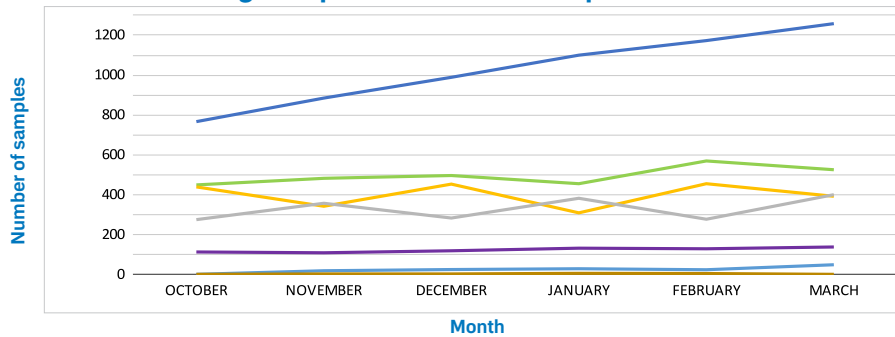


## Key Findings

- In March, a total of 2,769 drug checks were performed at community drug checking sites offering FTIR services in BC (54 access points).
- The percentage of all opioids testing positive for benzodiazepines by FTIR and test strip was 46.3% (582 of 1258 samples), the lowest rate observed since April 2023.
- Benzodiazepines continue to be detected by FTIR, indicating their presence in higher concentrations. In March, benzodiazepines were detected by FTIR in 16.1% of unregulated opioids, with bromazolam (145 samples) and desalkylgizapam (26 samples) identified most frequently.
- Fluorofentanyl was detected by FTIR in 22.2% of unregulated opioids (257 of 1158 samples), whereas fentanyl was detected in 51.2% (593 samples).
- Ortho-Methylfentanyl has recently emerged in the drug supply. Since adding a reference spectrum to the BCCSU libraries in February, ortho-Methylfentanyl was detected in 5.3% of unregulated opioid samples (61 of 1158) in March.
- Xylazine detection by FTIR in unregulated opioids decreased to 1.6% in March (19 of 1158 samples).
- The median fentanyl concentration of unregulated opioids was 16.8%, a slight decrease from last month's all-time high. See page 3 for more detailed results.

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



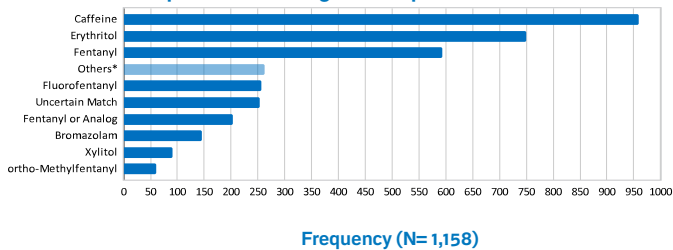
## Number of samples by drug category in March

Opioid	1258
Stimulant	526
Depressant	139
Psychedelic	393
Other	50
Polysubstance	2
Unknown	401

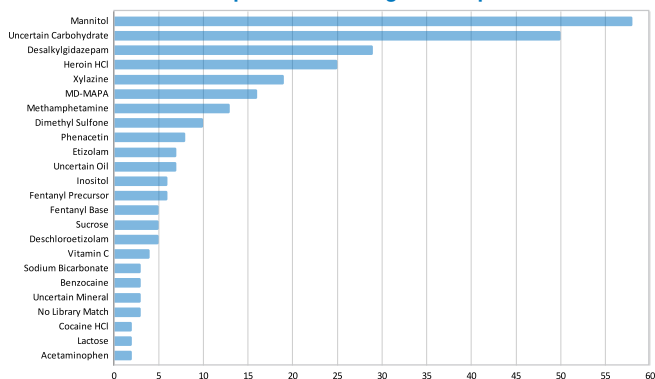
**TOTAL: 2,769**

## Components found in drug samples in March

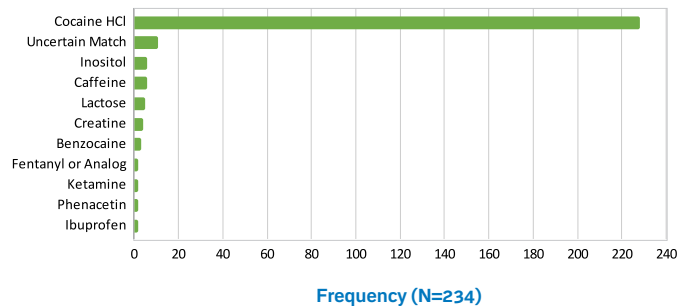
### Components in unregulated opioids



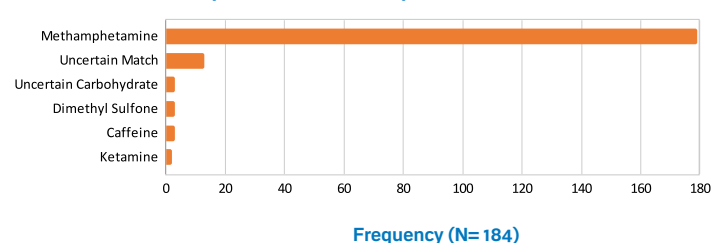
### \*Other components in unregulated opioids



### Components in cocaine

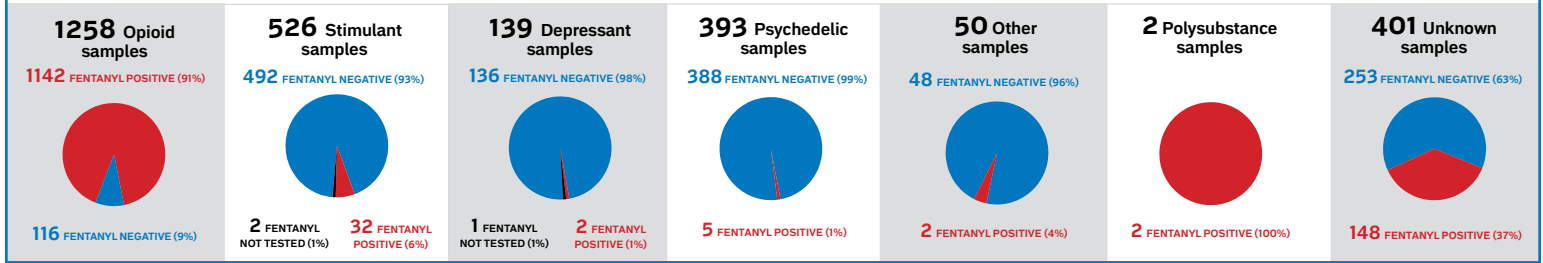


### Components in methamphetamine



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

## Number of samples tested with fentanyl present



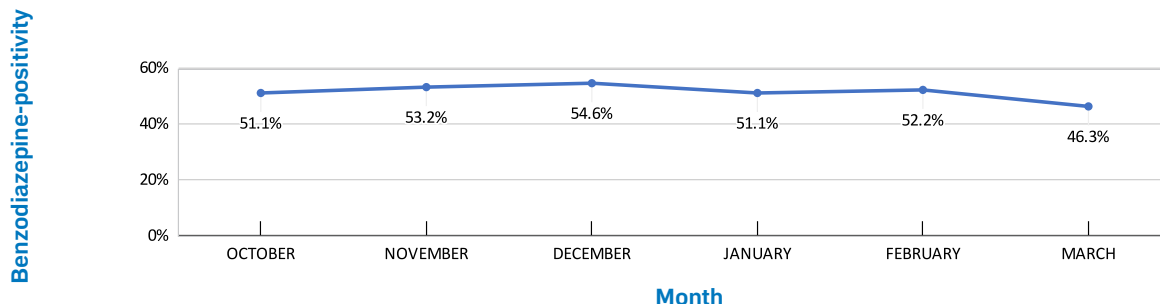
## PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Alert Message
March 4, 2024 Vancouver	Crack Cocaine	Cocaine Base	Negative	Positive	White pebbles sold as crack cocaine in the DTES of Vancouver tested positive for cocaine and benzodiazepines
March 8, 2024 Coquitlam	Down	Bromazolam, Fentanyl, Erythritol	Positive	Positive	Beige granules sold as Down tested positive for high concentrations of Bromazolam (over 60%) and Fentanyl in Coquitlam*
March 11, 2024 Vancouver	Ketamine	No Library Match	Negative	Positive	White powder expected to be ketamine in Vancouver tested positive for benzodiazepines and negative for ketamine
March 19, 2024 Grand Forks	Cocaine	Cocaine HCl	Positive	N/A	White powder sold as cocaine tested positive for fentanyl in Grand Forks
March 26, 2024 Vancouver	Tucibi	Ketamine, MDMA, Caffeine, Mannitol, Uncertain Match	Negative	Positive	Pink powder sold in Vancouver as "tuci" or "tusi", which typically is expected to contain ketamine, MDMA and/or stimulants, tested positive for ketamine, MDMA, and benzos

\*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

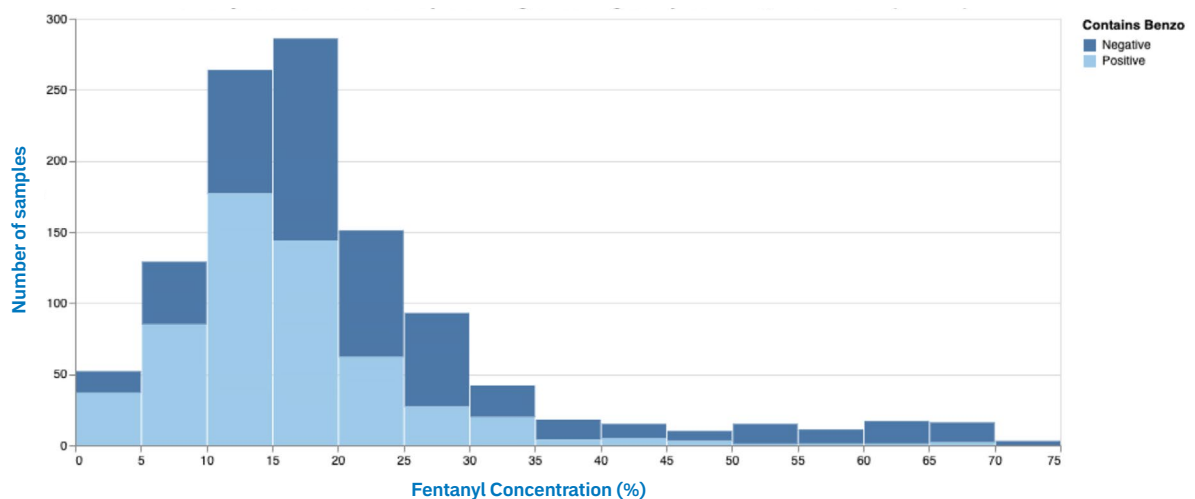


During the month of March, **46.3%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**582 samples of 1258 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, March 2024



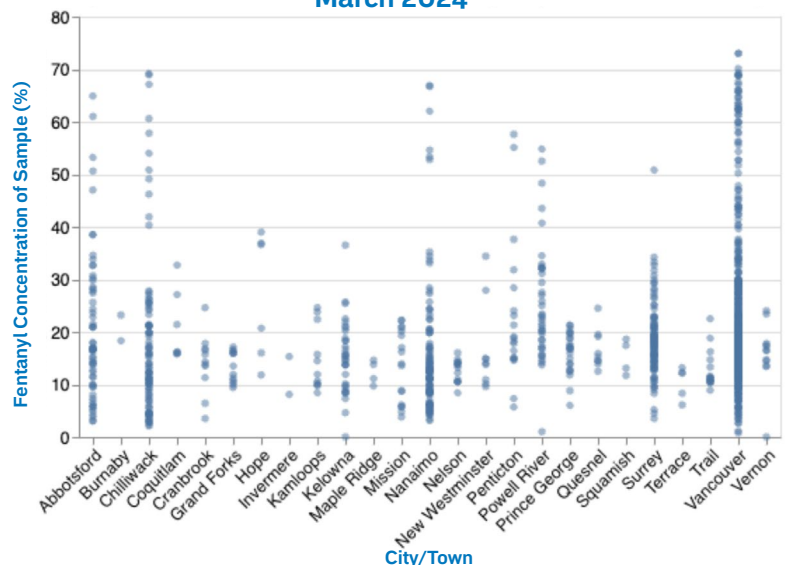
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples decreased slightly from the previous month to 16.8% in March. 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](mailto:drugchecking@bccsu.ubc.ca).

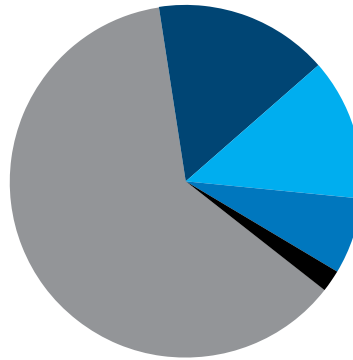
Fentanyl Concentration of Opioid Samples by City/Town, March 2024



## Number of samples tested by region:

Total #: 2,769

1,718: Vancouver Coastal  
Health region (62%)



432: Fraser Health region (16%)

360: Interior Health region (13%)

185: Vancouver Island  
Health Region (7%)

74: 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	1184	55	19	1258
Stimulant	500	23	3	526
Depressant	101	37	1	139
Psychedelic	344	24	25	393
Other	26	5	19	50
Polysubstance	2	0	0	2
Unknown	0	0	401	401
<b>Total</b>	<b>2157</b>	<b>144</b>	<b>468</b>	<b>2769</b>

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	222	3	0	225
Heroin	17	13	0	30
Down	890	12	1	903
Pharmaceutical	45	26	16	87
Opium	10	1	2	13
<b>Total</b>	<b>1184</b>	<b>55</b>	<b>19</b>	<b>1258</b>

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:

