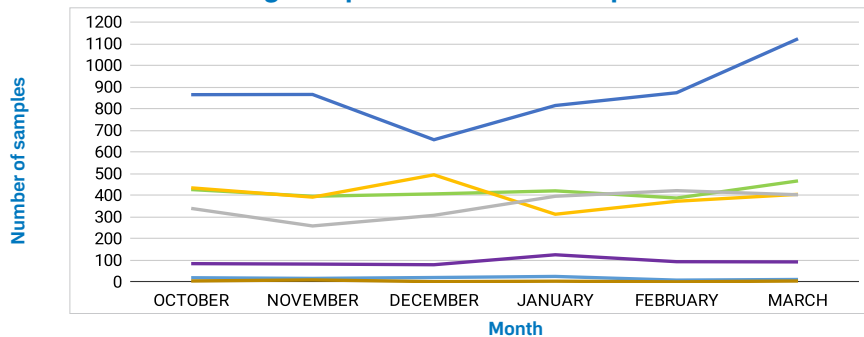


Key Findings

- In March, a total of 2,508 drug checks were performed at community drug checking sites offering FTIR services in BC (39 access points), the highest number of checks recorded to date.
- The overall percentage of opioids testing positive for benzodiazepines decreased from 50.6% to 46.5% in March (522 of 1123 samples).
- Bromazolam was the most frequent benzodiazepine detected by FTIR in March, found present in 97 opioid samples, followed by desalkylgidazepam (22 samples), and etizolam (10 samples).
- Para-fluorofentanyl continues to be increasingly detected by FTIR, found present in 163 opioid samples.
- Xylazine was detected in 28 samples, occurring mostly in the opioid category (23 of 1123 samples). Interior Health issued an alert concerning a crack cocaine sample in which fentanyl, bromazolam, and xylazine were detected. The 4 remaining samples were expected to be xylazine, or the expected drug was unknown.
- The median fentanyl concentration of all samples was 15.1%, decreasing from 15.5% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



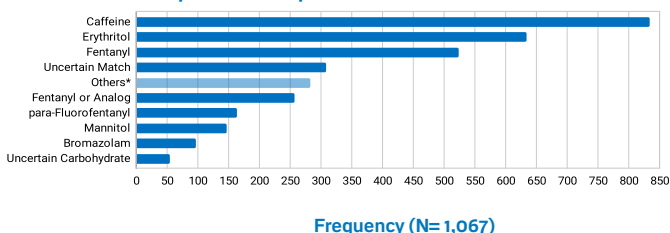
Number of samples by drug category in March

Opioid	1123
Stimulant	467
Depressant	93
Psychedelic	405
Other	12
Polysubstance	5
Unknown	403

TOTAL: 2,508

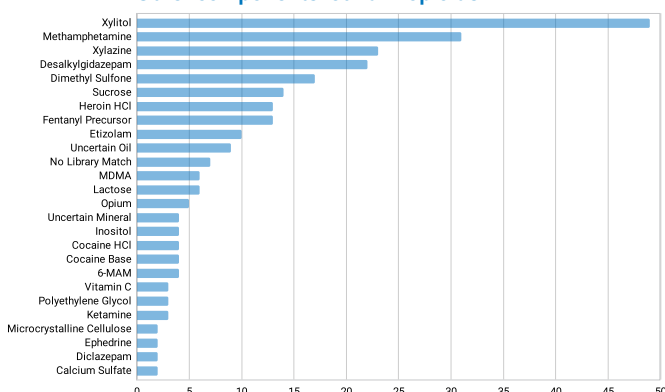
Components found in drug samples in March

Components in opioids

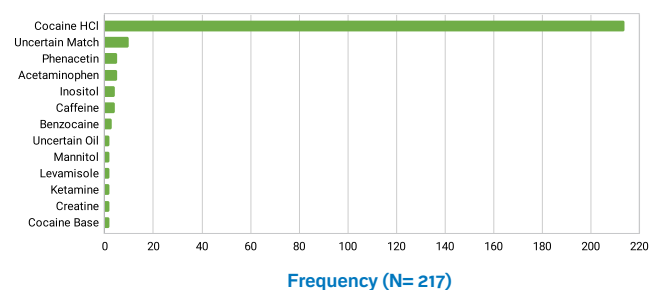


Frequency (N=1,067)

*Other components found in opioids

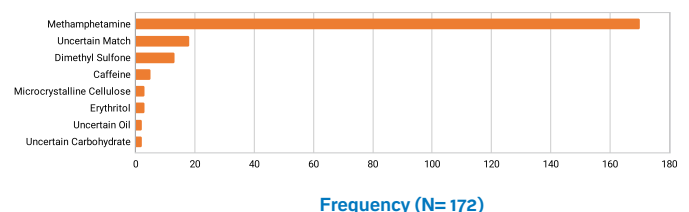


Components in cocaine



Frequency (N=217)

Components in methamphetamine



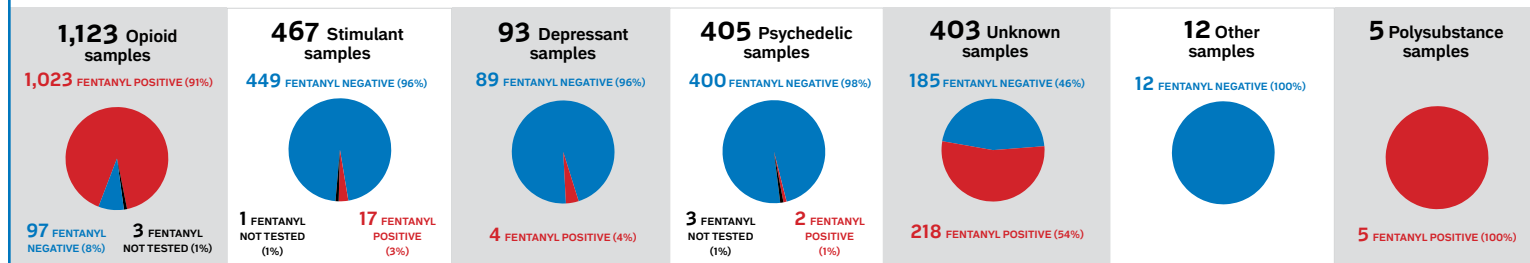
Frequency (N=172)

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/

March
2023

Drug Checking in British Columbia

Number of samples tested with fentanyl present

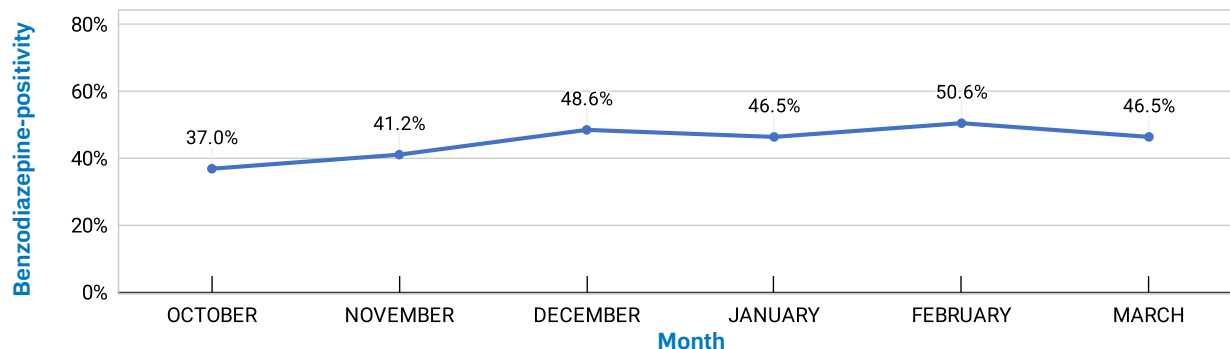


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
March 8, 2023 Vancouver	Down	Caffeine, Para-Fluorofentanyl, Mannitol	Positive	Positive	Vancouver	High concentration of para-fluorofentanyl and presence of benzodiazepines increases risk of overdose. Sample is believed to be associated with multiple overdoses.
March 21, 2023 Prince George	Down	Erythritol, Fentanyl	Positive	Positive	Prince George	High concentration of fentanyl and presence of benzodiazepines increases risk of overdose. Sample associated with prolonged sedation and breathing difficulties.
March 27, 2023 Penticton	Down	Fentanyl, Erythritol, Caffeine, Bromazolam	Positive	Positive	Penticton	High concentration of fentanyl and bromazolam (benzodiazepine) poses high risk of overdose.
March 30, 2023 Vernon	Crack Cocaine	Fentanyl, Bromazolam, Xylazine	Positive	Positive	Vernon	Sample sold as a stimulant instead contained high concentrations of fentanyl, bromazolam, and xylazine, posing high risk of overdose. Sample is believed to be associated with multiple drug toxicity events.
March 31, 2023 Penticton	Down	Para-fluorofentanyl	Positive	Negative	Penticton	Sample sold as down (typically a diluted mixture), tested as undiluted or "uncut" para-fluorofentanyl, posing 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

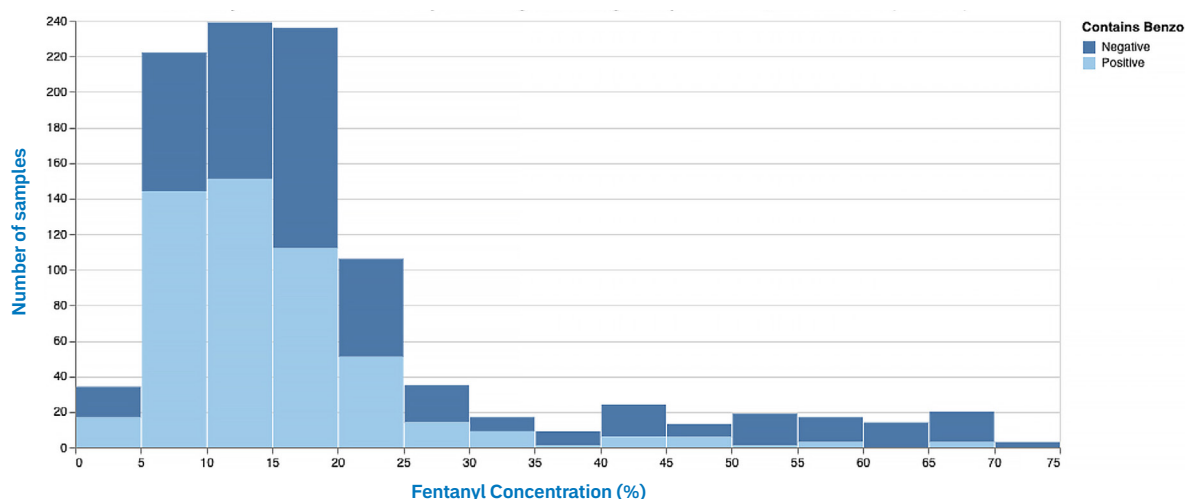


During the month of March, **46.5%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**522 samples of 1123 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, March 2023



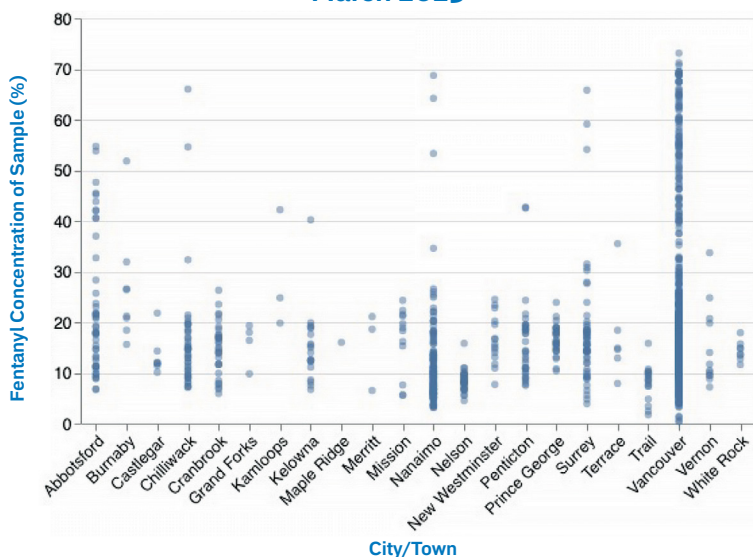
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 15.1%, decreasing from 15.5% last month. 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, March 2023



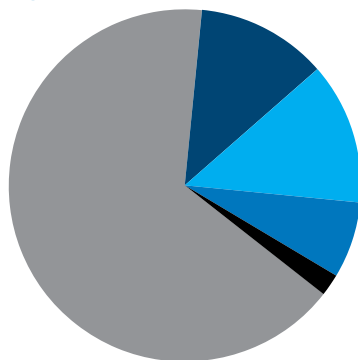
March
2023

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 2,508

1,625: Vancouver Coastal
Health region (66%)



295: Fraser Health region (12%)

351: Interior Health region (13%)

182: Vancouver Island
Health Region (7%)

55: Northern Health region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG		Matched	Did Not Match	Match Not Determined	Samples Tested
Opioid	<div><div></div><div></div><div></div></div>	1,050	54	19	1,123
Stimulant	<div><div></div><div></div><div></div></div>	450	15	2	467
Depressant	<div><div></div><div></div><div></div></div>	68	23	2	93
Psychedelic	<div><div></div><div></div><div></div></div>	364	35	6	405
Other	<div><div></div><div></div><div></div></div>	7	0	5	12
Polysubstance	<div><div></div><div></div><div></div></div>	5	0	0	5
Unknown	<div><div></div><div></div><div></div></div>	0	0	403	403
Total	<div><div></div><div></div><div></div></div>	1,944	127	437	2,508

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,
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.

March
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Drug Checking in British Columbia

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		323	6	0	329
Heroin		11	7	0	18
Other Opioid		1	1	0	2
Down		685	25	3	713
Pharmaceutical		25	15	16	56
Opium		5	0	0	5
Total		1,050	54	19	1,123

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

