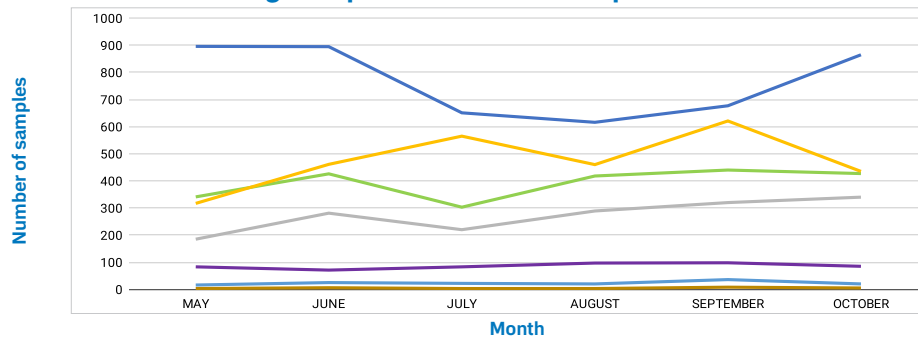


Key Findings

- In October, a total of 2177 drug checks were performed across 27 access points offering FTIR services in BC.
- Benzodiazepines were detected in 37.0% of all opioids tested at BC drug checking sites (318 of 865 samples), a rate slightly higher than previous months. As always, the true rate may be higher than reported here because benzodiazepines, and benzodiazepine-like substances like etizolam, may be missed by drug checking technologies.
- In October, bromazolam was the most frequent benzodiazepine detected by FTIR overall (found in 23 opioid samples), followed by etizolam (18). This indicates samples had concentrations of benzodiazepines above 5%, high enough to be detectable by FTIR.
- Drug alerts were issued for 6 samples in October. Most alerts concerned samples that had been sold as one substance but instead tested as fentanyl, or tested positive for the presence of fentanyl by test strip.
- The median fentanyl concentration of all opioid samples was 15.5%, a slight decrease from 16.4% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



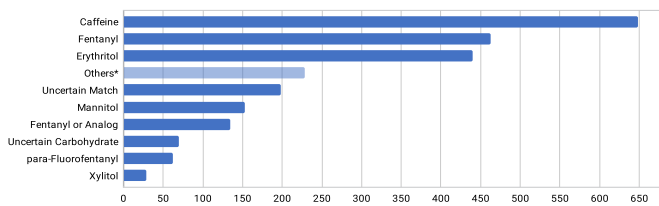
Number of samples by drug category in October

Opioid	865
Stimulant	427
Depressant	85
Psychedelic	435
Other	20
Polysubstance	5
Unknown	340

TOTAL: 2,177

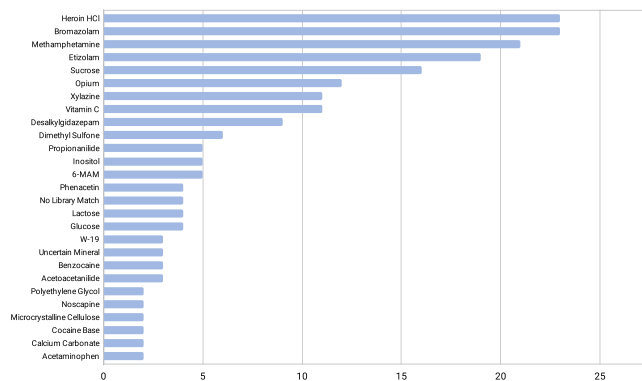
Components found in drug samples in October

Components in opioids



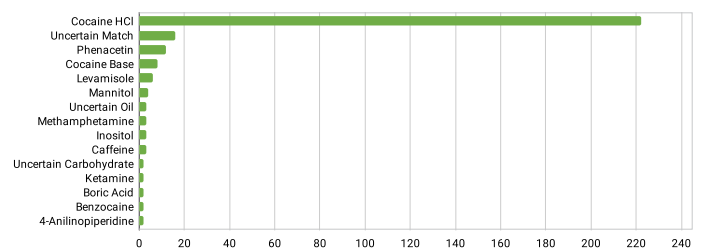
Frequency (N= 814)

*Other components found in opioids



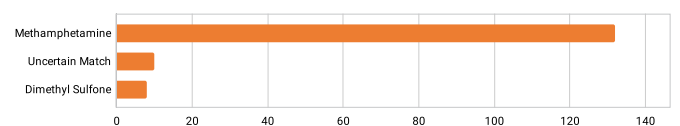
Frequency (N= 814)

Components in cocaine



Frequency (N= 235)

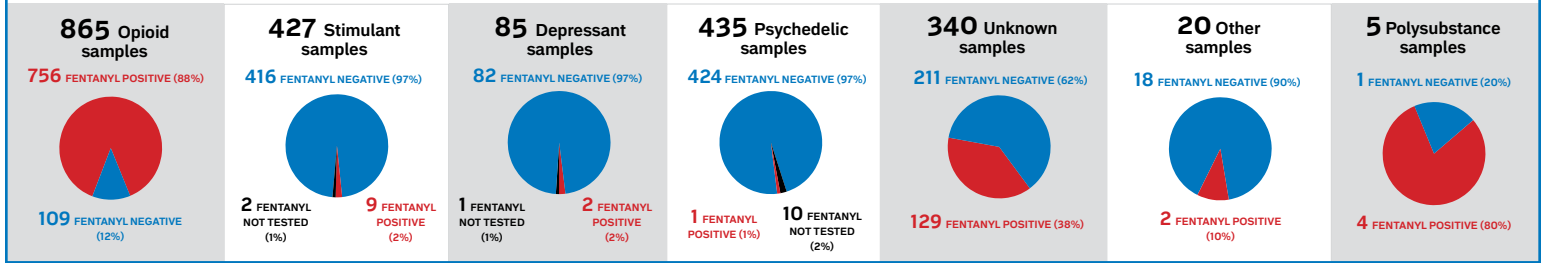
Components in methamphetamine



Frequency (N= 136)

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

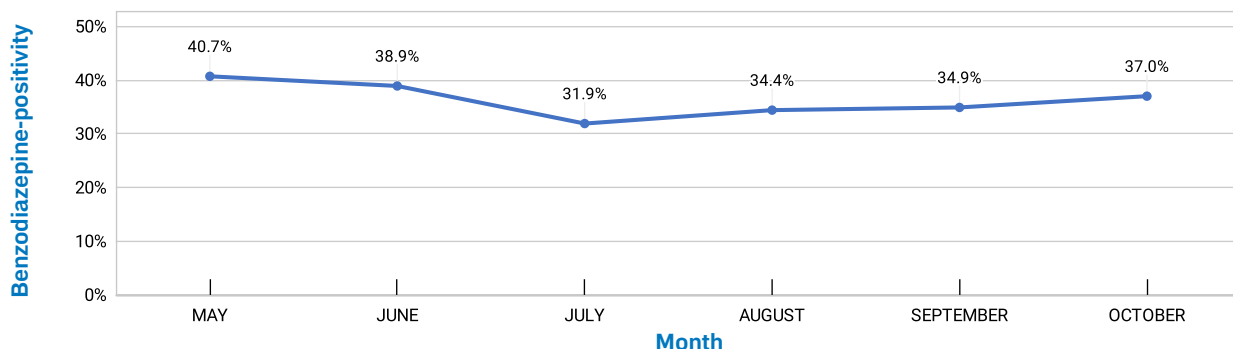


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
October 7 2022 Vancouver	Acetaminophen and Oxycodone (Percocet)	Microcrystalline cellulose, lactose, uncertain oil, caffeine	Positive	Negative	Vancouver	Presence of fentanyl in counterfeit Percocet poses risk of opioid toxicity.
October 11 2022 Vancouver	Cocaine	Fentanyl, Cocaine	Positive	Negative	Vancouver DTES	Sample sold as cocaine but tested mostly as fentanyl, posing a high risk of overdose to someone expecting cocaine.
October 11 2022 Vancouver	Alprazolam (Xanax)	Microcrystalline cellulose, PVP (polymer), uncertain oil	Positive	Negative	Vancouver	Presence of fentanyl in counterfeit Xanax may cause overdose when consumed unknowingly.
October 12 2022 Vancouver	Fentanyl	GHB	Positive	Negative	Vancouver DTES	Sample was sold as "liquid fentanyl", but instead tested as GHB with some fentanyl present. May also pose risk of opioid toxicity if expecting GHB.
October 14 2022 Prince George	Down/Fentanyl	Fentanyl	Positive	Positive	Prince George	High concentration of fentanyl in down with benzodiazepines increases risk of heavy sedation and overdose.
October 27 2022 DTES	Heroin	Caffeine, cocaine base, mannitol, para-fluorofentanyl	Positive	Positive	Vancouver DTES	High concentration of fentanyl analogue, and presence of benzodiazepines, increases risk of overdose if expecting heroin.

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

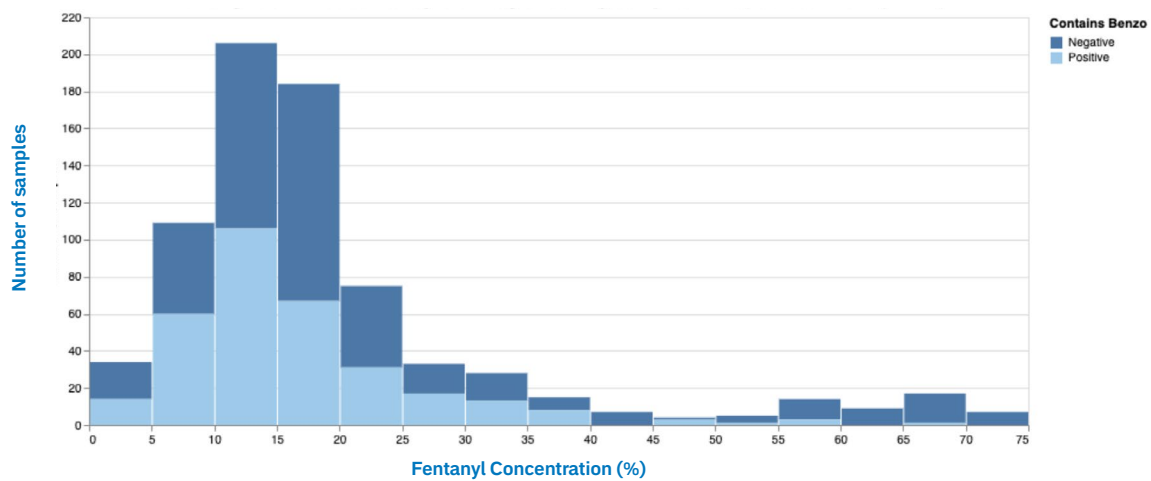


During the month of October, **37.0%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**318 samples of 865 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, October 2022



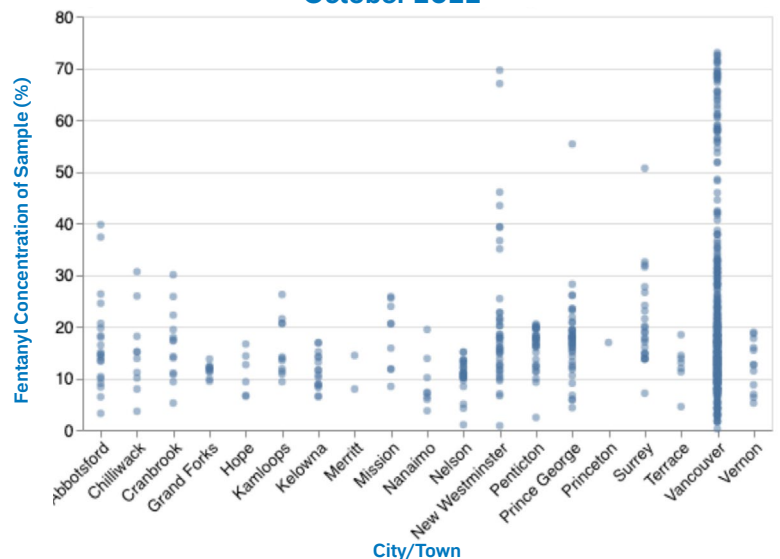
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 15.5%, down from 16.4% last month. When 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's hard 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.

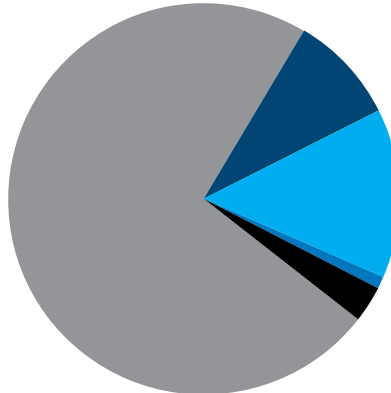
Fentanyl Concentration of Opioid Samples by City/Town, October 2022



Number of samples tested by region:

Total #: 2,177

1,574: Vancouver Coastal Health region (73%)



196: Fraser Health region (9%)

311: Interior Health region (14%)

22: Vancouver Island Health Region (1%)

74: Northern Health region (3%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG: Depressant

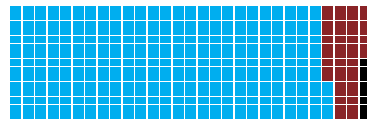
85 Samples Tested



Matched: 51
Did not match: 33
Match not determined: 1

EXPECTED DRUG: Psychedelic

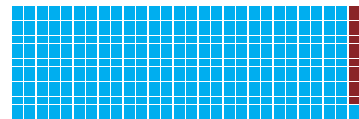
435 Samples Tested



Matched: 380
Did not match: 47
Match not determined: 8

EXPECTED DRUG: Stimulant

427 Samples Tested



Matched: 407
Did not match: 19
Match not determined: 1

EXPECTED DRUG: Polysubstance

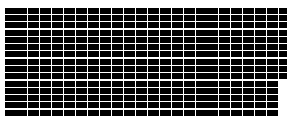
5 Sample Tested



Matched: 3
Did not match: 2

EXPECTED DRUG: Unknown

340 Samples Tested



Match not determined: 340

EXPECTED DRUG: Opioid

865 Samples Tested



Matched: 785
Did not match: 61
Match not determined: 19

EXPECTED DRUG: Other

20 Samples Tested



Matched: 9
Did not match: 8
Match not determined: 3

Total

2,177 Samples Tested



Matched: 1,635
Did not match: 170
Match not determined: 372

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.

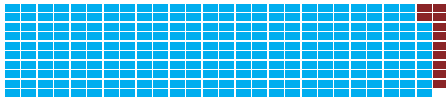
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

269 Samples Tested



Matched: 285
Did not match: 11

EXPECTED DRUG:

Heroin

33 Samples Tested



Matched: 18
Did not match: 15

EXPECTED DRUG:

Opium

12 Samples Tested

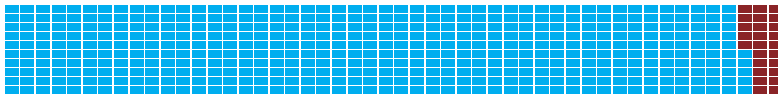


Matched: 12

EXPECTED DRUG:

Down

500 Samples Tested



Matched: 475
Did not match: 25

EXPECTED DRUG:

Pharmaceutical

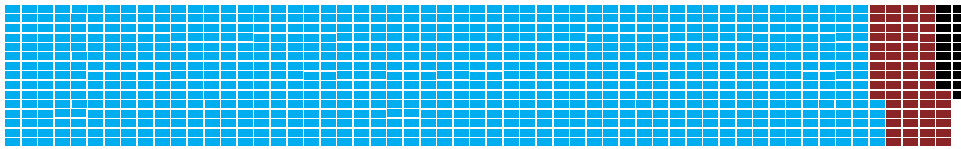
51 Samples Tested



Matched: 22
Did not match: 10
Match not determined: 19

Total

865 Samples Tested



Matched: 785
Did not match: 61
Match not determined: 19

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

