

In this issue: July to September 2019 – 837 samples analysed – 99 substances identified.
Project launch (Oct 2013) to Sept 2019 – 13,928 samples received – 10,579 analysed – 421 substances identified.

2019 has seen increases in the number of samples analysed each quarter compared to 2018.

For this reporting period, the number of samples analysed is 61 per cent higher than the same period in 2018. This is due to a number of factors including ongoing stakeholder development and networking, increased analytical capacity and the routine collection and analysis of night-time economy (NTE) samples from nightclub amnesty bins throughout Cardiff and Swansea. With an increased number of NTE samples we are now able to report specifically on samples received from within those settings. These samples are submitted without demographic information, self reported effects experienced or information relating to route of administration.

Community Samples

These are samples submitted anonymously by individuals, through a variety of collection mechanisms including via services and individuals working with or concern about individuals using substances, and the postal mechanism. 573 samples fall within this category.

Who:

91 per cent (n=522) of these samples were accompanied with basic demographic information including sex and age.

Age range – All: 14 to 80yrs

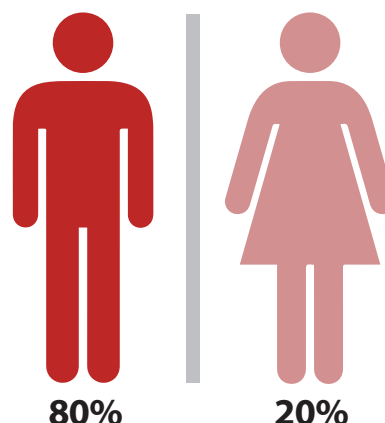
Median age – All : 33yrs

Age range – Male: 14 to 80yrs

Median age – Male: 32

Age range – Female: 16 to 70yrs

Median age – Female: 35



What:

WEDINOS collects self-reported data from individuals provided on the sample and effects record. This includes what an individual believed they had purchased (purchase intent). The following table compares the Top 10 substances by purchase intent with confirmed content following analysis.

Number Community purchase intent				Number Community post analysis			
1	Diazepam	6	Ketamine	1	Etizolam	6	Caffeine
2	Found / Unknown	7	Cannabis	2	Diazepam	7	Ketamine
3	Alprazolam	8	Spice	3	Cocaine	8	Flualprazolam
4	MDMA	9	Zopiclone	4	MDMA	9	4F-MDMB-BINACA
5	Cocaine	10	LSD	5	Alprazolam	10	Cannabis

As is shown, there are not only positional changes between the two Top 10s, but also entries and exits. Two of the new entries post analysis, etizolam and flualprazolam, can be explained through their identification in samples purchased as diazepam and alprazolam. This would also account for the positional fall of those substances. The rise of cocaine and the entrance of cannabis, was due to those substances prevalence amongst samples submitted as unknown substances or found items.

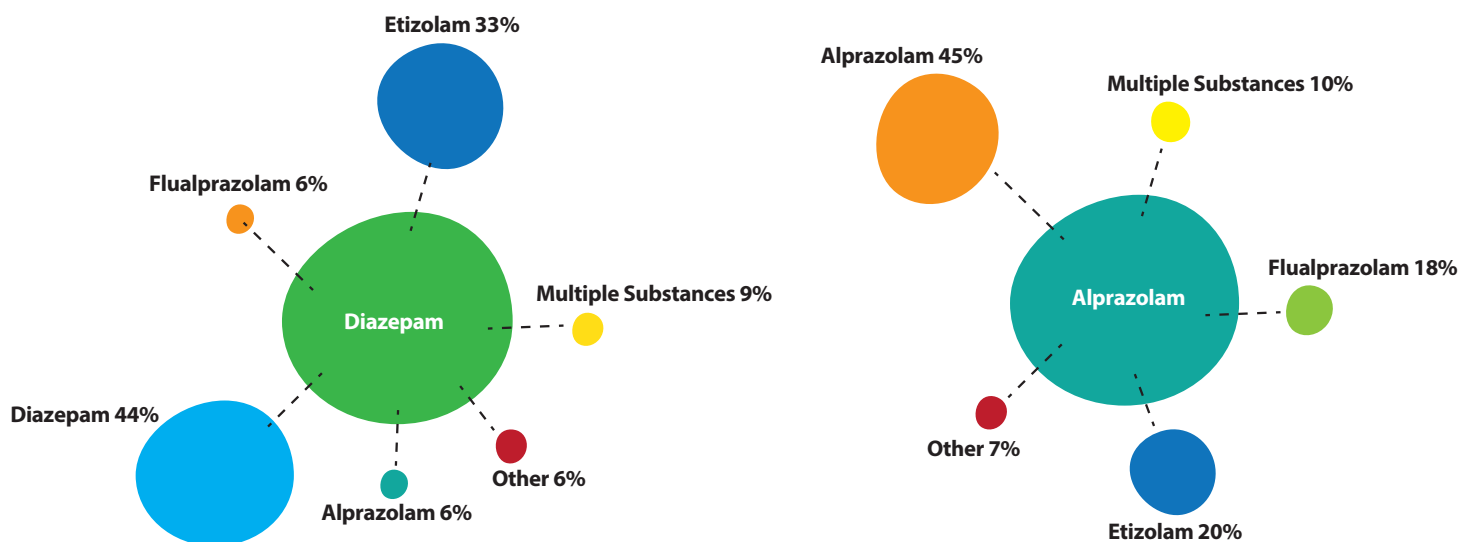
Benzodiazepines:

Since the launch of WEDINOS the programme has identified numerous benzodiazepine-type NPS and through previous reports evidenced their growing prevalence amongst samples analysed. Over the past twelve months benzodiazepines as a group have been the most commonly identified substances by WEDINOS, and this quarter continues that trend. Etizolam, was not only the most commonly identified benzodiazepine, but also the most commonly identified substance, followed by diazepam. Alprazolam and flualprazolam also featured amongst the top ten most commonly identified substances. A further six benzodiazepines were also identified outside the top 10, albeit with each identified on less than 10 occasions.

When discussing benzodiazepines it must be remembered that the therapeutic and recreational dose, potency, onset and duration of effects varies greatly. Alongside the continued substitution of one benzodiazepine for another within the 'non-medical use' market, makes this an area of public health concern.

Benzodiazepine – Substance Substitution

The following graphics show the percentage breakdowns of substances identified in samples submitted as diazepam and alprazolam.



As was mentioned earlier and is clearly demonstrated in the above graphics etizolam is a popular substitution for both diazepam (33 per cent) and alprazolam (20 per cent). In fact, etizolam is more commonly seen as a substitute for other benzodiazepines than it as a purchase intent, with 94 per cent of etizolam identifications being within samples that were purchased as something else.

The presence of flualprazolam in WEDINOS samples has been increasing over the past six months, with the number of identifications almost doubling this quarter (n=30) compared to the last (n=17). As with etizolam a worrying proportion (97 per cent, n=29) of these identifications are in samples purchased as something else.

Flualprazolam was formally notified on 2 February 2018 by the European Monitoring Council for Drugs and Drug Addictions on behalf of Sweden. Serious adverse events with confirmed exposure to flualprazolam have been reported. In total, 26 deaths with confirmed exposure to flualprazolam that occurred in 2018 have been reported by Sweden (24 deaths) and Finland (2 deaths).

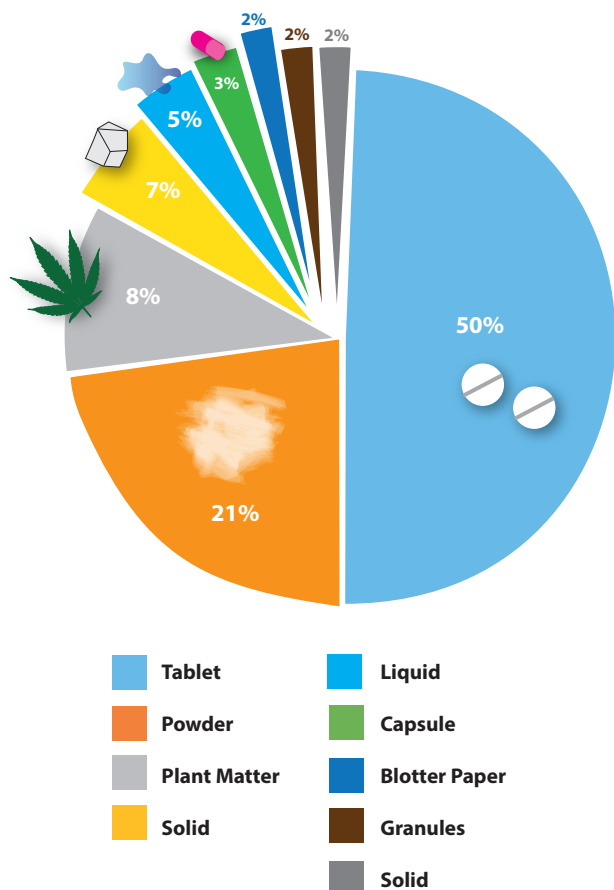
Flualprazolam was found to be more potent than alprazolam in all of the tests conducted ¹.

Alongside the rise in the number of flualprazolam substitutions within the illicit diazepam and alprazolam supply, WEDINOS has also seen an increase in the number of samples that have been found to contain multiple substances. The following combinations were identified this quarter:

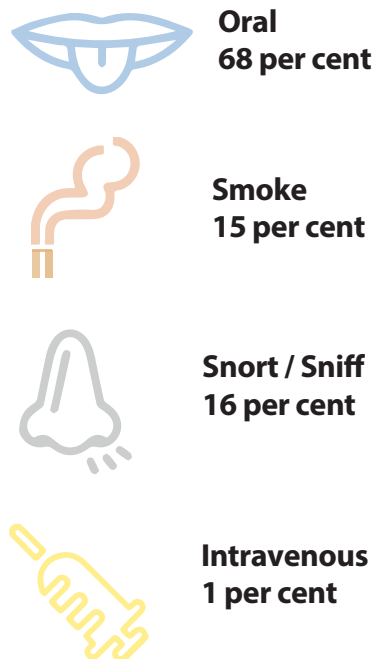
Purchased as diazepam	Purchased as alprazolam
Alprazolam and ketamine	Cyproheptadine and promethazine
2 x Alprazolam and Diclazepam	2 x Etizolam and flualprazolam
Etizolam and 5F-EMB-PINACA	Etizolam, codeine and chlorpheniramine
6 x Etizolam and Flualprazolam	Etizolam and caffeine
2 x Etizolam and Melatonin	Flualprazolam and ketamine
Etizolam, alprazolam and diclazepam	

1. Hester Jr JB, et al. 6-Phenyl-4H-s-triazolo [4, 3-a][1, 4] benzodiazepines which have central nervous system depressant activity. J Med Chem. 1971;14(11):1078-81.

How: Sample Form:



Route of Administration Community - All:



Route of Administration (Powders and crystalline material):



Here the intravenous use relates to samples of amphetamine, cocaine and Crack Cocaine.

Night-time economy

128 samples were received from night-time economy venues from within Cardiff and Swansea city centres.

As these samples are collected from within night club amnesty bins they are not accompanied with any demographic data or information relating to purchase intent. Collecting and analysing these samples allows WEDINOS to monitor recreational drug use market.

Over the past quarter the most commonly identified substances from this setting were:

No.	Night Time Economy
1	Cocaine
2	MDMA
3	Ketamine
4	Levamisole
5	Norcocaine
6	Diazepam
7	Paracetamol
8	Benzocaine
9	Caffeine
10	2C-B