylphenidate is a stimulant, structurally related to methylphenidate and ethylphenidate with an isopropyl instead of a methyl or ethyl group, respectively, attached to the carboxyl group. To 26th March 2015 WEDINOS has received seven samples of Isopropylphenidate. All samples were white powder in form. The route of transmission was listed as 'snort/sniff'.

Propylphenidate - to date the WEDINOS project has not received any samples of this substance.

The branded product Icenberg was found to contain ethylphenidate in combination with caffeine.

White Heroin
Heroin Hydrochloride

Opium poppy (Papaver somniferum) seed head with tapped white latex (opium).

Heroin is produced by the conversion of opium tapped from the seed head of the annual flowering plant the opium poppy (Papaver somniferum). Within the tapped opium there are over 40 different alkaloids; these include morphine, codeine, noscapine and papervirine.

Most street heroin is brown in colour and what is known as base heroin, often containing impurities of origin as well as other bulking / cutting agents such as; paracetamol, Mannitol, caffeine and fluoxetine (WEDINOS sample analysis).

White heroin has received media interest over the past six months. Notifications have been received from Dutch authorities raising concerns over white heroin being sold as cocaine – the consumption of which has led to several hospitalisations and three deaths (27th February 2015); including two British tourists who died in late November 2014 following snorting white heroin.

During this quarter the WEDINOS project has received three samples of white powder that upon analysis was found to be Heroin. The route of administration for these samples was snort/sniff in all three cases. Effects experienced included euphoria, relaxed, nausea, vomiting and agitation.

The WEDINOS Project would very much like to speak, anonymously, to the individuals who submitted the aforementioned samples (W003366, W003305 and W003269) to explore further purchase intent and the effects experienced. Sample providers can contact the project via email admin@wedinos.org.


GGD Amsterdam
Public Health Service

February 27, 2015

Renewed Cocaine alert

In the streets of Amsterdam WHITE HEROIN is sold as COCAINE.

The last months many young tourists ended up in hospital in life threatening conditions
Three have died!

IGNORE STREETDEALERS!

If someone faints or starts breathing superficially or is not breathing at all.
Call 112 for an ambulance!

You will not be a
CALL 112 for me
While you wait,
or pinching the

More infor

Public Health Service of Amsterdam www.drugsallert.nl

http://www.theguardian.com/world/2014/nov/28/british-tourists-died-white-heroin-amsterdam-cocaine-shaun-brother-ston-bradley-price


Netherlands

British tourists who died 'after snorting white heroin' named

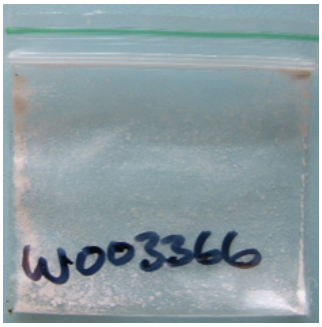
Shaun Brotherston and Bradley Price, who were found dead in a hotel on Tuesday, believed to have thought powder was cocaine

A warning sign in Amsterdam near the Bulldog coffeeshop. At least 17 people have needed medical treatment after taking white heroin, possibly believing it to be cocaine. Photograph: Peter Dejong/AP

W003269

W003305

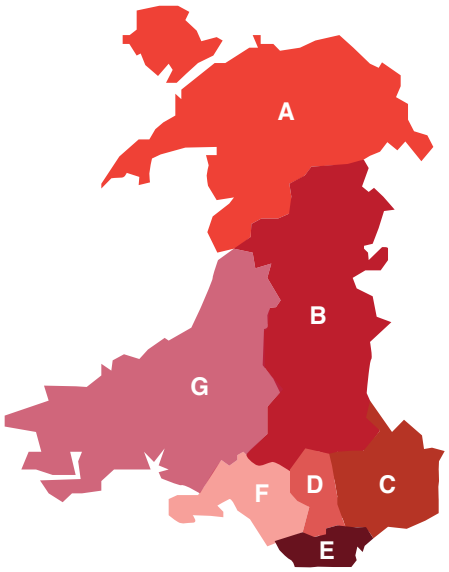
W003366



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 – 12 samples.
B - Powys Teaching Health Board – 9 samples.
C - Aneurin Bevan University Health Board – 54 samples (367 samples between Oct 2013 and December 2014).
D - Cwm Taf University Health Board – 2 samples.
E - Cardiff & Vale University Health Board – 101 samples.
F - Abertawe Bro Morgannwg University Health Board – 26 samples.
G - Hywel Dda University Health Board – 9 samples.

- 110 samples were received from England, 8 from Scotland and 7 from Northern Ireland.

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, 101 samples were received, accounting for 29per cent of all samples analysed. With the exception of Cwm Taf there was an increase in the number of samples submitted by Welsh Health Board areas in the quarter January to March 2015, compared to October to December 2014.

Psychoactive Substances

WHO...

Where a WEDINOS Effects Record was submitted and gender completed; 81per cent (n=157) of submissions were from males. The remaining 19per cent (n=37) were females; compared to last quarter where 85per cent (n=142) were male and 15per cent (n=26) were females.

The median age for all mind altering / psychoactive sample providers (Wales and wider UK) was 33 years (average age was 31 years old); with an age range of 15-61 years. In the last quarter median age was 31 (average age 28) and age range 14-61 years.

- **Females** - median age was 29 years and an average age of 29 years (range: 15-51 years) .
- **Males** - median age was 33 years, with an average age of 31 years (range: 18-61 years) .

Reason for purchase

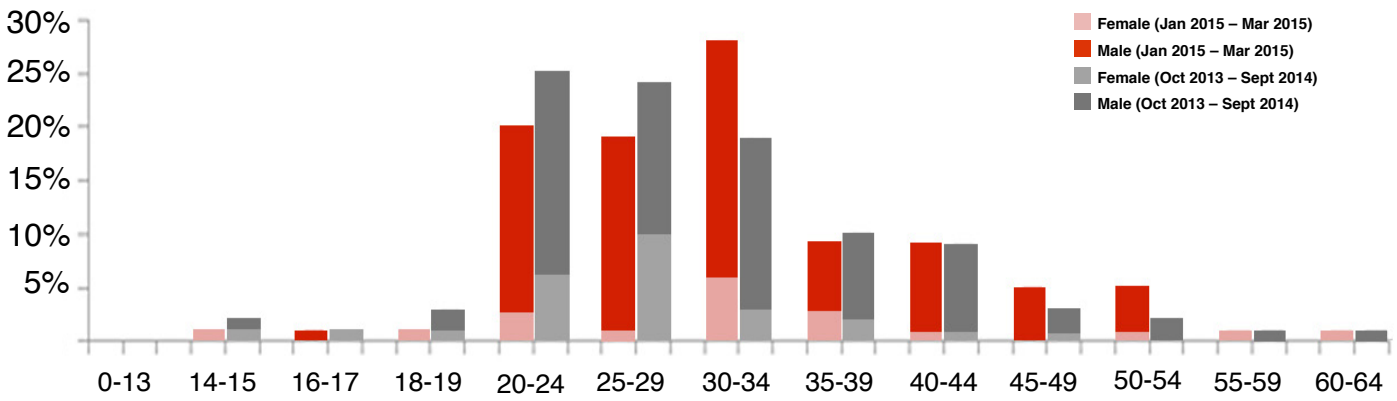
All samples

339 Mind Altering / Psychoactive samples were submitted for analysis during this quarter. 8 were submitted via Public Health Wales agreed sentinel providers of Steroids and Image Enhancing Drug (SIED) samples as SIEDs.

Samples Submitted from Wales

88per cent of Welsh samples were submitted via 24 service / organisations; with the remaining 12per cent being submitted anonymously.

Gender / Age profile of samples providers – Psychoactive Samples



As this report refers to samples submitted between January 2015 and March 2015, substances that became subject to a TCDO as Methylphenidate related compounds on 10th April 2015 have been treated as "not controlled". Tryptamines and LSD-related compounds that became classified as Class A drugs under the Misuse of Drugs Act 1971 on 7th January 2015 have been treated as Class A substances.

Of the 339 Mind Altering/Psychoactive samples:

- 48 samples were purchased in the belief that they were Class A substances
- 27 Class B
- 18 Class C
- 91 were believed not to be controlled
- A further 159 were submitted without any information relating to purchase intent, or perceived legal status

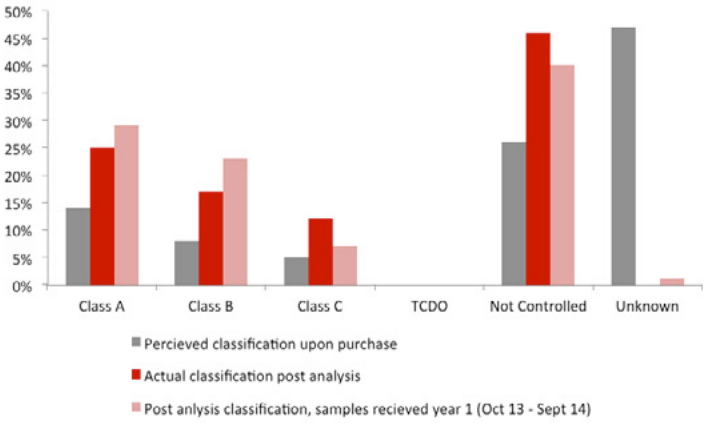
Post analysis we see that Class A increased from 48 samples to 85. Class B increased from 27 to 59 and Class C from 18 to 41. Substances that are not controlled increased from 87 to 154. It must be noted that although all groups increased with the post analysis categorisation of the "unknown" substances, several samples moved between classifications. Examples of this include:

- Sample believed to be **Cannabis** – found to contain **5F-PB-22 & 5F-AKB48** upon analysis
- Sample believed to be **MDAI** – found to contain **MDMA** upon analysis
- Sample believed to be **MDMA** – found to contain **alpha-PVP** upon analysis
- Five samples believed to be **MDMA** – found to contain **Ethylone** upon analysis
- Sample believed to be **Methamphetamine** – found to contain **Ethylone** upon analysis
- Sample believed to be **MDPV** – found to contain **25I-NBOMe & 25H-NB2OMe** upon analysis
- Sample believed to be **Amphetamine** – found to contain **Ethylphenidate** & **Benzocaine** upon analysis
- Sample believed to be **Amphetamine** – found to contain **Pseudoephedrine** upon analysis
- Sample believed to be **Crack Cocaine** – found to contain **TFMPP** upon analysis
- Sample believed to be **Heroin** – found to contain **Caffeine** upon analysis

Of **10** samples purchased and submitted as a "legal high" ; **7** contained controlled substances.

These substances included Ethylone, Mephedrone, Amphetamine and MDMA.

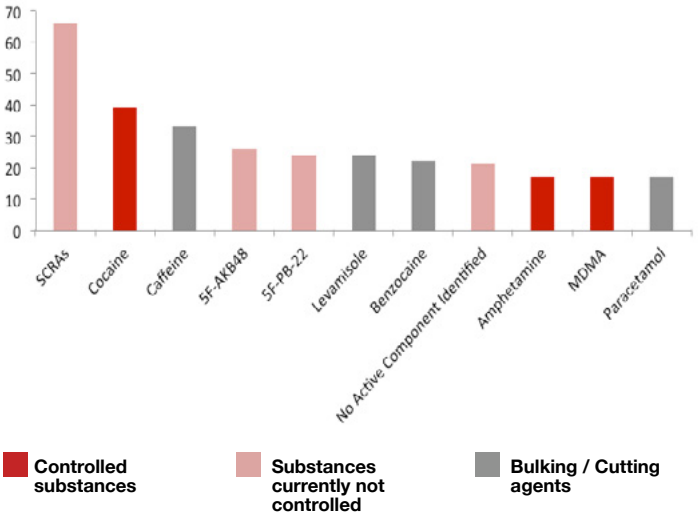
Proportion of controlled and not controlled / legal – Perceived and Actual (Psychoactive Substances)



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, Not controlled.

Most commonly identified substances

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



The most commonly identified psychoactive substances were Synthetic Cannabinoid Receptor Agonists (SCRAs) as a group. The most commonly identified individual substance was Cocaine. The most commonly identified psychoactive substance that is not currently controlled was the synthetic cannabinoid receptor agonist 5F-AKB48; a position the substance has held since April 2014.

Caffeine was the most commonly identified bulking / cutting agent. Consistent with previous findings it is used in a diverse range of substances. In this quarter, Caffeine has been identified alongside: Methiopropamine, Methoxphenidine, 5-MeO-DALT, Ethylphenidate, Methylhexamine, Amphetamine and Heroin.

Interestingly, Caffeine was identified in isolation in five samples. Another common bulking / cutting agent, Paracetamol, was also found in isolation in six samples in powder form.

Top Ten New Psychoactive Substances

TOP 10	January 2015 to March 2015
Number 1 – Non mover	5F-AKB48
Number 2 – Non mover	5F-PB-22
Number 3 – Up 1	Ethylphenidate
Number 4 – Up 1	Mephedrone
Number 5 – New Entry	Diazepam
Number 6 – Down 3	Methiopropamine
Number 7 – New Entry	Isopropylphenidate
Number 8 – New Entry	Ethylone
Number 9 – New Entry	3-Fluorophenmetrazine
Number 10 – New Entry	MMB-CHMINACA

Consistent with previous quarters and findings in our initial annual report (Oct 2013 – Sept 2014) Synthetic Cannabinoid Receptor Agonists (SCRAs) remain the most prevalent NPS submitted to and identified by the WEDINOS project. This quarter ten SCRAs were identified either in isolation or combination in 42 samples (accounting for 12per cent of all samples).

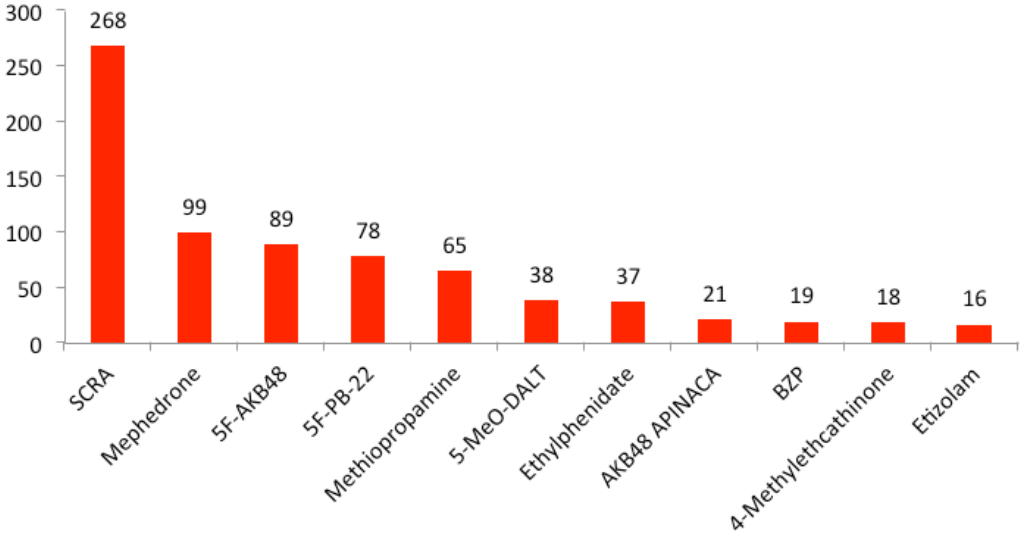
Unlike the previous quarter, no tryptamines are present, a group of substances that made up a third of our top ten last quarter (Oct 2014 – Dec 2014). The tryptamine chemical group became classified as Class A substances under the Misuse of Drugs Act 1971 on 7th January 2015.

Blotter papers and associated substances have also seen a reduced number of submissions this quarter with only one sample, the new EMCDDA notification, 1p-LSD, being received. Like tryptamines, the substances commonly associated with blotter papers, the LSD-related compounds such as ALD-52, AL-LAD, ETH-LAD, PRO-LAD and LSZ also became classified as Class A drugs under the Misuse of Drugs Act 1971 on 7th January 2015.

It will be interesting to monitor the prevalence of Ethylphenidate and Isopropylphenidate; both currently sat in the top ten; both of which became subject to a Temporary Class Drugs Order on 10th April 2015 (see section Methylphenidate related compounds)

As evidenced by the risers, fallers and new entries within the WEDINOS 'Top Ten' the NPS market remains fluid, with an increasing number of diverse substances. These changes may be influenced by the legislative control of substances as previously discussed; however, within the current NPS 'Top Ten' there are three controlled substances (Mephedrone, Diazepam & Ethylone).
This, coupled with the profiling of Cocaine, Amphetamine and MDMA within the ten most commonly identified psychoactive substances highlights the importance of not only being able to have an awareness of emerging substances, and the resources to categorise them (as a stimulant or depressant for instance) to enable relevant harm reduction advice; but also of not losing sight of more established substances such as Cocaine, Amphetamine, Heroin, MDMA , Cannabis and other controlled substances e.g. Mephedrone.

Ten most commonly identified New Psychoactive Substances (Oct 2013 – Oct 2014)



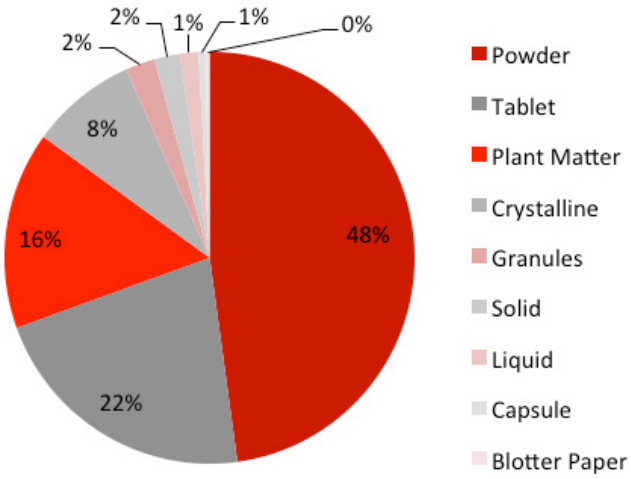
SCRA total 268 shows all SCRA as a group. 5F-AKB48, 5F-PB-22 and AKB48 APINACA are synthetic cannabinoid receptor agonists. Methiopropamine, Ethylphenidate, Mephedrone and 4-Methylethcathinone are stimulants. 5-MeO-DALT is a psychedelic tryptamine. BZP is a piperazine. Etizolam is a benzodiazepine analogue.

Form of Sample & Method of Consumption

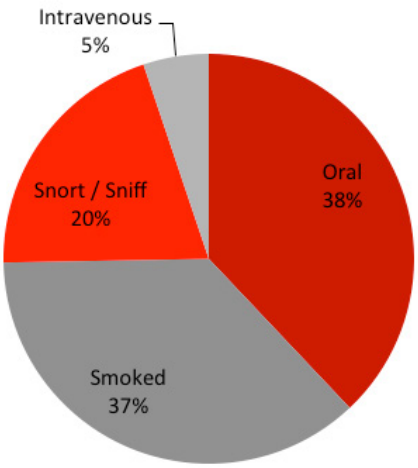
Mind Altering/Psychoactive

Powder remains the most prevalent sample form

Form of Sample



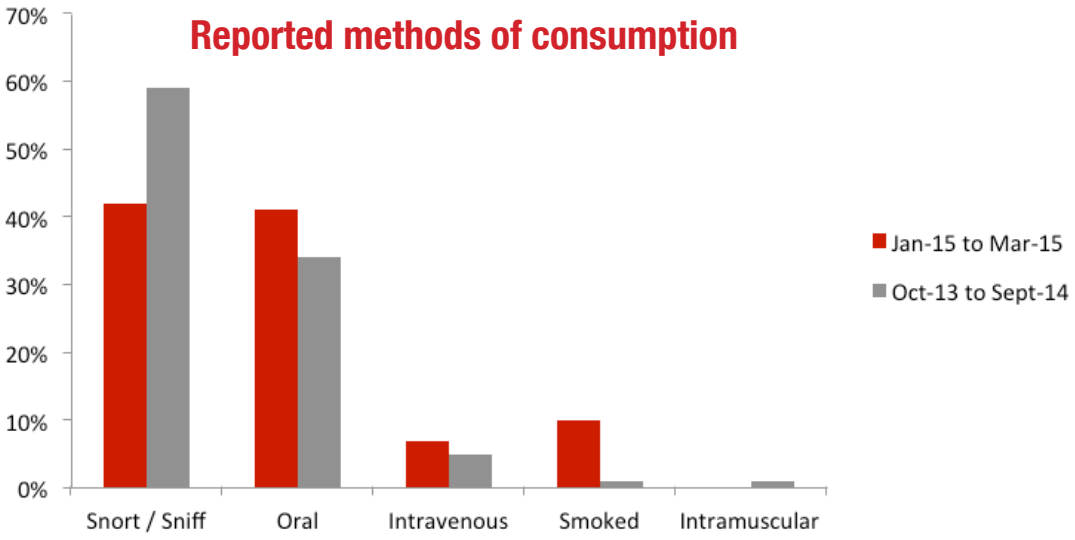
Method of Consumption



Where samples were purchased as Mind Altering/Psychoactive & a method of consumption was recorded (56per cent, n=195), and assuming that all plant matter and plant matter Synthetic Cannabinoid Receptor Agonists are smoked, samples were used consumed through a variety of methods, the most common method was to consume a substance orally (38per cent)followed by smoking (37per cent). The prevalence of snorting / sniffing as a route of administration (ROA) has fallen this quarter, from the second most prevalent route, used by 34% of sample providers to 20%. However, this chart may alter dramatically, if the route of administration was capture for all samples; for example 102 powder samples were submitted with any ROA data.

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 to consume a substance by snorting / sniffing. However, although snort/sniff follows the trend of Oct-13 to Sept 14, by remaining the most common ROA for these materials; its prevalence has fallen by almost a third from that period. Intravenous use fell from 21per cent last quarter to 7per cent and relates to samples of Amphetamine, Heroin, Ethylphenidate and Paracetamol (this sample was purchased in the belief that it was Heroin).



The injection of NPS, and in particular Ethylphenidate, has already caused concerns amongst drugs services within Scotland. The Scottish Drugs Forum (SDF) and the Greater Glasgow and Clyde NHS have produced an informative guide with the intention of informing people of the risks associated with injecting NPS. This and other harm reduction resources can be found here: http://www.sdf.org.uk/index.php/drug-information/

GEOGRAPHIC PROFILES / LOCAL TRENDS

Abertawe Bro Morgannwg University Health Board (ABMU)

- Cumulative total: 150 samples
- 60 samples were received from ABMU this quarter.
- During analysis 24 substances were identified either in combination or in isolation.
  - SCRAs and Diazepam featured highly amongst the samples submitted from within ABMU with four SCRAs being profiled.

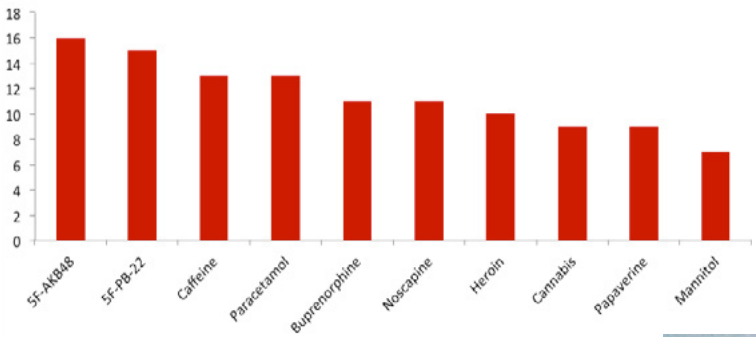
Aneurin Bevan University Health Board (ABU)

- Cumulative total: 422 samples
- 60 samples were received from ABU this quarter.
- During analysis of those samples, 24 substances were indentified either in combination or in isolation, with two samples having no active compound identified.
- Cocaine was the most commonly identified substance within the in 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, 4-Methylethcathinone, Methiopropamine and Ethylphenidate. Samples containing MDMA and piperazines were also submitted.
  - Samples of interest include:
    - A sample submitted as an Amphetamine that upon analysis was found to contain Pseudoephedrine
    - A sample submitted as Crack Cocaine that upon analysis was found to contain the piperazine TFMPP.

Betsi Cadwaladr University Health Board (BCU)

- Cumulative total: 111 samples
- 12 samples were received from BCU this quarter.
- During analysis of those samples, 14 substances were indentified either in combination or in isolation.
- MDMA was the most commonly identified substance within the BCU.
  - Samples of interest include:
    - A sample submitted as an MDMA that upon analysis was found to contain Ethylone.
    - A sample submitted as MDMA that upon analysis was found to contain Propanolol.
    - A sample submitted as MDPV that upon analysis was found to contain 25I-NBOMe and 25H-NB2OMe.

Cardiff & Vale University Health Board (CVU)



- Cumulative total: 324 samples
- 101 samples were received from CVU this quarter.
- During analysis 38 substances were identified either in combination or in isolation, with seven samples found to contain no active chemical compound.
- Five SCRAs were identified. Also, identified were 4 benzodiazepines / benzodiazepine analogues and the nonbenzodiazepine Z-drug, Zopiclone.
  - Samples of interest include:
    - Two samples that were purchased as Benzodiazepines that upon analysis were found to contain Zopiclone
    - A sample submitted as an MDMA tablet that upon analysis was found to contain Caffeine and 5-MeO-DALT
    - A sample submitted as heroin that upon analysis was found to contain the impurities of heroin manufacture; Noscapine and Papaverine. This sample contained no heroin.

Cwm Taf University Health Board (CTU)

- Cumulative total: 58 samples
- 2 samples were received from CTU this quarter
- These samples were found to contain Buprenorphine in combination with Mannitol; and the other contained no active ingredient.
- We do not believe that the number of samples submitted from CTU reflects the prevalence or any trends in substance use within the locality and 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 or email admin@wedinos.org

Hywel Dda University Health Board (HDU)

- Cumulative total: 53 samples
- 9 samples were received from HDU this quarter
- During analysis 9 substances were identified in isolation, or combination. Two samples contained no active compounds.
- SCRAs and Ethylphenidate were the most commonly identified substances.

Powys Teaching Health Board (PT)

- Cumulative total: 17 samples
- 9 samples were received from PT this quarter.
- During analysis 7 substances were identified in isolation, or combination. Two samples contained no active compounds.
- Diazepam was the most commonly identified substance. However the stimulants Mephedrone, Amphetamine and Ethylphenidate also accounted for just under half of PT samples. A single sample of SCRAs was also submitted.

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.

News from the Home Office and abroad

8th April 2015 - Temporary control of 5 methylphenidate-based NPS
https://www.gov.uk/government/publications/circular-0152015-temporary-control-of-5-methylphenidate-based-nps

12th March 2015 - Cocaine powder: review of its prevalence, patterns of use and harm
https://www.gov.uk/government/publications/cocaine-powder-review-of-its-prevalence-patterns-of-use-and-harm

4th March 2015 – ACMD advice on nitrous oxide abuse
https://www.gov.uk/government/publications/acmd-advice-on-nitrous-oxide-abuse

March 2015 – EMCDDA - New psychoactive substances in Europe. An update from the EU Early Warning System
http://www.emcdda.europa.eu/publications/2015/new-psychoactive-substances

20th February 2015 - A change to the Misuse of Drugs Act 1971: control of MT-45 and 4,4'-DMAR
https://www.gov.uk/government/publications/circular-0032015-a-change-to-the-misuse-of-drugs-act-1971-control-of-mt-45-and-44-dmar

February 2015 -EMCDDA - Drugnet Europe 89 report
http://www.emcdda.europa.eu/publications/drugnet/89

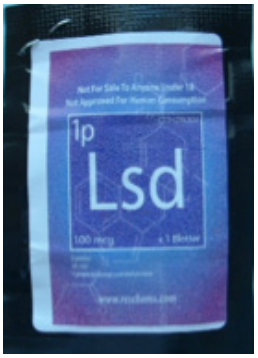
6th January 2015 - A Change to the Misuse of Drugs Act 1971: control of AH-7921, LSD–related compounds, tryptamines, and rescheduling of GHB
https://www.gov.uk/government/publications/circular-0012015-a-change-to-the-misuse-of-drugs-act-1971-control-of-ah-7921-lsd-related-compounds-tryptamines-and-rescheduling-of-ghb

January 2015 - The Internet and drug markets
http://www.emcdda.europa.eu/publications/technical-reports/internet-drug-markets

Notifications to the EMCDDA

In the past quarter WEDINOS has submitted three notifications to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). These notifications relate to substances previously unreported in the European Union.

- **1p-LSD - 1p-LSD (1-propionyl-lysergic acid diethylamide) is structurally related to LSD, controlled under the 1971 UN Convention, with a propanoyl group at the nitrogen atom of the indole ring.**
- **Isopropylphenidate - Isopropylphenidate is a stimulant, structurally related to methylphenidate and ethylphenidate with an isopropyl instead of a methyl or ethyl group, respectively, attached to the carboxyl group.**
- **HDMP-28 (methylnaphthidate) - HDMP-28 (methylnaphthidate) is a stimulant, structurally related to methylphenidate (controlled under the 1971 UN Convention) having a naphthalene ring instead of a benzene ring.**



1p-LSD

Isopropylphenidate

HDMP-28