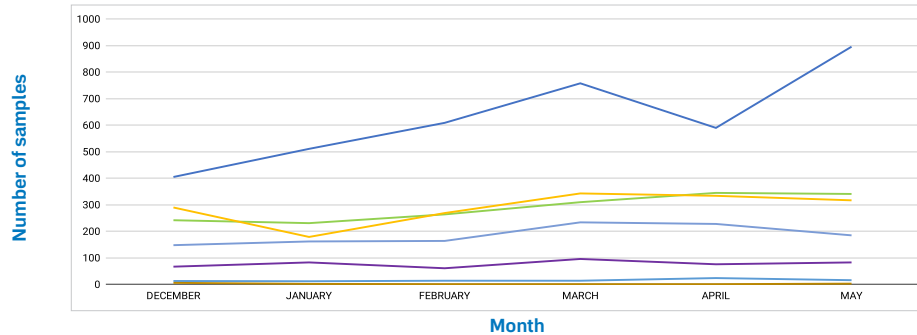


Key Findings

- May 2022 had the most ever drug checks in the province with 1,841. The Northern Health Region has drug checking available in Prince George with POUNDS and FTIR drug checking will soon be available in Terrace.
- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (40.7%) rose to the highest level ever detected in a month. As always, the true rate may be higher than reported here because etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies.
- The fentanyl analogue para-fluorofentanyl is appearing in down more frequently. Para-fluorofentanyl is believed to be less potent than fentanyl and is accurately detected with fentanyl test strips.
- There may be an ongoing shift from benzodiazepine-adulteration of opioids with etizolam to other benzodiazepines such as flualprazolam, flubromazolam, and flubromazepam, which are better detected with benzodiazepine test strips and cause the overall detection numbers to increase. These drugs are potent sedatives which can cause blackouts, memory loss, and make it difficult to tell when someone is experiencing opioid toxicity.
- The median fentanyl concentration of opioids checked was 14.3%, increasing from 13.2% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



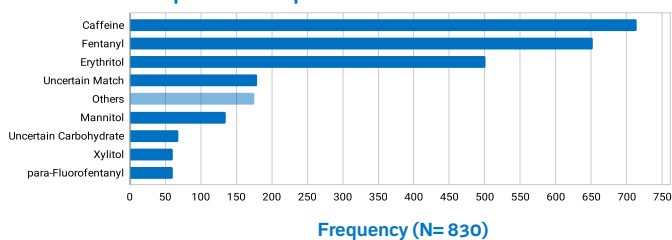
Number of samples by drug category in May

Opioid	896
Stimulant	341
Depressant	83
Psychedelic	317
Other	16
Polysubstance	3
Unknown	185

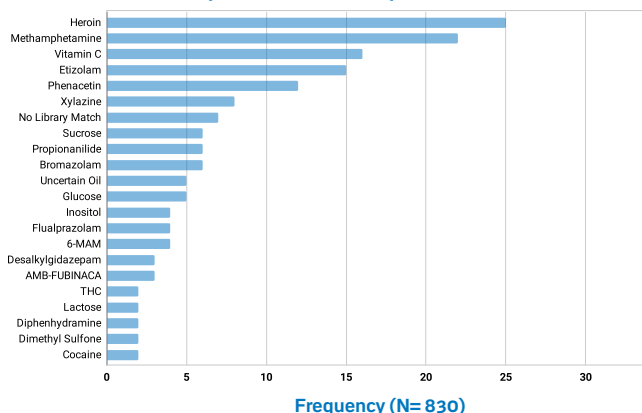
TOTAL: 1,841

Components found in drug samples in May

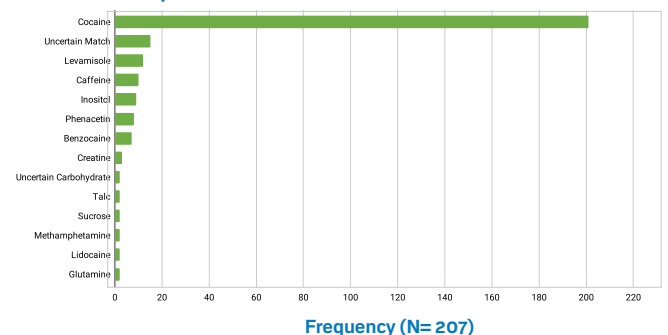
Components in opioids



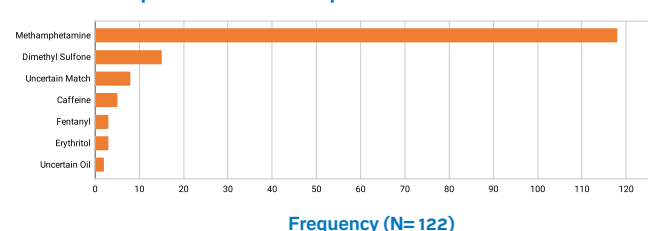
* Other components found in opioids



Components in cocaine

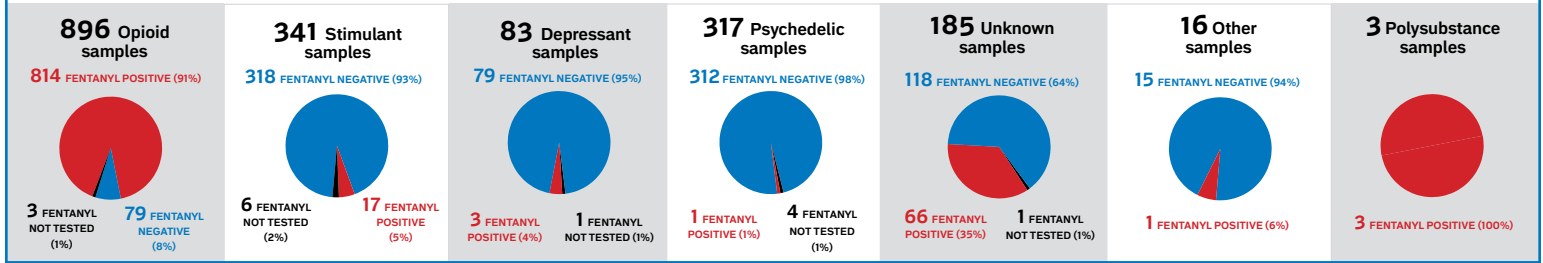


Components in methamphetamine



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/

Number of samples tested with fentanyl present

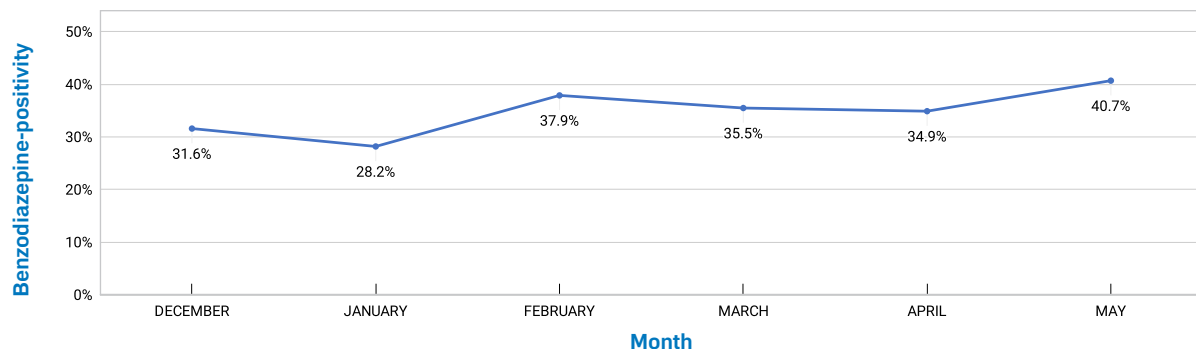


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
May 4 2022 Get Your Drugs Tested Vancouver	Down/Fentanyl	Caffeine, Fentanyl, Xylazine, Bromazolam	Positive	Positive	Vancouver	Combining depressants increases the risk of overdose, and the harms of xylazine and bromazolam are not well known.
May 5 2022 ASK Wellness Merritt	Down/Fentanyl	Caffeine, Erythritol, Fentanyl	Positive	Positive	Merritt	There is a high risk of overdose when down contains a high concentration of fentanyl and benzodiazepines.
May 25 2022 ANKORS Merritt	Down/Fentanyl	Caffeine, Erythritol, Fentanyl, Flualprazolam, Carfentanil	Positive	Positive	Nelson	These results are from a partnered laboratory. There is a high risk of overdose when carfentanil is consumed.

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

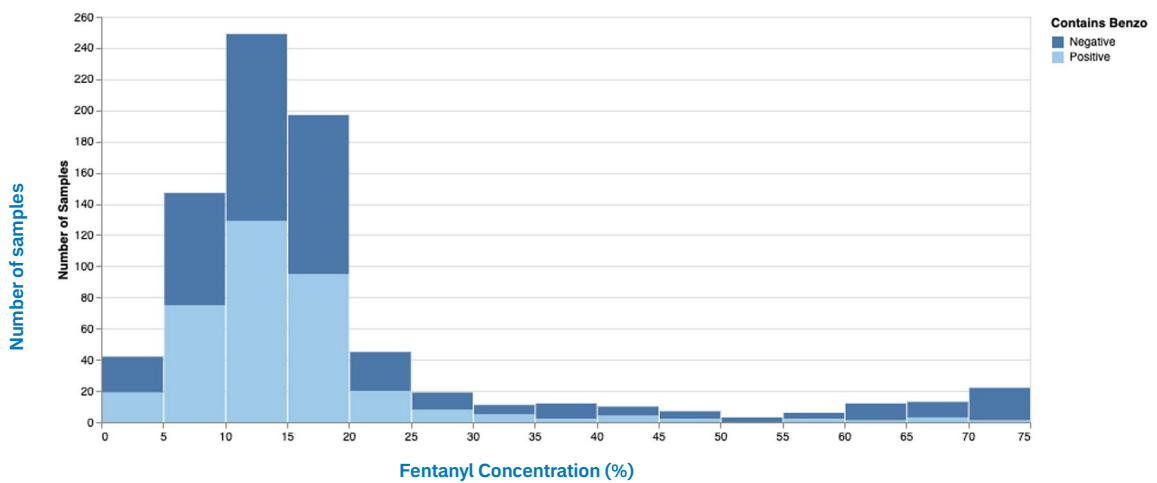


During the month of May, **40.7%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**353 samples of 868 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, May 2022



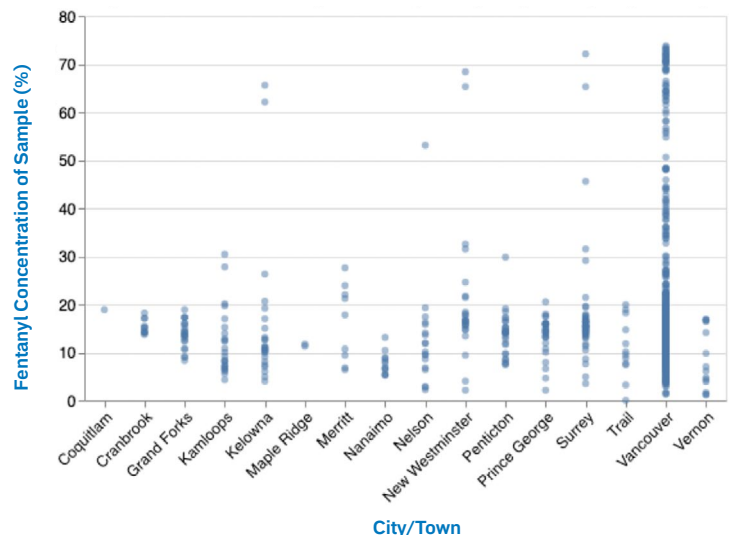
Only 60% of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 14.3%, up from 13.2% last month. When purchasing 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's hard 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 carfentanil. Carfentanil 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.

