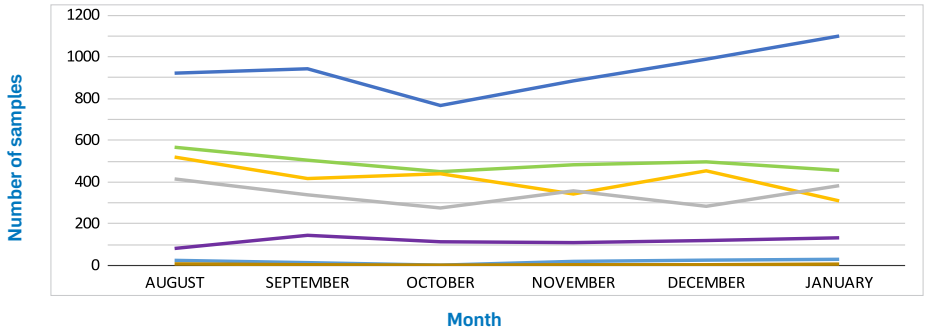
January 2024

Drug Checking in British Columbia

Key Findings

- In January, a total of 2,419 drug checks were performed at community drug checking sites offering FTIR services in BC (50 access points).
- The percentage of all opioids testing positive for benzodiazepines by FTIR and test strip was 51.1% (562 of 1100 samples).
- Benzodiazepines continue to be increasingly detected by FTIR, indicating their presence in higher concentrations. In January, benzodiazepines were detected by FTIR in 18.4% of unregulated opioids, with bromazolam (146 samples) most frequently identified. Desalkylgidazepam was identified in 39 samples, more than 3 times the amount detected in the previous month.
- Fluorofentanyl was detected by FTIR in 22.2% of unregulated opioids (229 of 1032 samples), whereas fentanyl was detected in 43.6% (450 samples).
- Xylazine was detected by FTIR in 1.9% of unregulated opioids (20 of 1032 samples), with Fraser and Interior Health observing the highest levels of detection.
- The median fentanyl concentration of unregulated opioids was 16.8%, a slight increase from the previous month, and highest level to-date. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



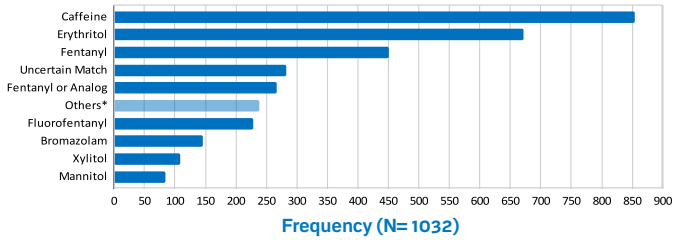
Number of samples by drug category in January

Opioid	1100
Stimulant	456
Depressant	133
Psychedelic	310
Other	30
Polysubstance	7
Unknown	383

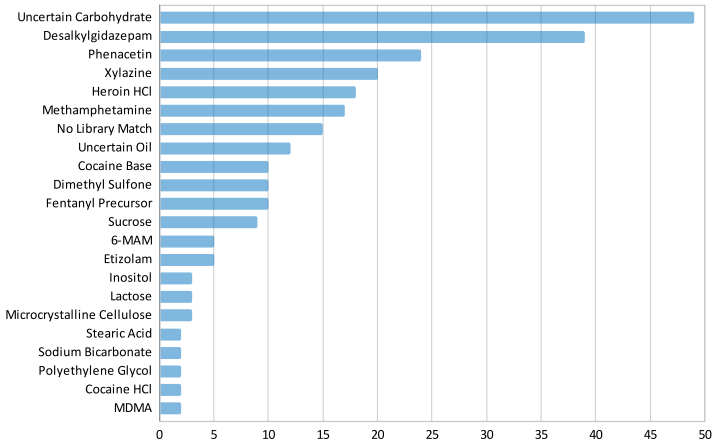
TOTAL: 2,419

Components found in drug samples in January

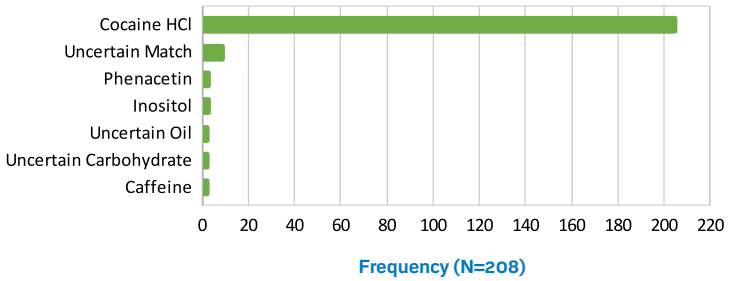
Components in unregulated opioids



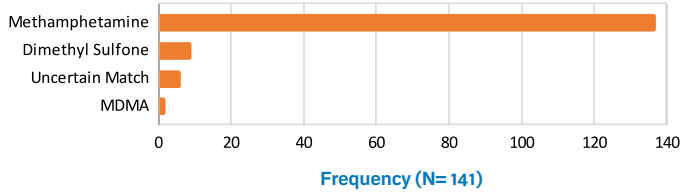
*Other components in unregulated opioids



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/

January 2024

Drug Checking in British Columbia

Number of samples tested with fentanyl present

1100 Opioid samples
1009 FENTANYL POSITIVE (92%)

91 FENTANYL NEGATIVE (8%)

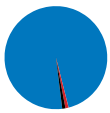
456 Stimulant samples
433 FENTANYL NEGATIVE (94%)

1 FENTANYL NOT TESTED (1%)
22 FENTANYL POSITIVE (5%)

133 Depressant samples
126 FENTANYL NEGATIVE (95%)

2 FENTANYL NOT TESTED (1%)
5 FENTANYL POSITIVE (4%)

310 Psychedelic samples
306 FENTANYL NEGATIVE (98%)



3 FENTANYL NOT TESTED (1%)
1 FENTANYL POSITIVE (1%)

30 Other samples
29 FENTANYL NEGATIVE (97%)

1 FENTANYL POSITIVE (3%)

7 Polysubstance samples
1 FENTANYL NEGATIVE (14%)

6 FENTANYL POSITIVE (86%)

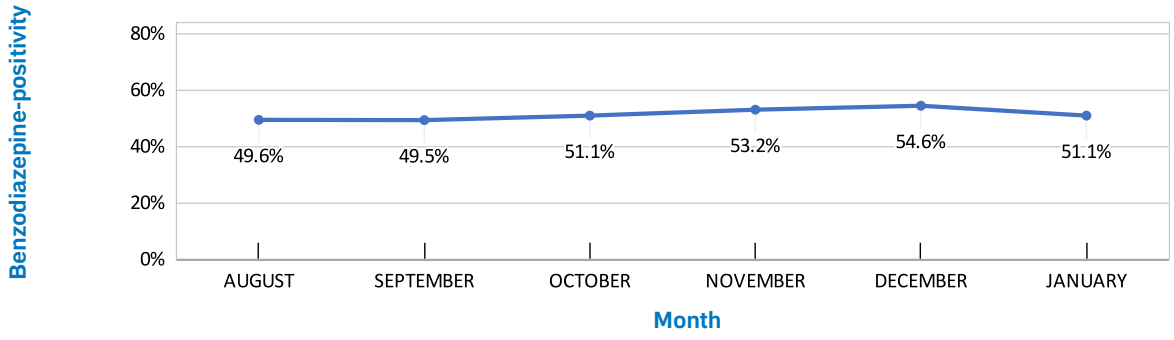
383 Unknown samples
253 FENTANYL NEGATIVE (66%)

127 FENTANYL POSITIVE (33%)
3 FENTANYL NOT TESTED (1%)

PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	FTIR Spectroscopy Results	Fentanyl Strip	Benzo Strip	Alert Message
January 17, 2024 Vancouver	GHB	Aniline	Negative	N/A	Brown liquid sold as GHB in Vancouver tested positive for aniline and negative for GHB. Aniline is an irritant that can be toxic if ingested.
January 18, 2024 Vernon	Down	Caffeine, Bromazolam, Manitol, Fentanyl, Phenacetin, Para-Fluorofentanyl Base	Positive	Positive	Beige/pink/brown granules sold as down tested positive for very high concentrations of fentanyl, as well as benzodiazepines in Vernon.
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, **51.1%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC **(562 samples of 1100 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.

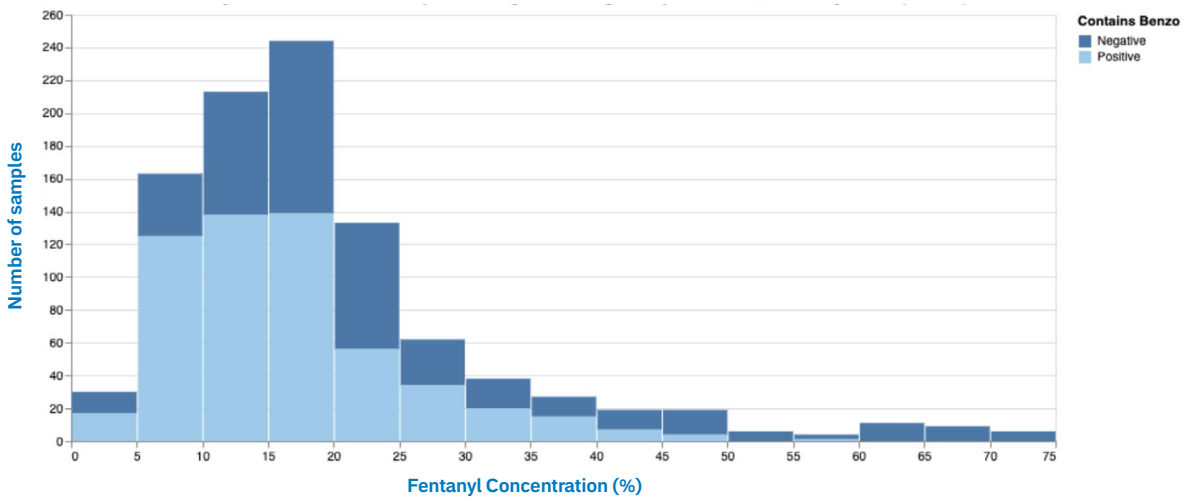
January 2024

Drug Checking in British Columbia

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 2024



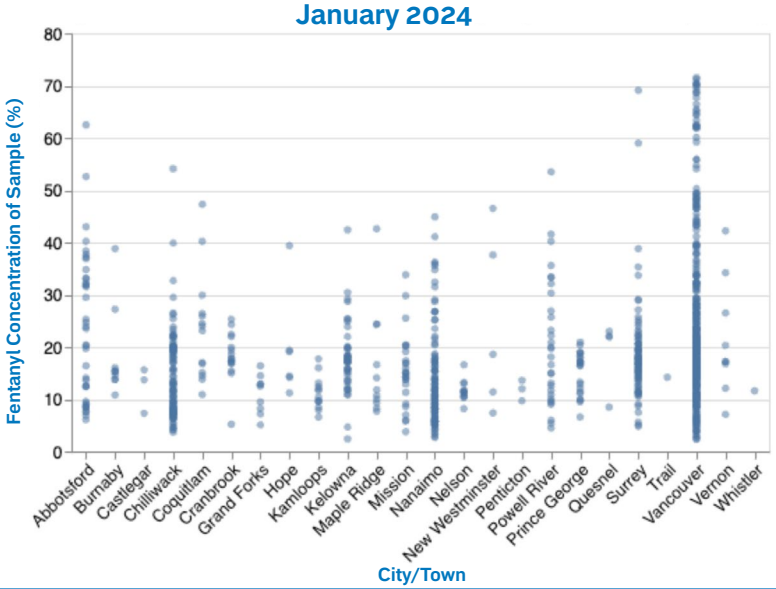
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 16.8% in December, a small increase from the previous 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 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 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 2024

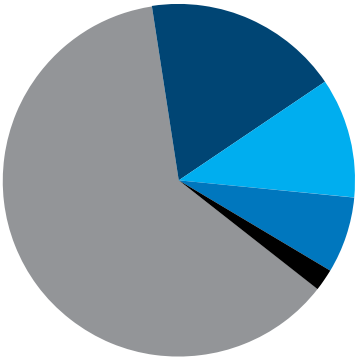


January 2024

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 2,419



1,506: Vancouver Coastal Health region (62%)

429: Fraser Health region (18%)

273: Interior Health region (11%)

176: Vancouver Island Health Region (7%)

35: 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	1020	65	15	1100
Stimulant	443	13	0	456
Depressant	95	34	4	133
Psychedelic	267	29	14	310
Other	16	3	11	30
Polysubstance	6	1	0	7
Unknown	0	0	383	383
Total	1847	145	427	2419

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*

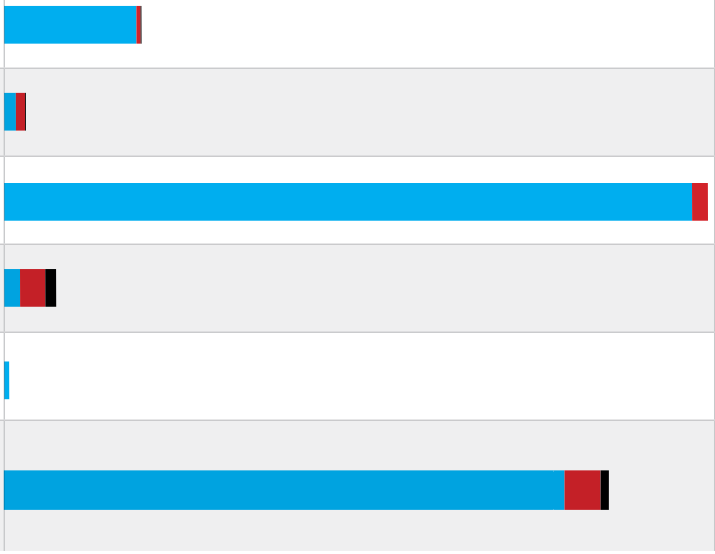
Unknown includes: *samples where the individual was unable to identify an expected substance - this includes found samples.*

January 2024

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	158	5	1	164
Heroin	14	11	1	26
Down	823	19	0	842
Pharmaceutical	19	30	13	62
Opium	6	0	0	6
Total	1020	65	15	1100

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 benzodiazapine 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:

British Columbia Centre on Substance Use · Health Canada · Santé Canada · Vancouver Coastal Health · fraserhealth · Interior Health · northern health · island health · CRISM British Columbia · Providence Health Care Research Institute · Providence Health Care · St. Paul's Foundation · UBC · Mountainside Harm Reduction Society · insite · ANKORS · ASK Wellness Society · O.P.S. · Canadian Mental Health Association · Purpose · phs Community Services Society · Lookout Housing + Health Society · The Pounds Project · GetYourDrugsTested.com