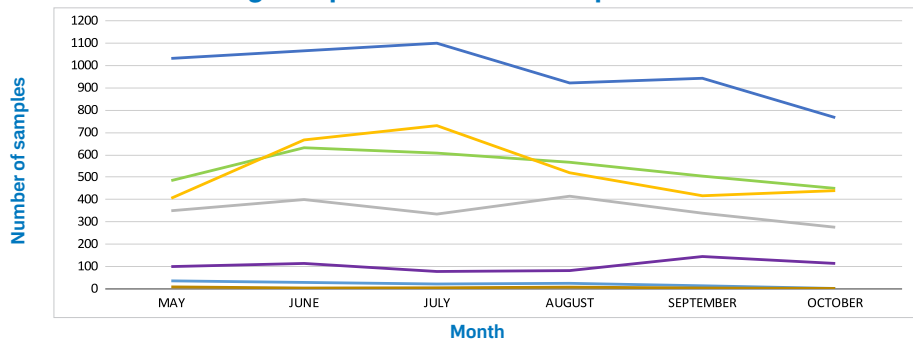


Key Findings

- In October, a total of 2,051 drug checks were performed at community drug checking sites offering FTIR services in BC (40 access points).
- The percentage of all opioids testing positive for benzodiazepines by FTIR and test strip was 51.1% (392 of 767 samples).
- Benzodiazepine detection by FTIR has been decreasing since June. In October, benzodiazepines were detected by FTIR in 13.4% of unregulated opioid samples, with bromazolam (77 samples), desalkylgidazepam (14 samples), and etizolam (3 samples) most frequently identified.
- Fluorofentanyl detection continues in the unregulated opioid supply. In October, fluorofentanyl was detected in 18.3% of unregulated opioid samples (131 of 716 samples), whereas fentanyl was detected in 47.3% (339 samples).
- Xylazine, a veterinary sedative, was detected in 2.5% of unregulated opioids (18 of 716 samples).
- The median fentanyl concentration of unregulated opioids in October was 16.0%. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



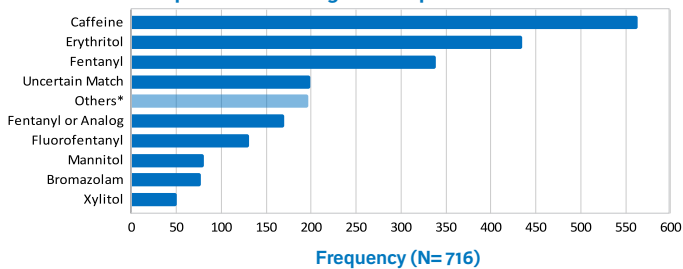
Number of samples by drug category in October

Opioid	767
Stimulant	450
Depressant	114
Psychedelc	440
Other	2
Polysubstance	2
Unknown	276

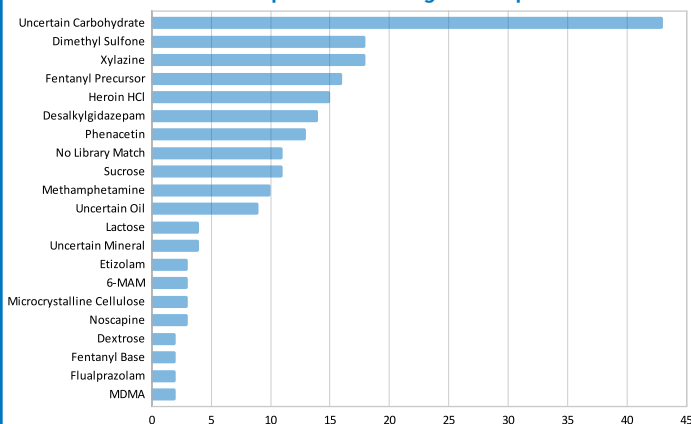
TOTAL: 2,051

Components found in drug samples in October

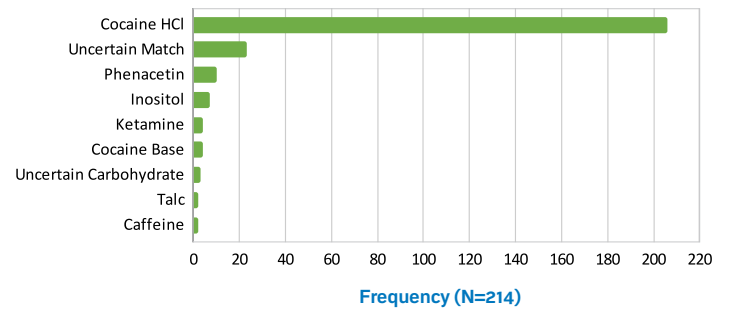
Components in unregulated opioids



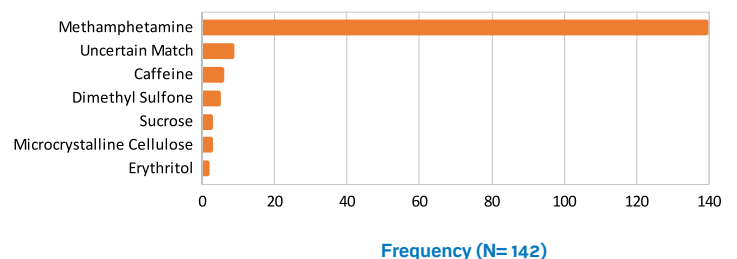
*Other components in unregulated opioids



Components in cocaine

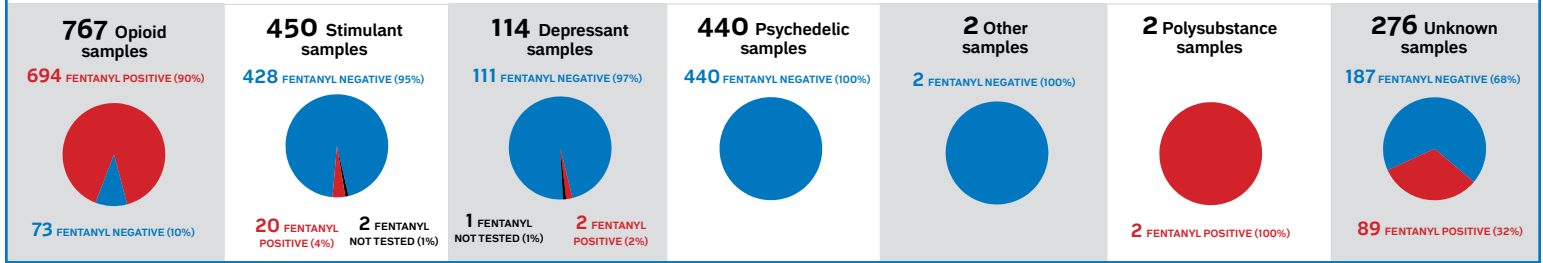


Components in methamphetamine



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

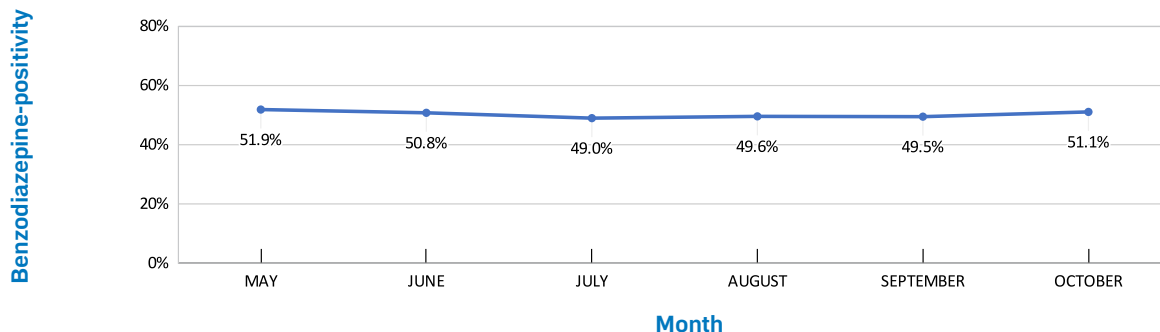


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
October 3, 2023 Prince George	Down	Xylazine, Bromazolam, Fentanyl	Positive	Positive	Prince George	Grey chunk sold as "down" tested positive for high levels of xylazine (25-30%), benzo called bromazolam (20-25%), and fentanyl (1-5%). Can cause severe and prolonged sedation, blackouts, and memory loss.
October 10, 2023 Vancouver	Down	Bromazolam, Uncertain Carbohydrate	Positive	Positive	Vancouver	Yellow powder sold as down in Vancouver tested positive for bromazolam, a benzo analog, and fentanyl.
October 23, 2023 Vancouver	Hydromorphone	Lactose, Uncertain Carbohydrate, Hydromorphone, Uncertain Oil	Positive	Positive	Vancouver	Light pink chunk sold as hydromorphone in Vancouver tested positive for hydromorphone, fentanyl, and benzos.
October 25, 2023 Vancouver	Fentanyl	Fentanyl, Bromazolam, Caffeine, Uncertain Carbohydrate	Positive	Positive	Vancouver	Pink granules sold as fentanyl in Vancouver tested positive for fentanyl and bromazolam, a benzo analog.
October 25, 2023 Surrey	Methamphetamine	Methamphetamine	Positive	Positive	Surrey	Multiple crystal samples ranging from clear to light pink in colour sold as methamphetamine tested positive for fentanyl and benzodiazepines in Surrey.
October 31, 2023 Vancouver	Crack Cocaine	Cocaine Base, Ketamine Base	Negative	N/A	Vancouver	Grey granules sold as crack cocaine in Vancouver tested positive for cocaine and ketamine.

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

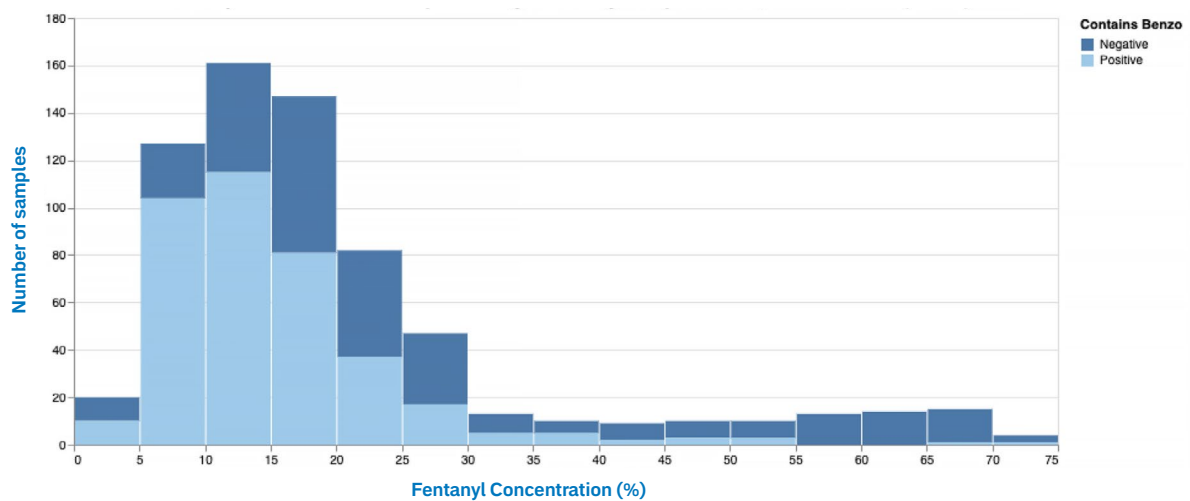


During the month of October, **51.1%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**392 samples of 767 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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 2023



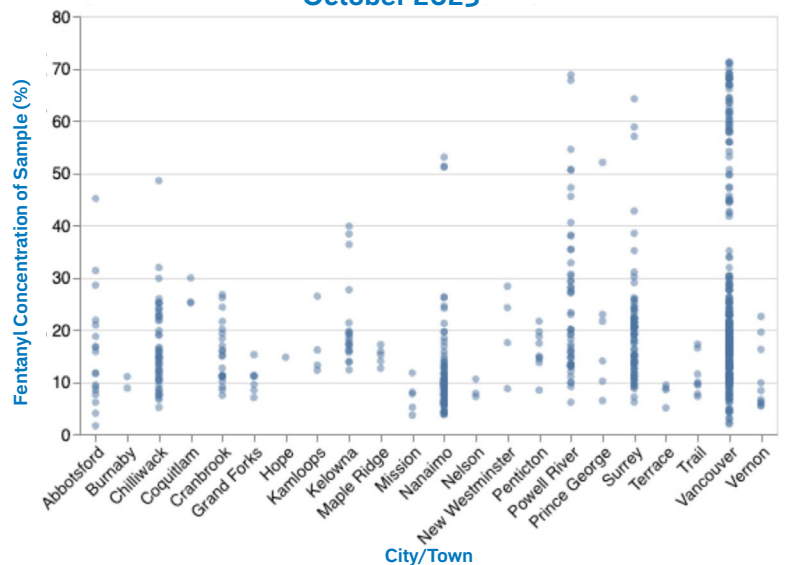
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples decreased slightly from 16.1% in September to 16.0% in October. 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 fluorofentanyl or carfentanil. While fluorofentanyl is reported to have similar potency to fentanyl, carfentanil is a very 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 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.

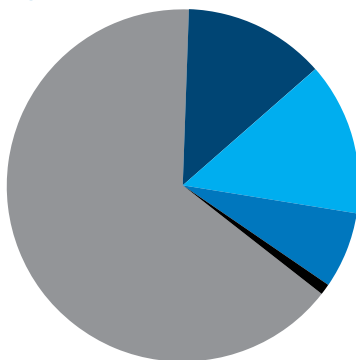
Fentanyl Concentration of Opioid Samples by City/Town, October 2023



Number of samples tested by region:

Total #: 2,051

1,347: Vancouver Coastal Health region (65%)



267: Fraser Health region (13%)

281: Interior Health region (14%)

137: Vancouver Island Health Region (7%)

19: Northern Health region (1%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG	Matched	Did Not Match	Match Not Determined	Samples Tested
Opioid	709	45	13	767
Stimulant	433	16	1	450
Depressant	94	20	0	114
Psychedelic	413	15	12	440
Other	1	0	1	2
Polysubstance	2	0	0	2
Unknown	0	0	276	276
Total	1652	96	303	2051

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

Opioids include:
"down", heroin, fentanyl
(unregulated opioids), and
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	Matched	Did Not Match	Match Not Determined	Samples Tested
Fentanyl	139	4	1	144
Heroin	6	10	0	16
Other Opioid	2	1	1	4
Down	543	15	1	559
Pharmaceutical	14	15	10	39
Opium	5	0	0	5
Total	709	45	13	767

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

