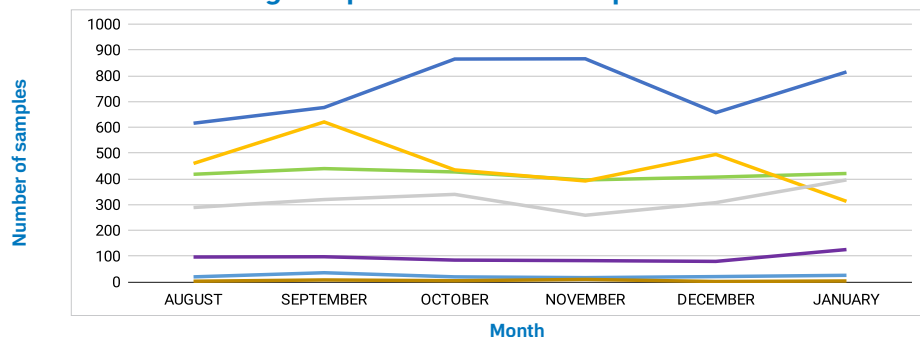


Key Findings

- In January, a total of 2,101 drug checks were performed across community drug checking sites offering FTIR services in BC.
- The overall percentage of opioids testing positive for benzodiazepines decreased from 48.6% to 46.5% in January (379 of 815 samples).
- There appears to 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.
- In January, bromazolam was the most frequent benzodiazepine detected by FTIR, found present in 67 opioid samples, followed by etizolam (16 samples).
- The median fentanyl concentration of all samples was 16.7%, increasing from 14.9% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



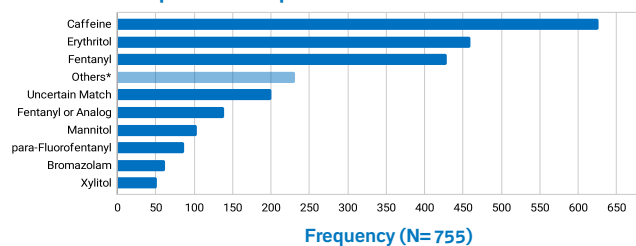
Number of samples by drug category in January

Opioid	815
Stimulant	421
Depressant	126
Psychedelic	313
Other	26
Polysubstance	4
Unknown	396

TOTAL: 2,101

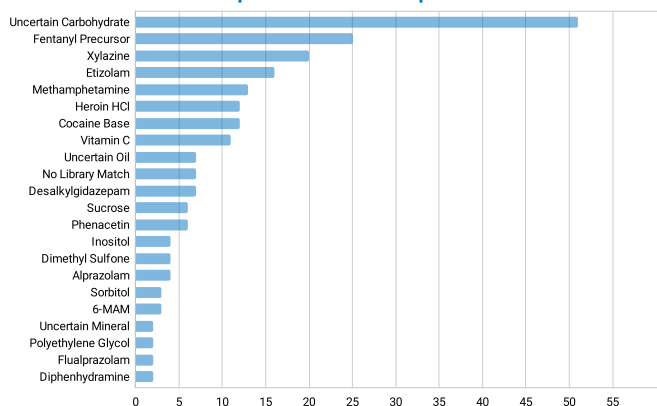
Components found in drug samples in January

Components in opioids



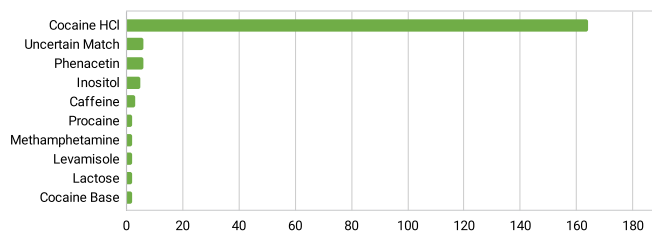
Frequency (N=755)

*Other components found in opioids



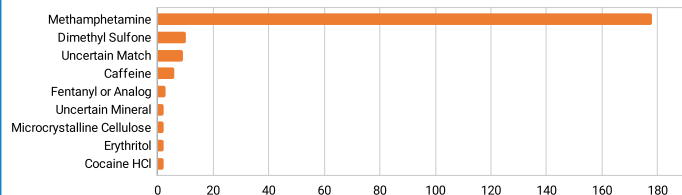
Frequency (N=755)

Components in cocaine



Frequency (N=166)

Components in methamphetamine



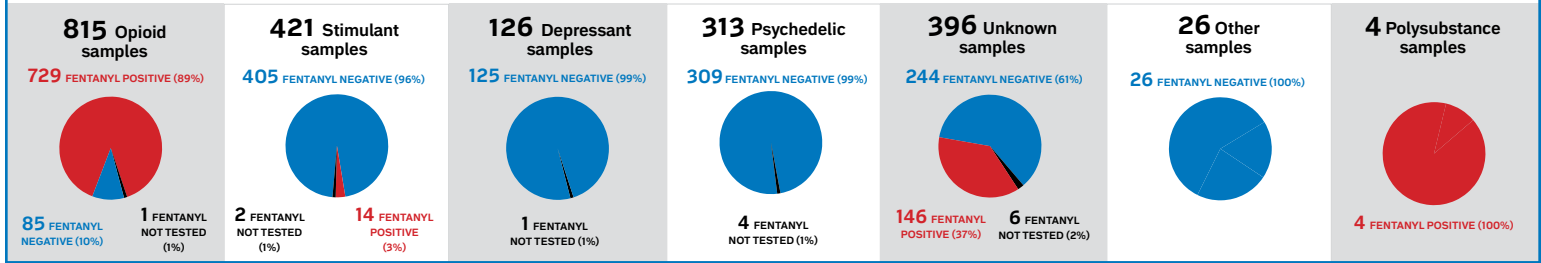
Frequency (N=180)

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/

January
2023

Drug Checking in British Columbia

Number of samples tested with fentanyl present

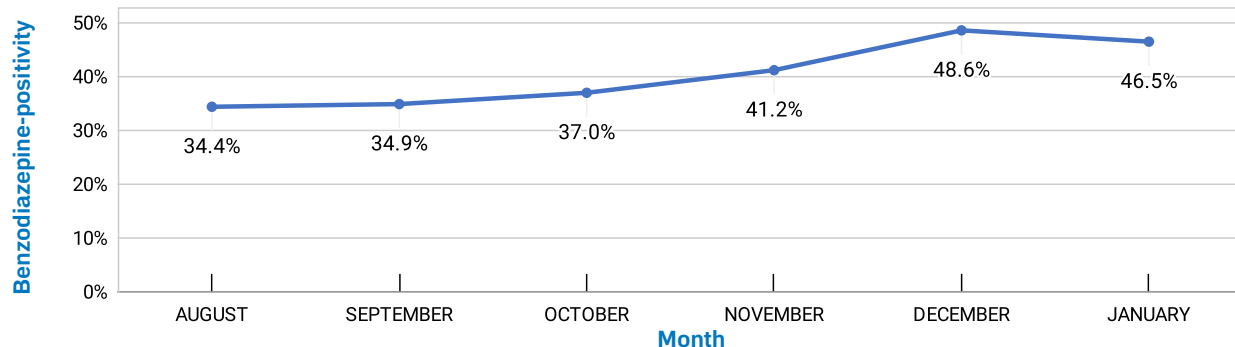


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
January 3, 2023 Vancouver	Fentanyl	Fentanyl, Caffeine, Erythritol, Xylazine, Bromazepam	Positive	Positive	Vancouver	High concentration of fentanyl combined with xylazine and a benzodiazepine poses high risk of overdose. Sample has been associated with multiple ODs
January 4, 2023 Coquitlam	Down	Xylitol, Caffeine, Carfentanyl	Positive	Negative	Coquitlam	High concentration of carfentanyl, a potent fentanyl analogue, poses very high risk of overdose
January 13, 2023 Cranbrook	Down/Fentanyl	Fentanyl, Para-fluorofentanyl, Bromazepam	Positive	Positive	Cranbrook	High concentrations of fentanyl/analogue and a benzodiazepine poses high risk of overdose that may not respond to naloxone
January 16, 2023 Vancouver	Down	Fentanyl, Caffeine, Bromazepam	Positive	Positive	Vancouver	High concentrations of fentanyl and a benzodiazepine increases the risk of overdose
January 16, 2023 Prince George	Down	Xylazine, Bromazepam, Caffeine	Negative	Positive	Prince George	High concentration of xylazine and a benzodiazepine poses risk of overdose. Sample has been associated with causing OD and heavy sedation
January 20, 2023 Vancouver	Acetaminophen and Oxycodone (Percocet)	Microcrystalline Cellulose, Uncertain Oil	Positive	Negative	Vancouver	Sample unexpectedly tested positive for presence of fentanyl, increasing risk of overdose
January 25, 2023 Penticton	Down/Fentanyl	Para-fluorofentanyl, Erythritol, Caffeine	Positive	Positive	Penticton	High concentration of fentanyl analogue and presence of benzodiazepines poses high risk of overdose. Sample has been associated with multiple ODs

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

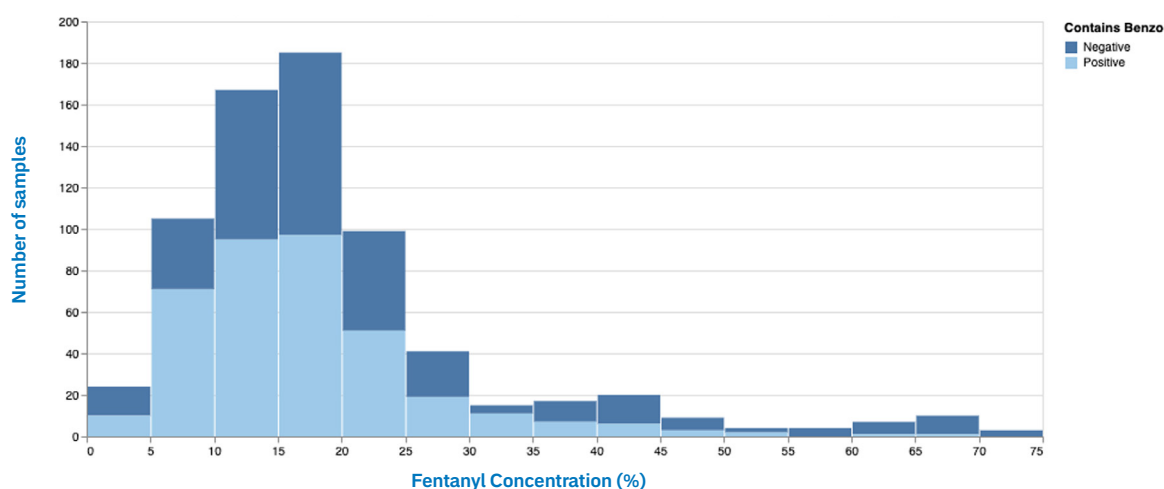


During the month of January, **46.5%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**379 samples of 815 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, January 2023



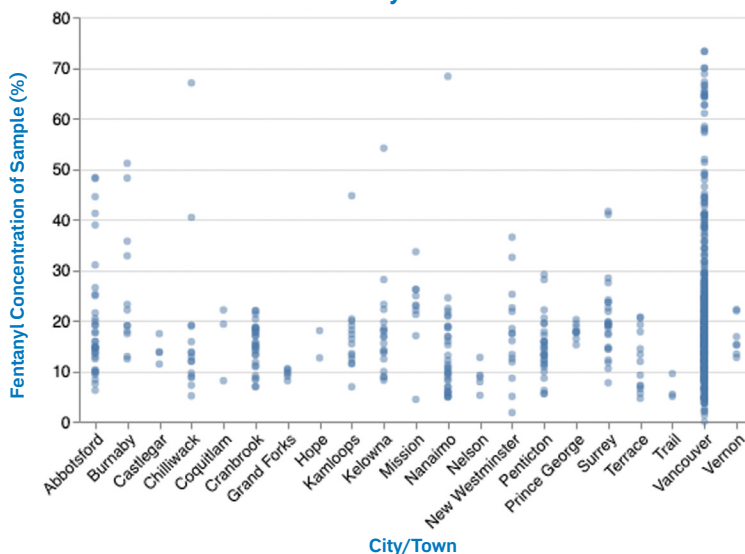
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 16.7%, increasing from 14.9% last month. 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 carfentanyl. Carfentanyl 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, January 2023



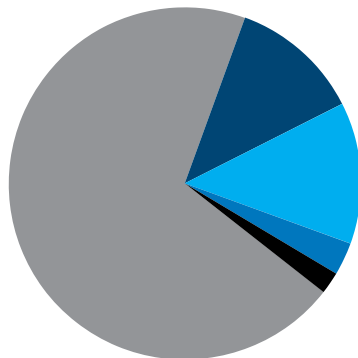
January
2023

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 2,101

1,474: Vancouver Coastal
Health region (70%)



252: Fraser Health region (12%)

276: Interior Health region (13%)

59: Vancouver Island
Health Region (3%)

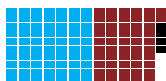
40: Northern Health region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG: Depressant

126 Samples Tested



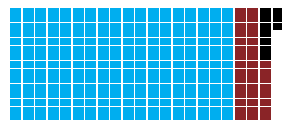
Matched: 70

Did not match: 52

Match not determined: 4

EXPECTED DRUG: Psychedelic

313 Samples Tested



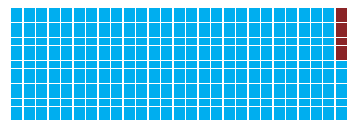
Matched: 275

Did not match: 28

Match not determined: 10

EXPECTED DRUG: Stimulant

421 Samples Tested



Matched: 413

Did not match: 8

EXPECTED DRUG: Polysubstance

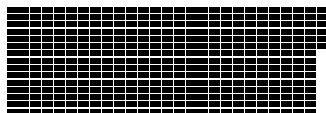
4 Sample Tested



Matched: 4

EXPECTED DRUG: Unknown

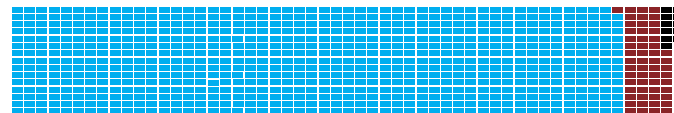
396 Samples Tested



Match not determined: 396

EXPECTED DRUG: Opioid

815 Samples Tested



Matched: 749

Did not match: 55

Match not determined: 11

EXPECTED DRUG: Other

26 Samples Tested



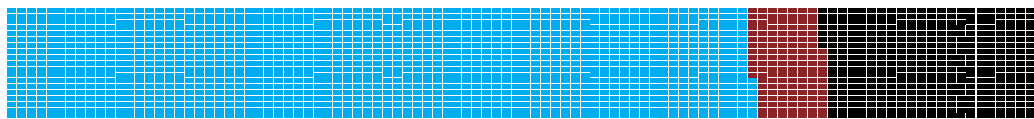
Matched: 17

Did not match: 2

Match not determined: 7

Total

2,101 Samples Tested



Matched: 1,528

Did not match: 145

Match not determined: 428

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.

January
2023

Drug Checking in British Columbia

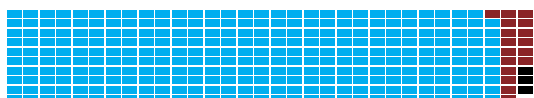
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

319 Samples Tested



Matched: 299

Did not match: 17

Match not determined: 3

EXPECTED DRUG:

Heroin

12 Samples Tested



Matched: 10

Did not match: 2

EXPECTED DRUG:

Fentanyl and Heroin

2 Samples Tested



Matched: 2

EXPECTED DRUG:

Opium

18 Samples Tested



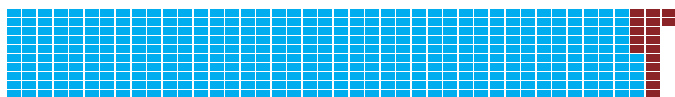
Matched: 17

Match not determined: 1

EXPECTED DRUG:

Down

422 Samples Tested



Matched: 405

Did not match: 17

EXPECTED DRUG:

Pharmaceutical

42 Samples Tested



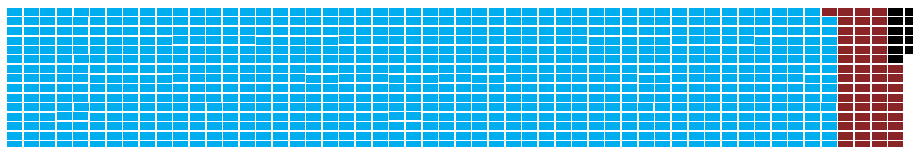
Matched: 16

Did not match: 19

Match not determined: 7

Total

815 Samples Tested



Matched: 749

Did not match: 55

Match not determined: 11

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

