

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

- October 2013 to June 2014
 - 1344 samples analysed
 - 213 substances identified in either combination or isolation
- This quarter (April 2014 to June 2014)
 - 641 samples received, this represents a 15% increase from the last quarter
- 35% of SIEDs samples did not contain what they were believed to.

On Friday 25th July 2014 WEDINOS stopped accepting samples of Steroids and Image Enhancing Drugs. However, testing via sentinel contributors will continue, to ensure contemporary evidence.

Changing Trends?

There has been a shift in our top ten most commonly identified mind altering / psychoactive substances and New Psychoactive Substances list over the past quarter. The more "classic" substances of misuse such as cannabis and diazepam have been displaced following an increased prevalence of Synthetic Cannabinoid Receptor Agonists (SCRA), currently non-controlled stimulants, such as Ethylphenidate & Methiopropamine as well the psychedelic tryptamine 5-MeO-DALT. NB. Please see the News section "Advisory Council on the Misuse of Drugs publishes recommendations and report on the new psychoactive substance Tryptamines" and note the potential changes to the legal status of 5-MeO-DALT.

There has also been a reduction in the number of samples of Mephedrone that the project has received, however there has been an increase in submissions of the substituted cathinone 4-methylethcathinone (4-MEC). We have also seen a re-emergence of MDMA over the past quarter; this seems to be in line with reports from other testing facilities of an increase in the purity of MDMA on the current market. However, users of MDMA should be aware that samples submitted to WEDINOS as MDMA have also been found to contain other substances including; 5/6 MAPB, BZP and MeOPP. In every sample that was submitted as MDMA / Ecstasy and analysed by WEDINOS, users reported several unexpected effects that included nausea, vomiting, memory loss, confusion, irregular heartbeat, nosebleeds, depression and agitation.

Synthetic cannabinoids (SCs or SCRAs) not 'fake cannabis'

Between October 2013 and June 2014, of the total psychoactive samples received by WEDINOS, 17% (n=98) contained Synthetic Cannabinoid Receptor Agonists (SCRAs), with 19 different SCRAs analysed. These substances represent the largest group of compounds currently monitored in Europe by the EU Early warning system on new psychoactive substances.

Reliable anecdotal evidence from substance misuse professionals across the UK (UK DrugWatch) report SCRAs being described as 'fake cannabis', 'legal highs' and 'synthetic cannabis' by specialist drugs and youth workers. This is an issue of concern as potentially incorrect assumptions regarding the nature, effect and potency of the drug may be inferred through this terminology. SCRAs effect the same cannabinoid receptors (CB1 & CB2) in the brain as Tetrahydrocannabinol (THC) and Cannabidiol (CBD) found in cannabis, however, some SCRAs are thought to be full receptor agonists as opposed to partial (as with cannabis). As such, some SCRAs and combinations of them commonly used may be more potent than others and far more potent and problematic than cannabis leading to potential psychological problems, dependency issues and unwanted /

unexpected adverse reactions. Sample providers to WEDINOS have listed many unexpected effects including: paranoia, memory loss, agitation, chest pains, irregular heartbeat, confusion, depression, nausea, vomiting, insomnia, auditory and visual hallucinations and sweats.

For more information on Synthetic cannabinoids in Europe please see <http://www.emcdda.europa.eu/topics/pods/synthetic-cannabinoids>

The screenshot shows the EMCDDA website interface for 'Synthetic cannabinoids in Europe'. It features a navigation menu with options like 'Data', 'Countries', 'Evidences (EN)', 'Our activities', 'Best practice', 'Publications', 'News and events', and 'About'. The main content area includes an 'Introduction' section dated 27/05/2014, a 'Part of the Perspectives on drugs (PODs) series' section, and a 'Download PDF version' button. A diagram illustrates the analytical process: 1. Analysis of synthetic cannabinoids in Europe, 2. Interactive, demystifying the chemistry, 3. Facts and figures, and 4. Code names of synthetic cannabinoids.

News from the Home Office and abroad

1st May 2014 – Government response to the twelfth report from the home affairs committee session 2013-14 HC819. This Command Paper was published in response to the Home Affairs Select Committee's report *Drugs: new psychoactive substances and prescription drugs*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307865/New_psychoactive_substances_and_prescription_drugsPRINT.pdf

May 2014 – EMCDDA risk assessment of 25I-NBOMe <http://www.emcdda.europa.eu/publications/risk-assessment/25I-NBOMe>

May 2014 – EMCDDA risk assessment of AH-7921 <http://www.emcdda.europa.eu/publications/risk-assessment/AH-7921>

May 2014 – EMCDDA risk assessment of MDPV <http://www.emcdda.europa.eu/publications/risk-assessment/MDPV>

May 2014 – EMCDDA risk assessment of Methoxetamine <http://www.emcdda.europa.eu/publications/risk-assessment/methoxetamine>

27th May 2014 – EMCDDA publishes their annual report *European Drug Report 2014: Trends and developments* <http://www.emcdda.europa.eu/publications/edr/trends-developments/2014>

30th May 2014 – Information leaflet about the classification of Khat as a Class C drug. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/313448/Khat_leaflet_A4_v11.pdf

23rd June 2014 – Advisory Council on the Misuse of Drugs (ACMD) recommendations and report on the new psychoactive substance Tryptamines and AH-7921. <https://www.gov.uk/government/publications/nps-reports-on-tryptamines-and-ah-7921>

Notifications to the EMCDDA

In the past quarter WEDINOS has submitted five notifications to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) for the following substances:

- 25C-NBOH: This notification was a first at both EU and UK levels.
- 25H-NB2OMe: First UK notification.
- AB-CHMINACA: First UK notification.
- NNEI: First UK notification.
- LSZ: First UK notification.

Polydrug use in a single packet

Polydrug use occurs when two or more drugs are used at the same time or on the same occasion; often with the intention of enhancing or countering the negative effects of another drug.

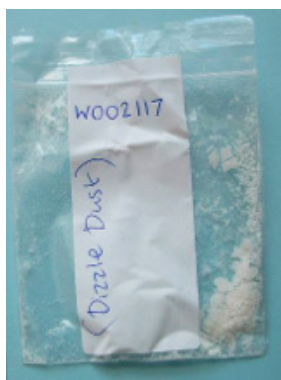
Many of the branded products that WEDINOS has analysed over the past quarter have contained more than one substance, in fact 77% of all branded psychoactive products were found to contain at least two substances following analysis; with 34% containing at least three substances.



The Synthetic cannabinoid receptor agonist (SCRA) product "**Moroccan**", contained five SCRA's (NNEI, JWH-018 adamantyl carboxamide analogue, AKB48 APINACA, 5F-AKB48 and STS-135).

The white powder product "**Dizzle Dust**" contained six different substances.

- Ethylphenidate - a central nervous system stimulant and an analogue of methylphenidate.
- Methiopropamine - a stimulant chemically related to methamphetamine.
- 2-aminoindane – a stimulant
- Ephedrine – a stimulant
- Caffeine – a stimulant / possible bulking agent
- Lidocaine – a local anaesthetic and common bulking agent in illicit drugs.



Substances may interact in hugely different ways in the body, from not at all to creating highly toxic and dangerous reactions, for example alcohol and cocaine combining to create Cocaethylene. Certain substances have a long history of being used together, as in the example of cocaine and alcohol; whilst others are newer and their short, medium and long term effects have not yet been evidenced.

Wales wide sample submission

From 18th August 2014 samples can be submitted via 101 locations across Wales
WEDINOS sample and effects packs can now be collected from 71 services (Red) across Wales. These completed packs can then be submitted either at any of the 71 services or at one of the 30 police stations (Blue) shown. If you are unable to access any of these you can download an effects form from the WEDINOS website and submit a sample by post. Please note: Do not knowingly submit samples of controlled drugs via the postal mechanism.

All the details of services taking part in the WEDINOS are available: http://www.wedinos.org/sample_testing_pack.html



Sample W000788

Date Received: 28/02/2014
 Postcode: WA9
 Purchase Intent: Gogaine
 Package Label: Gogaine
 Sample Colour: White
 Sample Form: Powder
 Consumption Method: Not Stated
 Self-Reported Effects: Not Stated
 Sample Upon Analysis (Major): Methiopropamine, Benzocaine
 Sample Upon Analysis (Minor):

Click to Enlarge

Not what it says on the tin...

But the concerns to public health do not stop at potentially unknown or naive polydrug use. Consumers expect a consistency in the association of a brand / name to a product. This is not the case, as is illustrated by comparing the results of three submissions of samples purchased as "**Gogaine**".

Sample W001623

Date Received: 21/05/2014
 Postcode: WA8
 Purchase Intent: Gogaine
 Package Label: Gogaine
 Sample Colour: White
 Sample Form: Powder
 Consumption Method: Snort / Sniff
 Self Reported Effects: Euphoria, Increased Energy, Increased Confidence, Enhanced Senses, Increased Stamina, Increased Strength, Insomnia
 Sample Upon Analysis (Major): Ethylphenidate, Lidocaine, Mannitol, Methiopropamine
 Sample Upon Analysis (Minor):

Click to Enlarge

Sample W000788

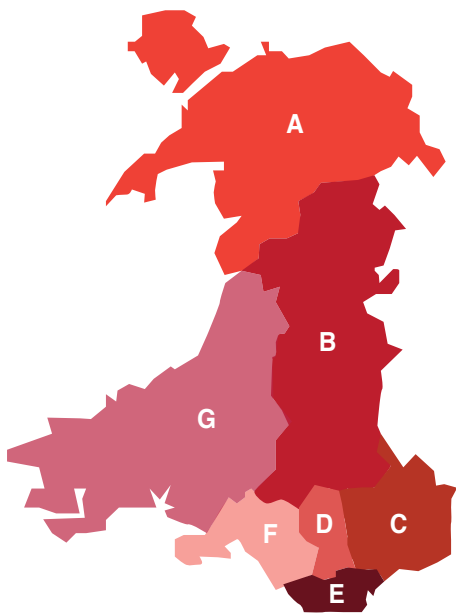
Date Received: 28/02/2014
 Postcode: WA9
 Purchase Intent: Gogaine
 Package Label: Gogaine
 Sample Colour: White
 Sample Form: Powder
 Consumption Method: Not Stated
 Self-Reported Effects: Not Stated
 Sample Upon Analysis (Major): Methiopropamine, Benzocaine
 Sample Upon Analysis (Minor):

Click to Enlarge

Findings...

Where...

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



Breakdown of sample submissions by Welsh Health Board areas

- A** - 26 samples - Betsi Cadwaladr (61 samples between Oct 2013 and June 2014)
- B** - 3 samples - Powys Teaching (5 samples between Oct 2013 and June 2014).
- C** - 88 samples - Aneurin Bevan (237 samples between Oct 2013 and June 2014).
- D** - 11 samples - Cwm Taf (39 samples between Oct 2013 and June 2014).
- E** - 34 samples - Cardiff & Vale (69 samples between Oct 2013 and June 2014).
- F** - 21 samples - Abertawe Bro Morgannwg (69 samples between Oct 2013 and June 2014).
- G** - 12 samples - Hywel Dda (18 samples between Oct 2013 and June 2014).

432 samples were received from England, 11 from Northern Ireland, 20 from Scotland and 15 from outside the United Kingdom. WEDINOS does not analyse samples received from outside of the United Kingdom.

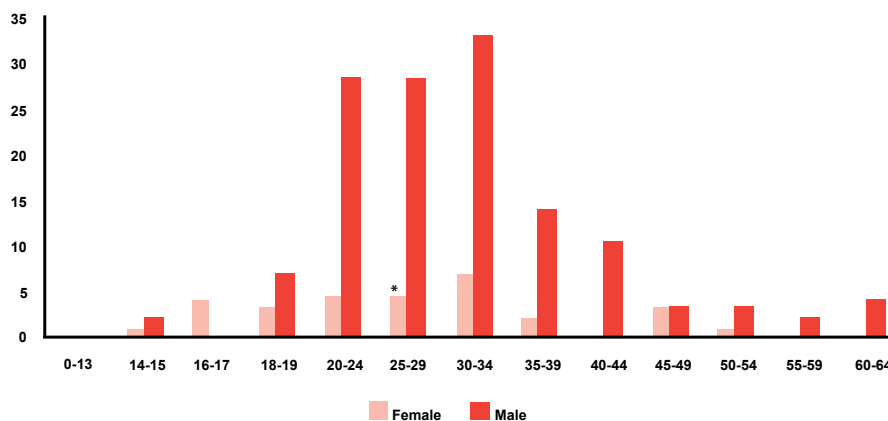
In relation to Welsh Health Boards, the highest proportion of samples came from Aneurin Bevan University Health Board, with 88 samples received, accounting for 13% of all samples analysed. The Bristol postcode area submitted the highest proportion of samples received from outside of Wales (39), equating to 6% of all samples analysed.

Who...

Where a WEDINOS Effects Record was submitted and gender completed; 87% (n=501) of submissions were from males. The gender split for mind altering/psychoactive substances was 72% (n=153) male to 28% (n=61) were females. In relation to SIEDs, 96% were submitted by males (348 male / 13 female), last quarter all SIED samples were submitted by males.

The average age of all sample providers was 30 (age range 15 to 61). Of those samples that were submitted as mind altering/psychoactive the average age was 29 (age range 15 to 61). The average age of sample providers of SIEDs was 30 (age range 20 to 52).

Gender / Age profile of samples providers – Psychoactive Samples



*Females aged 25-29; nineteen samples were received in two packages. These samples have been counted as two individuals.

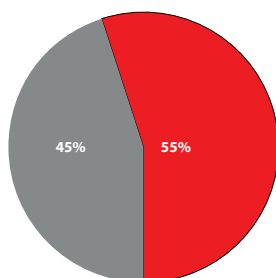
Why...

Reason for purchase

47% of all mind altering/psychoactive and 14% of all SIEDs samples were provided by Welsh services and individuals.

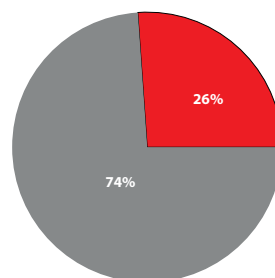
All samples

■ Steroid & Image Enhancing Drugs ■ Mind Altering/Psychoactive



Samples Submitted from Wales

■ Steroid & Image Enhancing Drugs ■ Mind Altering/Psychoactive



What...

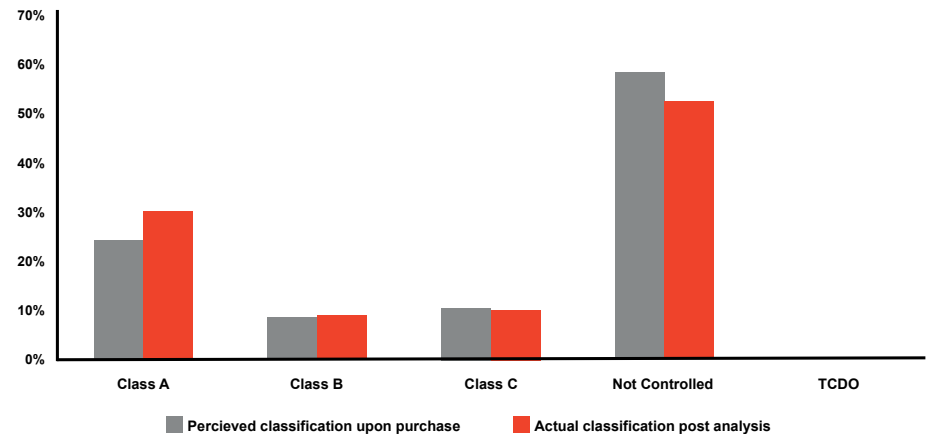
Where the intended purchase substance was listed as mind altering/psychoactive.

- 51 samples were purchased in the belief that they were Class A substances
- 18 Class B
- 21 Class C
- 126 were believed be 'not controlled/legal'.

Post analysis many samples changed legal classification. Samples that were purchased as 'not controlled / legal' were found to contain controlled substances and vice versa. Samples were also found to change class, for example sample purchased as MDMA (class A), upon analysis was found to contain BZP (Class C).

Class A increased from 51 samples to 64. Class B remained at 18 and Class C at 21, however, several samples were re-classified into and out of these groups. Substances that are not controlled fell from 126 to 113. Following analysis 16 samples purchased as contained a Class A substances, including: MDMA, LSD, 2C-B, Cocaine, 2,5-dimethoxy-4-bromoamphetamine and phenylethylamines; one contained a Class B substance and four Class C substances, based on the highest classified substance present.

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



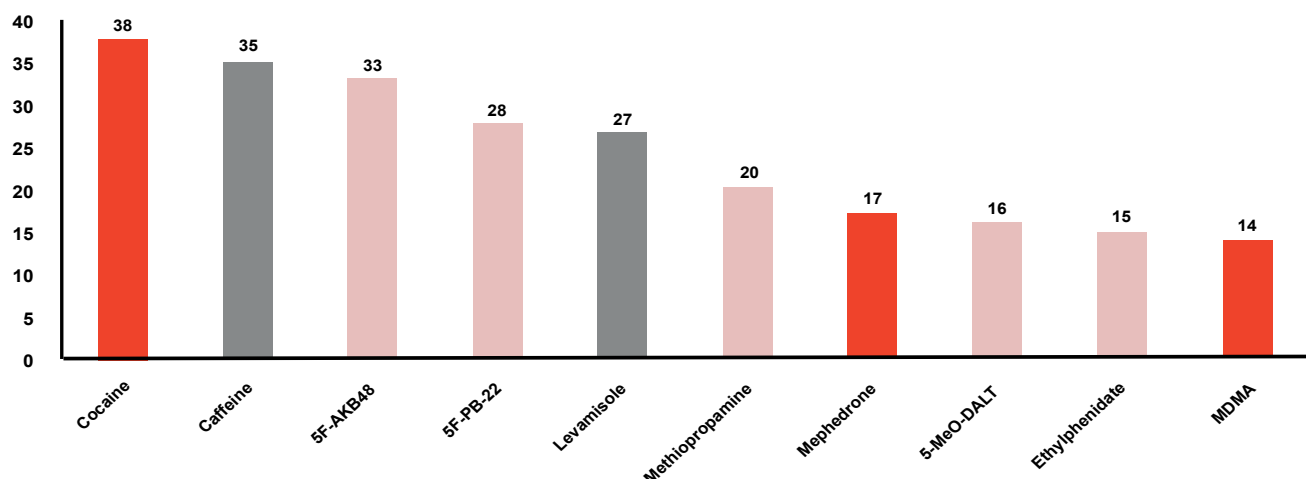
NB. Following analysis samples were categorised based on the highest classified substance present. Order of classification / control – Class A, B, C, Temporary Class Drugs Order, Not controlled.

What are Temporary Class Drug Orders (TCDO)?

The Misuse of Drugs Act 1971 has been amended to enable 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.

Most commonly identified substances

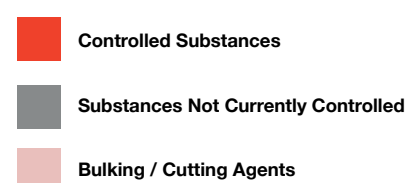
Most commonly identified substances in mind altering/psychoactive Substance samples.



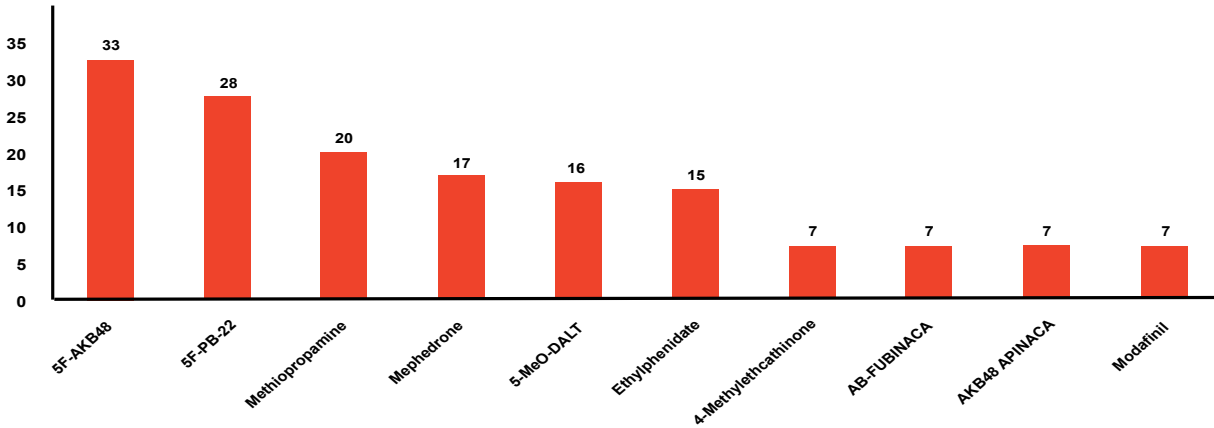
The most commonly identified controlled psychoactive substance was Cocaine and the most common not currently controlled was the synthetic cannabinoid receptor agonist 5F-AKB48.

Caffeine was the most popular bulking/cutting agent identified; and is again found to be the most diversely used bulking/cutting agent, identified in samples that contained Heroin, MDMA, Amphetamine, Cocaine, BZP, MDPBP, 5-MeO-DALT, Methiopropamine, Phenacetin, Ephedrine, Ethylphenidate and Methylphenidate as major components.

Testosterone Enanthate was the most commonly identified SIED.



Ten most commonly identified New Psychoactive Substances (NPS)



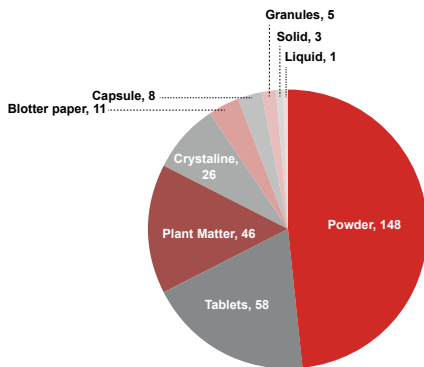
5F-AKB48, 5F-PB-22, AB-FUBINACA and AKB48 APINACA are synthetic cannabinoid receptor agonists. Methiopropamine, Ethylphenidate, 4-Methylethcathinone and Mephedrone are stimulants. 5-MeO-DALT is a psychedelic tryptamine. Modafinil is a medicine which is used in narcolepsy.

How...

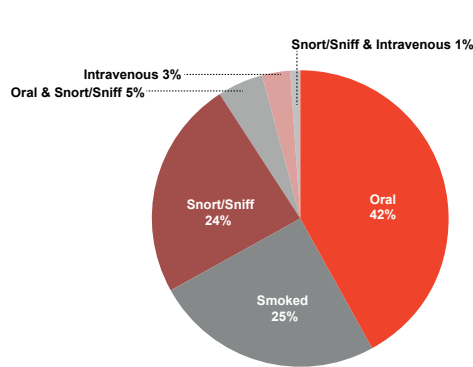
Form of Sample and Method of Consumption

Psychoactive samples came in a variety of forms, with the most common being powder.

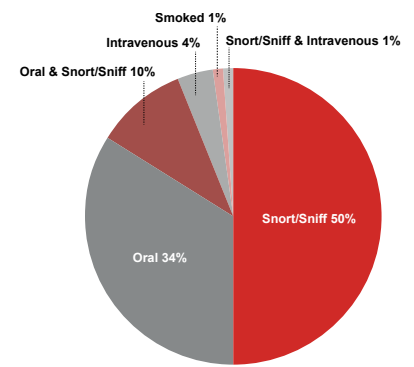
Form of sample



Method of consumption



Powders: Method of consumption



Assuming that all plant matter samples are smoked, the remaining samples were ingested through a variety of methods, most common was oral (37%) followed by sniff/snort (34%). Focusing on the method of use for powders and crystalline materials the most common method of consumption was snorting/sniffing. Intravenous use accounted

for 10% and relates to samples of Mephedrone, Amphetamine, Buprenorphine and Ethylphenidate (although this was purchased as Amphetamine).

Steroids and Image Enhancing Drugs (SIEDs)

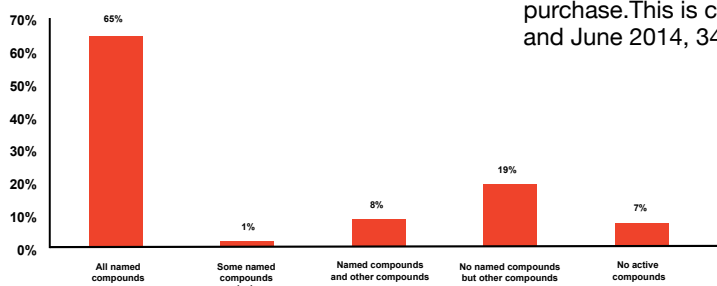
Based on the information provided on sample effects record:

- 232 (66%) of the SIED samples analysed contained all of the expected/named compounds
- Four (1%) contained some, but not all compounds expected/named
- 29 (8%) contained some of the named compounds, but also other compounds
- 67 (19%) contained none of the named compounds
- 23 (7%) contained no active chemical compounds.
- Just over a third of SIED samples analysed with purchase intent data submitted were found to be different from what they were believed to be at point of purchase. This is consistent with the previous findings - between October 2013 and June 2014, 34% of SIEDs did not contain what they were believed to.

On Friday 25th July 2014 WEDINOS stopped accepting samples of SIEDs from the general public.

Although the WEDINOS project is no longer testing samples of Steroids and Image Enhancing Drugs we are still very much interested to hear from individuals around the emergence of any new substances, blends of substances and of any concerns and issues that may be affecting the SIED using population. If you have any comments please contact us at admin@wedinos.org

SIEDs - Compounds found upon analysis



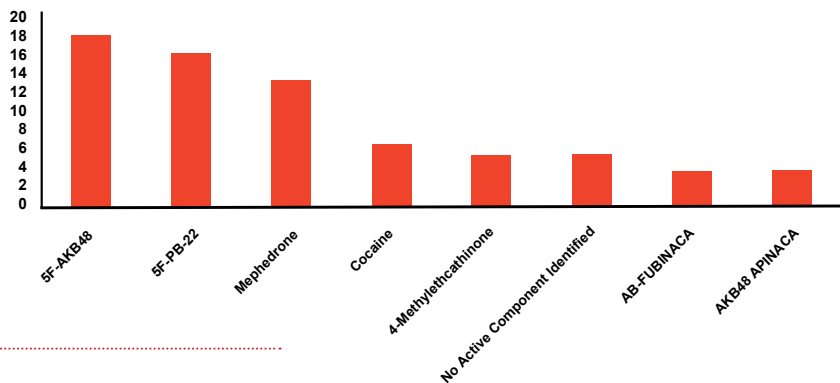
Geographic Profiles / Local Trends

Abertawe Bro Morgannwg University Health Board (ABMU)

- Cumulative total: 69 samples
- 21 samples were received from ABMU this quarter.
- During analysis 23 substances were identified either in combination or in isolation, with three samples having no active compound identified.
- SCRA's featured highly amongst the samples submitted from within ABMU with four different SCRA's identified (5F-PB-22, 5F-AKB48, AB-FUBINACA and AKB48 APINACA).
- However, we did not receive any samples of Amphetamine like substances or cathinones. We do not feel that this is a true reflection of trends in substance use in the ABMU area and would welcome your input and would happily accept more samples.

Aneurin Bevan University Health Board (ABU)

- Cumulative total: 237
- 88 samples were received from ABU this quarter.
- During analysis of those samples, 40 substances were identified either in combination or in isolation, with six samples having no active compound identified.
- Again a high prevalence in the submission of samples containing SCRA's with four of the eight most identified substances being part of this group of compounds, outside of the top ten a further seven SCRA's were identified in Aneurin Bevan University Health Board.

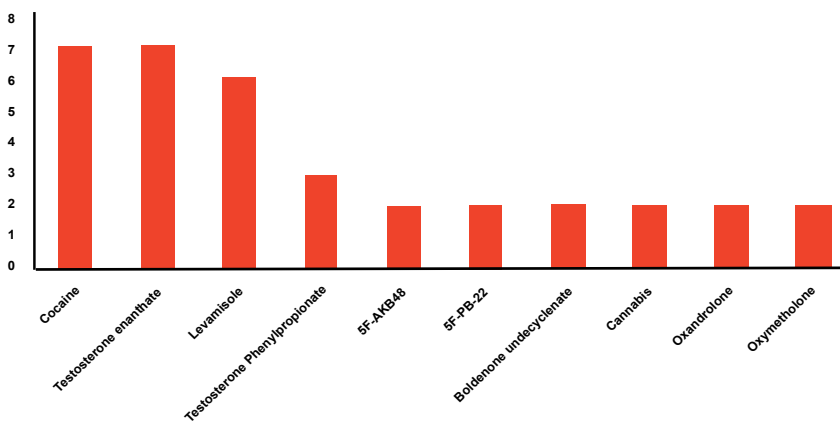


Betsi Cadwaladr University Health Board (BCU)

- Cumulative total: 61
- 26 samples were received from BCU this quarter.
- During analysis of those samples, 25 substances were identified either in combination or in isolation. One sample had no active components and another was insufficient for analysis.
- Caffeine was the most commonly identified substance
- BCU has developed a trend since the launch of the project of identifying some interesting psychedelic compounds and this quarter was no exception with compounds such as 25C-NBOH, 25I-NBOH and LSZ (Lysergic acid 2,4-dimethylazetidide) being identified on samples of blotting paper. The identification of 25C-NBOH was the first on a EU and UK level, LSZ was a UK first.

Cardiff & Vale University Health Board (CVU)

- Cumulative total: 69 samples
- 34 samples were received from CVU this quarter.
- During analysis 30 substances were identified either in combination or in isolation, with three samples found to contain no active chemical compound.



Hywel Dda University Health Board (HDU)

- Cumulative total: 18 samples
- 12 samples were received from HDU this quarter
- During analysis 15 substances were identified in isolation
- Caffeine was the most commonly identified substance, followed by the synthetic cannabinoid receptor agonists 5F-AKB48 and 5F-PB-22

Powys Teaching Health Board (PT)

- Cumulative total: 5 samples
- Three samples were received from PT this quarter
- During analysis four substances were identified, one a SIED contained caffeine and ephedrine, the other two samples were both white powders that contained Ethylphenidate and Methypropamine in isolation.

Cwm Taf University Health Board (CTU)

- Cumulative total: 39 samples
- 11 samples were received from CTU this quarter
- During analysis 15 substances were identified either in combination or in isolation, with one sample found to containing no active chemical compound
- Caffeine was the most commonly identified substance
- The Majority of samples from within the Cwm Taf University Health Board area were of SIED's. Two samples of interest were Ephedrine; upon analysis these samples were found to contain Methylhexanamine (DMAA). In August 2012 The Medicines and Healthcare products Regulatory Agency (MHRA) named all DMAA containing products as unlicensed medicines that need to be removed from the UK market amid concerns of potential risk to public safety.