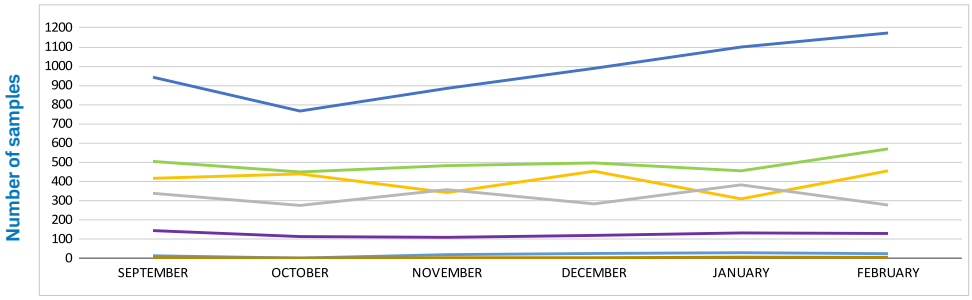
February 2024

# Drug Checking in British Columbia

## Key Findings

- In February, a total of 2,638 drug checks were performed at community drug checking sites offering FTIR services in BC (66 access points).
- The percentage of all opioids testing positive for benzodiazepines by FTIR and test strip was 52.2% (612 of 1173 samples).
- Benzodiazepines continue to be increasingly detected by FTIR, indicating their presence in higher concentrations. In February, benzodiazepines were detected by FTIR in 18.9% of unregulated opioids, with bromazolam (145 samples) and desalkylgidazepam (46 samples) identified 3 times more frequently than in the previous month.
- Fluorofentanyl was detected by FTIR in 21.5% of unregulated opioids (231 of 1073 samples), whereas fentanyl was detected in 44.6% (479 samples).
- The emergence of ortho-fluorofentanyl (a fentanyl analogue), is likely contributing to the increase in the number of "fentanyl or analogue" and "no library matches" found in unregulated opioid samples. We have added this compound to our FTIR library and will monitor detection.
- Xylazine was detected by FTIR in 3.3% of unregulated opioids (35 of 1073 samples), a small number but increasing rate of detection.
- The median fentanyl concentration of unregulated opioids was 17.0%, 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



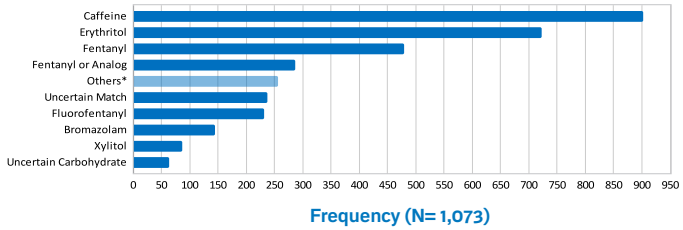

**Number of samples by drug category in February**

| | |
|---|---|
| Opioid | 1173 |
| Stimulant | 570 |
| Depressant | 130 |
| Psychedelic | 456 |
| Other | 25 |
| Polysubstance | 6 |
| Unknown | 278 |

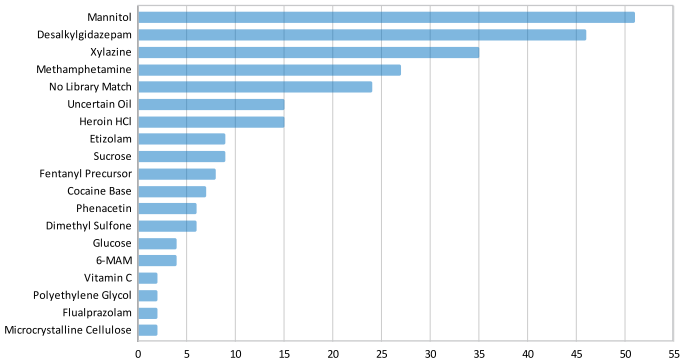
**TOTAL: 2,638**

## Components found in drug samples in February

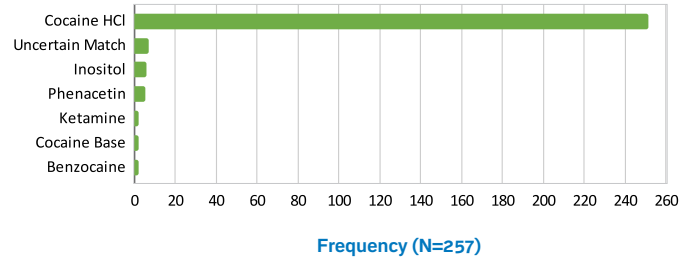
### Components in unregulated opioids



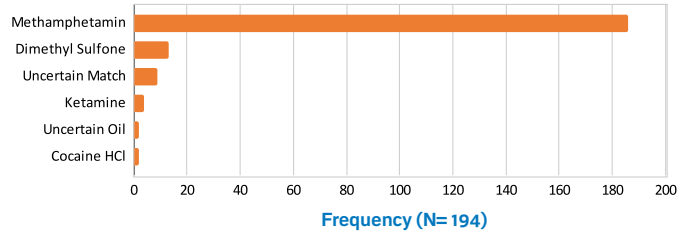

### *Other components in unregulated opioids




### 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/

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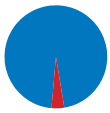
## Number of samples tested with fentanyl present

