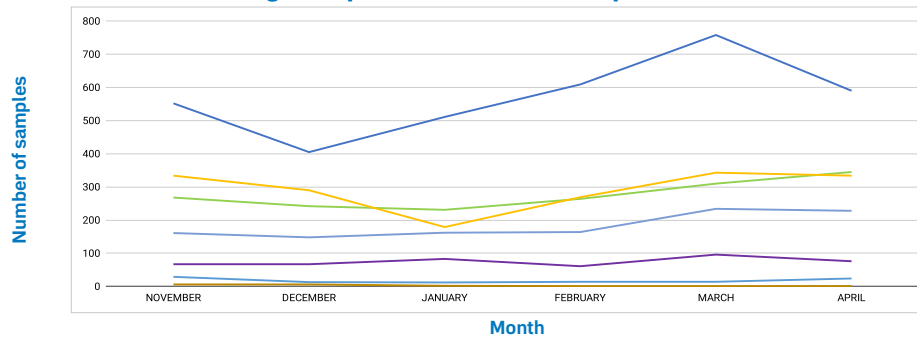


Key Findings

- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (34.9%) fell very slightly from the previous 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 13.2%, decreasing from 13.5% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



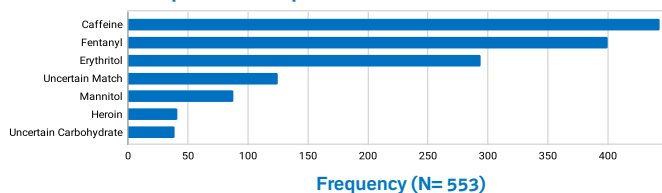
Number of samples by drug category in April

Opioid	590
Stimulant	345
Depressant	76
Psychedelic	334
Other	24
Polysubstance	1
Unknown	228

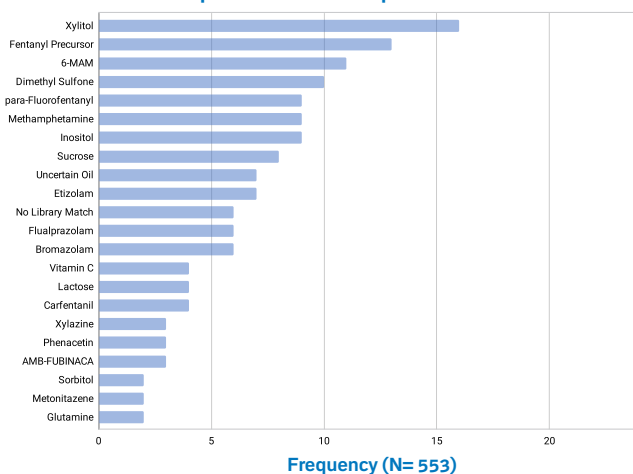
TOTAL: 1,598

Components found in drug samples in April

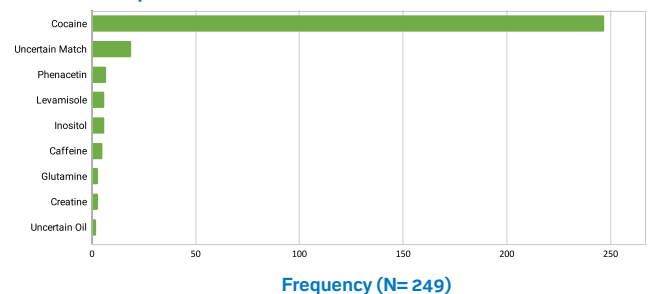
Components in opioids



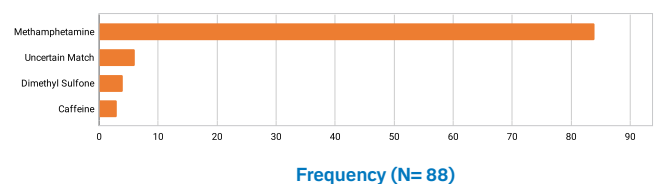
*Other components found in opioids



Components in cocaine

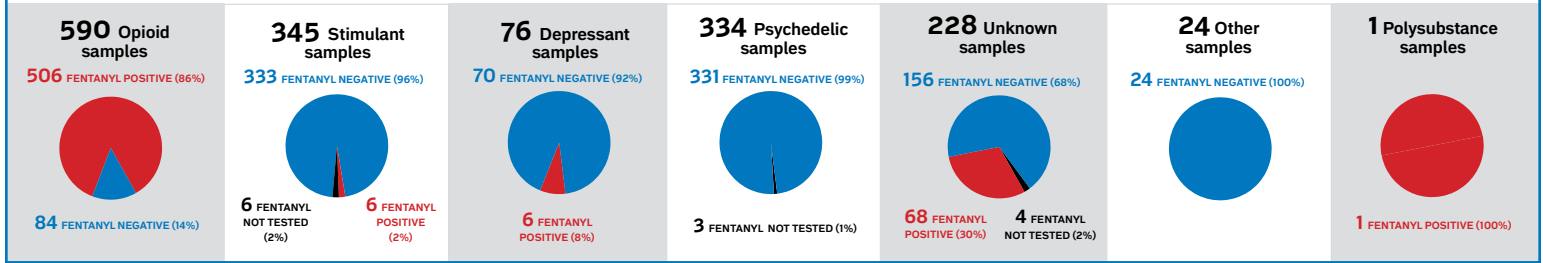


Components in methamphetamine



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

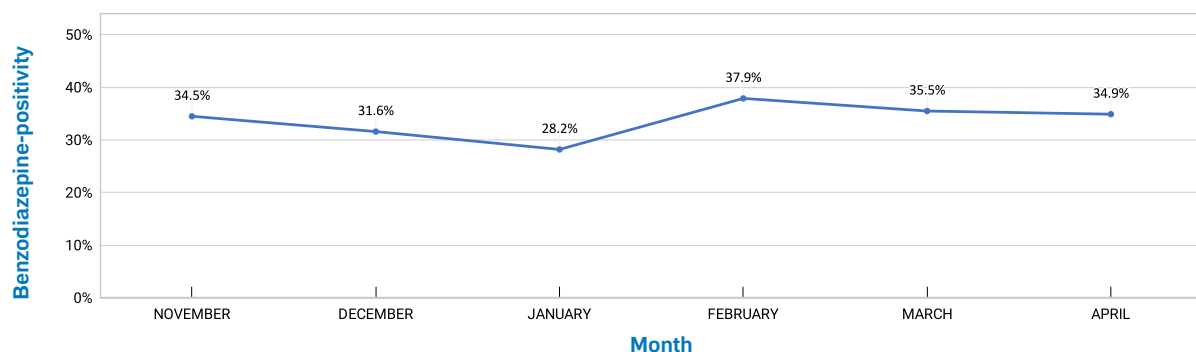


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
April 8 2022 Interior Health Williams Lake	Down or fentanyl Yellow chalky powder	Caffeine, Fentanyl	Positive	Positive	Williams Lake	Higher than normal concentration of fentanyl in a sample adulterated with benzodiazepines poses a risk of opioid toxicity.
April 21 2022 ANKORS Nelson	Colourless crystals or powder	Methamphetamine, Caffeine, Mannitol, Fentanyl	Positive	Positive	Nelson	Fentanyl contamination of stimulants poses a significant risk of opioid toxicity, especially to those without an opioid tolerance.
April 30 2022 Insite Vancouver	Down or fentanyl Yellow powder	Caffeine, Erythritol, Fentanyl	Positive	Positive	Vancouver	Higher than normal concentration of fentanyl in a sample adulterated with benzodiazepines poses a risk of opioid toxicity.
April 30 2022 Get Your Drugs Tested Vancouver	Down or fentanyl	Caffeine, AMB-FUBINACA	Positive	Negative	Vancouver	Synthetic cannabinoids can cause psychosis and are associated with adverse events.

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

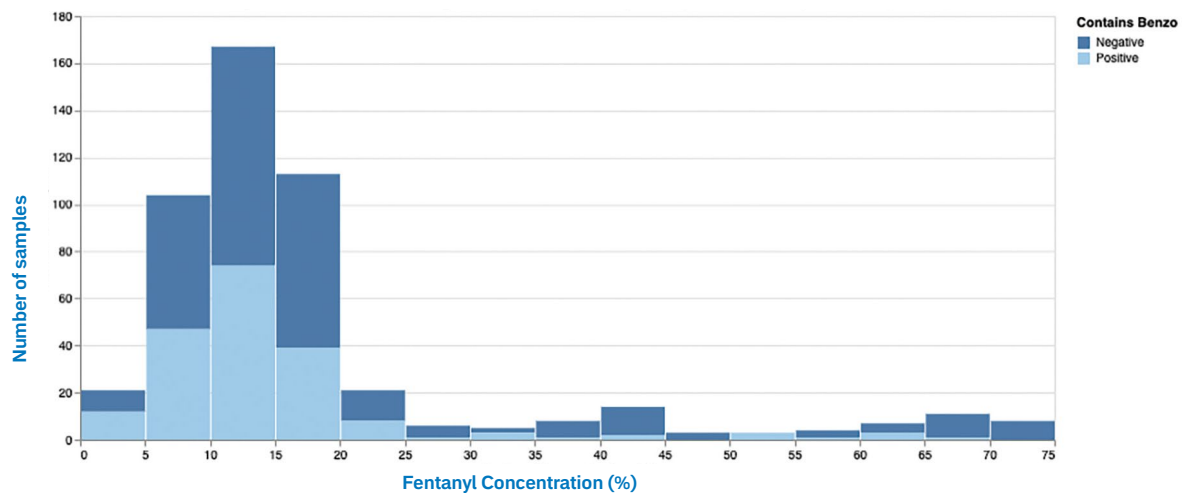


During the month of April, **34.9%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**206 samples of 590 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, April 2022



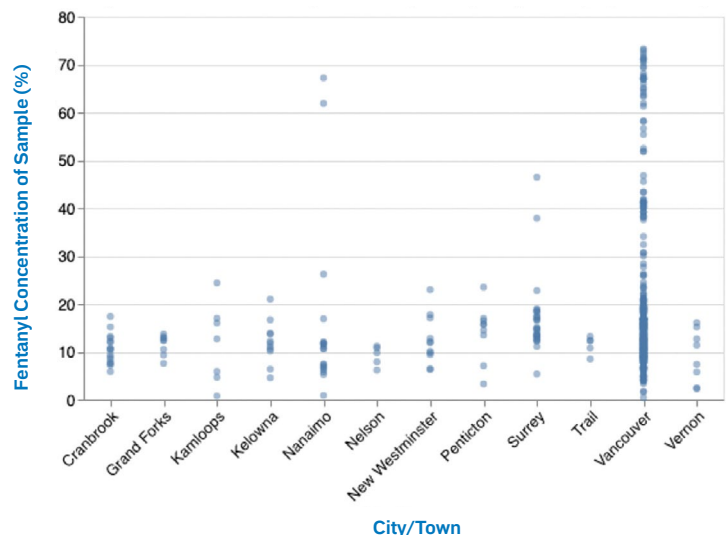
While nearly three quarters of fentanyl-positive opioids checked (72%) have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 80% of the mixture. The median fentanyl concentration of all samples was 13.2%, down from 13.5% 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.

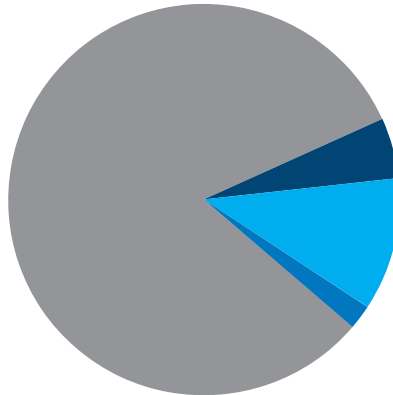
Fentanyl Concentration of Opioid Samples by City/Town, April 2022



Number of samples tested by region:

Total #: 1,598

1,310: Vancouver Coastal Health region (82%)



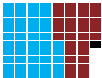

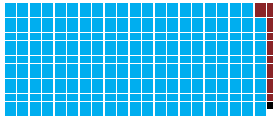

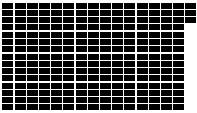
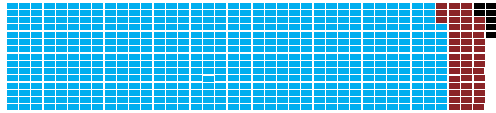

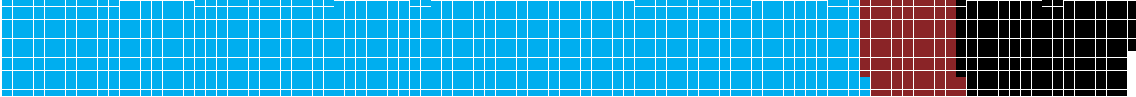
72: Fraser Health region (5%)

181: Interior Health region (11%)

35: Vancouver Island Health Region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

<p>EXPECTED DRUG: Depressant 76 Samples Tested</p>  <p>Matched: 45 Did not match: 30 Match not determined: 1</p>	<p>EXPECTED DRUG: Psychedelic 334 Samples Tested</p>  <p>Matched: 297 Did not match: 34 Match not determined: 3</p>	<p>EXPECTED DRUG: Stimulant 345 Samples Tested</p>  <p>Matched: 329 Did not match: 15 Match not determined: 1</p>	<p>EXPECTED DRUG: Other 24 Samples Tested</p>  <p>Matched: 13 Did not match: 6 Match not determined: 5</p>
<p>EXPECTED DRUG: Unknown 228 Samples Tested</p>  <p>Match not determined: 228</p>	<p>EXPECTED DRUG: Opioid 590 Samples Tested</p>  <p>Matched: 534 Did not match: 49 Match not determined: 7</p>		<p>EXPECTED DRUG: Polysubstance 1 Sample Tested</p>  <p>Did not match: 1</p>
<p>Total 1,598 Samples Tested</p>  <p>Matched: 1,218 Did not match: 135 Match not determined: 245</p>			

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.

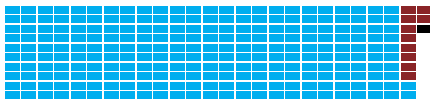
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

253 Samples Tested



Matched: 242

Did not match: 10

Match not determined: 1

EXPECTED DRUG:

Heroin

35 Samples Tested



Matched: 24

Did not match: 11

EXPECTED DRUG:

Opium

2 Samples Tested

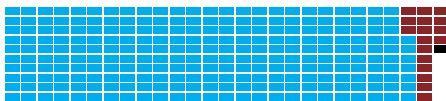


Matched: 2

EXPECTED DRUG:

Down

265 Samples Tested



Matched: 247

Did not match: 17

Match not determined: 1

EXPECTED DRUG:

Pharmaceutical

34 Samples Tested



Matched: 18

Did not match: 11

Match not determined: 5

EXPECTED DRUG:

Other Opioid

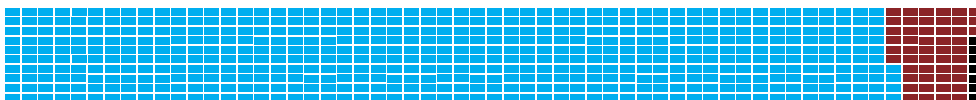
1 Samples Tested



Matched: 1

Total

590 Samples Tested



Matched: 534

Did not match: 49

Match not determined: 7

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



Interior Health



BRITISH COLUMBIA



PROVIDENCE HEALTH CARE
Research Institute



ST PAUL'S
FOUNDATION



Canadian Mental
Health Association