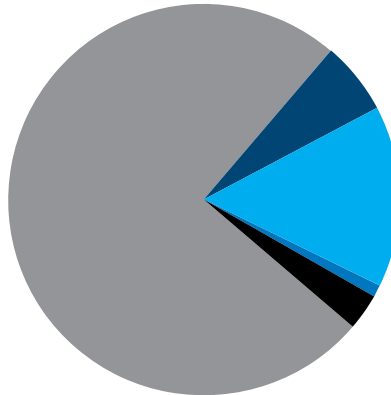
Fentanyl Concentration of Opioid Samples by City/Town, May 2022



Number of samples tested by region:

Total #: 1,841

1,389: Vancouver Coastal Health region (75%)



108: Fraser Health region (6%)

275: Interior Health region (15%)

20: Vancouver Island Health Region (1%)

49: Northern Health region (3%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:	EXPECTED DRUG:	EXPECTED DRUG:	EXPECTED DRUG:
Depressant 83 Samples Tested Matched: 59 Did not match: 23 Match not determined: 1	Psychedelic 317 Samples Tested Matched: 284 Did not match: 32 Match not determined: 1	Stimulant 341 Samples Tested Matched: 423 Did not match: 17	Other 16 Samples Tested Matched: 10 Did not match: 2 Match not determined: 4
Unknown 185 Samples Tested Match not determined: 185	Opioid 896 Samples Tested Matched: 826 Did not match: 52 Match not determined: 18	Polysubstance 3 Sample Tested Matched: 3	

Total

1,841 Samples Tested



Matched: 1,506
 Did not match: 126
 Match not determined: 209

Please note that the presence of the expected substance does not imply purity, as samples frequently contain adulterating cutting agents

Depressant may include:
 benzodiazepines, etizolam,
 GHB, hypnotics

Opioid may include:
 "down," heroin, fentanyl,
 pharmaceutical opioids

Polysubstance includes:
 cross-category mixtures

Psychedelic may include:
 MDMA and related,
 2C-family, tryptamines,
 ketamine, LSD

Stimulant may 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.

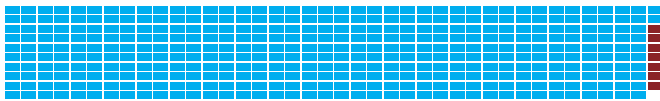
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

399 Samples Tested



Matched: 392
Did not match: 7

EXPECTED DRUG:

Heroin

24 Samples Tested



Matched: 10
Did not match: 14

EXPECTED DRUG:

Fentanyl and Heroin

1 Samples Tested

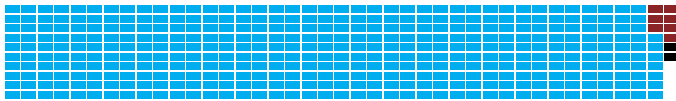


Did not match: 1

EXPECTED DRUG:

Down

406 Samples Tested



Matched: 397
Did not match: 7
Match not determined: 2

EXPECTED DRUG:

Pharmaceutical

61 Samples Tested



Matched: 27
Did not match: 19
Match not determined: 15

EXPECTED DRUG:

Other Opioid

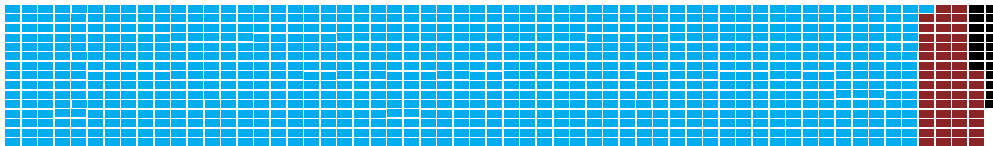
5 Samples Tested



Did not match: 4
Match not determined: 1

Total

896 Samples Tested



Matched: 826
Did not match: 52
Match not determined: 18

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



PROVIDENCE HEALTH CARE
Research Institute



Canadian Mental
Health Association

