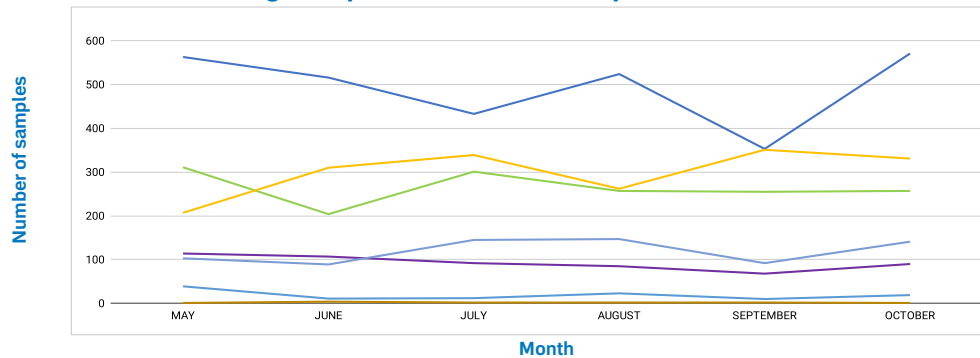


Key Findings

- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (31.9%) has increased dramatically to the highest since the start of this project. The true rate may be higher than reported here because etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies.
- October 2021 was the month with the most drugs checked ever in British Columbia (1,410 samples). The previous highest month was May 2021 with 1,338.
- Benzodiazepines confirmed in expected opioid samples in the last 3 months included etizolam, flualprazolam, and clonazepam. Both clonazepam and flualprazolam are potent unregulated benzodiazepines.
- Heroin was detected in only 5.1% of *down* samples. Throughout 2017 and 2018, heroin was detected in 17.6% of *down* samples.
- The median fentanyl concentration of opioids checked was 13.5%, increasing from 11.9% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



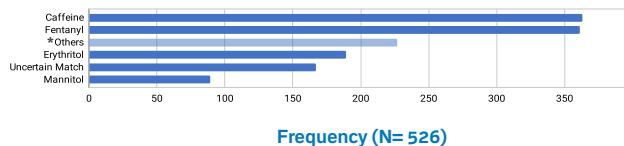
Number of samples by drug category in October

Opioid	571
Stimulant	257
Depressant	90
Psychedelic	331
Other	19
Polysubstance	1
Unknown	141

TOTAL: 1410

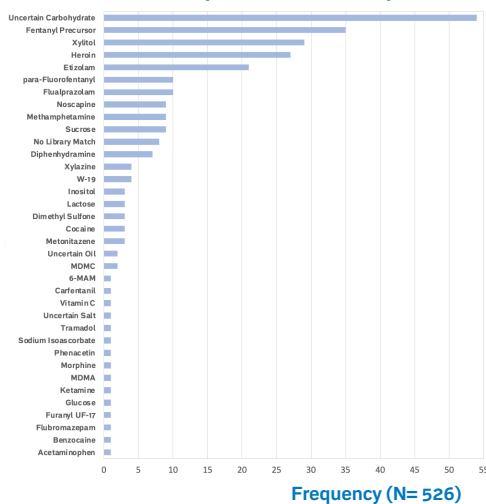
Components found in drug samples in October

Components in opioids



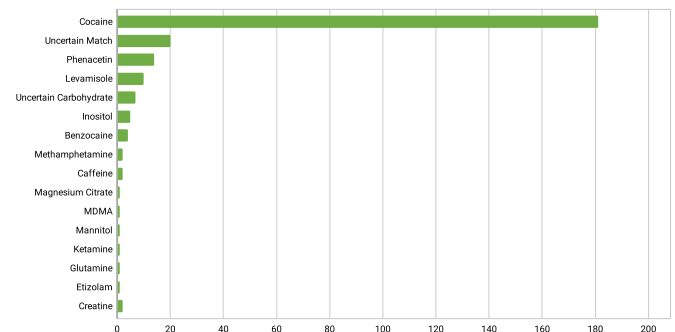
Frequency (N= 526)

* Other components found in opioids



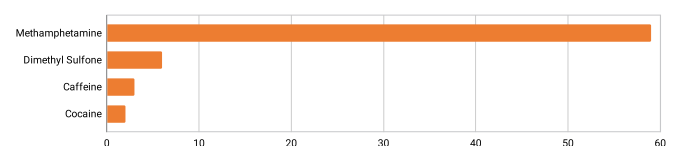
Frequency (N= 526)

