

## Drug Checking Service (SAS)

### Report on samples analyzed in February and March 2022

#### Key points

- During this period, we analyzed **38 samples**.
- Mannitol (a sugar), caffeine (a mild stimulant), and cellulose (an inactive filler) were the cutting agents most commonly detected.
- **One sample, purchased as MDMA, was found to be Eutylone, a synthetic cathinone in the stimulant category.**

#### Data on the users of our service for February and March :

37 users of our mobile service

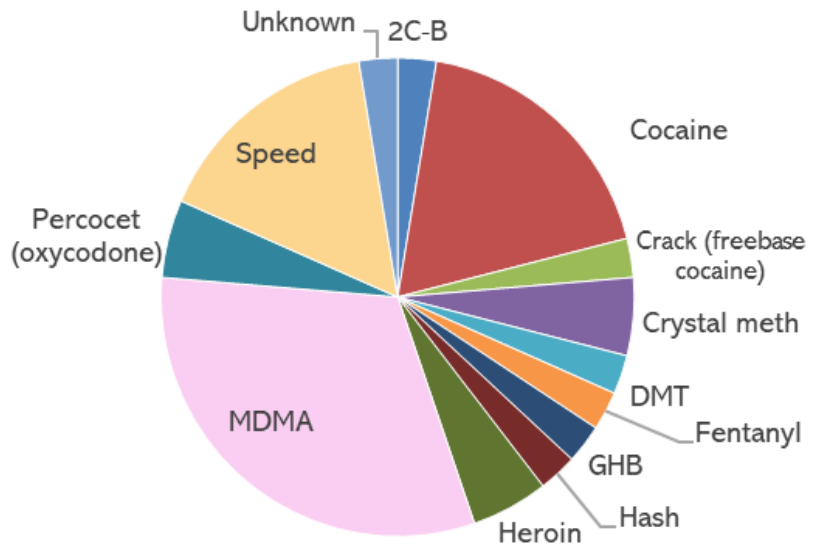
Service users without analysis (material distribution and overdose prevention): 13

Service users with analysis: 24

Total number of samples: 38

#### Variation of analyzed samples

Assumed substance	Number of samples
2C-B	1
Cocaine	7
Crack (freebase cocaine)	1
Crystal meth	2
DMT	1
Fentanyl	1
GHB	1
Hash	1
Heroin	2
MDMA	12
Percocet (oxycodone)	2
Speed	6
Unknown	1



## Noteworthy Sample

- One sample, purchased as MDMA, was found to be **Eutylone**.
  - Eutylone is a synthetic cathinone, a member of the family of substances sometimes called “bath salts”.
  - Eutylone is a stimulant.
  - The short and long-term effects are not well-studied. However, the reported effects have been described as similar to MDMA, possibly with insomnia and paranoia.
  - The dosages of Eutylone are not known. However, Eutylone has been reported to be stronger than MDMA, so there is a risk of taking a high dose of Eutylone if it is believed to be MDMA.
  - The risk of negative effects is increased at higher doses. Reports of unpleasant experiences are more common when a person re-doses.

### Commonly seen cutting agents:

- Caffeine
  - Caffeine is a legal substance that is often found in samples of speed (amphetamine/methamphetamine), fentanyl, and heroin. It is a mild stimulant but can cause strain on the heart when mixed with other stimulants or depressants.
- Cellulose
  - Cellulose is often seen in pills from both pharmaceutical and non-pharmaceutical origin. As a substance that can be compressed and hold its form, it is used in mixtures for pressed pills. It is not psychoactive. Cellulose is useful in many cases because the active component of a medication may be just 5% or less of the entire pill.
- Mannitol
  - Mannitol is a sweetener used in food and beverages that is also sometimes used as a medication to lower pressure in the eyes. We have detected mannitol in samples of cocaine, MDMA, and fentanyl.

## Our drug checking technologies have limits:

- Fentanyl test strips:

These strips can only detect fentanyl, and if the sample is not mixed properly, a false negative may be obtained. False positives have been observed with methamphetamine and MDMA if too much sample is used. Research into whether test strips can reliably detect fentanyl analogues (e.g. carfentanil or acetyl fentanyl) is limited.

- Benzodiazepine test strips:

These test strips are most reliable for detecting the most commonly prescribed benzodiazepines (e.g. alprazolam (Xanax) and diazepam (Valium)). Their reliability is limited when it comes to detecting the newer benzos such as etizolam. Because benzodiazepines may be present in a sample in small amounts and are not easily dissolved, a negative result cannot confirm that there are no benzodiazepines in the sample.

- Colorimetry:

The observed color is the result of the complete composition of the sample, and stronger colors will dominate weaker colors. Even if the colors of the reaction match what is expected from the pure substance, other unexpected compounds may be present. The ability of the colorimetric test to identify the components of a mixture depends on the nature of those components and the homogeneity of the sample. Using more reagents to test your sample increases the power of differentiation, but reagent analysis cannot confirm that a sample is pure or safe.

- FT-IR:

The FT-IR cannot detect substances present at a concentration of 5% or less. It can also only identify substances that are in the database, which might not contain newly synthesized substances. When analyzing a mixture, the FT-IR can only detect a maximum of 5 components, each of which must be present at more than 5% to be detected. We are not able to give results on the percentage composition, or purity of a sample. We can only conclude that if a component is detected, it is present at more than 5%. Even if only one substance is detected in a sample, this does not mean that there are no other substances in the sample present at concentrations of 5% or less.

## Drug Checking Service (SAS) - Report for February and March 2022



ID	Presumed substance	Sample type	Colour and shape	FT-IR Results (See note 1 and 2)	Test strip results		Apparent composition	Comments
					Fentanyl test strips (Note 3)	Benzo test strips (Note 4)		
57	2CB	Pill "Batman"	yellow, oval	Cellulose and 2C-B	Negative		Cellulose and 2C-B	
37	Cocaine	Powder	white	Cocaine and an unknown match	Negative	Negative	Cocaine with one or more other non-identifiable substances	Part of the FT-IR spectrum could not be explained. Colorimetry indicated the presence of cocaine with other unidentifiable substances.
47	Cocaine	Powder	white	Cocaine and an uncertain match	Negative		Cocaine with one or more other un-identifiable substances	Part of the FT-IR spectrum could not be explained.
73	Cocaine	Powder	white	Cocaine	Negative	Negative	Cocaine and an adulterant. Might be a fentanyl analog or a kind of benzodiazepine which was not detected with the test strips.	The person reported effects that are consistent with the presence of depressant adulterant in their substance.
48	Cocaine	Powder	white	Cocaine	Negative		Cocaine	Colorimetry indicated the possible presence of another substance, but could not confirm which.
56	Cocaine	Powder	white	Cocaine and mannitol	Negative		Cocaine and mannitol	
59	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
61	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
46	Crack (freebase cocaine)	Crystals	white	Freebase cocaine	Negative		Freebase cocaine	
43	Crystal (methamphetamine)	Crystals	white	Methamphetamine	Negative		Methamphetamine	
71	Crystal (methamphetamine)	Crystals	white	Methamphetamine	Negative		Methamphetamine	
68	DMT	Liquid from a vape pen	brown-amber	Propylene glycol and an unknown match			Propylene glycol and substances un-identifiable	Propylene glycol is a common diluting agent for vape pens.
69	Fentanyl	Paste	purple	Caffeine, mannitol, and an uncertain match	Positive	Positive	Caffeine, mannitol, and the presence of fentanyl and benzodiazepine(s)	
45	GHB	Liquid	transparent	GHB and an uncertain match	Negative		GHB and possibly GBL or other substances	The uncertain FT-IR match might be GBL.
72	Hash (THC)	Hard paste	brown-black	Unknown carbohydrate	Negative	Negative	Inconclusive. We were not able to find psychoactive substances.	
40	Heroin	Used material, maxi-cup with cotton	indigo		Positive	Negative	Non-identifiable substances with the presence of fentanyl	Not enough substance for FT-IR analysis.
42	Heroin	Used material, maxi-cup with cotton	brown-beige		Positive	Negative	Non-identifiable substances with the presence of fentanyl	Not enough substance for FT-IR analysis.
38	MDMA	Used material, pipe with bulb	black		Negative	Negative		We cannot form conclusions on the composition based solely on test strip results.
50	MDMA	Crystals	brown	MDMA and mannitol	Negative		MDMA and mannitol	
51	MDMA	Capsule with crystals	pale-beige	MDMA	Negative		MDMA	
52	MDMA	Capsule with crystals	pale-grey	Eutylone	Negative		Eutylone	Eutylone is a synthetic cathinone, which belongs to the family of "bath salts". It is a stimulant, which can cause insomnia and paranoia. People who think they are using MDMA may be tempted to take another dose when they do not feel the effects. At higher doses, the negative effects are more pronounced.

ID	Presumed substance	Sample type	Colour and shape	FT-IR Results (See note 1 and 2)	Test strip results		Apparent composition	Comments
					Fentanyl test strips (Note 3)	Benzo test strips (Note 4)		
55	MDMA	Crystals	mauve	MDMA	Negative		MDMA	
58	MDMA	Crystals	beige	MDMA and an unknown match	Negative		MDMA and an un-identifiable substance	Part of the FT-IR spectrum could not be explained.
60	MDMA	Poudre	white	MDA	Negative		MDA	
62	MDMA	Capsule avec poudre	white	MDMA and mannitol	Negative		MDMA and mannitol	
63	MDMA	Capsule avec poudre	white	MDMA and mannitol	Negative		MDMA and mannitol	
64	MDMA	Crystals	pale-yellow	MDMA	Negative		MDMA	
66	MDMA	Crystals	brown	MDMA	Negative		MDMA	
67	MDMA	Crystals	mauve	MDMA	Negative		MDMA	
53	Percocet (oxycodone)	Pill "TEC 30"	white, round	Cellulose	Negative	Negative	Cellulose	The active components were not able to be detected.
54	Percocet (oxycodone)	Pill "TEC 30"	white, round	Cellulose	Negative	Negative	Cellulose	The active components were not able to be detected.
44	Speed	Pill "ICE"	white, rectangular	Methamphetamine and an uncertain match	Negative		Methamphetamine and an unknown substance	
49	Speed	Pill "F 8"	white, oval	Citalopram and lactose	Negative		Citalopram and lactose	This sample seems to be a crushed pill of Celexa, an anti-depressant.
39	Speed (amphetamine)	Pill "ICE"	white, rectangular	Caffeine, cellulose, and an uncertain match	Negative	Negative	Caffeine, cellulose, and possibly (meth)amphetamine	The colorimetric reagents indicated the presence of methamphetamine.
70	Speed (amphetamine)	Pill "Snapchat"	grey-white, round	Caffeine and cellulose	Negative		Caffeine, cellulose, and suspected methamphetamine	The colorimetric reagents indicated the presence of methamphetamine.
41	Speed (amphetamine)	Powder in a maxicup	white	Cellulose and caffeine	Negative	Negative	Cellulose, caffeine, and possibly (meth)amphetamine	The results of colorimetry indicate that the sample is a mixture of multiple substances and is not homogenous.
65	Speed (methamphetamine)	Pill "ON"	white, round	Cellulose, methamphetamine, and caffeine	Negative	Negative	Cellulose, methamphetamine, and caffeine	
36	Unknown	Powder	white	Paracetamol and aminopyrine	Negative	Negative	Paracetamol and aminopyrine	This sample appears to be a crushed pill of an analgesic or anti-inflammatory drug.

#### NOTES

- 1 The FT-IR matches are presented in the order that they are found. This does not translate to the % composition or the purity of the sample.
- 2 The FT-IR cannot detect substances that are present at a concentration of less than 5%. In addition, it cannot detect substances that are not in our database, which may include newly synthesized substances.
- 3 The detection limit of the fentanyl test strips is 20 ng/mL. These test strips can only detect fentanyl, and if the sample is not well mixed, a false negative result might be obtained.
- 4 The detection limit of the benzodiazepine test strips is 300 ng/mL. These test strips cannot detect all benzodiazepines.

Number of service users in February 13 (8 without drug checking)  
Number of substances in February 5  
Number of service users in March 24 (5 without drug checking)  
Number of substances in March 33