**1173 Opioid samples**
1055 FENTANYL POSITIVE (90%)

118 FENTANYL NEGATIVE (10%)

**570 Stimulant samples**
545 FENTANYL NEGATIVE (96%)

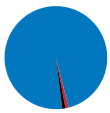


25 FENTANYL POSITIVE (4%)

**130 Depressant samples**
122 FENTANYL NEGATIVE (94%)

8 FENTANYL POSITIVE (6%)

**456 Psychedelic samples**
452 FENTANYL NEGATIVE (98%)



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

**25 Other samples**
23 FENTANYL NEGATIVE (92%)

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

**6 Polysubstance samples**
1 FENTANYL NEGATIVE (17%)

5 FENTANYL POSITIVE (83%)

**278 Unknown samples**
161 FENTANYL NEGATIVE (58%)

1 FENTANYL NOT TESTED (1%)
116 FENTANYL POSITIVE (41%)

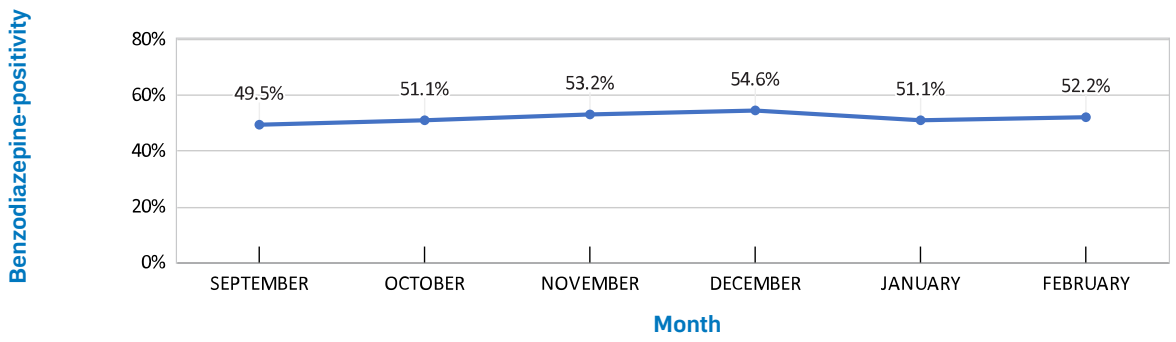
## PUBLIC HEALTH NOTIFICATIONS

| Date & Location | Expected Drug | Drugs Detected | Fentanyl Strip | Benzo Strip | Alert Message |
|---|---|---|---|---|---|
| February 14, 2024 Vernon | Down | Fentanyl | Positive | Negative | Substance that looks like meth is sold as down and contains undiluted fentanyl in Vernon. |
| February 14, 2024 Vancouver | Crack Cocaine | Fentanyl Base | Positive | Negative | White pebbles sold as crack cocaine in the DTES of Vancouver tested positive for fentanyl and negative for cocaine. Substance has caused OD. |
| February 16, 2024 Cranbrook | Down | Fentanyl, Caffeine, Bromazolam, Uncertain Carbohydrate | Positive | Positive | Pinkish-purple chunks sold as down tested positive for high concentrations fentanyl (14%), and bromazolam (10%) in Cranbrook.* |
| February 28, 2024 Vancouver | Methamphetamine | Ketamine | Negative | Negative | Clear crystals sold as methamphetamine in Vancouver tested positive for ketamine and negative for methamphetamine. |

*Quantitative results provided by complementary testing partner Substance using Paper Spray Mass Spectrometry, all other spectroscopy results are determined by FTIR.

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, **52.2%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC **(612 samples of 1173 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.

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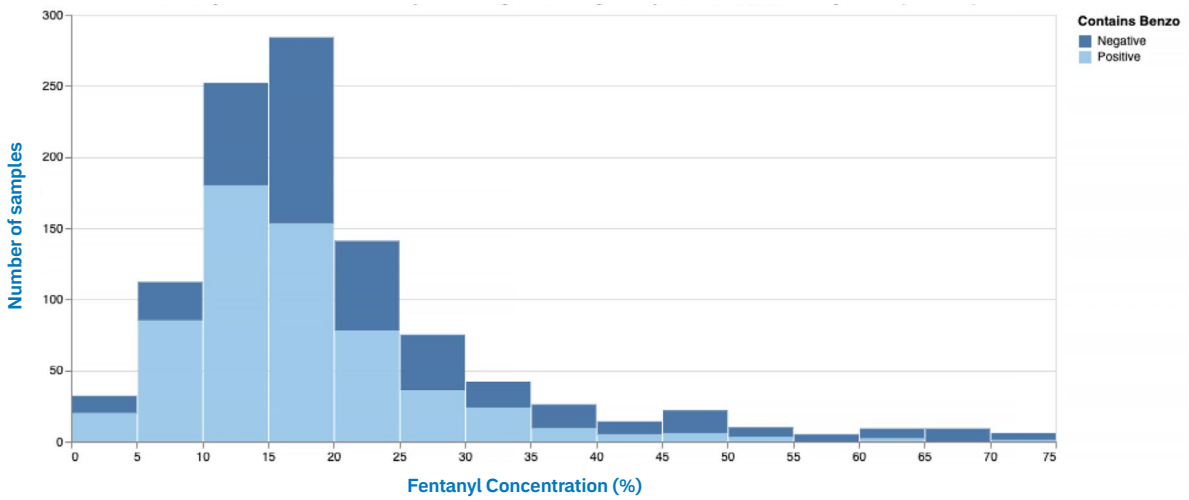
# Drug Checking in British Columbia

## 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, February 2024



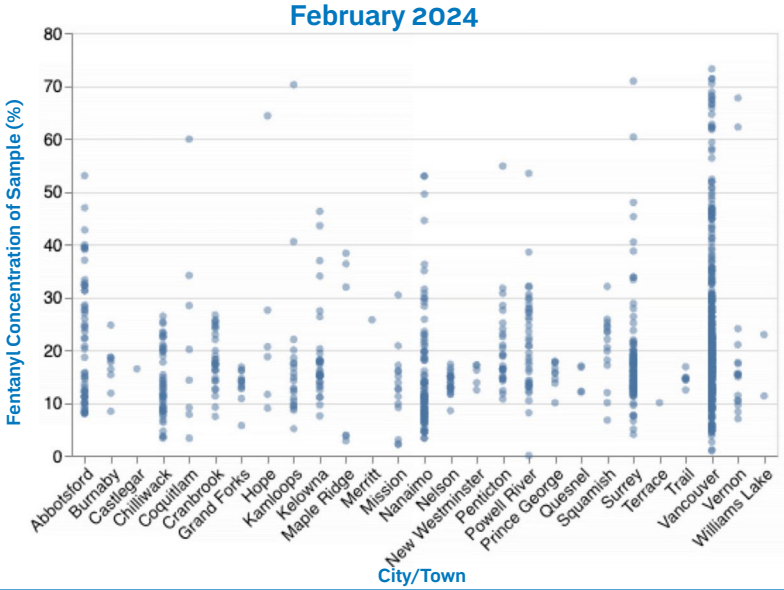

While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples increased from the previous month to 17.0% in February. 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, February 2024



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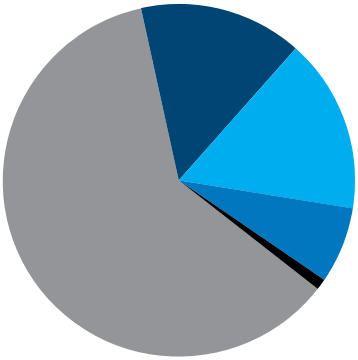
# Drug Checking in British Columbia

## Number of samples tested by region:

**Total #: 2,638**



1,621: Vancouver Coastal Health region (61%)

384: Fraser Health region (15%)

430: Interior Health region (16%)

179: Vancouver Island Health Region (7%)

24: 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 | 1104 | 51 | 18 | 1173 |
| Stimulant | 538 | 29 | 3 | 570 |
| Depressant | 99 | 29 | 2 | 130 |
| Psychedelic | 407 | 26 | 23 | 456 |
| Other | 16 | 5 | 4 | 25 |
| Polysubstance | 3 | 3 | 0 | 6 |
| Unknown | 0 | 0 | 278 | 278 |
| Total | 2167 | 143 | 328 | 2638 |

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.*

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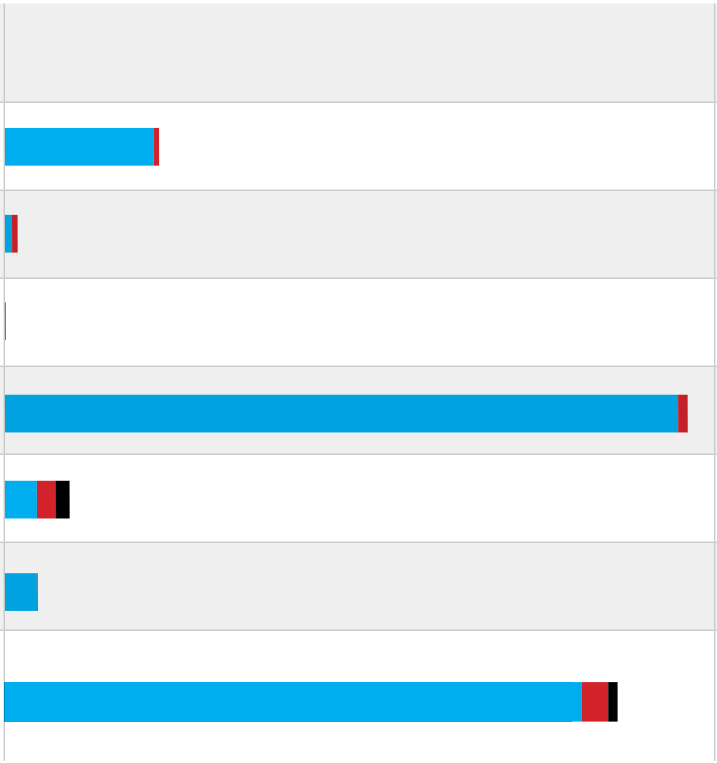
# Drug Checking in British Columbia

## 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 | 187 | 7 | 0 | 194 |
| Heroin | 9 | 7 | 0 | 16 |
| Fentanyl and Heroin | 0 | 1 | 0 | 1 |
| Down | 850 | 12 | 0 | 862 |
| Pharmaceutical | 40 | 23 | 18 | 81 |
| Opium | 18 | 1 | 0 | 19 |
| **Total** | 1104 | 51 | 18 | 1173 |

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