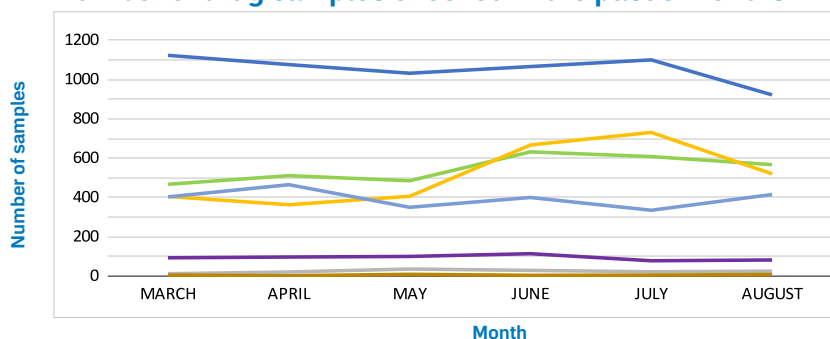


Key Findings

- In August, a total of 2,539 drug checks were performed at community drug checking sites offering FTIR services in BC (48 access points). The total number of samples checked fell slightly after the summer festival season.
- The overall percentage of opioids testing positive for benzodiazepines by FTIR and test strip was 49.6% (457 of 922 samples).
- Benzodiazepines continue to be increasingly detected by FTIR, indicating their presence in higher concentrations. In August, bromazepam was detected in 111 opioid samples, followed by desalkylgizapam (11 samples), and etizolam (2 samples).
- A shift from fentanyl to fluorofentanyl continues in the unregulated opioid supply. Fluorofentanyl was detected in 23.5% of unregulated opioid samples (205 of 872 samples), whereas fentanyl was detected in 51.3% (447 samples).
- Xylazine, a veterinary sedative, was found in 1.1% of unregulated opioids (10 of 872 samples), occurring mostly in the Fraser Health region.
- The median fentanyl concentration of unregulated opioids has been increasing over the past year. In August, the median fentanyl concentration of opioids checked was 15.0%. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



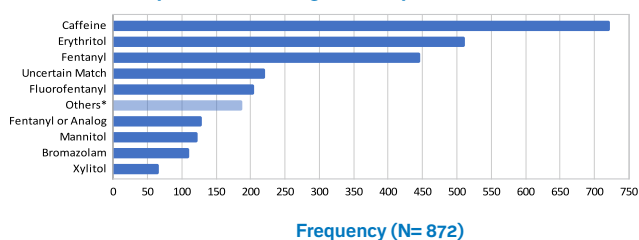
Number of samples by drug category in August

Opioid	922
Stimulant	567
Depressant	82
Psychedelic	520
Other	25
Polysubstance	8
Unknown	415

TOTAL: 2,539

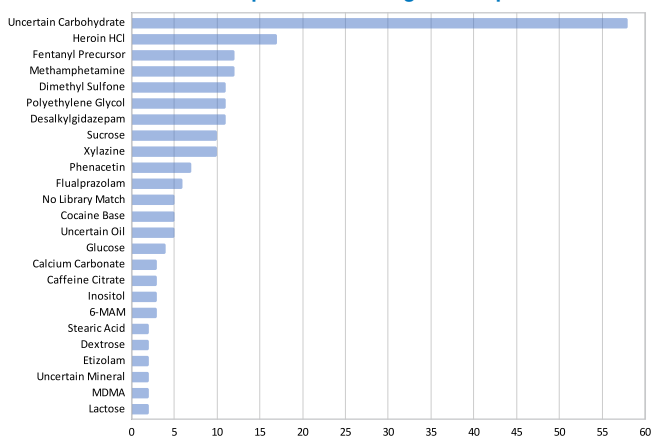
Components found in drug samples in August

Components in unregulated opioids

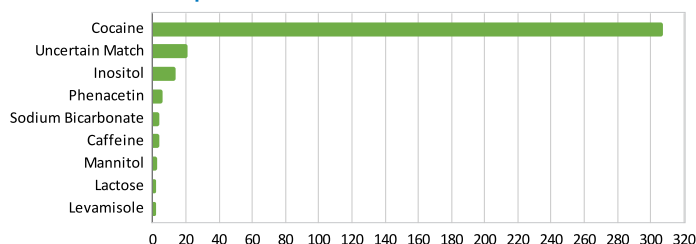


Frequency (N=872)

*Other components in unregulated opioids

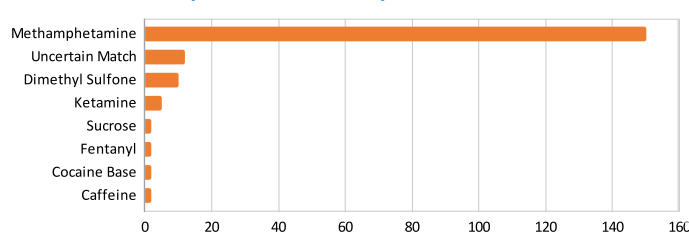


Components in cocaine



Frequency (N=308)

Components in methamphetamine



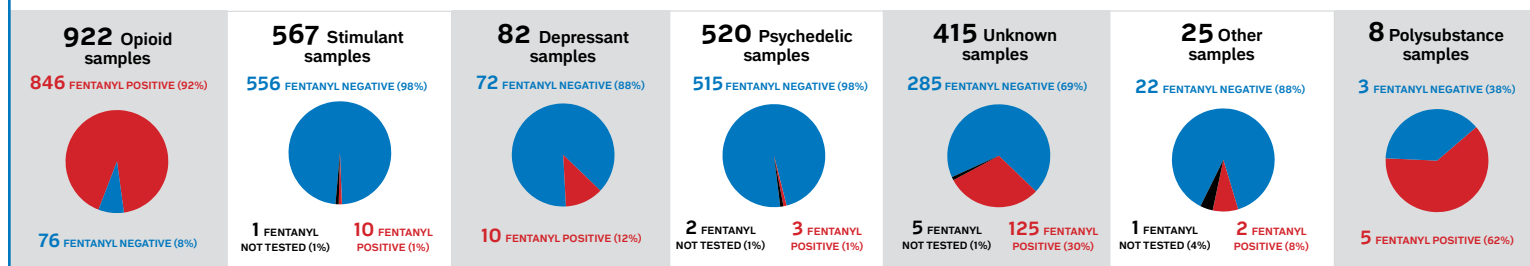
Frequency (N=159)

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/

August
2023

Drug Checking in British Columbia

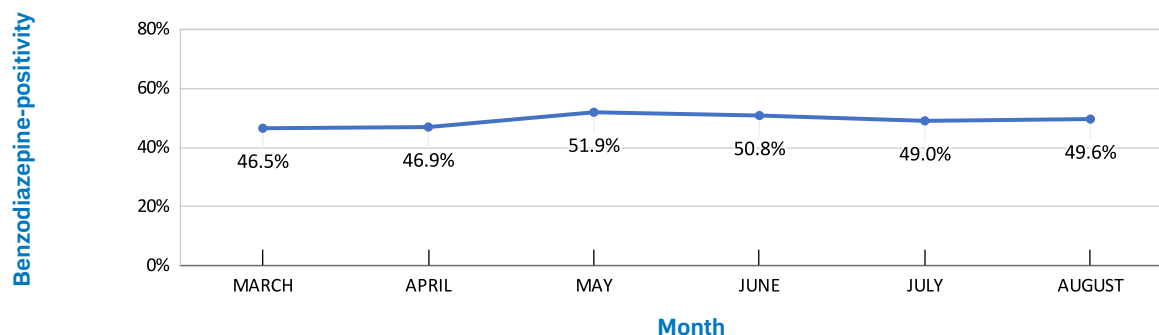
Number of samples tested with fentanyl present



PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
August 8, 2023 Vancouver	2C-B	Xylazine, Ketamine	Negative	N/A	Vancouver	White powder sold as 2C-B in Vancouver tested positive for xylazine and ketamine
August 30, 2023 New Westminster	Crack Cocaine	Cocaine Base	Positive	Negative	New Westminster	White waxy chunks sold as Crack Cocaine tested positive for fentanyl in New Westminster.
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

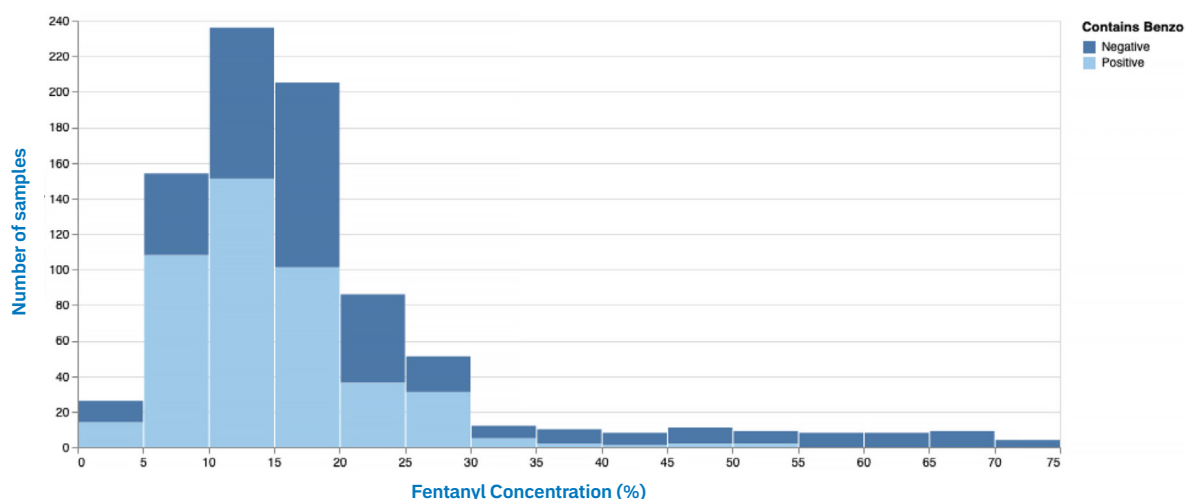


During the month of August, **49.6%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**457 samples of 922 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, August 2023



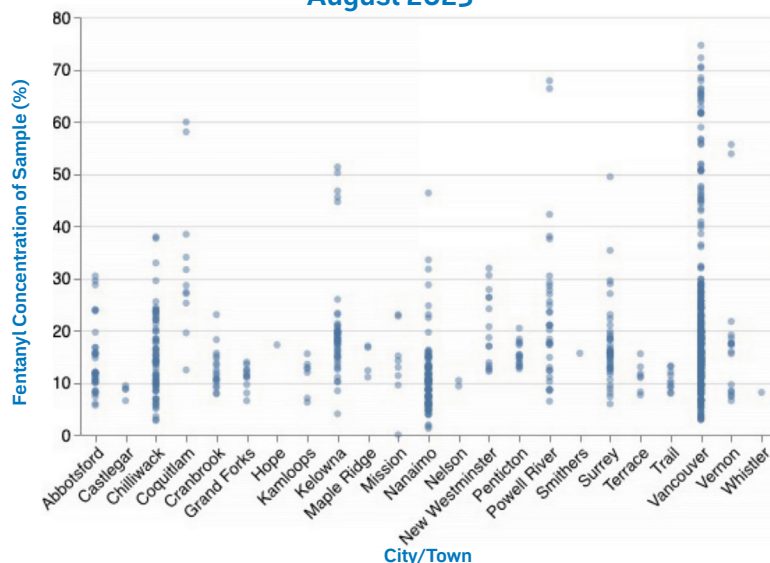
While most of fentanyl-positive opioids checked have a concentration of fentanyl between 10% and 20%, there remain many samples above 20% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples decreased from 15.8% in July to 15.0% in August. 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 carfentanyl. While fluorofentanyl is reported to have similar potency to fentanyl, carfentanyl 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 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, August 2023



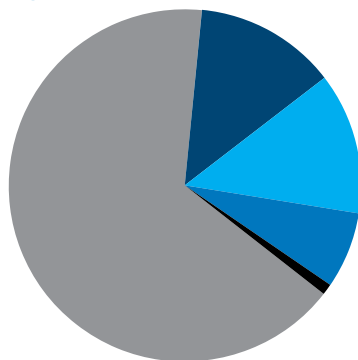
August
2023

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 2,539

1,683: Vancouver Coastal
Health region (66%)



323: Fraser Health region (13%)

336: Interior Health region (13%)

183: Vancouver Island
Health Region (7%)

14: 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		879	35	8	922
Stimulant		551	15	1	567
Depressant		61	19	2	82
Psychedelic		488	24	8	520
Other		11	2	12	25
Polysubstance		2	6	0	8
Unknown		0	0	415	415
Total		1992	101	446	2539

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.

August
2023

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		210	7	0	217
Heroin		7	6	0	13
Fentanyl and Heroin		0	1	0	1
Other Opioid		0	1	0	1
Down		631	13	1	645
Pharmaceutical		26	6	7	39
Opium		5	1	0	6
Total		879	35	8	922

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:

