August 17 2022

groupe de recherche et d'intervention psychosociale

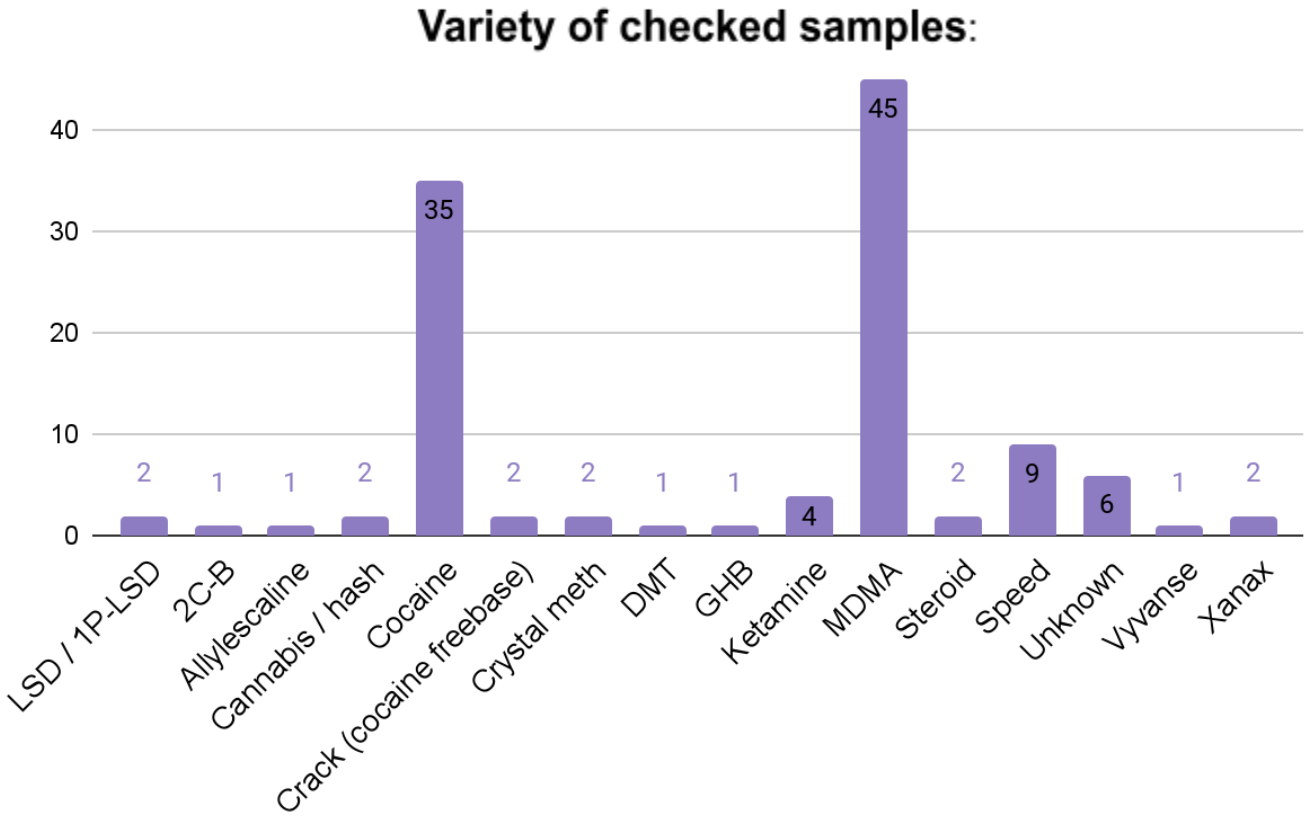
Drug Checking Service (SAS)

Report on samples checked in June and July 2022

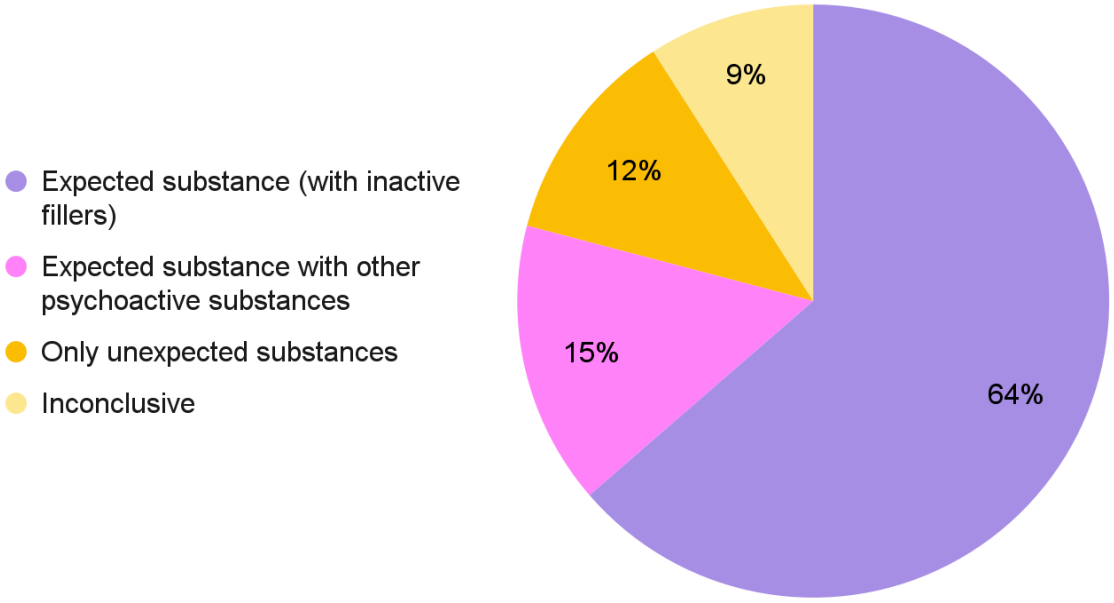
Key Points

- During this period we checked **116 samples**.
- Multiple samples were not what they were expected to be. For example, one sample that was expected to be MDMA was found to be N-ethylpentylone (a cathinone or ”bath salt”), and one sample thought to be Vyvanse (a stimulant) was found to be a benzodiazepine (a depressant).
- In 45 samples of MDMA, 20% did not contain MDMA, and we found no relationship between the colour of the MDMA and the identity of the substances in the samples.

Data on the users of our service in June and July:
126 users of our mobile service
Users without drug checking (material distribution and overdose prevention): 43
Users with drug checking: 83
Total number of samples: 116



General results:



Commonly seen cutting agents:

- Dimethyl sulfone
  - Dimethylsulfone, also known as methylsulfonylmethane (MSM), is a substance that occurs naturally in the human body and in some plants and foods. Its function has not been fully discovered, but it is considered a form of dietary sulfur. Its medical usefulness has not been proven, however it is sold as a dietary supplement.

- Lactose
  - Lactose is a type of sugar that is commonly used in the pharmaceutical industry and in the illegal drug market as a cutting agent. It is used in pressed pills as an excipient (a substance used in pills to take up space and help the pill keep its shape). It can cause side effects in people who are lactose intolerant.

- Phenacetin
  - Phenacetin is a pain-killer similar to paracetamol (acetaminophen or Tylenol). It was sold in pharmacies until the 1970s, when it was withdrawn from the market because of its carcinogenic properties. It is used as a cutting agent because of its physical appearance.

Our drug checking technologies have limits:

FT-IR Spectrometer



With FT-IR, **we can :**

- Analyze samples that contain multiple substances or cutting agents present in concentrations of 5% and more.
- Identify up to 3 or 4 different components in the sample.

With FT-IR, **we cannot :**

- Detect substances or cutting agents that are present in low concentrations (5% and less).
- Distinguish between substances that have a similar chemical structure (e.g. the 2C-X family, or derivatives of fentanyl).



Test Strips

for fentanyl and benzodiazepines

With test strips, **we can :**

- Detect the presence of fentanyl and some fentanyl derivatives.
- Detect the presence of some benzodiazepines.

With test strips, **we cannot** :

- Assume that the test results apply to the rest of your sample or batch.
- Detect all of the derivatives of fentanyl or benzodiazepines that are in circulation.

Reagent Testing



With reagent testing, **we can :**

- Detect some components of the sample present in small quantities.
- Complement the information provided by FT-IR and test strips, through a process of elimination.

With reagent testing, **we cannot :**

- Identify the components of a complex mixture.
- Identify the components with precision and certainty.

In general, we cannot :

- Determine the purity or the strength of a drug. We can give you an idea of what is present in the sample, but we cannot determine the quantities or proportions of the components.
- Detect the hundreds of new drugs that are synthesized each year.
- Analyze samples of organic matter (like cannabis, mushrooms, or food).

Drug Checking Service (SAS) - Report for June and July 2022

groupe de recherche et d'intervention psychosociale

					Test strips			
ID	Presumed substance (expected substance)	Sample type	Colour and Shape	FT-IR results (see notes 1 and 2)	Fentanyl test strips (Note 3)	Benzo test strips (Note 4)	Apparent composition	Comments
218	1P-LSD	Tab "molecules"	white	*FT-IR is not possible on tabs*	Negative		LSD or analog	Reagent testing (Ehrlich reagent) indicated that LSD or an analog is present.
231	2C-B	Chunks	brown	2C-B	Negative		2C-B	
217	Allylescaline	Capsule with powder	beige	Escaline or a related substance	Negative		Escaline or a related substance	
216	Cannabis	Organic matter, buds	dark green	*FT-IR cannot analyse organic matter like plant material*	Negative		Inconclusive	
162	Cocaine	Powder	white	Cocaine	Negative		Cocaine	Reagent testing indicated that there is possibly levamisole present.
163	Cocaine	Powder	white	Cocaine and caffeine	Negative		Cocaine and caffeine	
164	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
165	Cocaine	Powder	white	Cocaine and lactose	Negative		Cocaine and filler (lactose)	
167	Cocaine	Powder	white	Cocaine and caffeine	Negative		Cocaine and caffeine	
168	Cocaine	Powder	white	Cocaine and caffeine	Negative		Cocaine and caffeine	
169	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
171	Cocaine	Powder	white	Cocaine and phenacetin	Negative		Cocaine and phenacetin	
172	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
176	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
177	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
178	Cocaine	Powder	white	Cocaine and an uncertain match	Negative		Cocaine and one or more unidentifiable substances	
179	Cocaine	Powder	white	Cocaine and l-glutamine	Negative		Cocaine and filler (l-glutamine)	L-glutamine is an amino acid. It is sold as a supplement.
185	Cocaine	Powder	white	*Not enough sample for FT-IR analysis*				

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186	Cocaine	Chunks	white	Cocaine			Cocaine	
194	Cocaine	Powder	white	Cocaine and an uncertain match			Cocaine and one or more unidentifiable substances	
208	Cocaine	Powder	white	Cocaine	Negative		Cocaine and levamisole	Reagent testing indicated that levamisole is present.
211	Cocaine	Powder	white	Cocaine			Cocaine	
213	Cocaine	Powder	white	Cocaine and caffeine	Negative		Cocaine and caffeine	
215	Cocaine	Lumpy powder	white	Cocaine	Negative		Cocaine with possibly meth/amphetamine	Reagent testing indicated that there may be methamphetamine or amphetamine present.
226	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
227	Cocaine	Powder	white	Cocaine, caffeine, and phenacetin	Negative		Cocaine, caffeine, and phenacetin	
228	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
234	Cocaine	Powder	white	Cocaine and inositol	Negative		Cocaine and sugar (inositol)	
238	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
247	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
250	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
251	Cocaine	Powder	white	Cocaine and lidocaine	Negative		Cocaine and lidocaine	
252	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
254	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
256	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
259	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
271	Cocaine	Powder	white	Cocaine	Negative		Cocaine	
272	Cocaine	Powder	white	Cocaine and phenacetin	Negative		Cocaine and phenacetin	

Drug Checking Service (SAS) - Report for June and July 2022

					Test strips			
ID	Presumed substance (expected substance)	Sample type	Colour and Shape	FT-IR results (see notes 1 and 2)	Fentanyl test strips (Note 3)	Benzo test strips (Note 4)	Apparent composition	Comments
235	Cocaine (speed suspected)	Powder	white	Cocaine	Negative		Cocaine	
183	Crack (freebase cocaine)	Crystals	white	Freebase cocaine	Negative		Freebase cocaine	
242	Crack (freebase cocaine)	Crystals	white	Freebase cocaine	Negative		Freebase cocaine	
202	Crystal meth	Crystals	transparent	Methamphetamine	Negative		Methamphetamine	
204	Crystal meth (ketamine suspected)	Residue, crystal pipe	white crystals that become red when smoked	Methamphetamine and ketamine	Negative		Methamphetamine and ketamine	
175	DMT	Powder	pale yellow	Dimethyltryptamine base and an uncertain match			DMT	
248	GHB	Liquid	transparent	Water - *The sample was too dilute*	Negative		Water and GHB	The colorimetric tests for GHB gave a positive result for this sample.
225	Hash (meth suspected)	Paste	brown	THC and an uncertain carbohydrate	Negative	Negative	Inconclusive	
158	MDMA	Capsule with powder	brown	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
159	MDMA	Capsule with powder	white	MDA	Negative		MDA	
160	MDMA	Capsule with powder	grise	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
161	MDMA	Powder	white	MDA	Negative		MDA	
166	MDMA	Capsule with powder and crystals	white	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
170	MDMA	Capsule with powder	pale yellow	MDMA	Negative		MDMA	
182	Ketamine	Powder	white	Ketamine	Negative		Ketamine	
233	Ketamine	Powder	white	Ketamine	Negative		Ketamine	
263	Ketamine	Crystals	white	Ketamine	Negative		Ketamine	
181	Ketamine (cathinone suspected)	Crystals	white-transparent	Ketamine	Negative	Negative	Ketamine	
192	LSD	Tab		*FT-IR is not possible on tabs*	Negative		LSD or an analog	Reagent testing (Ehrlich reagent) indicated that LSD or an analog is present.
157	MDMA	Capsule with powder	yellow-pale	MDMA	Negative		MDMA	

					Test strips			
ID	Presumed substance (expected substance)	Sample type	Colour and Shape	FT-IR results (see notes 1 and 2)	Fentanyl test strips (Note 3)	Benzo test strips (Note 4)	Apparent composition	Comments
187	MDMA	Capsule with powder	mauve	MDMA	Negative		MDMA	
188	MDMA	Capsule transparent with crystals	white	MDA	Negative		MDA	
189	MDMA	Black capsule with crystals	white	MDMA	Negative		MDMA	
190	MDMA	Blue capsule with powder	brown	MDMA	Negative		MDMA	
191	MDMA	Crystals	brown	MDMA	Negative		MDMA	
199	MDMA	Capsule with powder and crystals	pink powder and transparent crystals	Dimethyl sulfone, MDMA and mannitol			Dimethyl sulfone, MDMA and sugar (mannitol)	Laboratory analysis of this sample with technologies more precise confirmed our result.
200	MDMA	Capsule with powder	brown	MDA, dimethyl sulfone and sucrose			MDA, dimethyl sulfone and sugar (sucrose)	
201	MDMA	Capsule with crystals	brown	MDMA and safrole	Negative		MDMA and safrole	Safrole is a precursor in the synethesis of MDMA. It is toxic for humans when used in the long-term.
203	MDMA	Red and white capsule with powder and crystals	white	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
206	MDMA	Capsule with powder and crystals	brown	MDMA	Negative		MDMA	
207	MDMA	Capsule with crystals	white	MDA	Negative		MDA	
209	MDMA	Pill "Tekashi" "69"	turquoise	MDMA and cellulose	Negative		MDMA and cellulose	
210	MDMA	Pill "Tekashi" "69"	purple-grey	MDMA and cellulose	Negative		MDMA and cellulose	
212	MDMA	Transparent capsule with powder	pale yellow	MDMA	Negative		MDMA	
229	MDMA	Capsule with powder or crystals	brown	MDMA	Negative		MDMA	
230	MDMA	Capsule with powder or crystals	brown	MDMA	Negative		MDMA	
232	MDMA	Black capsule with crystals	white	MDMA	Negative		MDMA	
236	MDMA	Pill "star"	purple	Caffeine, MDMA, and cellulose	Negative		Caffeine, MDMA, and cellulose	
237	MDMA	White and green capsule with powder or crystals	white	MDMA	Negative		MDMA	
240	MDMA	Pill "smiley"	yellow, round	Glucose and polyethylene	Negative		Inconclusive	Inconclusive, no active component found.

					Test strips			
ID	Presumed substance (expected substance)	Sample type	Colour and Shape	FT-IR results (see notes 1 and 2)	Fentanyl test strips (Note 3)	Benzo test strips (Note 4)	Apparent composition	Comments
241	MDMA	Capsule with powder	purple	MDMA	Negative		MDMA	
243	MDMA	Powder	white	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
244	MDMA	Powder	brown	MDMA	Negative		MDMA	
245	MDMA	Powder	pale purple	MDMA	Negative		MDMA	
246	MDMA	Crystals	brown	MDMA	Negative		MDMA	
253	MDMA	Capsule with powder	white	MDMA	Negative		MDMA	
257	MDMA	Crystals	brown	MDMA	Negative		MDMA	
258	MDMA	Powder	white	Cocaine	Negative		Cocaine	
260	MDMA	Crystals	mauve	MDMA	Negative		MDMA	
261	MDMA	Crystals	brown	MDMA	Negative		MDMA	
262	MDMA	Crystals	white	MDMA	Negative		MDMA	
264	MDMA	Crystals	beige	N-ethylpentylone	Negative		N-ethylpentylone	
265	MDMA	Crystals	brown	MDMA	Negative		MDMA	
266	MDMA	Crystals	mauve	MDMA	Negative		MDMA	
268	MDMA	Capsule with crystals	white	MDA	Negative		MDA	
269	MDMA	Capsule with powder	pink	MDMA and mannitol	Negative		MDMA and sugar (mannitol)	
270	MDMA	Capsule with powder	mauve	MDMA	Negative		MDMA	
267	MDMA (amphetamine suspected)	Crystals	grey	MDMA and dimethyl sulfone	Negative		MDMA and dimethyl sulfone	
220	Nolvadex	Liquid	transparent	Polyethylene glycol			Inconclusive	This sample was a supposed steroid. We were unable to find the active components.
219	Ostarine	Capsule with powder	white	Cellulose and calcium stearate			Inconclusive	This sample was a supposed steroid. We were unable to find the active components.

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ID	Presumed substance (expected substance)	Sample type	Colour and Shape	FT-IR results (see notes 1 and 2)	Fentanyl test strips (Note 3)	Benzo test strips (Note 4)	Apparent composition	Comments
205	Speed	Pill "MTL"	white, rectangle	Cellulose, calcium carbonate, and methamphetamine	Negative		Filler (cellulose, calcium carbonate) and methamphetamine	
180	Speed (amphetamine)	Pill	pale yellow	Cellulose and caffeine	Negative		Filler (cellulose), caffeine and methamphetamine	Reagent testing confirmed the presence of methamphetamine.
221	Speed (caffeine suspected)	Pill "ICE"	white-beige, rectangle	Calcium carbonate, cellulose, methamphetamine, and baking soda	Negative		Filler (cellulose, calcium carbonate, baking soda) and methamphetamine	
173	Speed (methamphetamine)	Pill "Snapchat"	white, round	Cellulose, methamphetamine and baking soda	Negative		Filler (cellulose, baking soda) and methamphetamine	More precise testing by laboratory instruments also found caffeine in this sample.
174	Speed (methamphetamine)	Pill "ICE"	white, rectangle	Calcium carbonate, baking soda, and methamphetamine	Negative		Filler (calcium carbonate, baking soda) and methamphetamine	
214	Speed (methamphetamine)	Pill (no brand)	white, round	Caffeine	Negative		Caffeine	Reagent testing confirmed that there was no methamphetamine or amphetamine in this sample.
222	Speed (methamphetamine)	Pill "ICE"	white, rectangle	Cellulose, caffeine and methamphetamine	Negative		Filler (cellulose), caffeine and methamphetamine	
223	Speed (methamphetamine)	Pill "ICE"	white, rectangle	Caffeine, methamphetamine and cellulose	Negative		Caffeine, methamphetamine, and filler (cellulose)	
224	Speed (methamphetamine)	Pill "UFC"	white, rectangle	Cellulose and caffeine	Negative		Filler (cellulose) and caffeine	
239	Unknown	Powder	white and brown	MDMA	Negative		MDMA	
249	Unknown	Powder	white	Magnesium carbonate			Salt (magensium carbonate)	
255	Unknown (cocaine suspected)	Powder	white	Cocaine	Negative		Cocaine	
196	Unknown (vitamine suspected)	Capsule with powder	beige	Uncertain carbohydrate and cellulose	Negative		Inconclusive	
197	Unknown (vitamine suspected)	Capsule with powder	browne	Uncertain carbohydrate	Negative		Inconclusive	
198	Unknown (vitamine suspected)	Capsule with powder	rose	Glycogen and an uncertain match	Negative		Inconclusive	
193	Vyvanse (lisdexamfandamine)	White and blue capsule with powder	white	Chlordiazepoxide and cellulose	Negative		Chlordiazepoxide and cellulose	Chlordiazepoxide is a type of benzodiazepine, a substance in the depressant category.
184	Xanax (alprazolam)	Pill "Xanax" "2"	white, rectangle	Cellulose	Negative		Cellulose	Very large pill, the benzo (normally present in a few mg) is below the FT-IR detection limit.
195	Xanax (alprazolam)	Pill	yellow	Cellulose and lactose		Positif	Cellulose, lactose, and un ou plusieurs benzodiazepines	Very large pill, the benzo (normally present in a few mg) is below the FT-IR detection limit.

Service users in June	48 (10 without drug checking)
Number of samples tested in June	52
Service users in July	78 (33 without drug checking)
Number of samples tested in July	64

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.