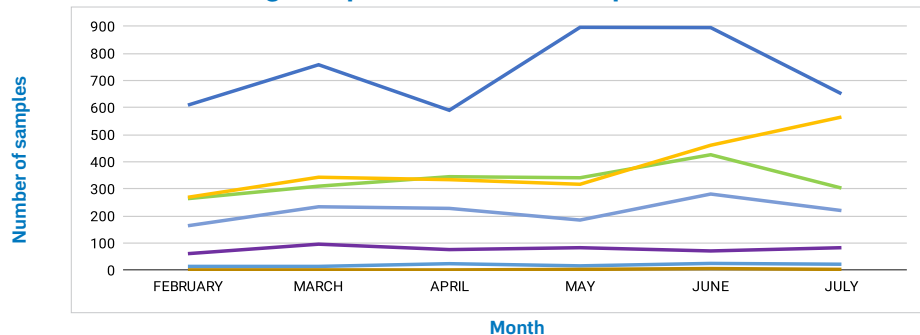


Key Findings

- July 2022 saw a decrease in overall drug checks compared to last month. However, data from drug checking services at Basscoast and Shambhala music festivals are excluded and will be published in a separate report.
- The number of psychedelics checked increased significantly, which is typical in the summer months. MDMA and ketamine are included in this category and make up the majority of psychedelics tested.
- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (32.0%) fell almost 7% from June, which had been the second-highest level ever detected in a month. As always, the true rate may be higher than reported here because etizolam, a benzodiazepine-like substance in expected opioids, may be missed by drug checking technologies.
- Xylazine, a non-opioid veterinary tranquilizer, was detected in 9 opioid samples in July.
- The median fentanyl concentration of all samples was 14.3%, up slightly from 14.1% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



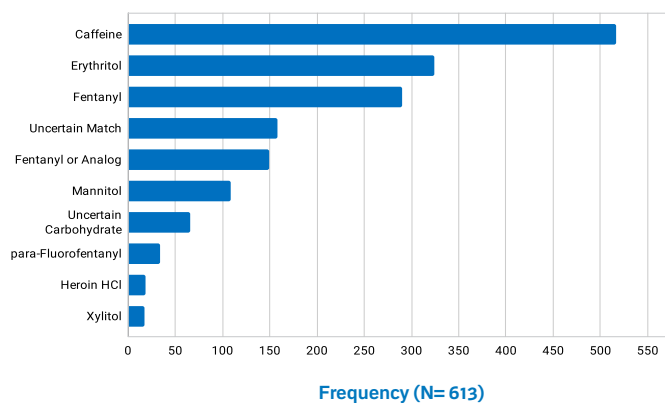
Number of samples by drug category in July

Opioid	651
Stimulant	303
Depressant	83
Psychedelic	565
Other	22
Polysubstance	3
Unknown	220

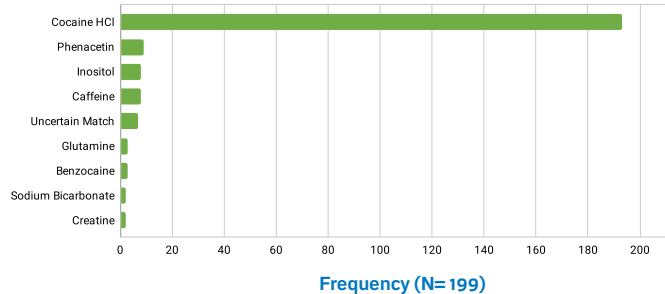
TOTAL: 1,847

Components found in drug samples in July

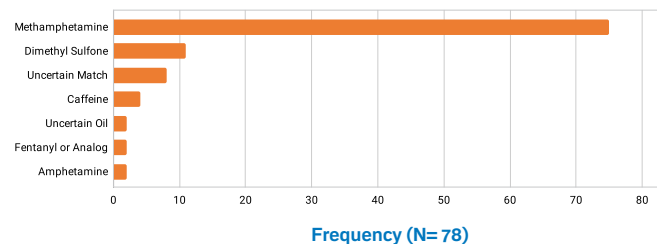
Components in opioids



Components in cocaine

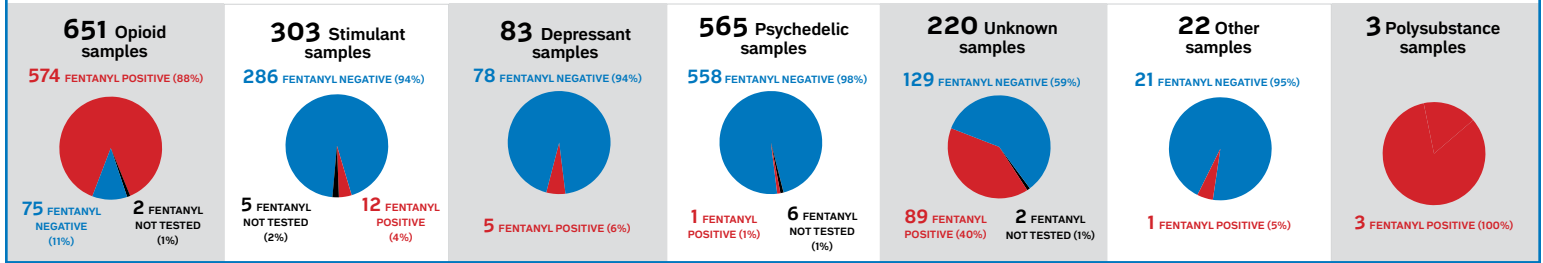


Components in methamphetamine



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

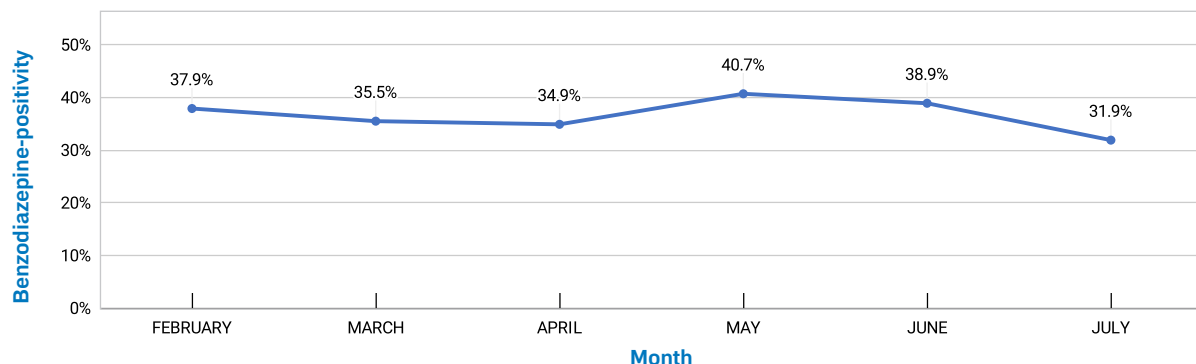


PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
July 6 2022 Vancouver	Heroin	Paraffin Wax, Uncertain Match	Negative	Negative	Vancouver	Sample was sold as heroin, but neither opioids nor other psychoactive substances were detected.
July 19 2022 Penticton	Down/Fentanyl	Fentanyl	Positive	Negative	Penticton	High concentration of fentanyl in samples sold as down pose an increased risk of overdose.
July 22 2022 Vancouver	Fentanyl	Fentanyl, Xylazine	Positive	Positive	Vancouver	Combination of respiratory depressants fentanyl, xylazine, and benzodiazepines poses an increased risk of overdose.
July 26 2022 Vancouver	Cocaine	Fentanyl	Positive	Negative	Vancouver	Risk of overdose is high as sample was sold as cocaine but instead is fentanyl. Sample has been associated with an overdose.

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

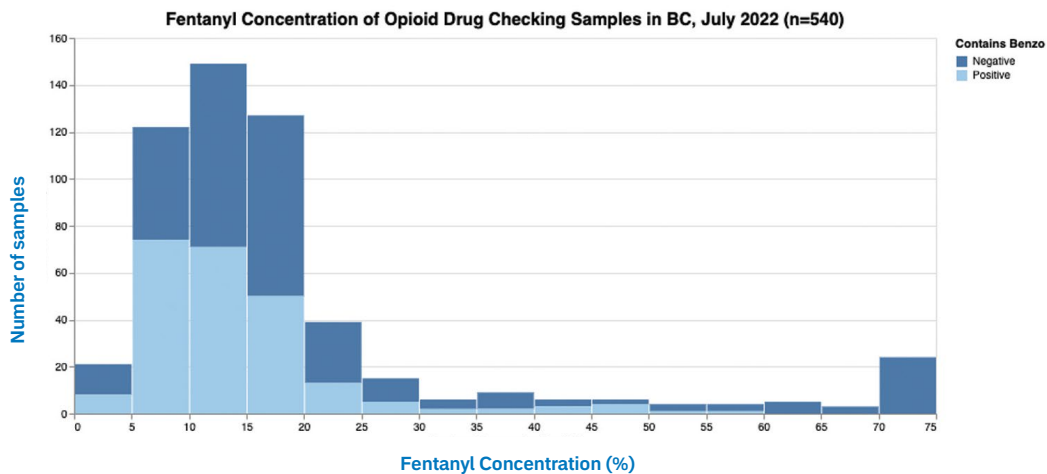


During the month of July, **31.9%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**208 samples of 651 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, July 2022



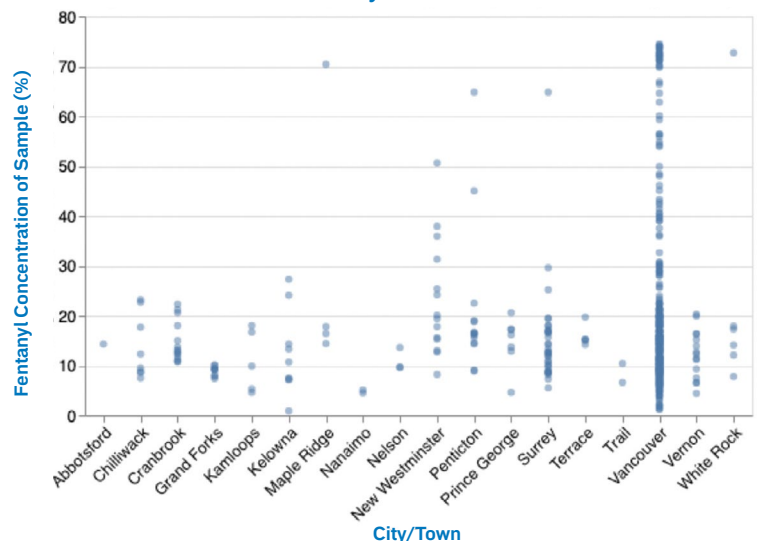
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 5% and 15%, there remain many samples above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 14.3%, up from 14.1% last month. When purchasing 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 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.

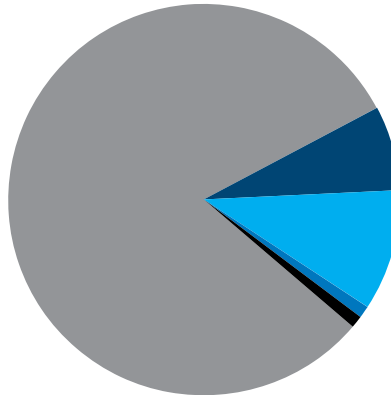
Fentanyl Concentration of Opioid Samples by City/Town, July 2022



Number of samples tested by region:

Total #: 1,847

1,500: Vancouver Coastal Health region (81%)



124: Fraser Health region (7%)

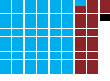
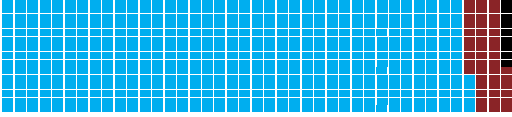
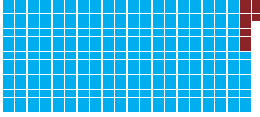

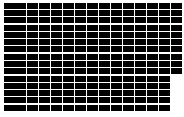
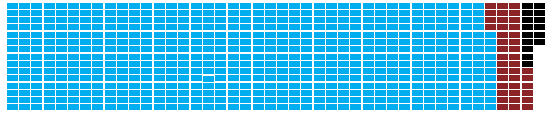


177: Interior Health region (10%)

20: Vancouver Island Health Region (1%)

26: Northern Health region (1%)

Number of samples that matched expectation

using FTIR/test strip drug checking

<p>EXPECTED DRUG: Depressant 83 Samples Tested</p>  <p>Matched: 61 Did not match: 21 Match not determined: 1</p>	<p>EXPECTED DRUG: Psychedelic 565 Samples Tested</p>  <p>Matched: 510 Did not match: 46 Match not determined: 9</p>	<p>EXPECTED DRUG: Stimulant 303 Samples Tested</p>  <p>Matched: 293 Did not match: 10</p>	<p>EXPECTED DRUG: Other 22 Samples Tested</p>  <p>Matched: 14 Did not match: 6 Match not determined: 2</p>
<p>EXPECTED DRUG: Unknown 220 Samples Tested</p>  <p>Match not determined: 220</p>	<p>EXPECTED DRUG: Opioid 651 Samples Tested</p>  <p>Matched: 596 Did not match: 40 Match not determined: 15</p>	<p>EXPECTED DRUG: Polysubstance 3 Sample Tested</p>  <p>Matched: 3</p>	
<p>Total 1,847 Samples Tested</p>  <p>Matched: 1,477 Did not match: 123 Match not determined: 247</p>			

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

Depressant July include:
benzodiazepines, etizolam,
GHB, hypnotics

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

Polysubstance includes:
cross-category mixtures

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

Stimulant July 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.

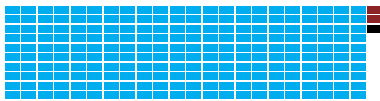
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

223 Samples Tested



Matched: 220

Did not match: 2

Match not determined: 1

EXPECTED DRUG:

Heroin

13 Samples Tested



Matched: 8

Did not match: 5

EXPECTED DRUG:

Fentanyl and Heroin

2 Samples Tested



Did not match: 2

EXPECTED DRUG:

Opium

7 Samples Tested

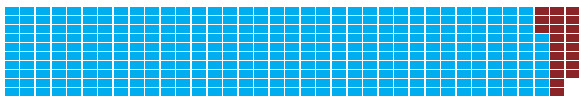


Matched: 7

EXPECTED DRUG:

Down

368 Samples Tested



Matched: 347

Did not match: 21

EXPECTED DRUG:

Pharmaceutical

37 Samples Tested



Matched: 14

Did not match: 9

Match not determined: 14

EXPECTED DRUG:

Other Opioid

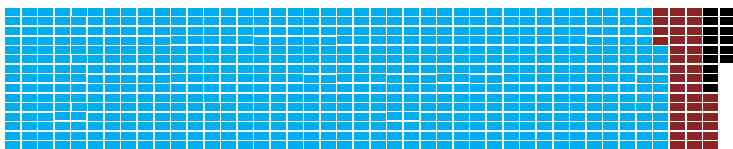
1 Samples Tested



Did not match: 1

Total

651 Samples Tested



Matched: 596

Did not match: 40

Match not determined: 15

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

