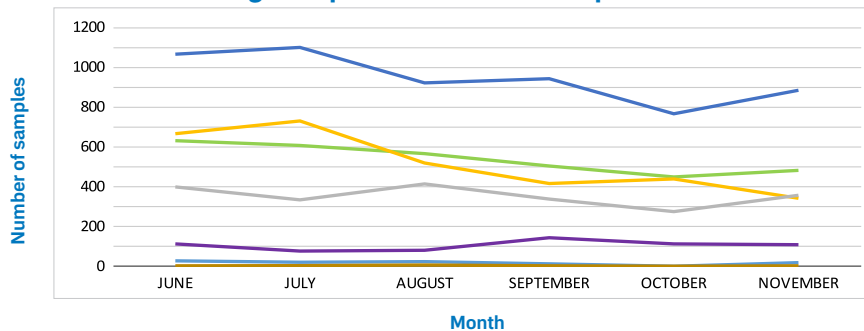


Key Findings

- In November, a total of 2,203 drug checks were performed at community drug checking sites offering FTIR services in BC (44 access points).
- The percentage of all opioids testing positive for benzodiazepines by FTIR and test strip was 53.2% (471 of 885 samples).
- Benzodiazepines continue to be increasingly detected by FTIR, indicating their presence in higher concentrations. In November, benzodiazepines were detected by FTIR in 18.5% of unregulated opioids, with bromazolam (127 samples), desalkylgidazepam (15 samples), and etizolam (6 samples) most frequently identified.
- Fluorofentanyl detection has been decreasing since June. In November, fluorofentanyl was detected in 17.2% of unregulated opioids (141 of 820 samples), whereas fentanyl was detected in 49.8% (408 samples).
- Xylazine was detected in 3.3% of unregulated opioids (27 of 820 samples).
- The median fentanyl concentration of unregulated opioids was 16.7%, the highest median concentration to-date. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



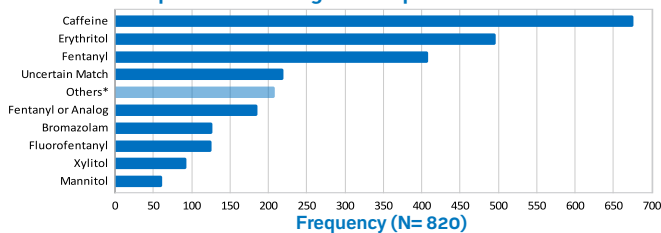
Number of samples by drug category in November

Opioid	885
Stimulant	483
Depressant	110
Psychedelic	343
Other	20
Polysubstance	4
Unknown	358

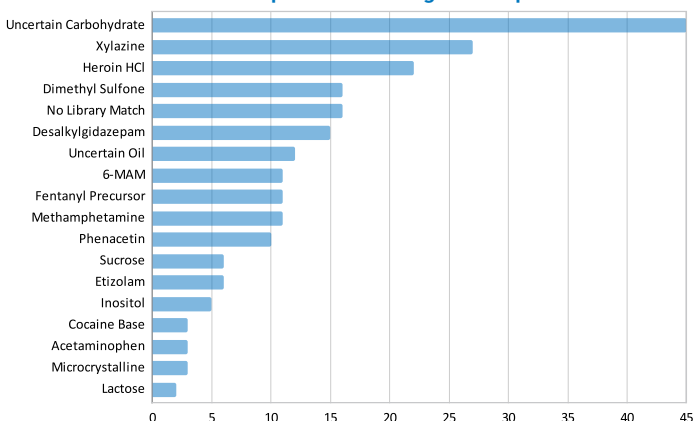
TOTAL: 2,203

Components found in drug samples in November

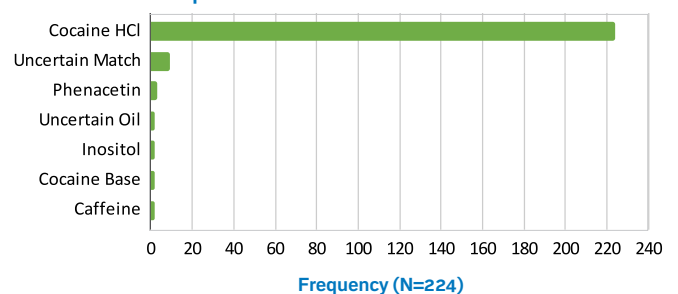
Components in unregulated opioids



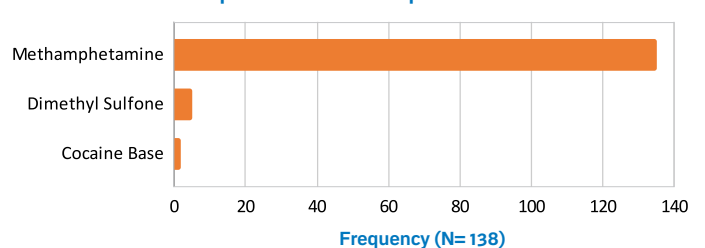
*Other components in unregulated opioids



Components in cocaine

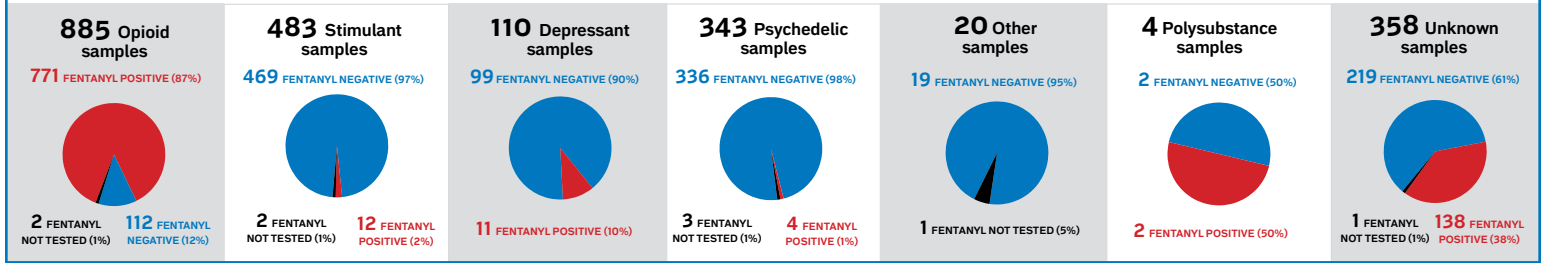


Components in methamphetamine



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

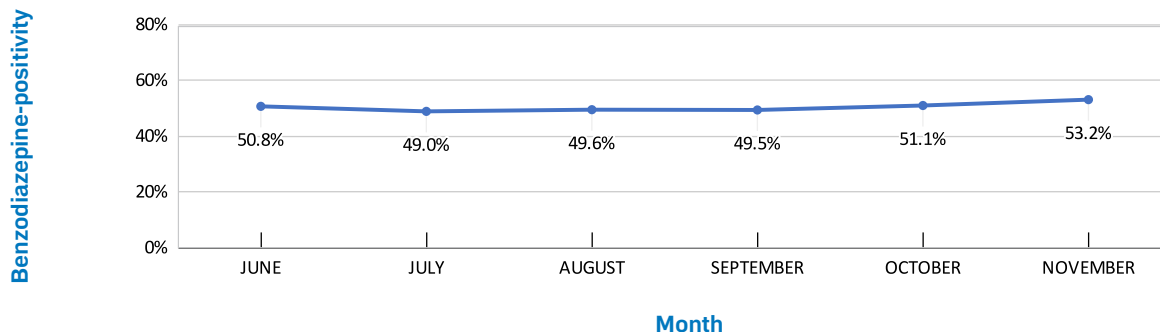


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
November 7, 2023 New Westminster	Heroin	Bromazolam, Uncertain Match	Negative	Positive	New Westminster	Beige powder sold as heroin tested as bromazolam, a benzodiazepine in New Westminster
November 16, 2023 Cranbrook	Down	Fentanyl/Fluorofentanyl, Bromazolam, Xylazine	Positive	Positive	Cranbrook	Xylazine has been found in multiple down samples. The samples also contained fentanyl or fentanyl analogues and benzodiazepines in various colours and textures in Cranbrook
November 21, 2023 Vancouver	Down	Fentanyl, Xylitol, Bromazolam, Xylazine	Positive	Positive	Vancouver	Purple granules sold as down in Vancouver tested positive for fentanyl, xylazine and bromazolam, a benzo analogue
November 30, 2023 Vancouver	DMT	AMB-FUBINACA, Caffeine	Positive	Negative	Vancouver	White powder sold as DMT in Vancouver tested positive for fentanyl and AMB-FUBINACA, a synthetic cannabinoid, and negative for DMT. Substance has caused 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

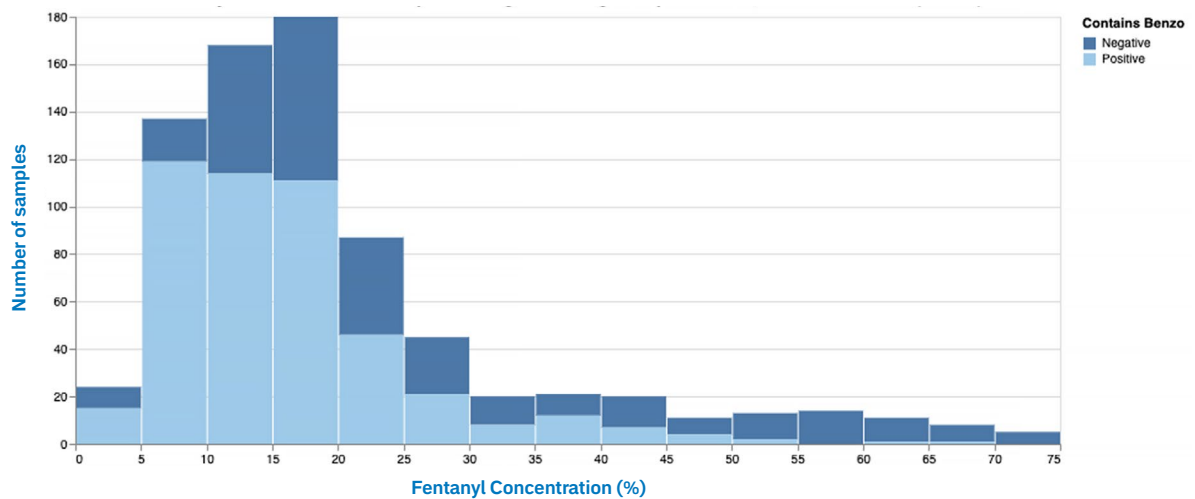


During the month of November, **53.2%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**471 samples of 885 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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 2023



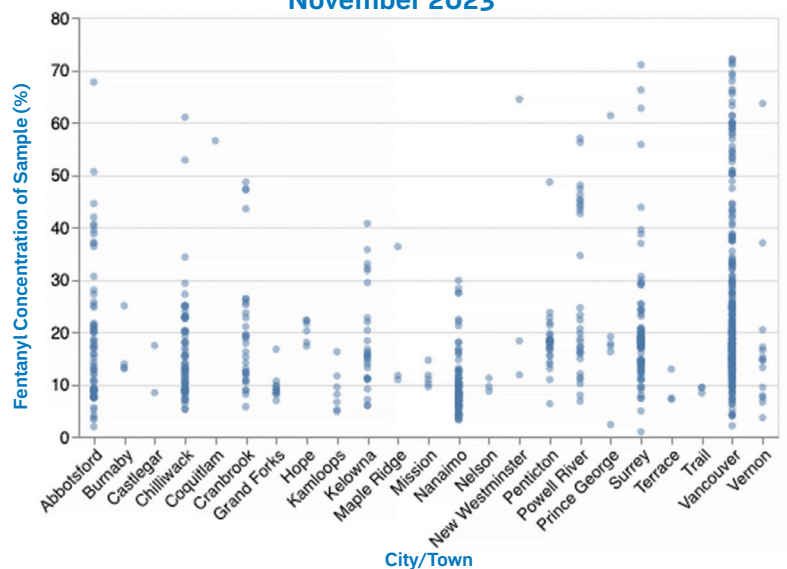
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples increased from 16.0% in October to 16.7% in November. 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.

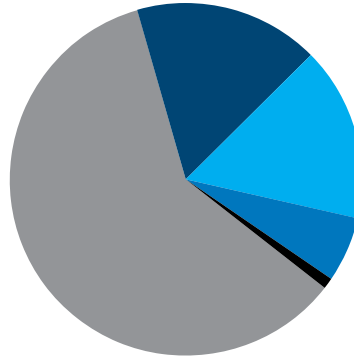
Fentanyl Concentration of Opioid Samples by City/Town, November 2023



Number of samples tested by region:

Total #: 2,203

1,320: Vancouver Coastal Health region (60%)



380: Fraser Health region (17%)

339: Interior Health region (16%)

135: Vancouver Island Health Region (6%)

29: 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	819	47	19	885
Stimulant	462	21	0	483
Depressant	88	20	2	110
Psychedelic	305	25	13	343
Other	8	3	9	20
Polysubstance	1	1	2	4
Unknown	0	0	358	358
Total	1683	117	403	2203

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	133	9	0	142
Heroin	21	14	0	35
Other Opioid	1	1	0	2
Down	627	15	1	643
Pharmaceutical	25	7	18	50
Opium	12	1	0	13
Total	819	47	19	885

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:

