

WEDINOS Headlines

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.

TOTAL number of samples received by WEDINOS October 2013 to December 2015

3596
Samples analysed

87
Samples pending

306
Substances identified in either combination or isolation

This quarter (October 2015 to December 2015)

278
Samples analysed

53
Samples pending

41
Samples rejected

79
Substances identified in either combination or isolation

Temporary Class Drug Order (TCDO) – Methylphenidate related New Psychoactive Substances (NPS)

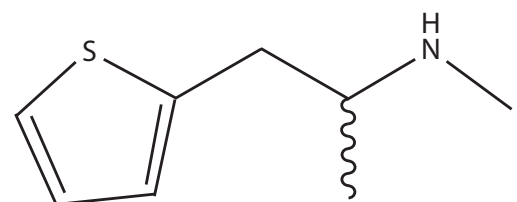
Methiopropamine - N-methyl-1-(thiophen-2-yl)propan-2-amine



WEDINOS sample W000976 – Methiopropamine

Methiopropamine (MPA) was first synthesized in 1942 by F.F. Blicke and J.H. Burkhalter. It is a thiophene ring analogue of the controlled Class A substance methamphetamine, however, its effects are very different to Methamphetamine.

In 2010 MPA appeared for sale online as an uncontrolled / legal stimulant, with internet forums describing it as accompanied with mild euphoric effects.



Temporary Class Drug Order article continued overleaf...

Temporary Class Drug Order continued...

On 27th November 2014 following a review of the evidence of use and harm by the Advisory Council on the Misuse of Drugs, the Government issued a Temporary Class Drug Order (TCDO) on MPA. The TCDO will last for up to 12 months: possession of MPA during this time is not an offence, however, anyone caught making, supplying or importing the drug will face up to 14 years in prison and an unlimited fine

Samples submitted to WEDINOS that were identified as containing MPA came in a variety of different forms: powder, crystalline, capsule, tablet and solid, the most common form for this substance was powder.

MPA can be purchased as a substance in isolation, however it is also common in branded products sold not for human consumption, but that are consumed for a psychoactive effect. These branded products often contain a blend of several substances. WEDINOS has identified MPA in the following brands (*It must be noted that manufacturers often change the blends of substances used in branded products and that blends have been found to vary from region to region*):

- B3
- Banshee Dust
- Synthacaine
- Madcat
- Gogaine
- Purple Bomb
- Pink Panthers
- Charlie Sheen
- Dizzle Dust
- Dust Til Dawn
- Diablo XXX
- NRG-3
- NRG-2
- Project X
- Crank
- Rush
- Black Cats
- Blue Snowball
- China White
- Blow
- Bliss Ultra



Self-reported effects from MPA use include:

Increased Energy	Insomnia
Increased Confidence	Enhanced Senses
Euphoria	Increased Stamina
Relaxed	Agitation
Nausea	Paranoia
Empathy	Increased Libido
Irregular Heartbeat	Confusion
Vomiting	Auditory & Visual Hallucinations
Depression	Chest Pains
Memory Loss	Panic Attack
Headache	Loss of consciousness
Suicidal Ideation	

Information provided by WEDINOS sample provider effects database

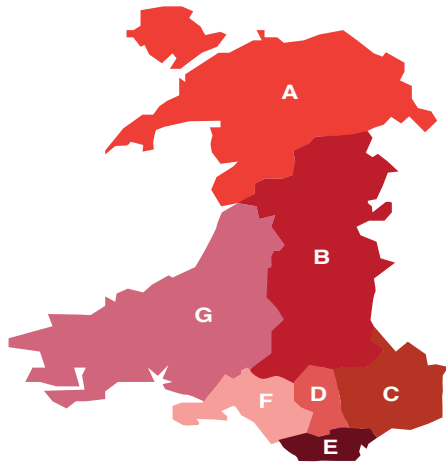
There is very little information available in relation to the human effects of MPA or its toxicity.

The National Programme of Substance Abuse Deaths¹: (NPSAD) reported 30 cases where MPA was found in post mortem toxicology, between 2012 and 2015. In 22 of these, MPA was implicated in the cause of death.

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 – 19 samples.
- B** - Powys Teaching Health Board – 2 samples.
- C** - Aneurin Bevan University Health Board – 93 samples.
- D** - Cwm Taf University Health Board – 4 samples.
- E** - Cardiff & Vale University Health Board – 54 samples.
- F** - Abertawe Bro Morgannwg University Health Board – 17 samples.
- G** - Hywel Dda University Health Board – 1 sample.

66 samples were received from England, 11 from Scotland and one 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 Aneurin Bevan University Health Board, 93 samples were received, accounting for 34 per cent of all samples analysed.

Psychoactive Substances

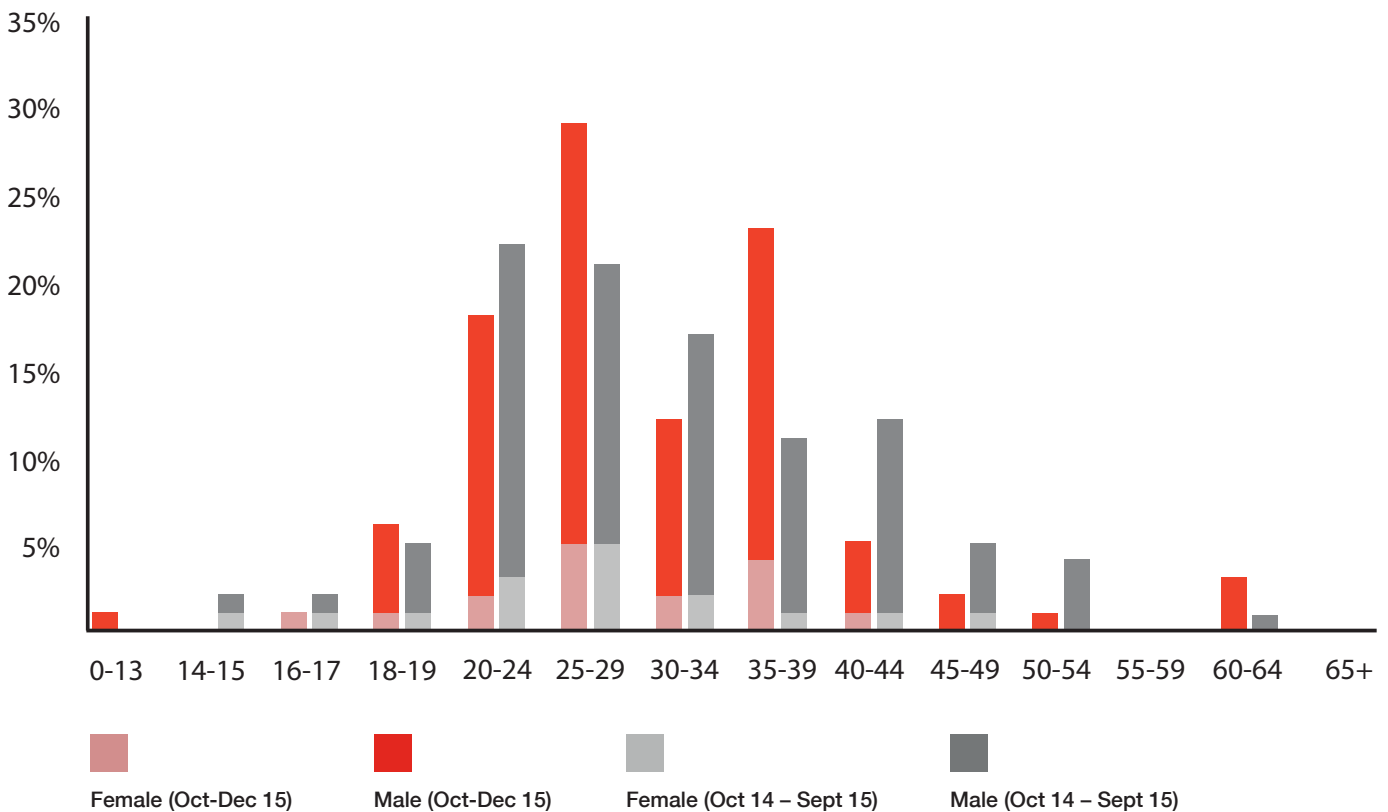
WHO...

Where a WEDINOS Effects Record was submitted and gender completed; 87 per cent (n=159) of submissions were from males. The remaining 13 per cent (n=23) were females.

The median age for all mind altering / psychoactive sample providers (Wales and wider UK) was 30 years (average age was 30 years old); with an age range of 13-62 years.

- Females - median age was 32 years and an average age of 30 years (range: 16-51 years)
- Males - median age was 29 years, with an average age of 30 years (range 13-62 years)

Gender / Age profile of samples providers – Psychoactive Samples



Reason for purchase

All samples

258 Mind Altering / Psychoactive samples were submitted for analysis during this quarter. 20 were submitted via Public Health Wales agreed sentinel providers of Steroids and Image Enhancing Drug (SIED) samples as SIEDs

Samples Submitted from Wales

87 per cent of Welsh samples were submitted via 26 services / organisations; with the remaining 13 per cent being submitted anonymously.

WHAT...

Of the 258 Mind Altering/Psychoactive samples:

- 39 samples were purchased in the belief that they were Class A substances
- 15 Class B
- 6 Class C
- 5 were subject to a TCDO
- 63 were believed not to be controlled
- A further 130 were submitted without any information relating to purchase intent, or perceived legal status

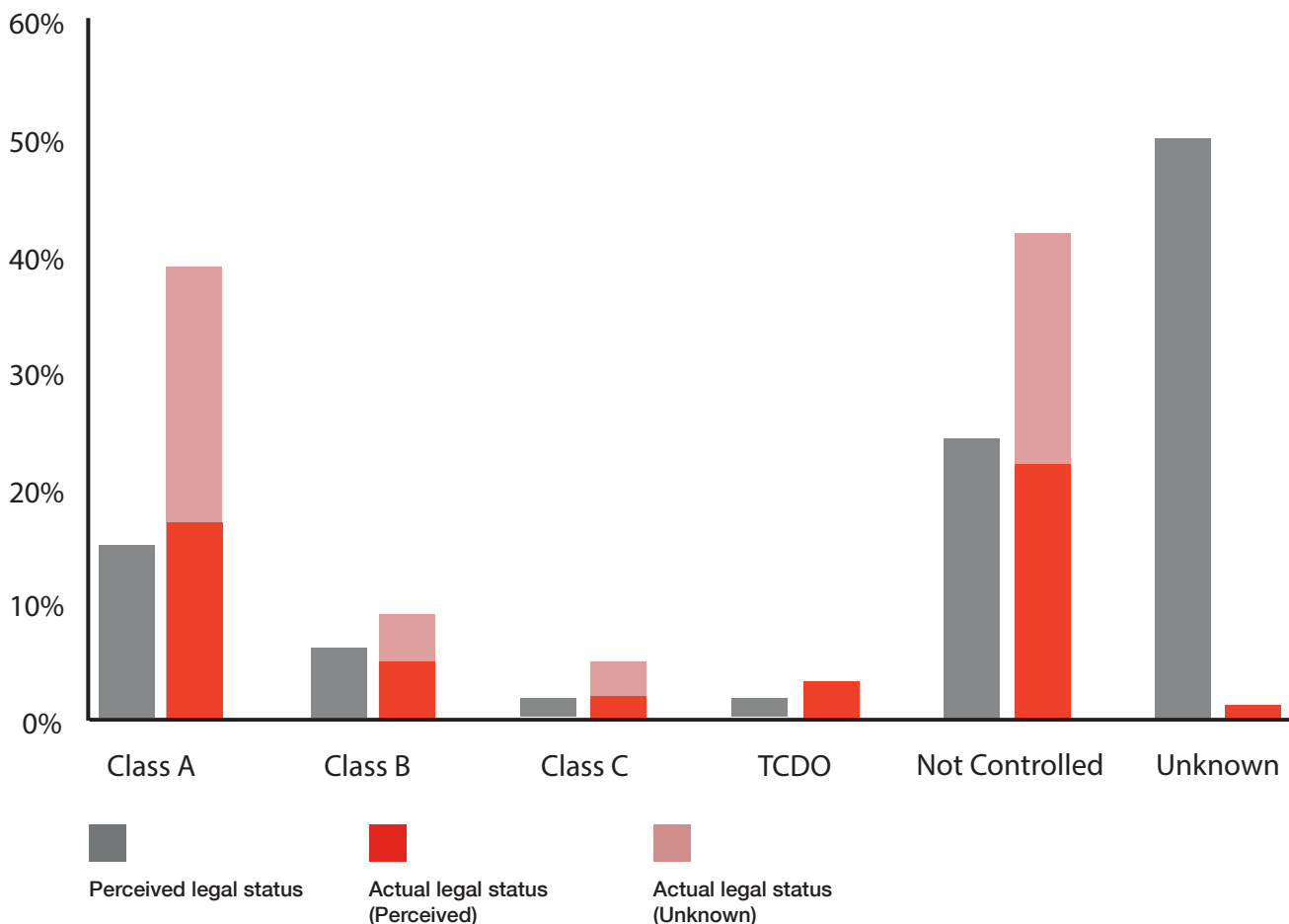
Post analysis we see that Class A increased from 39 samples to 102. Class B increased from 15 to 23 and Class C from 6 to 13. Substances that are not controlled increased from 63 to 109. It must be noted that although all groups increased with the post analysis categorisation of the “unknown” substances, several samples moved between classifications.

Examples of this include:

- Sample believed to be 2C-B – found to contain Cocaine upon analysis
- Five samples believed to be Cocaine – found to contain Ethylphenidate upon analysis
- Sample believed to be Dextroamphetamine – found to contain Cocaine upon analysis
- Sample believed to be MDMA – found to contain alpha-PVP upon analysis
- Sample believed to be Methoxetamine – found to contain 5-MeO-MiPT upon analysis
- Sample believed to be Methoxphenidine – found to contain Ketamine upon analysis
- Sample believed to be Cannabis – found to contain 5F-PB-22 upon analysis
- Sample believed to be LSD – found to contain 25C-NBOMe upon analysis
- Sample believed to be Diazepam – found to contain Diclazepam upon analysis
- Sample believed to be MDPV – found to contain 25I-NBOMe upon analysis

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

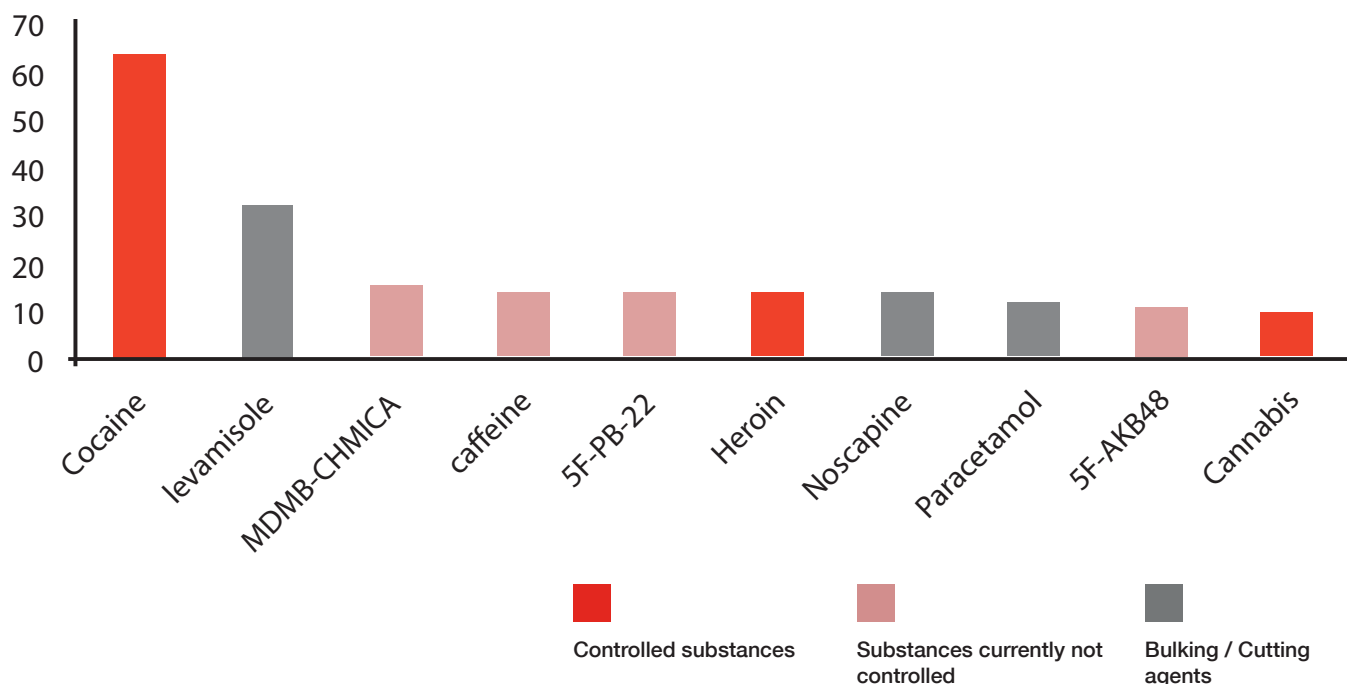
Of the 20 samples purchased and submitted as a “legal high” or “research chemical”; 11 contained controlled substances. These substances included Methylone, MDMA, Cocaine, 5-MeO-DALT, 2C-B, Cannabis, MZBP, Ketamine, and Methiopropamine.



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 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 MDMB-CHMICA; a position the substance has held since April 2014.

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

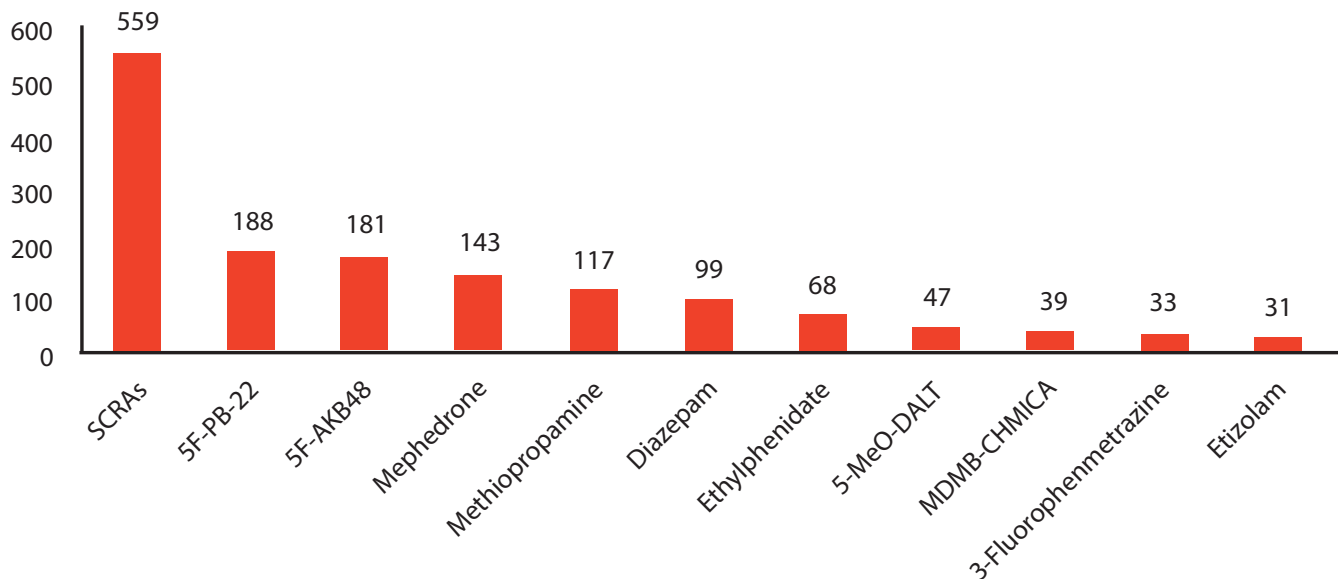
Oct 2015 to Dec 2015

Number 1 – Up 5	⬆️	MMB-CHMINACA
Number 2 – Down 1	⬇️	5F-PB-22
Number 3 – Down 1	⬇️	5F-AKB48
Number 4 – Non Mover	⋯	Methiopropamine
Number 5 – Non Mover	⋯	Diazepam
Number 6 – New Entry	⬆️	2C-B
Number 7 – Down 3	⬇️	3-Fluorophenmetrazine
Number 8 – New Entry	⬆️	4F-MPH
Number 9 – New Entry	⬆️	5-MeO-Mipt
Number 10 – New Entry	⬆️	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 no different with SCRAs sitting at Numbers 1, 2 and 3. What we have seen over the last quarter is rise of MDMB-CHMICA, meaning that for the first time since early 2014 neither 5F-PB-22 nor 5F-AKB48 occupy the position of most commonly identified NPS.

This quarter six SCRAs were identified either in isolation or combination in 35 samples (this accounts for 14 per cent of psychoactive samples).

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



SCRA's total 559 shows all SCRA's 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.

MDMB-CHMICA – a worrying chart climber

MDMB-CHMICA is a synthetic cannabinoid receptor agonist (SCRA). First notified to the European Early Warning System following its identification in Hungary on 11th September 2014 following a seizure of 0.19g of green/brown herbal product.

Believed to have a greater toxicity than most other synthetic cannabinoids. There have been a number of fatalities and non-fatal intoxications in Europe associated with this substance. Non-fatal intoxications have been characterised by loss of consciousness.

MDMB-CHMICA is structurally related compound MDMB-FUBINACA, which has been associated with fatalities and over 700 non-fatal intoxications in Russia (reported by the media).

Currently a legal substance in the United Kingdom, MDMB-CHMICA can be purchased either as a ready to smoke product in a herbal incense blend or in powder form.

MDMB-CHMICA was first identified in a sample submitted to WEDINOS on 26th September 2014. Since that time MDMB-CHMICA has been identified on 39 occasions. MDMB-CHMICA prevalence over the last quarter of 2015 not only saw it move into the WEDINOS quarterly Top Ten most commonly identified new psychoactive substances, but climb to be the number one substance. Reported adverse effects from those submitting samples include:

Agitation	Nosebleeds	Euphoria
Auditory Hallucination	Panic Attack	Increased Confidence
Breathlessness	Paranoia	Increased Energy
Chest Pains	Relaxed	Increased Libido
Confusion	Seizure	Insomnia
Depression	Suicidal Ideation	Irregular Heartbeat
Empathy	Visual Hallucination	Memory Loss
Enhanced Senses	Vomiting	Nausea

The is limited information around the effects of this substance or its toxicity.

MDMB has been profiled by WEDINOS in the following branded products:

- Sweet Leaf Obliteration
- SKYHIGH
- Vertex Pirate Edition
- Insane Joker
- K2 Black Edition



Form of Sample & Method of Consumption

Mind Altering/Psychoactive

Powder remains the most prevalent sample form

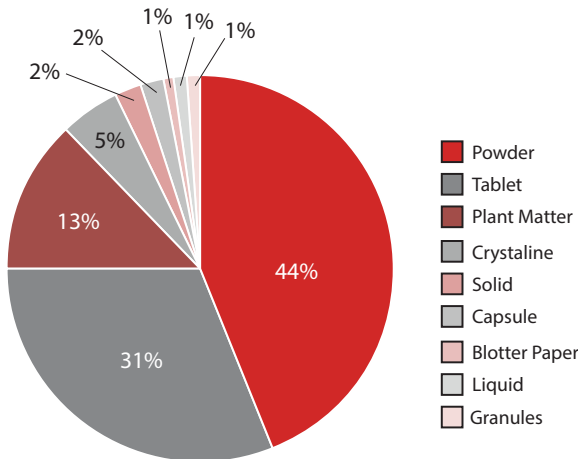
Samples provided that would have a Mind Altering/Psychoactive effect came in a variety of forms, consistent with previous quarters and reports where a method of consumption was identified the most prevalent sample form was powder.

Where samples were purchased as Mind Altering/Psychoactive & a method of consumption was recorded (42 per cent, n=109), 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 smoke (38 per cent) a substance followed by oral consumption (35 per cent). Snorting / sniffing as a route of administration made up 23 per cent of responses, with 4% stating they used their substance via intravenous injection. However, this chart may alter dramatically, if the route of administration was captured for all samples; for example 83 powder samples were submitted without any method of consumption data.

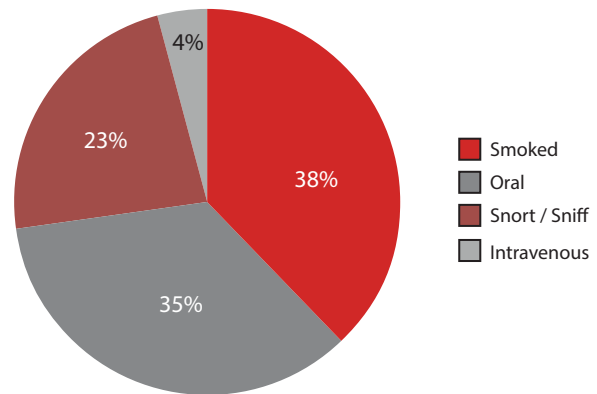
All samples where intravenous injection was selected as the method of consumption were purchased in the belief that they were heroin. The presence of heroin was analytically confirmed in all samples.

These samples were submitted by individuals who had experienced unexpected effects following their use or via services who had concerns over the welfare of their service users.

Mind Altering/Psychoactive - Form of Sample



Mind Altering/Psychoactive - Method of Consumption

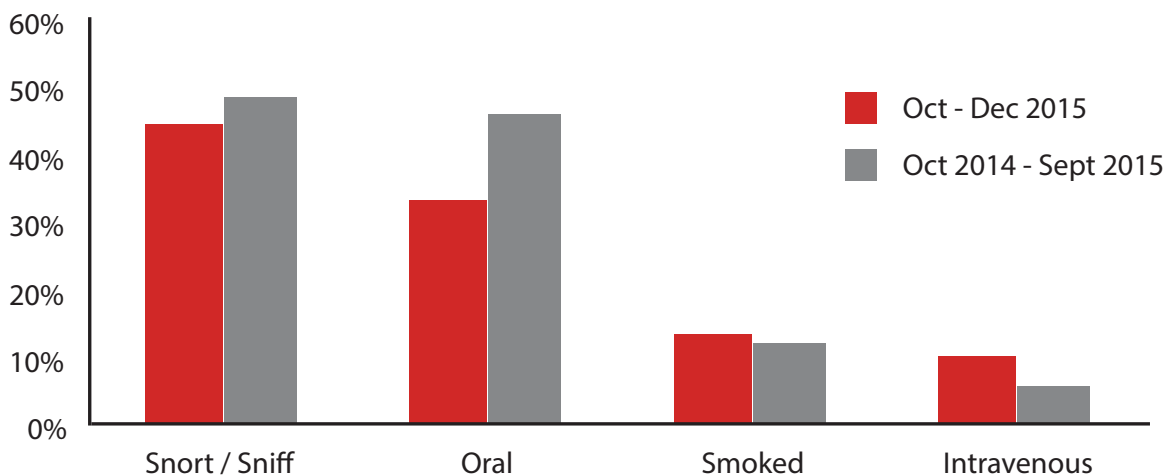


Changes of Methods of Consumption for Powders

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-14 to Sept 15, by remaining the most common method of consumption for these materials; its prevalence has fallen.

Intravenous use was higher for this quarter compared to the previous twelve months and related solely to the use of heroin. However, it should be noted that a method of consumption was recorded for 39 per cent of all powder and crystalline sample submitted during this quarter. To enable the accurate monitoring of trends in substance use, and for this to be followed by pragmatic and relevant harm reduction advice WEDINOS requests that as much of the sample and effects record is completed as possible. This includes method of consumption.

Reported Methods of Consumption (%)



GEOGRAPHIC PROFILES / LOCAL TRENDS

Abertawe Bro Morgannwg University Health Board (ABMU)

- Cumulative total: 219 samples.
- 17 samples were received from ABMU this quarter.
- During analysis eight substances were identified either in combination or in isolation. Three samples had no active compound identified.
 - The SCRA, MDMB-CHMICA, was identified in a sample from Bridgend.

Aneurin Bevan University Health Board (ABU)

- Cumulative total: 613 samples
- 93 samples were received ABU this quarter.
- During analysis of those samples, 30 substances were identified either in combination or in isolation, with three 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 and methamphetamine. Samples containing MDMA were also submitted. Three synthetic cannabinoid receptor agonists were also identified including nine samples that contained MDMB-CHMICA
 - Samples of interest include:
 - A sample submitted as diazepam that upon analysis was found to contain diclazepam. A study by Babbini et al. showed that diclazepam is approximately 4–8 times more potent than diazepam.

Betsi Cadwaladr University Health Board (BCU)

- Cumulative total: 159 samples
- 19 samples were received from BCU this quarter
- During analysis of those samples, 20 substances were identified either in combination or in isolation. One sample was found to contain no active compound.
- SCRA's were the most commonly identified substances within BCU, with three strains being identified:
 - MDMB-CHMICA
 - 5F-PB-22
 - 5F-AKB48
- Also identified were substances from the stimulant, depressant, hallucinogenic and dissociative substance categories; including MZBP, diazepam, 1p-LSD and ketamine.
- A sample submitted as methoxpheidine was found to contain ketamine.
- A sample submitted as ethylphenidate was found to contain cocaine

Cardiff & Vale University Health Board (CVU)

- Cumulative total: 511 samples
- 54 samples were received from CVU this quarter
- During analysis 34 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 SCRA's were identified, including MDMB-CHMICA. Also, identified were 4 benzodiazepines / benzodiazepine analogues.

Cwm Taf University Health Board (CTU)

- Cumulative total: 62 samples
- 4 samples were received from CTU this quarter
- One sample was found to contain caffeine, another 5F-AKB48. A blue tablet was identified as diazepam, the fourth sample 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: 70 samples
- 1 samples were received from HDU this quarter
- During analysis the two SCRA compounds 5F-PB-22 and 5F-AKB48 were identified in combination.

Powys Teaching Health Board (PT)

- Cumulative total: 22 samples
- 2 samples were received from PT this quarter
- During analysis two substances were identified in isolation, or combination.
- One sample contained ethylphenidate and the other the SCRA MDMB-CHMICA

News from the Home Office and abroad

- Preventing opioid overdose deaths with take-home naloxone - EMCDDA, Lisbon, January 2016
<http://www.emcdda.europa.eu/publications/insights/take-home-naloxone>
- Drugnet Europe 92 - November 2015 – Newsletter of the EMCDDA
<http://www.emcdda.europa.eu/publications/drugnet/92>
- Report on the risk assessment of 4,4'-DMAR in the framework of the Council Decision on new psychoactive substances - EMCDDA, October 2015
<http://www.emcdda.europa.eu/publications/risk-assessment/44-dmar>
- Report on the risk assessment of MT-45 in the framework of the Council Decision on new psychoactive substances - EMCDDA, October 2015
<http://www.emcdda.europa.eu/publications/risk-assessments/mt-45>
- Misuse of Drugs Act 1971 (Temporary Class Drug) (No. 3) Order 2015 subjects N-methyl-1-(thiophen-2-yl)propan-2-amine (methiopropamine or MPA) and its simple derivatives, to a temporary class drug order under the Misuse of Drugs Act 1971 – 26th November 2015
<https://www.gov.uk/government/publications/circular-0282015-misuse-of-drugs-act-1971-temporary-class-drug-no-3-order-2015/circular-0282015-misuse-of-drugs-act-1971-temporary-class-drug-no-3-order-2015-si-20151929>
- ACMD's temporary class drug order report on Methiopropamine – 26th November 2015
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479996/23_November_-_TCDO_Report_for_MPA.pdf
- How can opioid substitution therapy be optimised to maximise recovery outcomes for service users? – ACMD, 23rd October 2015
<https://www.gov.uk/government/publications/how-can-opioid-substitution-therapy-be-optimised-to-maximise-recovery-outcomes-for-service-users>

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.

Samples may be rejected if no postcode is supplied, demographic information is missing or where a sample has been consumed the grey 'Dose and Effects' section on the sample and effects record has not been completed.