Components in cocaine



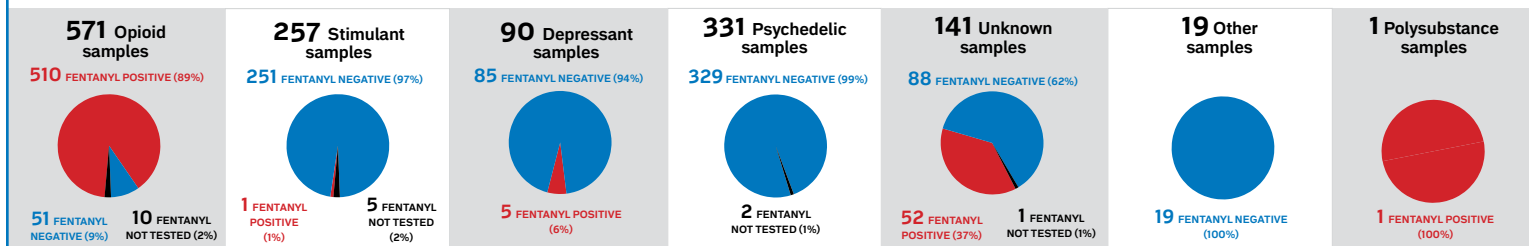
Frequency (N= 183)

Components in methamphetamine



Frequency (N= 60)

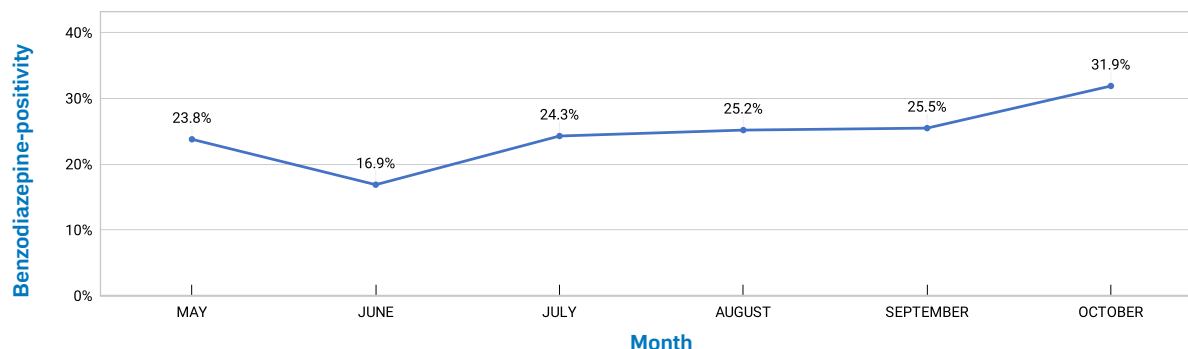
Number of samples tested with fentanyl present



PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
October 14, 2021 ASK Wellness Kamloops	Methamphetamine	Methamphetamine, Caffeine	Positive	N/A	Kamloops	The unexpected presence of fentanyl poses significant risk of opioid toxicity, especially for opioid-naïve individuals.
October 20, 2021 Overdose Prevention Society Vancouver	Fentanyl	Metonitazene	Positive	Negative	Unknown	Metonitazene is a new opioid with limited information on its toxicity and effects.
October 28, 2021 Vernon MHSU Vernon	Fentanyl	Caffeine, Fentanyl	Positive	Positive	Vernon	Benzodiazepines combined with opioids can cause prolonged sedation and increases the risk of overdose.

Percentage of opioids testing positive for benzodiazepines in the past 6 months

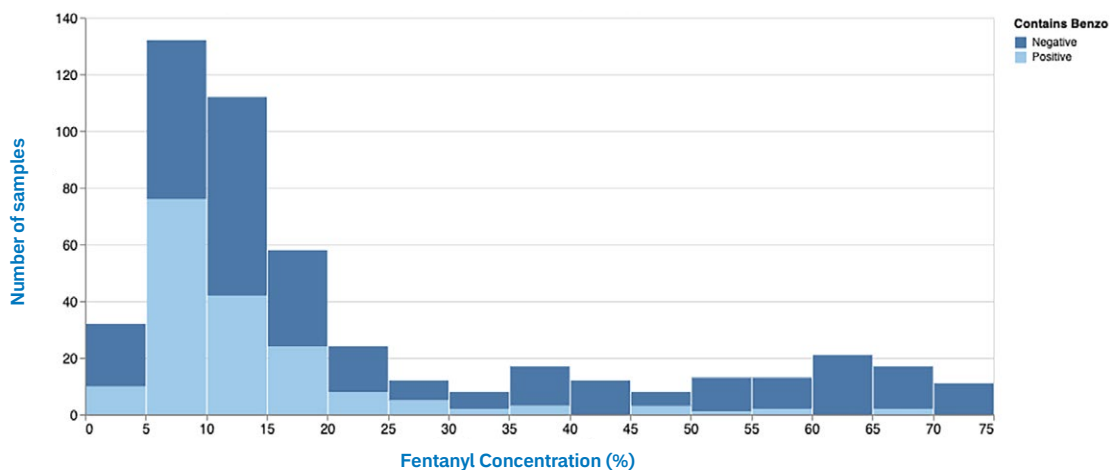


During the month of October, **32%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**182 samples of 571 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, October 2021



