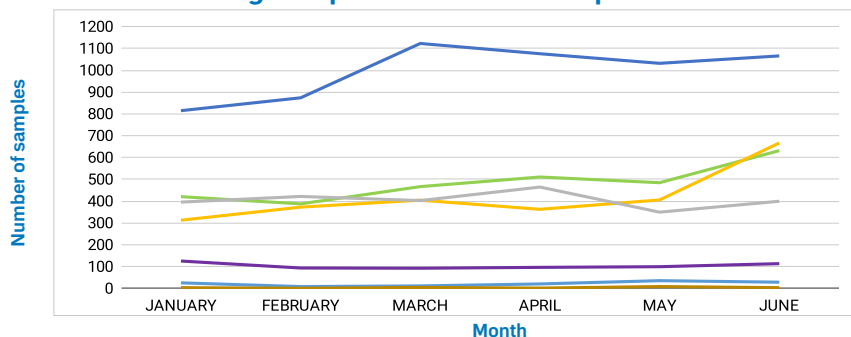


Key Findings

- In June, a total of 2,902 drug checks were performed at community drug checking sites offering FTIR services in BC (44 access points).
- The overall percentage of opioids testing positive for benzodiazepines by FTIR and test strip was 50.8% (542 of 1066 samples).
- Benzodiazepines continue to be increasingly detected by FTIR, indicating their presence in high concentrations. In June, bromazolam was detected in 135 opioid samples, followed by desalkylgidazepam (13 samples), and etizolam (12 samples).
- A shift from fentanyl to fluorofentanyl continues in the unregulated opioid supply. In June, 37.5% of unregulated opioid samples were found to contain fluorofentanyl (372 of 986 samples), whereas 40.2% contained fentanyl (400 samples).
- Xylazine, a veterinary sedative, was found in 2.5% of unregulated opioids in June (25 of 993 samples), occurring mostly in the Fraser Health region.
- The median fentanyl concentration of unregulated opioids has been increasing over the past year. In June, the median fentanyl concentration of opioids checked was 14.9%. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



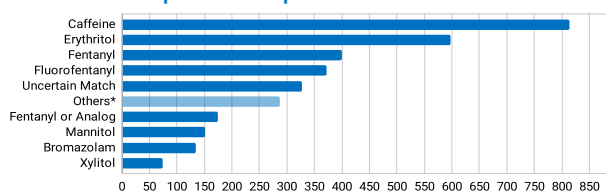
Number of samples by drug category in June

Opioid	1066
Stimulant	632
Depressant	114
Psychedelic	667
Other	29
Polysubstance	4
Unknown	400

TOTAL: 2,912

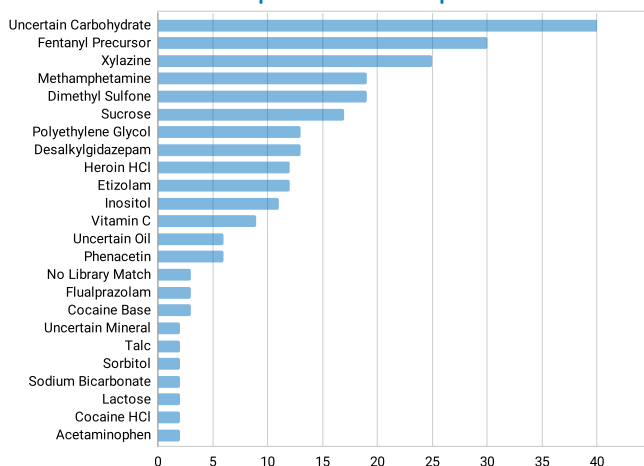
Components found in drug samples in June

Components in opioids

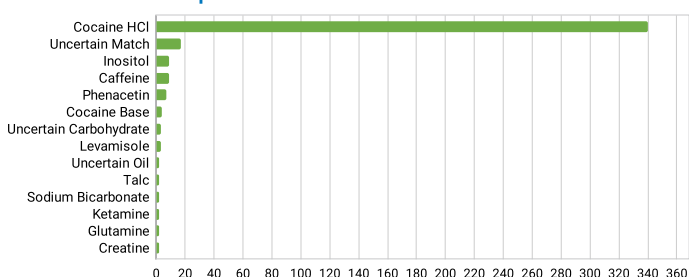


Frequency (N= 993)

*Other components found in opioids

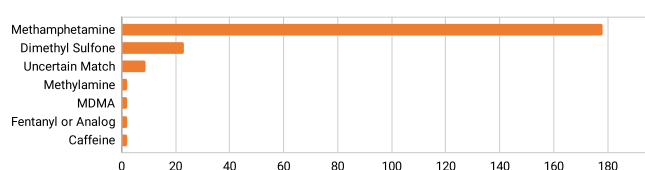


Components in cocaine



Frequency (N= 375)

Components in methamphetamine



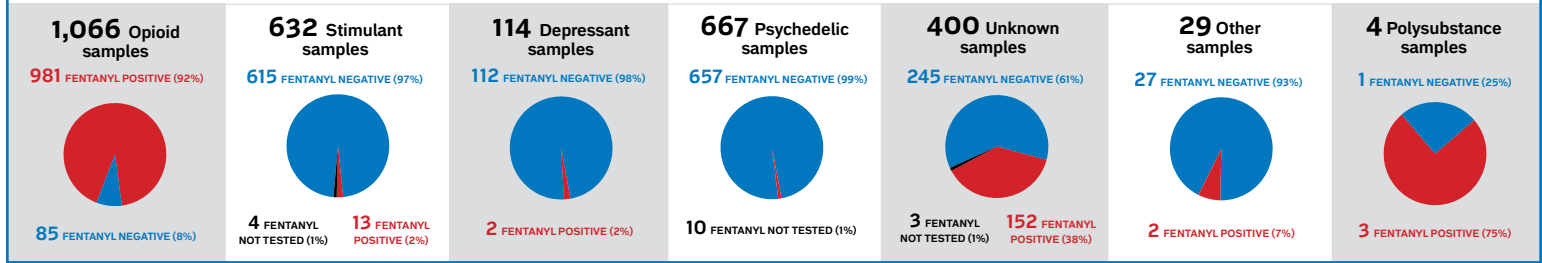
Frequency (N= 197)

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/

June
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Drug Checking in British Columbia

Number of samples tested with fentanyl present

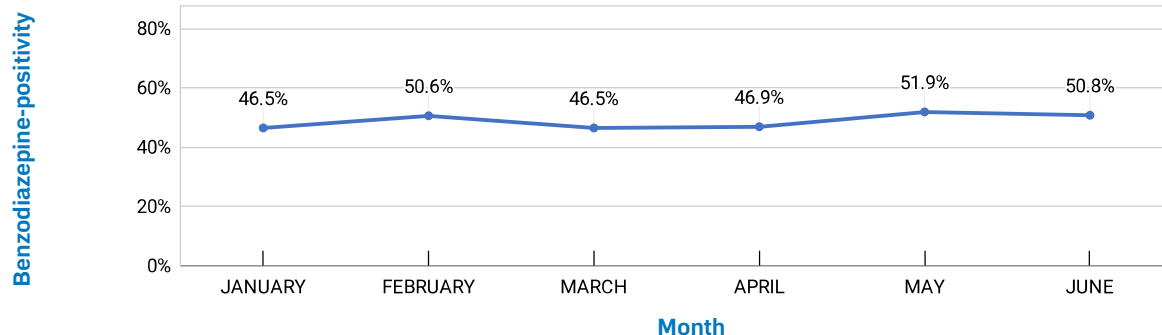


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
June 15, 2023 Cranbrook	Down	Para-fluorofentanyl, Caffeine, Erythritol	Positive	Negative	Cranbrook	Green chunks sold as down in Cranbrook contain very high amounts of para-fluorofentanyl.
June 19, 2023 Qathet Region/ Powell River	Fentanyl	Caffeine, Para-fluorofentanyl, Erythritol	Positive	Positive	Qathet/ Powell River	Orange pebbles sold as fentanyl in the qathet region tested positive for para-fluorofentanyl and benzos. Substance has caused OD.
June 22, 2023 Trail	Down	Fluorofentanyl	Positive	Positive	Trail	Light green and purple pebbles sold as down with high concentrations of fluorofentanyl and benzodiazepines were tested at the Trail shelter. The sample was associated with multiple ODs.
June 22, 2023 Nelson/ Castlegar	Down	Caffeine, Mannitol, Fentanyl or Analogue	Positive	Positive	Nelson/ Castlegar	Drug alert for Nelson/Castlegar after a sample containing fluorofentanyl and a benzo analogue was tested at ANKORS. High risk of OD/fatal OD, sample associated with multiple ODs.
June 26, 2023 Vancouver	2C-I	6-MAM, Caffeine, Mannitol	Negative	N/A	Vancouver	Light brown granules sold as 2C-I tested positive for 6-MAM (6-Monoacetylmorphine), a metabolite of heroin.
June 27, 2023 Vernon	Crack	Xylitol, Caffeine, Fentanyl or Analogue, Bromazolam	Positive	Positive	Vernon	Light purple substance sold as crack tested positive for fentanyl analogue and benzodiazepines in Vernon.
June 27, 2023 Vancouver/ DTES	Fentanyl	Bromazolam, Caffeine, Fentanyl, Uncertain Carbohydrate	Positive	Positive	Vancouver/ DTES	Beige granules sold as fentanyl in the DTES of Vancouver tested positive for both fentanyl and bromazolam, a benzo analogue.
June 28, 2023 Kamloops	Down	Caffeine, Fentanyl, Bromazolam, Magnesium Sulfate	Positive	Positive	Kamloops	Brown granules sold as down contain high concentrations of fentanyl and benzodiazepines in Kamloops.
June 29, 2023 Chilliwack	Cannabis Vape Cartridge	No Library Match - suspected synthetic cannabinoids	Negative	Positive	Chilliwack	Vape juice containing cannabis/suspected synthetic cannabinoids sold in refillable, unmarked, and unbranded cartridges tested positive for benzodiazepines in Chilliwack. Reported side effects include: prolonged sedation, nausea, vomiting, and black outs.

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

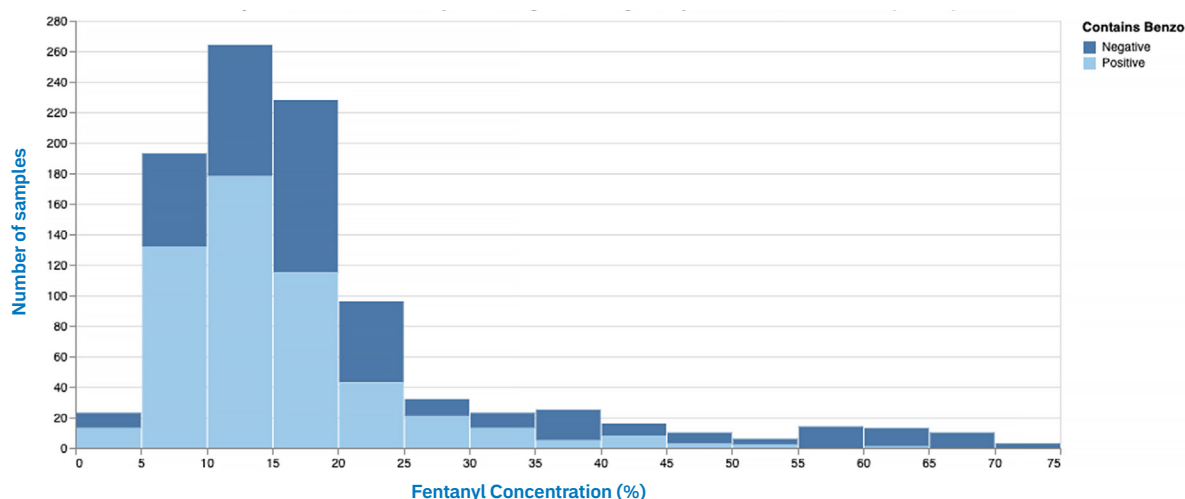


During the month of June, **50.8%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**542 samples of 1066 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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 June 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, June 2023



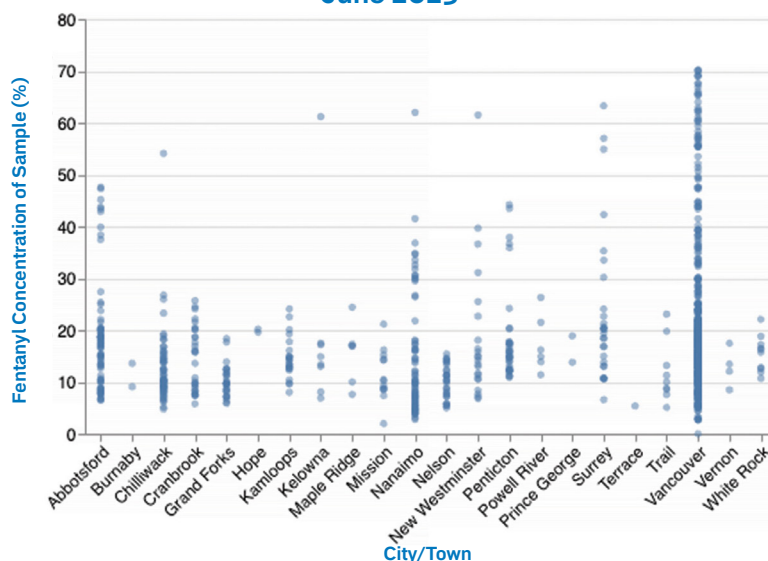
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples decreased slightly from the previous month to 14.9%. 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, June 2023



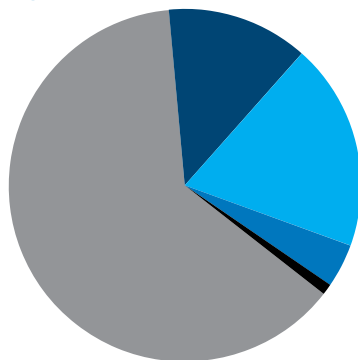
June
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Drug Checking in British Columbia

Number of samples tested by region:

Total #: 2,912

1,833: Vancouver Coastal
Health region (63%)



373: Fraser Health region (13%)

565: Interior Health region (19%)

115: Vancouver Island
Health Region (4%)

26: 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		1012	36	18	1066
Stimulant		618	8	6	632
Depressant		83	28	3	114
Psychedelic		621	41	5	667
Other		13	7	9	29
Polysubstance		2	2	0	4
Unknown		0	0	400	400
Total		2349	122	441	2912

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.

June
2023

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		340	6	0	346
Heroin		7	11	0	18
Fentanyl and Heroin		1	0	0	1
Other Opioid		2	0	1	3
Down		626	2	0	628
Pharmaceutical		21	15	17	53
Opium		15	2	0	17
Total		1012	36	18	1066

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:

