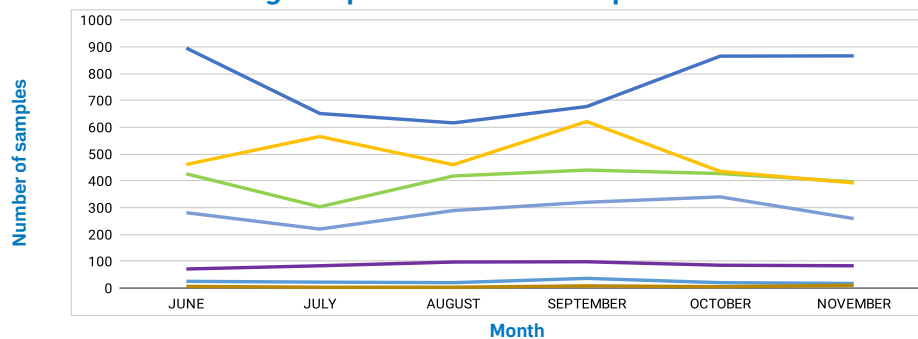


Key Findings

- In November, a total of 2,023 drug checks were performed across community drug checking sites offering FTIR services in BC.
- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites rose from 37.0% to 41.2% in November (357 of 866 samples), the highest level ever detected in a month. As always, the true rate may be higher than reported here as benzodiazepines, including benzodiazepine-like substances like etizolam, may be missed by drug checking technologies.
- There may be an ongoing shift from benzodiazepine-adulteration of opioids with etizolam to other benzodiazepines such as bromazolam, which are better detected with benzodiazepine test strips and cause the overall detection numbers to increase.
- Drug alerts were issued for 8 samples in November. Most alerts concerned down samples in which high concentrations of fentanyl and benzodiazepines had been detected.
- The median fentanyl concentration of all samples was 14.7%, a slight decrease from 15.5% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



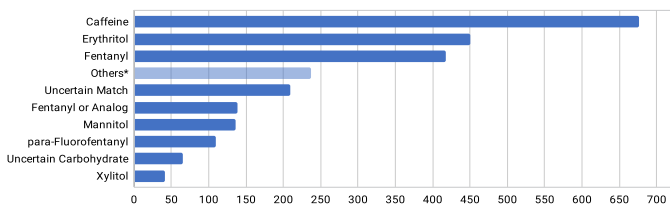
Number of samples by drug category in November

| | |
|---------------|-----|
| Opioid | 866 |
| Stimulant | 396 |
| Depressant | 83 |
| Psychedelic | 392 |
| Other | 17 |
| Polysubstance | 10 |
| Unknown | 259 |

TOTAL: 2,023

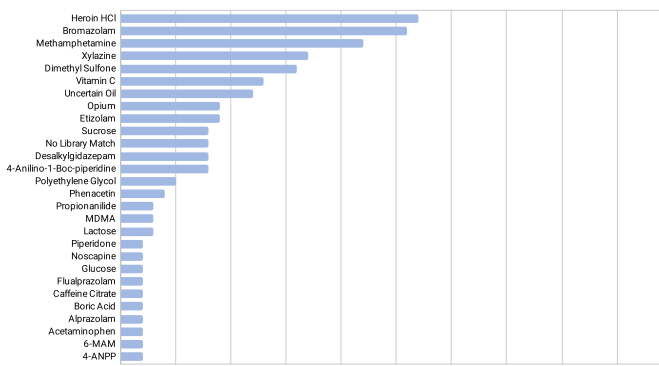
Components found in drug samples in November

Components in opioids



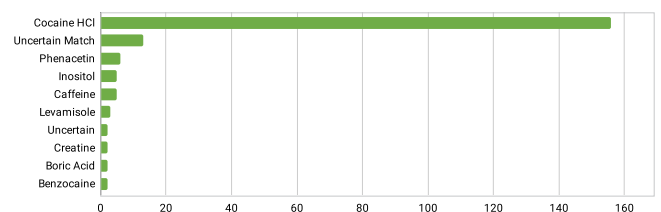
Frequency (N= 814)

*Other components found in opioids



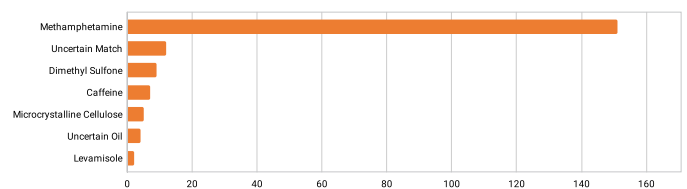
Frequency (N= 814)

Components in cocaine



Frequency (N= 163)

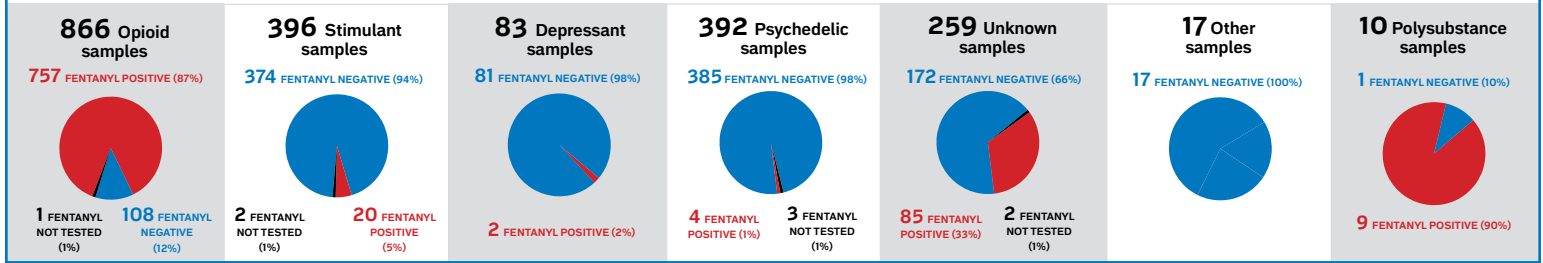
Components in methamphetamine



Frequency (N= 154)

There were additional compounds detected a single time each. To save space, they have been omitted from these charts. For the full list of compounds detected, visit our data dashboard at www.drugcheckingbc.ca/dashboard/

Number of samples tested with fentanyl present

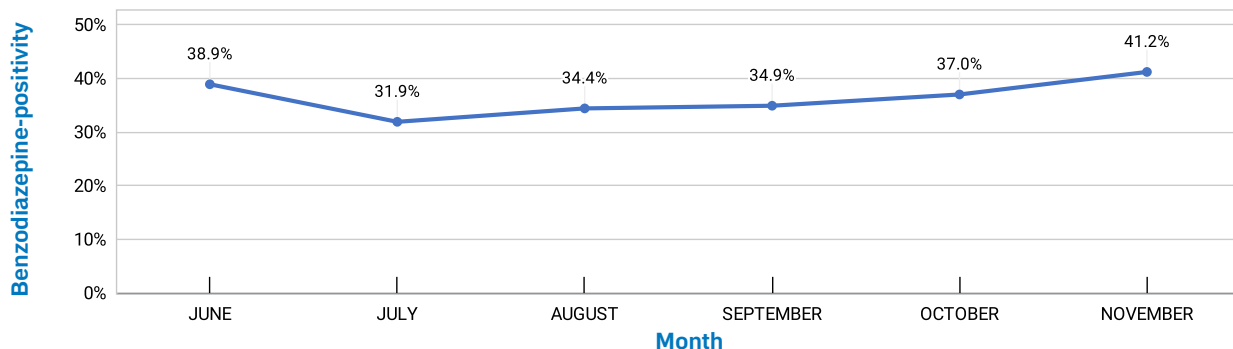


PUBLIC HEALTH NOTIFICATIONS

| Date & Location | Expected Drug | Drugs Detected | Fentanyl Strip | Benzo Strip | Area Purchased | Alert Message |
|-----------------------------|--------------------|---|----------------|-------------|----------------|---|
| November 4, 2022 Kelowna | Down/Fentanyl | Fentanyl, Bromazolam | Positive | Positive | Kelowna | Higher than average concentrations of both fentanyl and benzodiazepines poses high risk of overdose |
| November 7, 2022 Vancouver | Down | Fentanyl, Caffeine, Erythritol, Bromazolam | Positive | Positive | Vancouver | High concentrations of fentanyl and benzodiazepines poses high risk of overdose. |
| November 9, 2022 Vancouver | Down | Caffeine, Fentanyl, Bromazolam | Positive | Positive | Vancouver | Sample contains high concentration of both fentanyl and a benzodiazepine, posing risk of complex overdose. |
| November 14, 2022 Vancouver | Alprazolam (Xanax) | Microcrystalline Cellulose, Uncertain Mineral, Fentanyl | Positive | Negative | Vancouver | Sample unexpectedly contained fentanyl instead of benzodiazepines. Consuming fentanyl unknowingly can lead to overdose. |
| November 17, 2022 Vancouver | Unknown | Xylitol, Carfentanil | Positive | Negative | Vancouver | Carfentanil is an extremely potent fentanyl analogue, posing high risk of overdose. We are waiting for confirmatory results to further investigate this instance. |
| November 28, 2022 Vancouver | Oxycodone | Microcrystalline Cellulose, Fentanyl or analogue | Positive | Positive | Vancouver | Sample unexpectedly contains a fentanyl analogue and benzodiazepines, posing risk of complex overdose. |
| November 30, 2022 Kelowna | Down/Fentanyl | Fentanyl, Bromazolam | Positive | Positive | Kelowna | Higher than average concentration of fentanyl, and very high concentration of benzodiazepines poses high risk of overdose |
| November 30, 2022 Cranbrook | Down/Fentanyl | Fentanyl/fentanyl analogue | Positive | Positive | Cranbrook | Higher than average concentration of fentanyl and/or fentanyl analogue, as well as presence of benzodiazepines poses high risk of overdose |

Health authorities and community organizations issue further toxic drug alerts from sources other than drug checking. See their respective websites or social media accounts for more alerts.

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

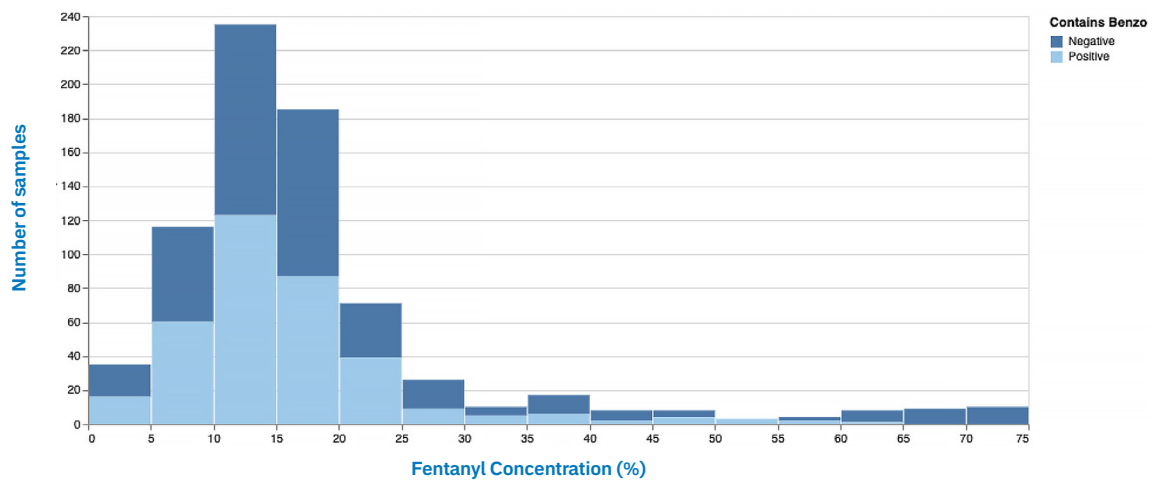


During the month of November, **41.2%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**357 samples of 866 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are derived from both of these technologies and are presumptive until confirmed by a laboratory.

Fentanyl Quantification

The charts below summarize fentanyl concentrations of fentanyl-positive opioid samples brought for drug checking in British Columbia. Fentanyl concentrations were determined using FTIR and a calibrated fentanyl quantification model. Technicians at point-of-care may provide an estimated fentanyl quantification, generally an approximate range of fentanyl percentage in a mixture, but these results were calculated separately (post hoc) using the model for the purpose of this report.

Fentanyl Concentration of Opioid Drug Checking Samples in BC, November 2022



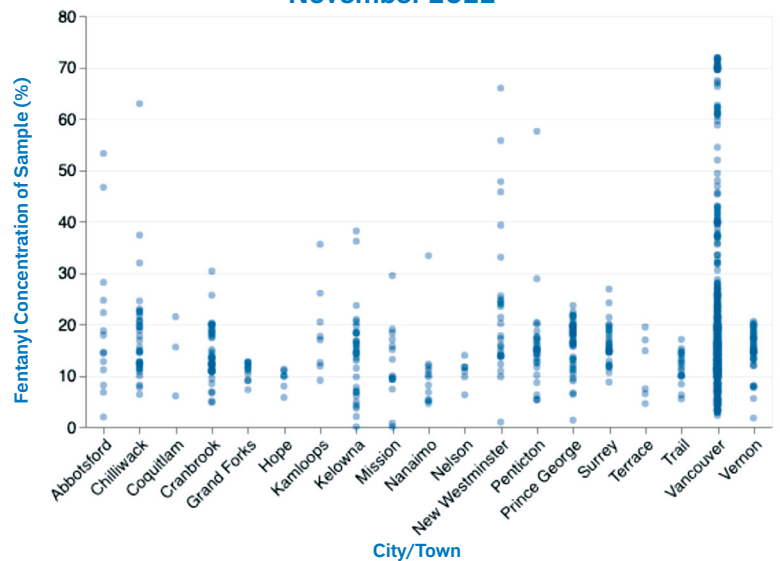
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 14.7%, down from 15.5% last month. When purchasing fentanyl from an unregulated drug supply, it is often impossible to know what the fentanyl concentration of the drugs is. Drug checking can help, but point-of-care quantification results are provided in a range since it is not possible to be precise with the available technologies. For example, a technician might say, “This sample contains caffeine, mannitol, and between 5% and 10% fentanyl.”

Drug supplies vary by location in the province. While samples from smaller communities appear to be more consistent, it is important to remember that this is a small number of drugs checked in each city or town. It is also important to note that these locations include only those participating in the BCCSU Drug Checking Project that provide data from FTIR spectroscopy. These numbers may not represent the broader supply or the supply in other settings.

It is very important to remember that the results presented here are fentanyl, not fentanyl analogues like carfentanil. Carfentanil is a potent opioid that is often present below the detection limit of the spectrometer and is therefore missed by point-of-care drug checking technologies. Your drug checking technician can explain the limitations in detail when you get your drugs checked, but always take additional harm reduction precautions, like using at an OPS if available, because potent opioids may be presented and go undetected.

If you have any questions about the results, please email us at drugchecking@bccsu.ubc.ca.

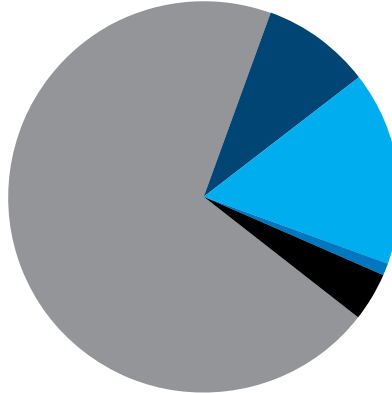
Fentanyl Concentration of Opioid Samples by City/Town, November 2022



Number of samples tested by region:

Total #: 2,023

1,407: Vancouver Coastal Health region (70%)



200: Fraser Health region (9%)

318: Interior Health region (16%)

21: Vancouver Island Health Region (1%)

77: Northern Health region (4%)

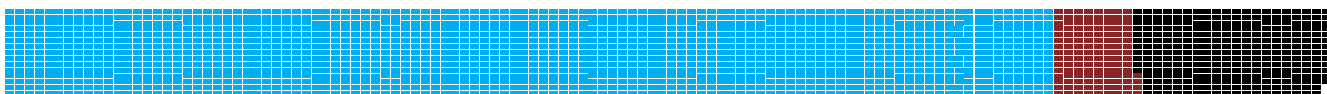
Number of samples that matched expectation

using FTIR/test strip drug checking

| EXPECTED DRUG: | EXPECTED DRUG: | EXPECTED DRUG: | EXPECTED DRUG: |
|---|---|--|--|
| Depressant 83 Samples Tested | Psychedelic 392 Samples Tested | Stimulant 396 Samples Tested | Polysubstance 10 Sample Tested |
| Matched: 59 Did not match: 23 Match not determined: 1 | Matched: 363 Did not match: 20 Match not determined: 9 | Matched: 375 Did not match: 20 Match not determined: 1 | Matched: 7 Did not match: 3 |
| Unknown 259 Samples Tested | Opioid 866 Samples Tested | Other 17 Samples Tested | |
| Match not determined: 259 | Matched: 791 Did not match: 55 Match not determined: 20 | Matched: 10 Did not match: 3 Match not determined: 4 | |

Total

2,023 Samples Tested



Matched: 1,605
Did not match: 124
Match not determined: 294

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

Depressant include:
benzodiazepines, etizolam,
GHB, hypnotics

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

Polysubstance includes:
cross-category mixtures

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

Stimulant 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.

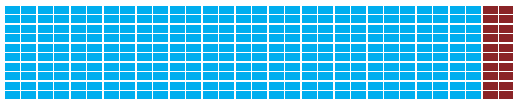
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

310 Samples Tested



Matched: 290
Did not match: 20

EXPECTED DRUG:

Heroin

18 Samples Tested



Matched: 15
Did not match: 3

EXPECTED DRUG:

Opium

10 Samples Tested

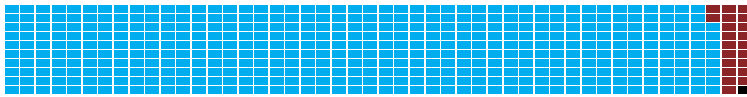


Matched: 9
Did not match: 1

EXPECTED DRUG:

Down

480 Samples Tested



Matched: 458
Did not match: 21
Match not determined: 1

EXPECTED DRUG:

Pharmaceutical

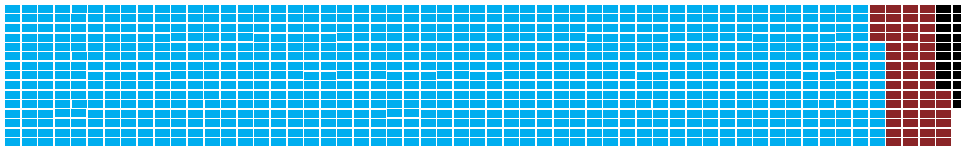
45 Samples Tested



Matched: 16
Did not match: 10
Match not determined: 19

Total

866 Samples Tested



Matched: 791
Did not match: 55
Match not determined: 20

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:



Health Canada Santé Canada



fraserhealth



Interior Health



Canadian Mental Health Association

