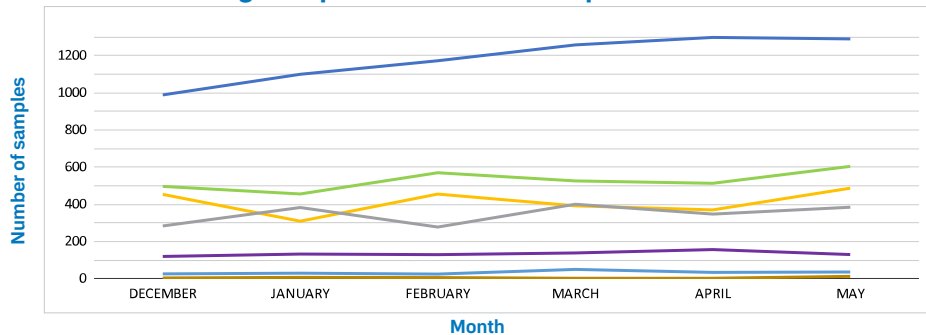


Key Findings

- In May, a total of 2,945 drug checks were performed at community drug checking sites offering FTIR services in BC (54 access points). The number of stimulant and psychedelic samples increased, which is typical leading into the summer season.
- The percentage of all opioids testing positive for benzodiazepines by FTIR and/or test strip in BC was 40.5% (522 of 1290 samples), decreasing in all regions except the Nanaimo site in Island Health. The true rate may be higher as benzo-like substances such as etizolam are not reliably detected with benzodiazepine test strips.
- Benzodiazepines were detected by FTIR in 12.7% of unregulated opioids (153 of 1205 samples), indicating their presence in higher concentrations.
- Multiple fentanyl analogues have been detected in unregulated opioids. The most recent to emerge, ortho-Methylfentanyl, was detected by FTIR in 11.5% of samples (139 of 1205). Fluorofentanyl was detected in 29.5% (356 samples).
- Xylazine detection by FTIR in unregulated opioid samples increased from 2.4% to 3.3% in May (40 of 1205 samples).
- The median fentanyl concentration of unregulated opioids was 16.8%, consistent with the previous month. See page 3 for more detailed results.
- The BCCSU Drug Checking Program website has recently been updated. To find drug checking services near you, please see our [site locator](#).

Number of drug samples checked in the past 6 months



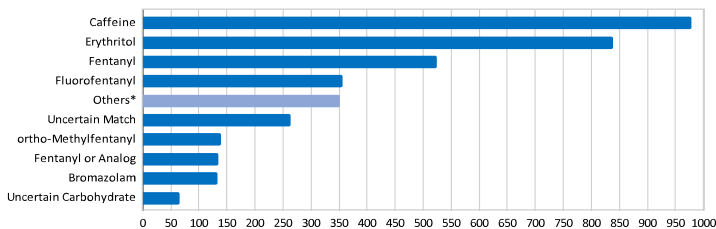
Number of samples by drug category in May

Opioid	1290
Stimulant	604
Depressant	130
Psychedelic	488
Other	36
Polysubstance	12
Unknown	385

TOTAL: 2,945

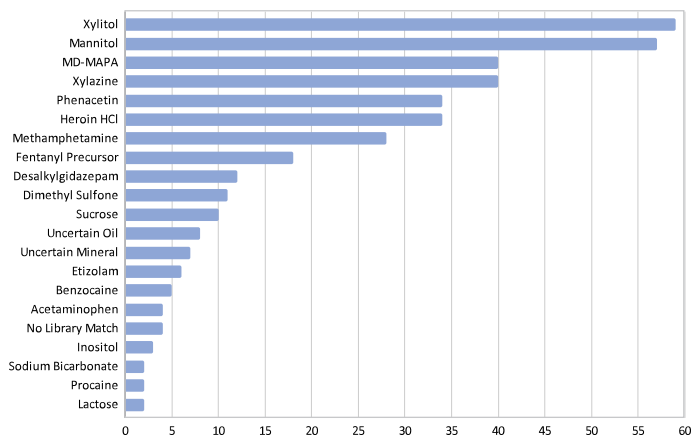
Components found in drug samples in May

Components in unregulated opioids

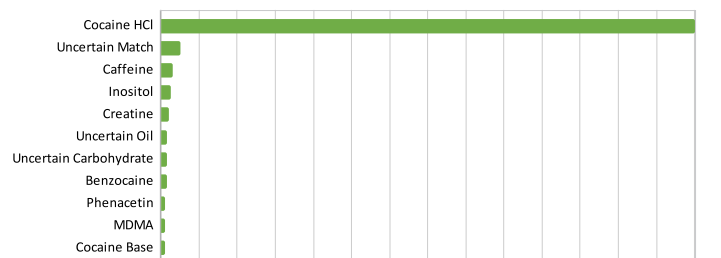


Frequency (N=1,205)

*Other components in unregulated opioids

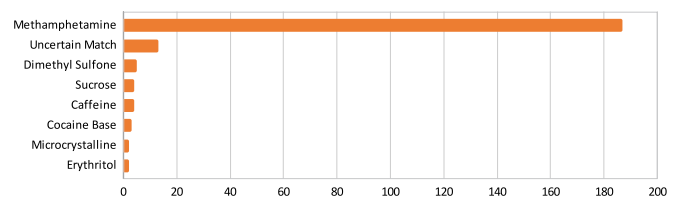


Components in cocaine



Frequency (N=287)

Components in methamphetamine



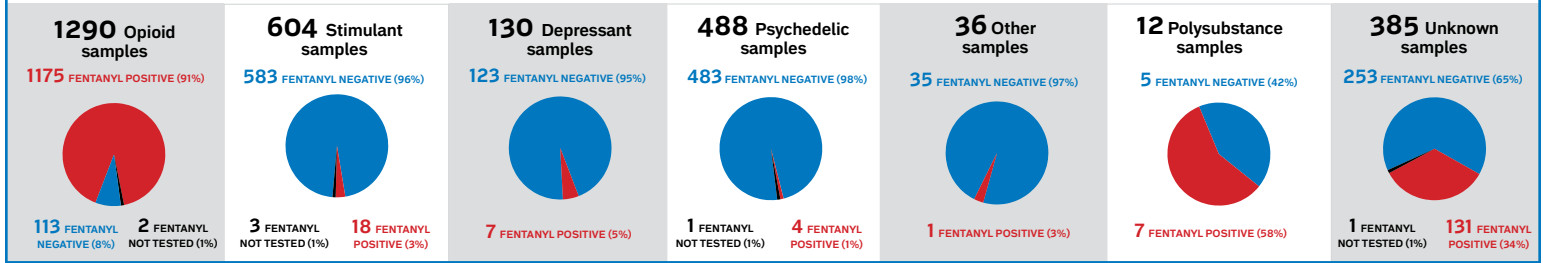
Frequency (N=192)

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/

May
2024

Drug Checking in British Columbia

Number of samples tested with fentanyl present



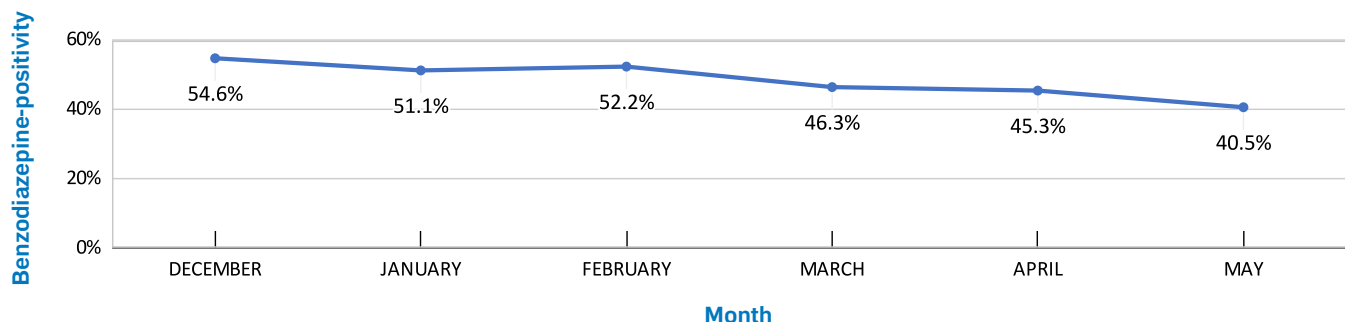
PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Alert Message
May 10, 2024 Vancouver	Oxycodone	Microcrystalline Cellulose, Protonitazene, Uncertain Oil, Uncertain Match	Negative	Negative	Yellow pressed pill with imprint "40" resembling oxycodone sold in Vancouver tested positive for Protonitazene, a synthetic opioid, and negative for oxycodone
May 21, 2024 Vancouver	Cocaine	Caffeine	Positive	Negative	White granules sold as cocaine in Vancouver tested positive for fentanyl and negative for cocaine

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.

To subscribe to the provincial drug alert and response system, text the word JOIN to 253787 (ALERTS).

Percentage of opioids testing positive for benzodiazepines in the past 6 months

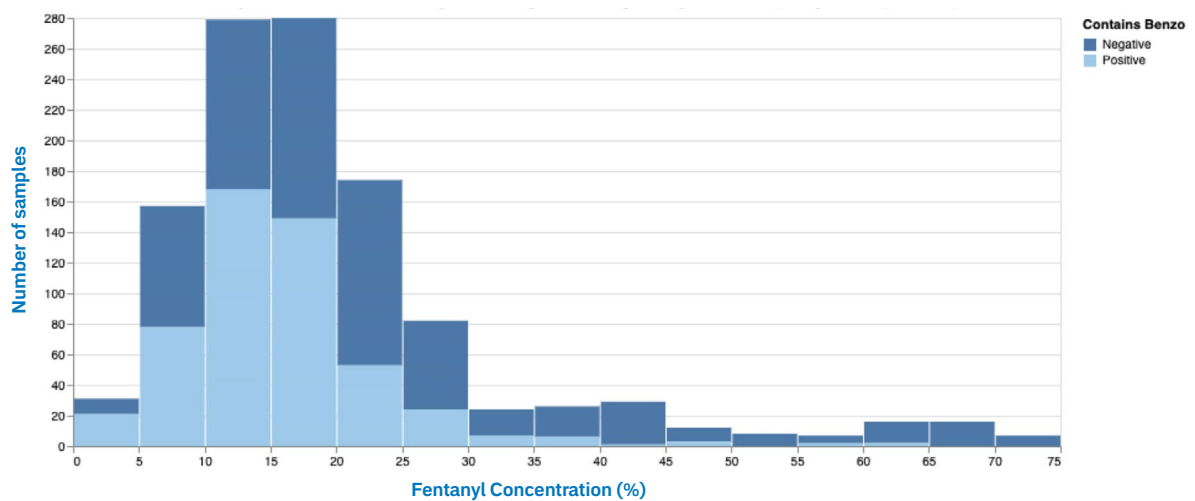


During the month of May, **40.5%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**522 samples of 1290 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, May 2024



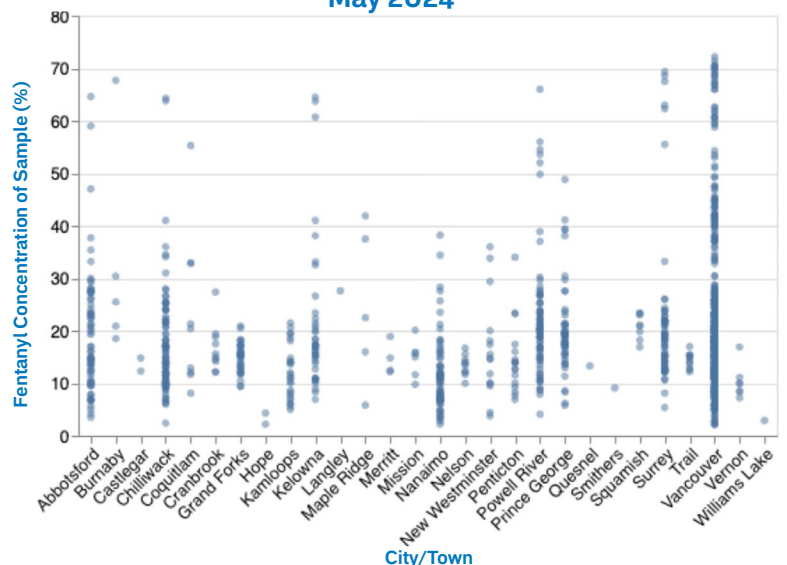
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 16.8% in May, consistent with the previous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

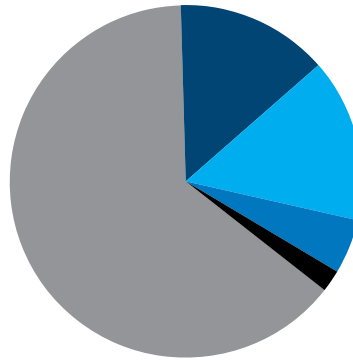
Fentanyl Concentration of Opioid Samples by City/Town, May 2024



Number of samples tested by region:

Total #: 2,945

1,883: Vancouver Coastal Health region (64%)



405: Fraser Health region (14%)

443: Interior Health region (15%)

138: Vancouver Island Health Region (5%)

76: Northern Health region (2%)

Number of samples with expected drug present

using FTIR/test strip drug checking

EXPECTED DRUG	Present	Not Present	Presence Not Determined	Samples Tested
Opioid	1221	53	16	1290
Stimulant	576	26	2	604
Depressant	115	14	1	130
Psychedelic	433	41	14	488
Other	21	4	11	36
Polysubstance	6	2	4	12
Unknown	0	0	385	385
Total	2372	140	433	2945

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 with expected drug present

using FTIR/test strip drug checking

EXPECTED DRUG	Present	Not Present	Presence Not Determined	Samples Tested
Fentanyl	223	2	1	226
Heroin	19	10	0	29
Down	931	17	2	950
Pharmaceutical	40	24	13	77
Opium	8	0	0	8
TOTAL	1221	53	16	1290

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:

