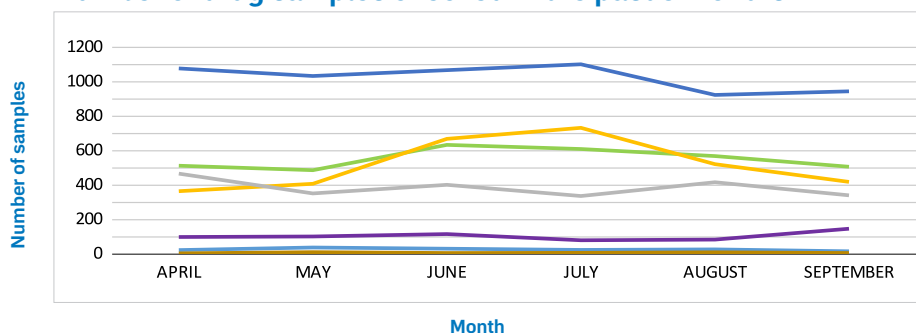


## Key Findings

- In September, a total of 2,367 drug checks were performed at community drug checking sites offering FTIR services in BC (40 access points).
- The overall percentage of opioids testing positive for benzodiazepines by FTIR and test strip was 49.5% (467 of 943 samples).
- Benzodiazepines have been increasingly detected by FTIR, indicating their presence in higher concentrations. In September, bromazolam was detected in 130 opioid samples, followed by desalkylgidazepam (16 samples), and flualprazolam (7 samples).
- Detection of fluorofentanyl continues in the unregulated opioid supply. Fluorofentanyl was detected in 23.2% of unregulated opioid samples (204 of 880 samples), whereas fentanyl was detected in 47.4% (417 samples).
- Xylazine, a veterinary sedative, was found in 2.0% of unregulated opioids (18 of 880 samples).
- The median fentanyl concentration of unregulated opioids has been increasing over the past year. In 2022, the median fentanyl concentration of opioids checked was 14.9%, in September 2023, the median was 16.1%. See page 3 for more detailed results.

## Number of drug samples checked in the past 6 months



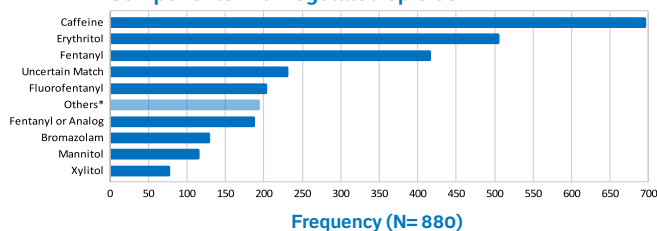
## Number of samples by drug category in September

Opioid	922
Stimulant	567
Depressant	82
Psychedelic	520
Other	25
Polysubstance	8
Unknown	415

**TOTAL: 2,367**

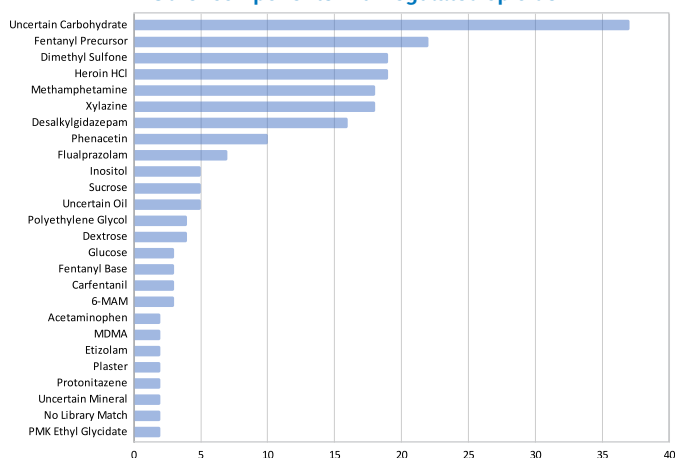
## Components found in drug samples in September

### Components in unregulated opioids

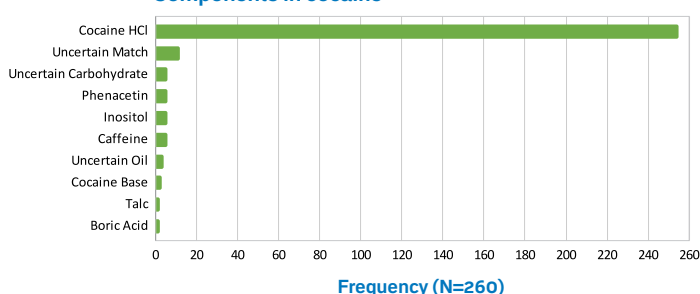


Frequency (N=880)

