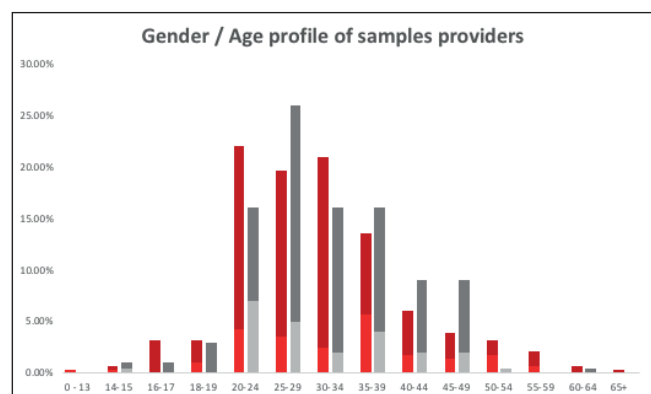
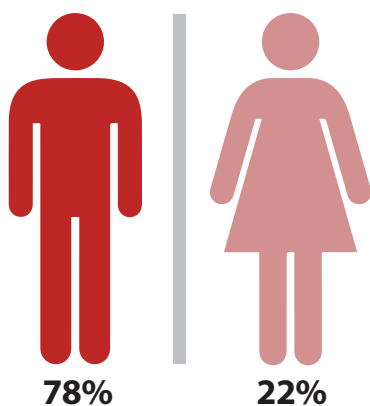


**In this issue: October to December 2018 – 836 samples received – 639 analysed – 63 substances identified.**

**Project launch (Oct 2013) to Sept 2018 – 10,107 samples received – 8,397 analysed – 389 substances identified.**

## Who:

53 per cent of samples were accompanied with demographic data.



## Where:

Samples were submitted from across the United Kingdom. Samples were submitted from 38 services as well as anonymously by individuals.



## What:

Top ten most commonly identified substances. NPS refers to New Psychoactive Substances.

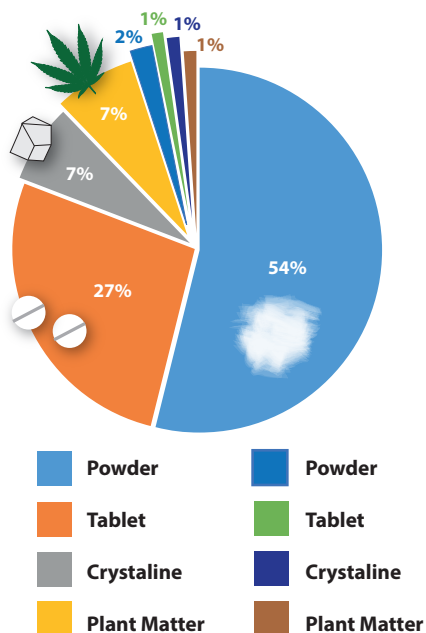
Number	All Substances	NPS	Number	All Substances	NPS
1	Ketamine	Ketamine	6	Etizolam	5F-ADB
2	Cocaine	Alprazolam	7	Diazepam	Diclazepam
3	MDMA	Etizolam	8	Cannabis	Zolpidem
4	Caffeine	AMB-FUBINACA	9	Amphetamine	Modafinil
5	Alprazolam	2C-B	10	10 Heroin	Mephedrone

# What (Cont.):

This quarter several samples were found to contain different substances upon analysis to the purchase intent:

Sample believed to be...	Found to contain...
8 x Diazepam	Etizolam
3 x Diazepam	Diclazepam
2 x Diazepam	Diclazepam & Alprazolam
Diazepam	Alprazolam
Diazepam	Clonazolam
8 x Alprazolam	Etizolam
Alprazolam	Clonazolam
Pyrozolam	Etizolam
Zopiclone	Etizolam
CBD oil	5F-ADB
2 x MDMA	Ketamine
2C-B	3-Methylmethcathinone
4 x CBD oil	5F-ADB

## Form:



## How:

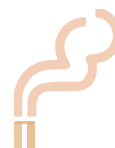
### Route of administration – Powders and crystalline material:



Snort / Sniff  
52 per cent



Oral  
35 per cent



Smoke  
10 per cent



Intravenous  
3 per cent

Here the intravenous use relates to samples of heroin and amphetamine.

As can be seen above and on the previous page, benzodiazepines may often be unknowingly substituted for a different benzodiazepine e.g. diazepam for etizolam. However, these substances have varied therapeutic dose ranges and duration of onset and effect, as outlined in the table below.

Benzodiazepine	Therapeutic Dose	Dose Range	Onset of Effects	Dosage of Effects	Toxicity
Diazepam	For treatment of anxiety - 2mg 3 times a day, this can be increased further under clinical supervision. <sup>1</sup>	Light – 2.5 to 5mg Common – 5 to 15mg Strong – 15 to 30mg <sup>2</sup> .	30 to 90 mins.	12 to 24 hours	The primary toxicity of benzodiazepines is central nervous system depression; the effects are potentially more severe when co-ingested with alcohol and other CNS depressants <sup>3</sup> .
Etizolam	0.5mg 2 or 3 times per day <sup>4</sup> . Etizolam is not licenced for use in the UK.	Light – 0.2 to 0.5mg Common – 0.5 to 1mg Strong – 1 to 5mg <sup>5</sup> .	15 to 25 mins.	5 to 7 hours	Etizolam has the full range of group-specific benzodiazepine effects: anxiolytic, sedative, hypnotic, anticonvulsant and muscle relaxant. It is 6-10 times more potent than diazepam <sup>6</sup> .
Alprazolam	250–500mg 3 times a day, this can be increased under clinical supervision <sup>7</sup> .	Light – 0.25 to 0.5mg Common – 0.5 to 1.5mg Strong – 1.5 to 2mg <sup>8</sup> .	20 to 40 mins.	5 to 8 hours	In overdose, alprazolam is significantly more toxic than other benzodiazepines (Isbister et al, 2004) and death has occurred when alprazolam was taken alone; two females died following intentional ingestions of unknown quantities of alprazolam (Jenkins et al, 1997; Edinboro and Barker, 1985) <sup>9</sup> .

1. <https://bnf.nice.org.uk/drug/diazepam.html>  
 2. <https://psychonautwiki.org/wiki/Diazepam>  
 3. <https://www.toxbase.org/Poisons-Index-A-Z/D-Products/Diazepam/>  
 4. Fukami G, Hashimoto T, Shirayama Y, Hasegawa T, Watanabe H, Fujisaki M, et al. Effects of etizolam and ethyl loflazepate on the P300 event-related potential in healthy subjects. *Ann Gen Psychiatry*. 2010;9:37.  
 5. <https://psychonautwiki.org/wiki/Etizolam>  
 6. WHO Expert Committee on Drug Dependence: Twenty-seventh report, World Health Organisation, Geneva, 1991.  
 7. <https://bnf.nice.org.uk/drug/alprazolam.html#indicationsAndDoses>  
 8. <https://psychonautwiki.org/wiki/Alprazolam>  
 9. <https://www.toxbase.org/Poisons-Index-A-Z/A-Products/Alprazolam/>

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Benzodiazepine	Therapeutic Dose	Dose Range	Onset of Effects	Dosage of Effects	Toxicity
Diclozepam	No evidence of medical use.	Light – 1 to 2mg Common – 2 to 3mg Strong – 3 to 4mg	10 to 45 mins.	8 to 12 hours	There is no available data on pharmacokinetics on this agent.
Clonazepam	For treatment of panic disorder - 1–2mg daily <sup>10</sup> .	Light – 0.25 to 0.5mg Common – 0.5 to 1mg Strong – 1 to 2mg <sup>11</sup> .	20 to 60 mins.	8 to 12 hours	Drowsiness and ataxia resulting from an overdose of up to 60mg <sup>12</sup> .
Clonazolam	No evidence of medical use.	Light – 75 to 200mcg Common – 200 to 400mcg Strong – 400 to 1000mcg <sup>13</sup> .	10 to 30 mins.	6 to 10 hours	There is limited evidence of the effects of clonazolam. Clonazolam is reported to be highly potent, causing strong sedation and amnesia following oral doses as low as 0.5mg <sup>14</sup> .

10. <https://bnf.nice.org.uk/drug/clonazepam.html#indicationsAndDoses>

11. <https://psychonautwiki.org/wiki/Clonazepam>

12. Baselt, Randall C. (Randall Clint), 1944-. Disposition of Toxic Drugs and Chemicals in Man / Randall C. Baselt. Foster City, Ca :Biomedical Publications, 2010. Print.

13. <https://psychonautwiki.org/wiki/Clonazolam>

14. Moosmann, B. , King, L. A. and Auwärter, V. (2015), Designer benzodiazepines: A new challenge. World Psychiatry, 14: 248-248. doi:10.1002/wps.20236.