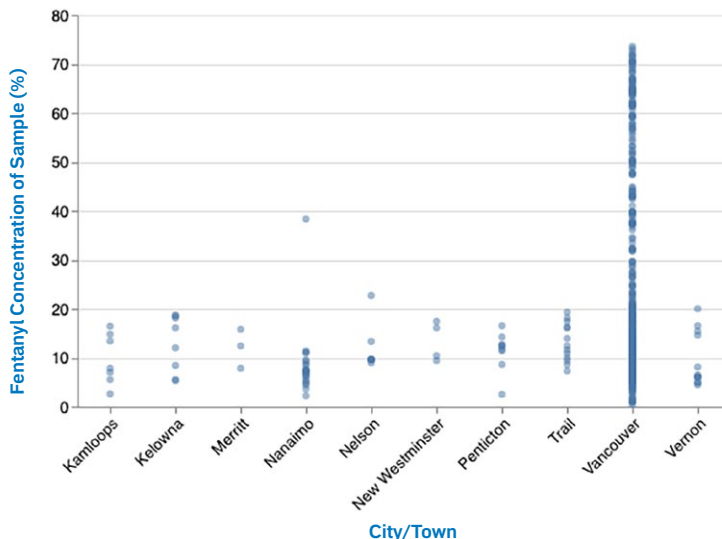
Nearly 50% of opioids checked have a concentration of fentanyl between 5% and 15%, but over 40% of samples are above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 13.5%, up from 11.9% last month. When purchasing fentanyl 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.

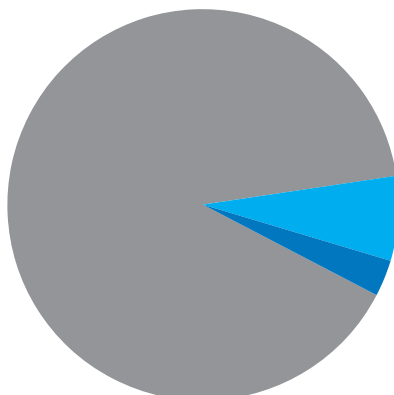
Fentanyl Concentration of Opioid Samples by City/Town, October 2021



Number of samples tested by region:

Total #: 1,410

1,274: Vancouver Coastal Health region (90%)



105: Interior Health region (7%)

31: Vancouver Island Health Region (3%)

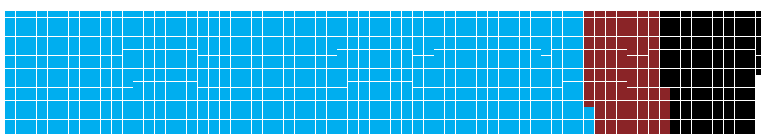
Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:	EXPECTED DRUG:	EXPECTED DRUG:	EXPECTED DRUG:
Depressant 90 Samples Tested Matched: 50 Did not match: 34 Match not determined: 6	Psychedelic 331 Samples Tested Matched: 268 Did not match: 49 Match not determined: 14	Stimulant 257 Samples Tested Matched: 249 Did not match: 8	Other 19 Samples Tested Matched: 7 Did not match: 2 Match not determined: 10
Unknown 141 Samples Tested Match not determined: 141	Opioid 571 Samples Tested Matched: 510 Did not match: 50 Match not determined: 11	Polysubstance 1 Sample Tested Did not match: 1	

Total

1,410 Samples Tested



Matched: 1,084

Did not match: 144

Match not determined: 182

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.

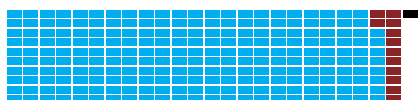
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

241 Samples Tested



Matched: 228

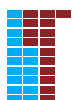
Did not match: 12

Match not determined: 1

EXPECTED DRUG:

Heroin

31 Samples Tested



Matched: 16

Did not match: 15

EXPECTED DRUG:

Fentanyl and Heroin

5 Samples Tested

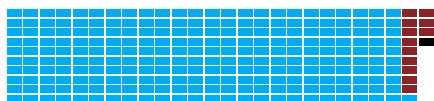


Matched: 5

EXPECTED DRUG:

Down

254 Samples Tested



Matched: 241

Did not match: 12

Match not determined: 1

EXPECTED DRUG:

Pharmaceutical

2 Samples Tested



Matched: 1

Match not determined: 1

EXPECTED DRUG:

Other Opioid

38 Samples Tested



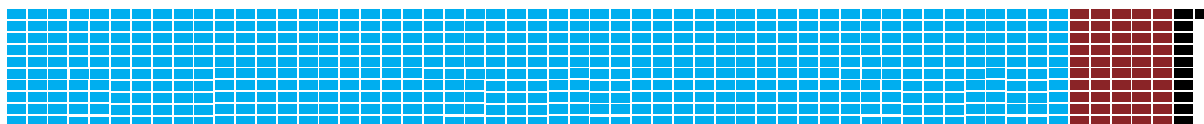
Matched: 19

Did not match: 11

Match not determined: 8

Total

571 Samples Tested



Matched: 510

Did not match: 50

Match not determined: 11

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



How you want to be treated.



Canadian Mental
Health Association