### \*Other components in unregulated opioids

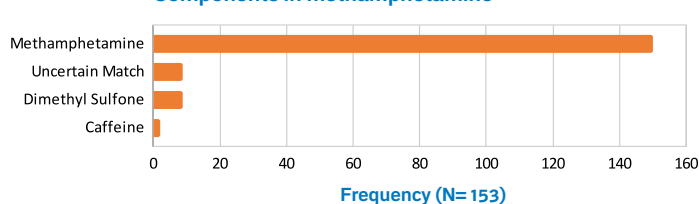


### Components in cocaine



Frequency (N=260)

### Components in methamphetamine



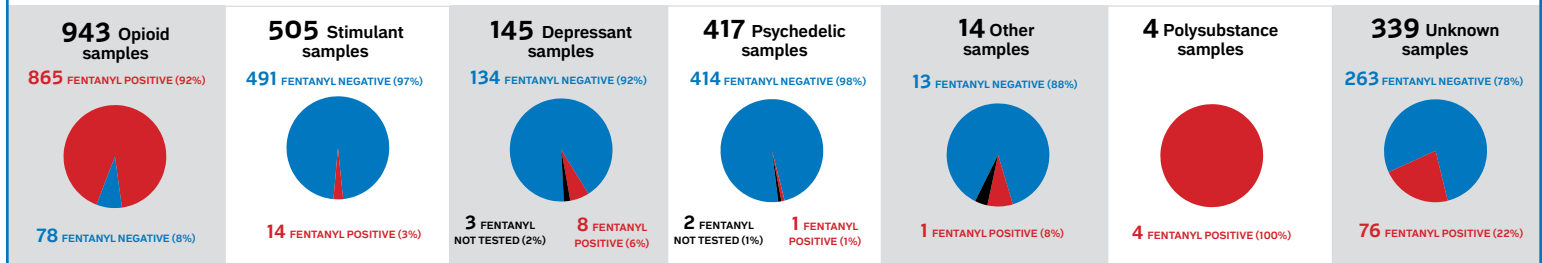
Frequency (N=153)

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/](http://www.drugcheckingbc.ca/dashboard/)

September  
2023

# Drug Checking in British Columbia

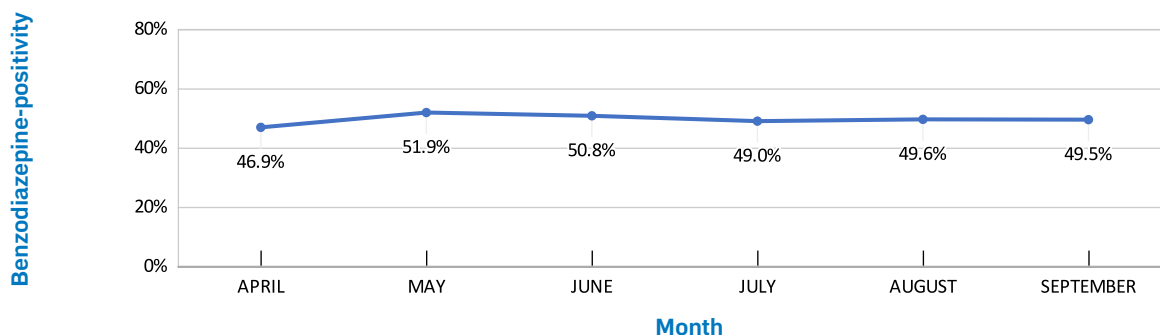
## Number of samples tested with fentanyl present



## PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
September 8, 2023 Cranbrook	Down	Bromazolam, para-Fluorofentanyl	Positive	Positive	Cranbrook	Blue pebbles sold as down contain high concentrations of bromazolam and p-fluorofentanyl (fentanyl analogue) in Cranbrook.
September 11, 2023 Vancouver	Down	Fentanyl, Bromazolam, Xylazine	Positive	Positive	Vancouver	Dark red/brown pebbles sold as down in the DTES of Vancouver tested positive for fentanyl, bromazolam, a benzo analogue, and xylazine. Substance has caused OD.
September 18, 2023 Vancouver	Heroin	Para-Fluorofentanyl, Caffeine, Bromazolam, Erythritol	Positive	Positive	Vancouver	Light brown powder sold as heroin in the DTES of Vancouver tested positive for para-fluorofentanyl and bromazolam, a benzo analogue.
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

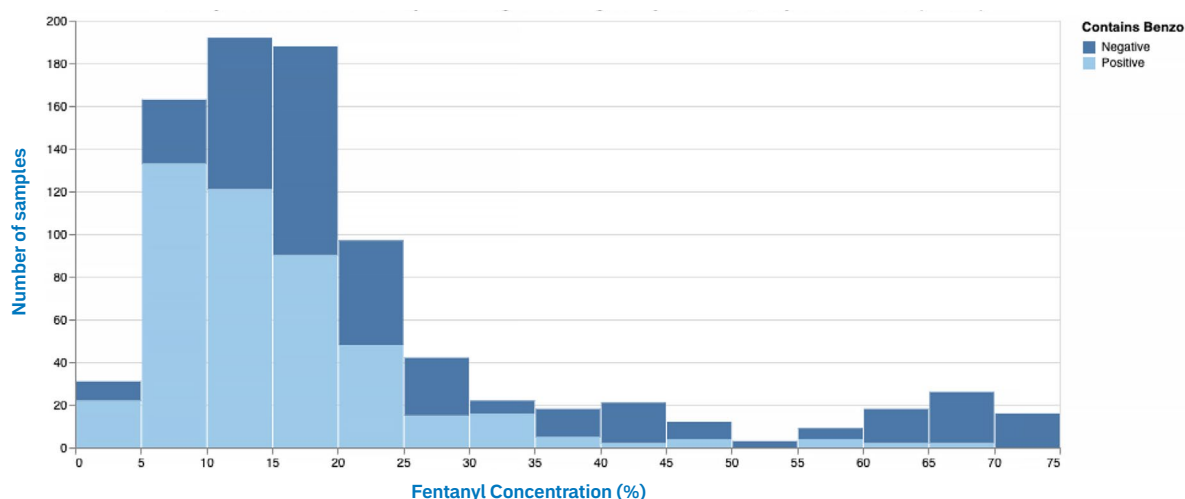


During the month of September, **49.5%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**467 samples of 943 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, September 2023**



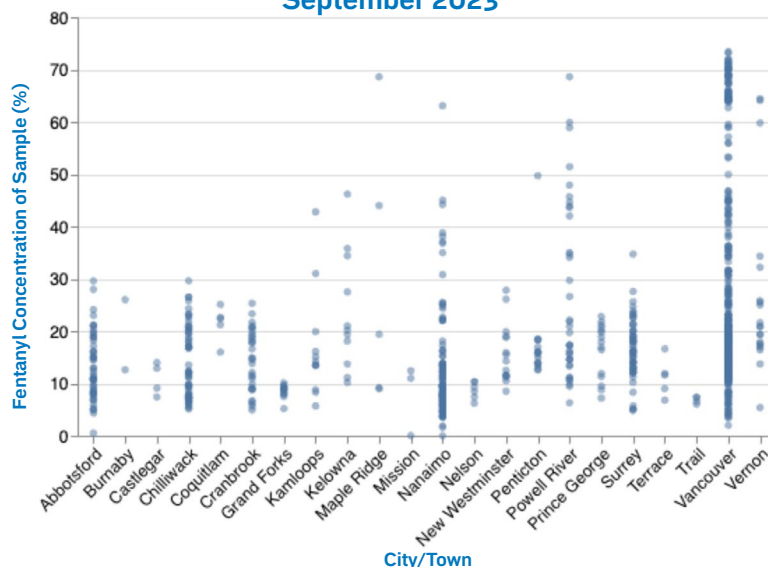
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples increased from 15.0% in August to 16.1% in September. 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 carfentanyl. While fluorofentanyl is reported to have similar potency to fentanyl, carfentanyl 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 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](mailto:drugchecking@bccsu.ubc.ca).

**Fentanyl Concentration of Opioid Samples by City/Town, September 2023**



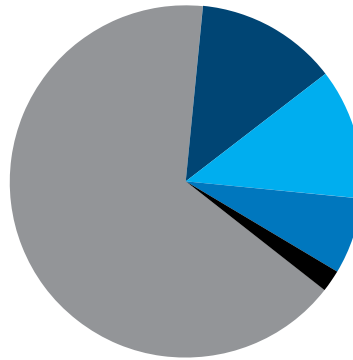
September  
2023

# Drug Checking in British Columbia

## Number of samples tested by region:

Total #: 2,367

1,567: Vancouver Coastal  
Health region (66%)



313: Fraser Health region (13%)

274: Interior Health region (12%)

165: Vancouver Island  
Health Region (7%)

48: 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	898	29	16	943
Stimulant	487	17	1	505
Depressant	107	33	5	145
Psychedelic	391	18	8	417
Other	7	2	5	14
Polysubstance	3	0	1	4
Unknown	0	0	339	339
Total	1893	99	375	2367

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 that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG		Matched	Did Not Match	Match Not Determined	Samples Tested
Fentanyl		174	6	0	180
Heroin		8	9	0	17
Other Opioid		0	1	0	1
Down		677	7	1	685
Pharmaceutical		36	6	15	57
Opium		3	0	0	3
Total		898	29	16	943

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

