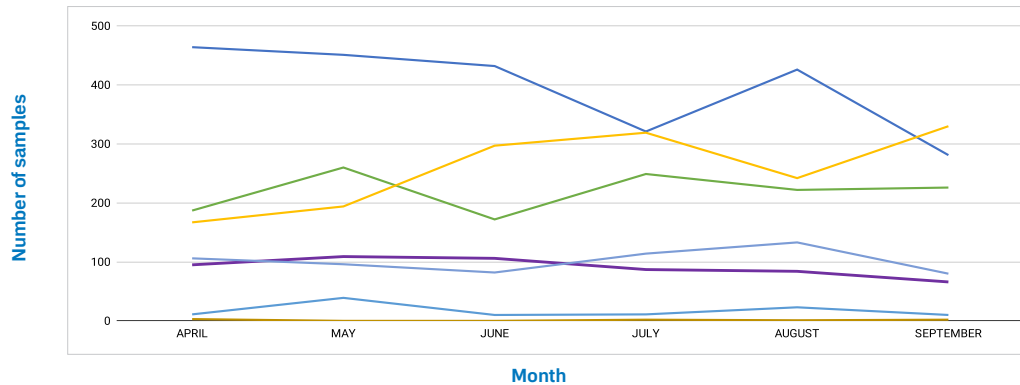


Key Findings

- The percentage of opioids testing positive for benzodiazepines (21%, 59 of 281 samples) increased to its highest point since the start of this project. Etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies. This means that the true rate may be higher than reported here.
- Four alerts were issued from drugs checked in Vancouver: benzodiazepine-positive fentanyl linked to prolonged overdoses, N-ethylpentylone sold as MDMA, counterfeit XANAX tablets, and a powder sold as flualprazolam contained fentanyl. See the table below for more information.
- Benzodiazepines confirmed in expected opioid samples in the last 3 months included etizolam, flualprazolam, and clonazolam. Both clonazolam and flualprazolam are potent unregulated benzodiazepines. Benzodiazepine-adulterated opioids increase the risk of overdose and can cause prolonged sedation.

Number of drug samples checked in the past 6 months



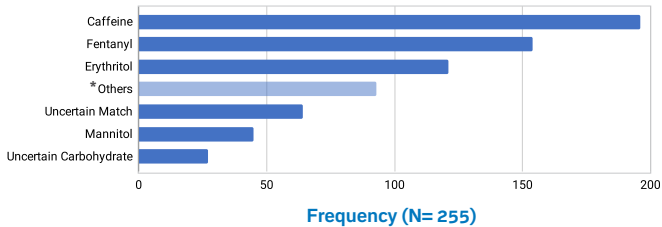
Number of samples by drug category in September

Opioid	281
Stimulant	226
Depressant	66
Psychedelic	330
Other	10
Polysubstance	2
Unknown	80

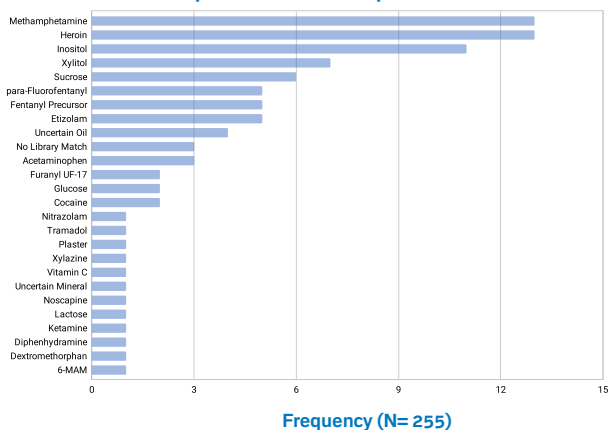
TOTAL: 995

Components found in drug samples in September

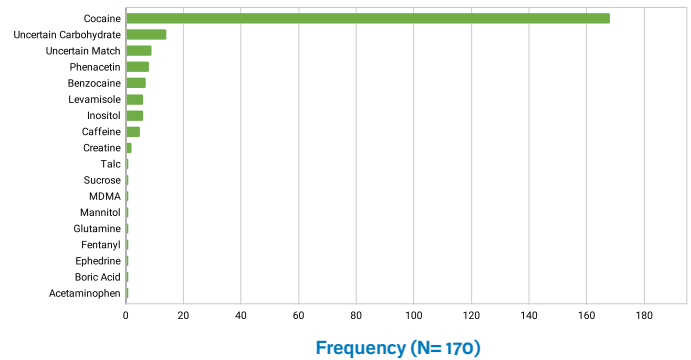
Components in opioids



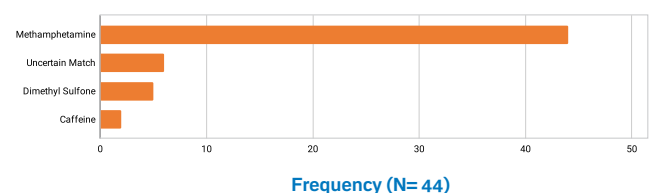
* Other components found in opioids



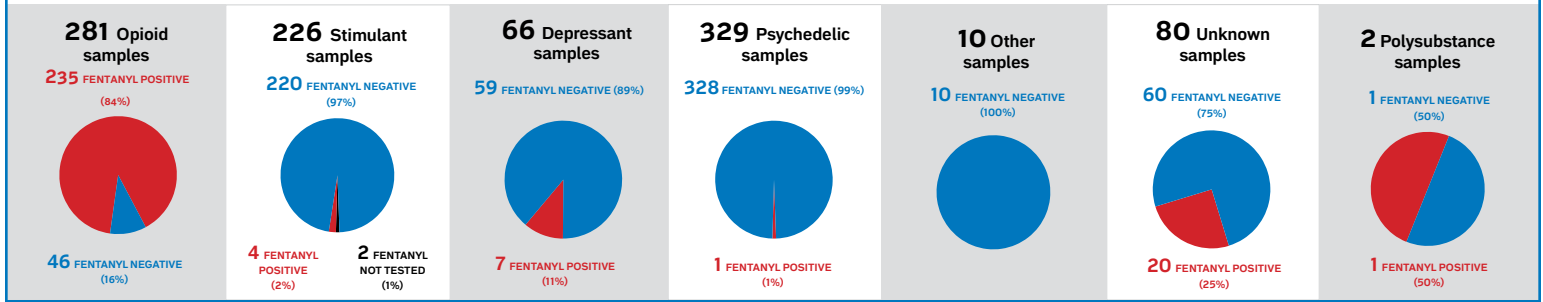
Components in cocaine



Components in methamphetamine



Number of samples tested with fentanyl present

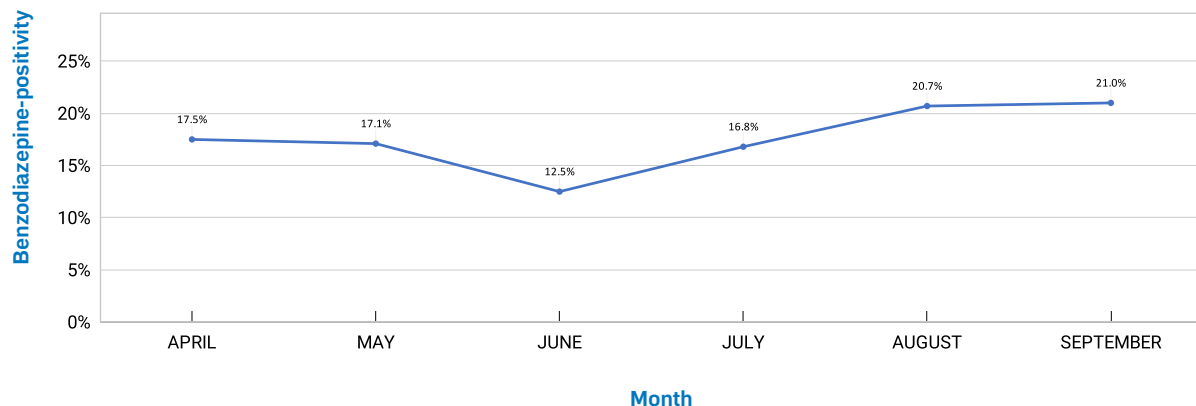


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
September 13, 2021 Get Your Drugs Tested Vancouver	Alprazolam (XANAX)	Microcrystalline cellulose	Positive	Negative	Vancouver	Fentanyl can cause opioid toxicity especially for opioid-naïve individuals. Combining depressants also increases the risk of overdose.
September 13, 2021 Get Your Drugs Tested Vancouver	Flualprazolam	Flualprazolam, Uncertain match	Positive	Positive	Unknown	Fentanyl can cause opioid toxicity especially for opioid-naïve individuals. Combining depressants also increases the risk of overdose.
September 7, 2021 Get Your Drugs Tested Vancouver	MDMA	Dimethyl sulfone, N-ethylpentylone	Negative	Negative	Vancouver	This synthetic cathinone is associated with health harms including overdose.
September 3, 2021 Overdose Prevention Society Vancouver	Alprazolam (XANAX)	Microcrystalline cellulose	Positive	Positive	Vancouver	Benzodiazepines combined with opioids can cause prolonged sedation and increases the risk of overdose.

To receive drug contamination alerts, text "alert" to (236) 999-DOPE (3673)

Percentage of opioids testing positive for benzodiazepines in the past 6 months




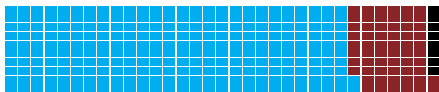
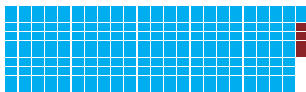

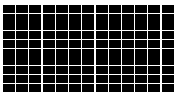
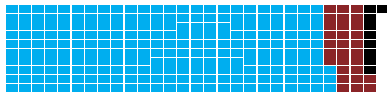

During the month of September, **21.0%** of expected opioid samples tested positive for benzodiazepines using test strips in our partner sites in Vancouver Coastal Health (**59 samples of 281 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are derived from both of these technologies and are presumptive until confirmed by a laboratory.

Number of drug checks and hours at each site

Location	# of Drugs Checked
Get Your Drugs Tested	899
Insite	12
Overdose Prevention Society OPS	84
Total	995

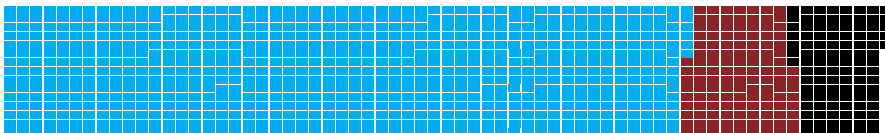
Number of samples that matched expectation

using FTIR/test strip drug checking

<p>EXPECTED DRUG: Depressant 66 Samples Tested</p>  <p>Matched: 38 Did not match: 27 Match not determined: 1</p>	<p>EXPECTED DRUG: Psychedelic 330 Samples Tested</p>  <p>Matched: 262 Did not match: 60 Match not determined: 8</p>	<p>EXPECTED DRUG: Stimulant 226 Samples Tested</p>  <p>Matched: 222 Did not match: 4</p>	<p>EXPECTED DRUG: Polysubstance 2 Samples Tested</p>  <p>Matched: 1 Did not match: 1</p>
<p>EXPECTED DRUG: Unknown 80 Samples Tested</p>  <p>Match not determined: 80</p>	<p>EXPECTED DRUG: Opioid 281 Samples Tested</p>  <p>Matched: 243 Did not match: 29 Match not determined: 9</p>	<p>EXPECTED DRUG: Other 10 Samples Tested</p>  <p>Matched: 5 Did not match: 1 Match not determined: 4</p>	

Total

995 Samples Tested



Matched: 771
Did not match: 122
Match not determined: 102

Please note that the presence of the expected substance does not imply purity, as samples frequently contain adulterating cutting agents

Depressant may include:
benzodiazepines, etizolam,
GHB, hypnotics

Opioid may include:
"down," heroin, fentanyl,
pharmaceutical opioids

Polysubstance includes:
cross-category mixtures

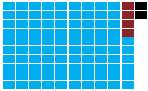





Psychedelic may include:
MDMA and related,
2C-family, tryptamines,
ketamine, LSD

Stimulant may include:
methamphetamine,
"speed," cocaine and crack
cocaine, cathinones

Unknown includes:
samples where the individual
was unable to identify an
expected substance - this
includes found samples.

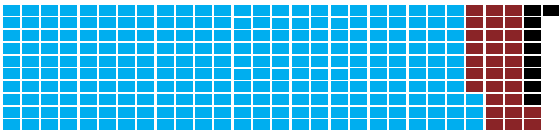
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

<p>EXPECTED DRUG: Fentanyl 102 Samples Tested</p>  <p>Matched: 96 Did not match: 4 Match not determined: 2</p>	<p>EXPECTED DRUG: Heroin 13 Samples Tested</p>  <p>Matched: 6 Did not match: 2</p>	<p>EXPECTED DRUG: Pharmaceutical 25 Samples Tested</p>  <p>Matched: 13 Did not match: 5 Match not determined: 7</p>
<p>EXPECTED DRUG: Down 139 Samples Tested</p>  <p>Matched: 128 Did not match: 11</p>	<p>EXPECTED DRUG: Other Opioid 1 Samples Tested</p>  <p>Match not determined: 1</p>	<p>EXPECTED DRUG: Fentanyl and Heroin 1 Samples Tested</p>  <p>Did not match: 1</p>

Total

281 Samples Tested



Matched: 243
Did not match: 29
Match not determined: 9

Please note that the presence of the expected substance does not imply purity, as samples frequently contain adulterating cutting agents. 'Down' can refer to any opioid drug present in any amount.

Data represented here are collected from our partner sites across the province. Drug samples are tested using the Fourier Transform Infrared (FTIR) spectrometer in combination with fentanyl test strips and benzodiazepine test strips.

There is 5% fentanyl detection limit on the FTIR spectrometer (McCrae, 2019), and a drug check on any given sample consists of both the FTIR and BTNX fentanyl immunoassay test strip testing done in combination. When applicable, BTNX benzodiazepine immunoassay test strips are also used.

BCCSU gratefully acknowledges the contributions of the following partners:

