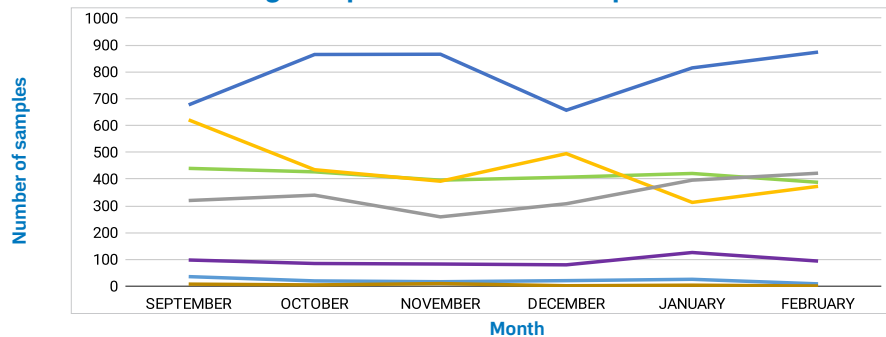


## Key Findings

- In February, a total of 2,161 drug checks were performed across community drug checking sites offering FTIR services in BC (30 access points).
- The overall percentage of opioids testing positive for benzodiazepines increased from 46.5% to 50.6% in February (442 of 874 samples).
- Bromazepam was the most frequent benzodiazepine detected by FTIR in February, found present in 58 opioid samples, followed by desalkylgidazepam (18 samples), and etizolam (12 samples).
- Para-fluorofentanyl continues to be increasingly detected by FTIR, found present in 111 opioid samples.
- The median fentanyl concentration of all opioid samples was 15.5%, decreasing from 16.7% last month. See page 3 for more detailed results.

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



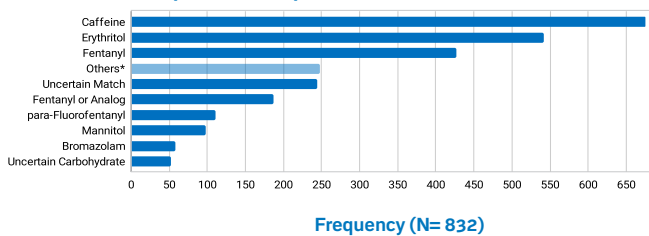
## Number of samples by drug category in February

Opioid	874
Stimulant	388
Depressant	94
Psychedelic	373
Other	9
Polysubstance	1
Unknown	422

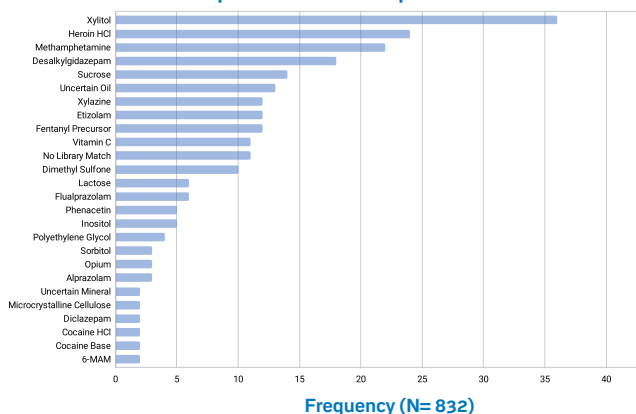
TOTAL: 2,161

## Components found in drug samples in February

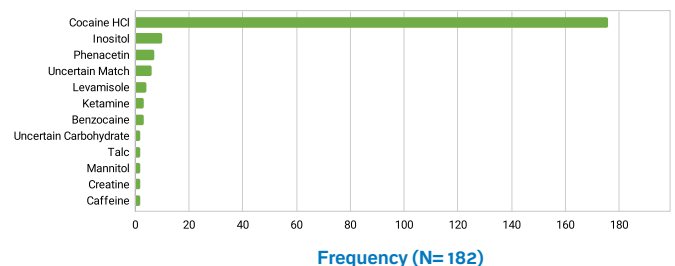
## Components in opioids



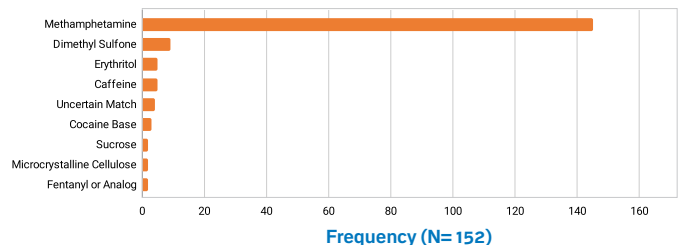
## \*Other components found in opioids



## Components in cocaine



## Components in methamphetamine

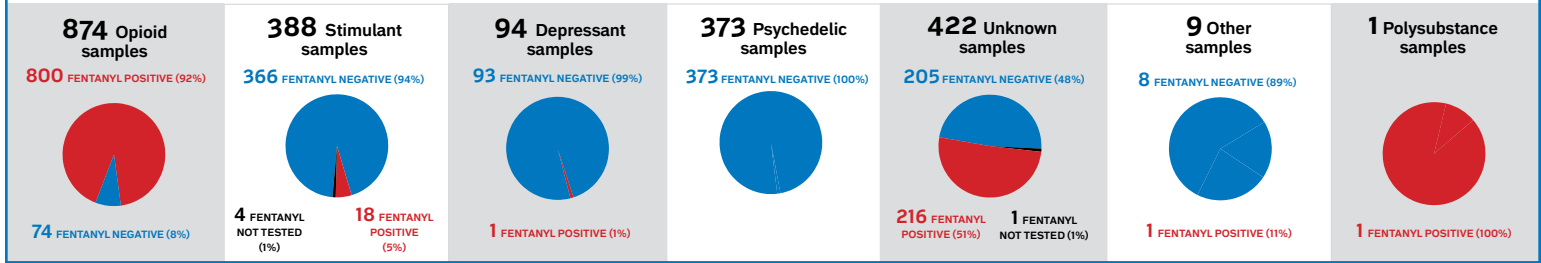


There were additional compounds detected a single time each. To save space, they have been omitted from these charts. For the full list of compounds detected, visit our data dashboard at [www.drugcheckingbc.ca/dashboard/](http://www.drugcheckingbc.ca/dashboard/)

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# Drug Checking in British Columbia

## Number of samples tested with fentanyl present

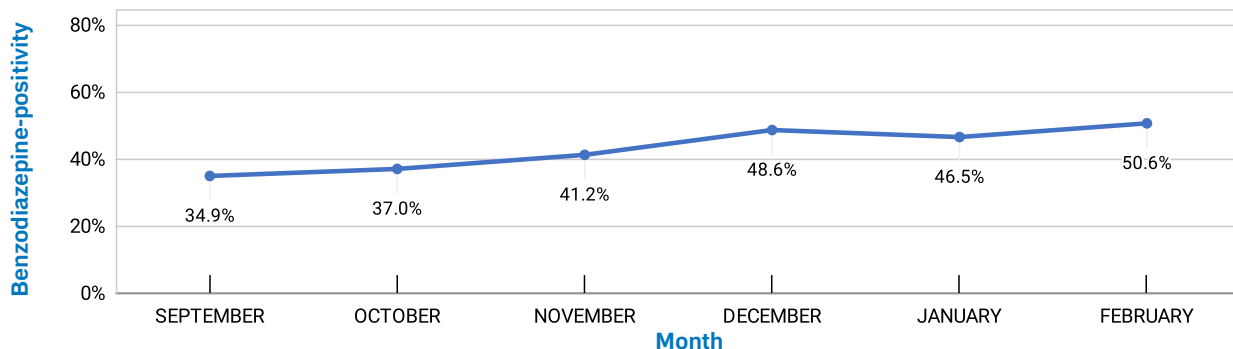


## PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
February 2, 2023 Kamloops	Ketamine	Methamphetamine, Ketamine	Negative	N/A	Kamloops	High concentration of methamphetamine may pose risk of stimulant OD when expecting ketamine
February 8, 2023 Vancouver	Alprazolam (Xanax)	Microcrystalline Cellulose, Xylazine, Uncertain Oil	Negative	Negative	Vancouver	Sample was expected to contain a benzodiazepine but instead contained xylazine, an animal sedative
February 10, 2023 Prince George	Down	Caffeine, Erythritol, Fentanyl, Bromazepam	Positive	Positive	Prince George	High concentration of fentanyl and bromazepam (benzodiazepine) poses high risk of OD. Sample has been associated with causing heavy sedation and fatal OD.
February 11, 2023 Cranbrook (A)	Down	Methamphetamine, Caffeine, Erythritol, Fentanyl or Analogue, Xylazine	Positive	Negative	Cranbrook	Combination of fentanyl or a fentanyl analogue, as well as xylazine, increases risk of drug toxicity, respiratory depression, loss of consciousness
February 15, 2023 Kamloops	Methamphetamine	Sucrose	Positive	N/A	Kamloops	Presence of fentanyl poses risk of opioid OD, loss of consciousness, when expecting methamphetamine
February 17, 2023 Penticton (A)	Down	Para-fluorofentanyl, Erythritol	Positive	Positive	Penticton	Combination of para-fluorofentanyl and presence of benzodiazepines poses risk of OD. Sample has been associated with multiple OD events
February 17, 2023 Penticton (B)	Down	Lactose, Fentanyl	Positive	Negative	Penticton	High concentration of fentanyl poses risk of OD

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

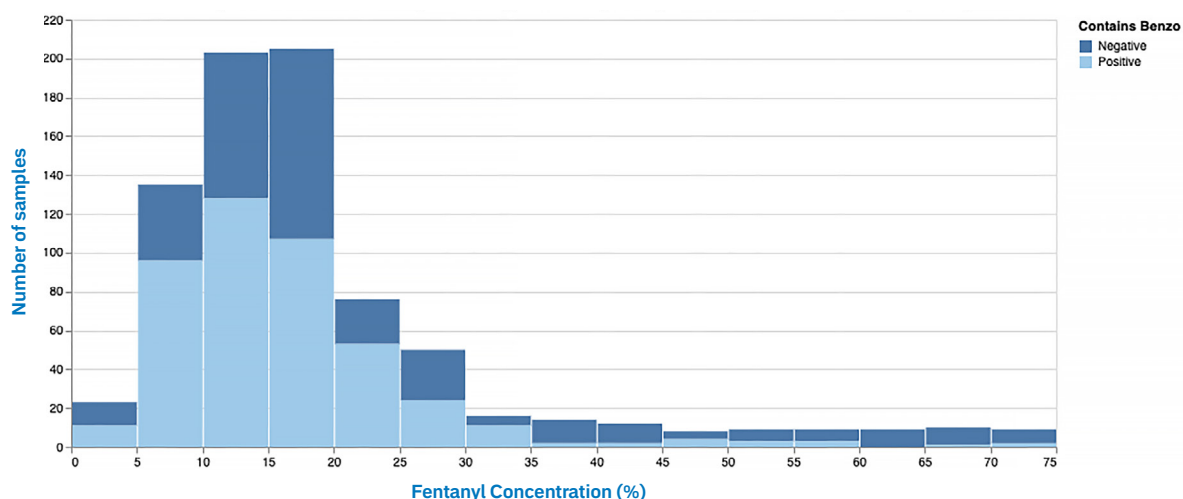


During the month of February, **50.6%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**442 samples of 874 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, February 2023



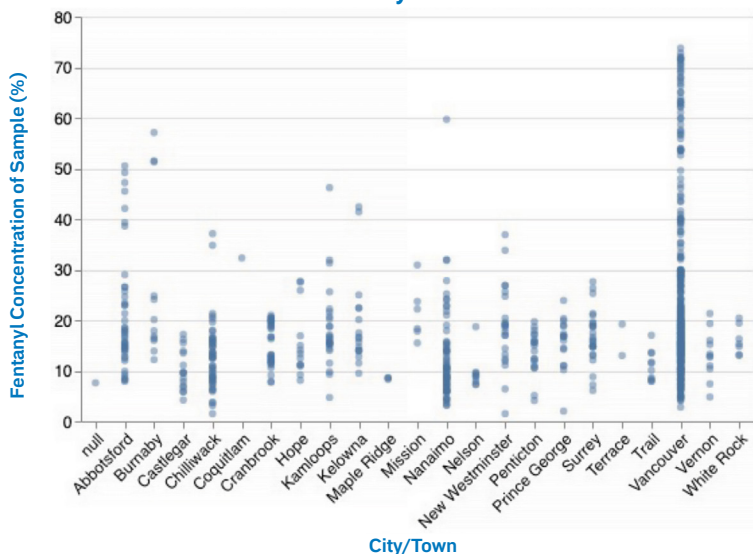
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 15.5%, decreasing from 16.7% last month. 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](mailto:drugchecking@bccsu.ubc.ca).

Fentanyl Concentration of Opioid Samples by City/Town, February 2023



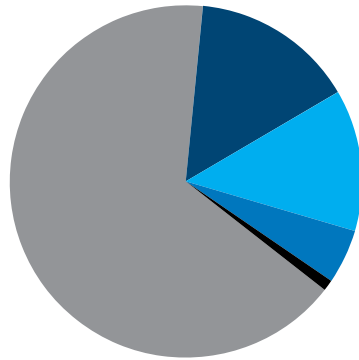
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# Drug Checking in British Columbia

## Number of samples tested by region:

Total #: 2,161

1,426: Vancouver Coastal  
Health region (66%)



318: Fraser Health region (15%)

283: Interior Health region (13%)

100: Vancouver Island  
Health Region (5%)

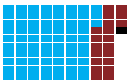
34: Northern Health region (1%)

## Number of samples that matched expectation

using FTIR/test strip drug checking

### EXPECTED DRUG: Depressant

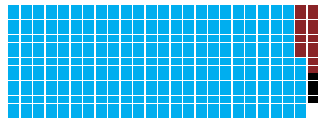
94 Samples Tested



Matched: 73  
Did not match: 20  
Match not determined: 1

### EXPECTED DRUG: Psychedelic

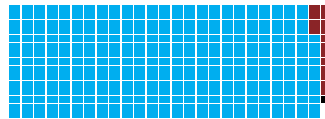
373 Samples Tested



Matched: 353  
Did not match: 16  
Match not determined: 4

### EXPECTED DRUG: Stimulant

388 Samples Tested



Matched: 371  
Did not match: 16  
Match not determined: 1

### EXPECTED DRUG: Polysubstance

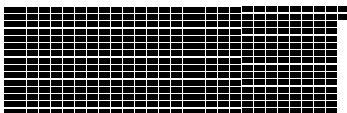
1 Sample Tested



Matched: 1

### EXPECTED DRUG: Unknown

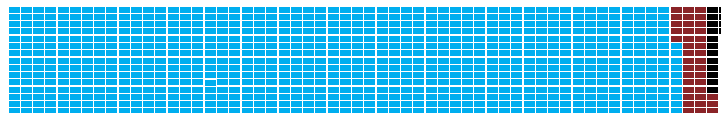
422 Samples Tested



Match not determined: 422

### EXPECTED DRUG: Opioid

874 Samples Tested



Matched: 820  
Did not match: 38  
Match not determined: 16

### EXPECTED DRUG: Other

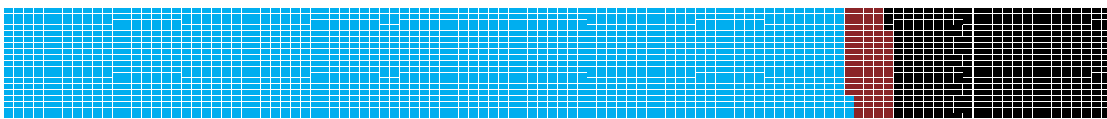
9 Samples Tested



Matched: 7  
Did not match: 1  
Match not determined: 1

## Total

2,161 Samples Tested



Matched: 1,625  
Did not match: 91  
Match not determined: 445

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.

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# Drug Checking in British Columbia

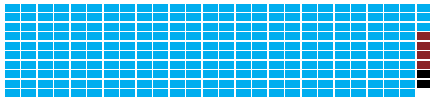
## Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

**Fentanyl**

259 Samples Tested



Matched: 253

Did not match: 4

Match not determined: 2

EXPECTED DRUG:

**Heroin**

21 Samples Tested



Matched: 16

Did not match: 5

EXPECTED DRUG:

**Other Opioid**

3 Samples Tested



Matched: 3

EXPECTED DRUG:

**Opium**

3 Samples Tested

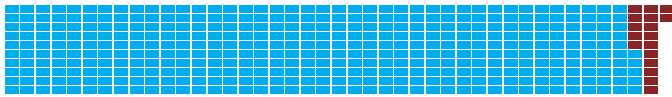


Matched: 3

EXPECTED DRUG:

**Down**

547 Samples Tested



Matched: 531

Did not match: 13

Match not determined: 3

EXPECTED DRUG:

**Pharmaceutical**

42 Samples Tested



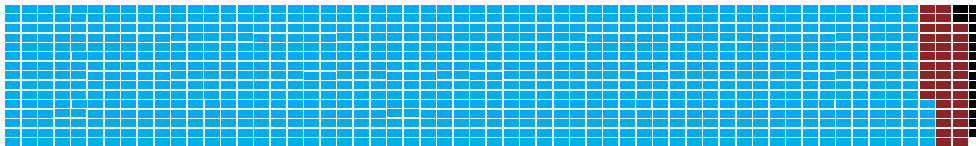
Matched: 15

Did not match: 16

Match not determined: 11

### Total

874 Samples Tested



Matched: 820

Did not match: 38

Match not determined: 16

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

