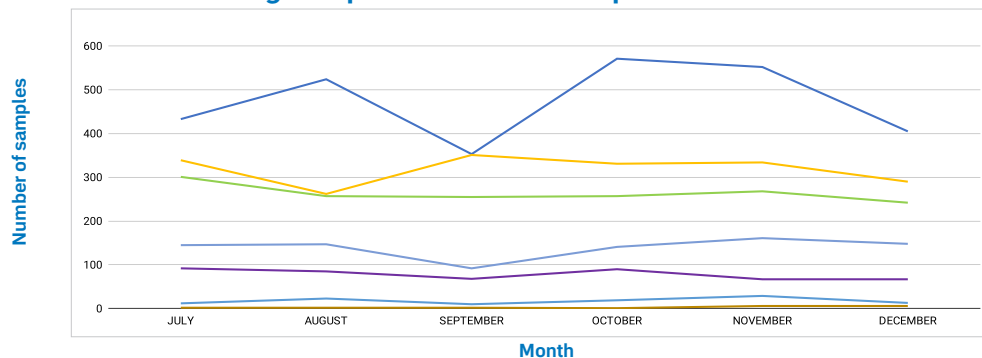


Key Findings

- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (31.6%) fell slightly from two previous record-breaking months. The true rate may be higher than reported here because etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies.
- Benzodiazepines confirmed in expected opioid samples in the last 3 months included etizolam, flualprazolam, flubromazolam, norfludiazepam, and clonazepam. These are all potent unregulated benzodiazepines.
- Novel opioids detected by confirmatory testing in December include para-fluorofentanyl, para-bromofentanyl, carfentanil, and metonitazene.
- 14 non-opioids tested positive for fentanyl in December. These included samples of MDMA, ketamine, cocaine, and others. Many samples can be explained by cross-contamination and are not always due to adulteration.
- The median fentanyl concentration of opioids checked was 12.2%, increasing from 11.4% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



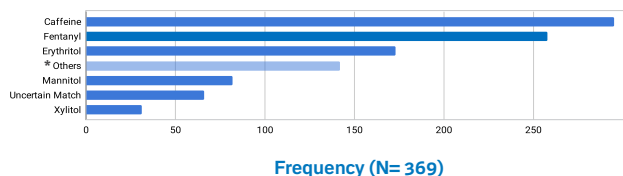
Number of samples by drug category in December

Opioid	405
Stimulant	242
Depressant	67
Psychedelic	290
Other	13
Polysubstance	6
Unknown	148

TOTAL: 1,171

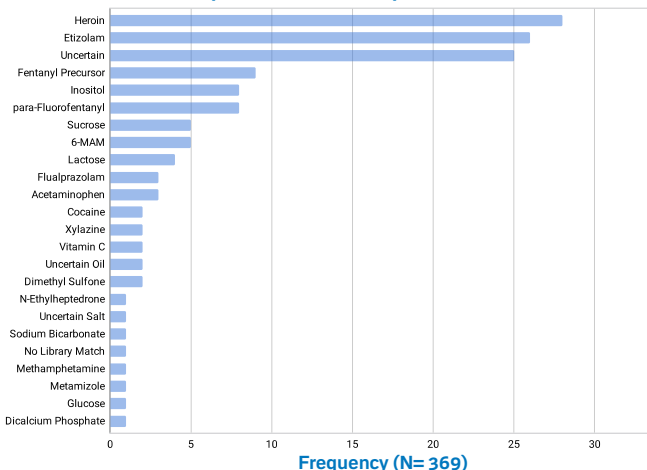
Components found in drug samples in December

Components in opioids



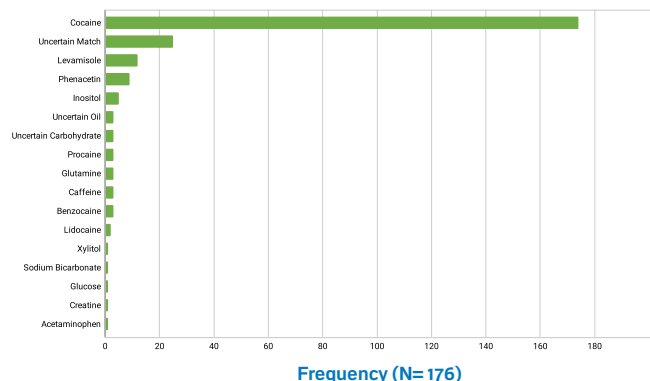
Frequency (N= 369)

* Other components found in opioids



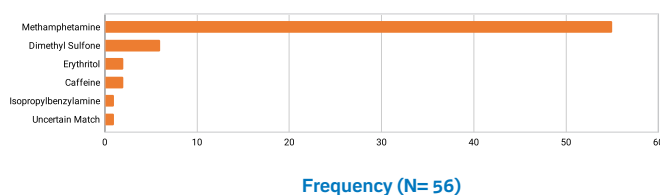
Frequency (N= 369)

Components in cocaine



Frequency (N= 176)

Components in methamphetamine

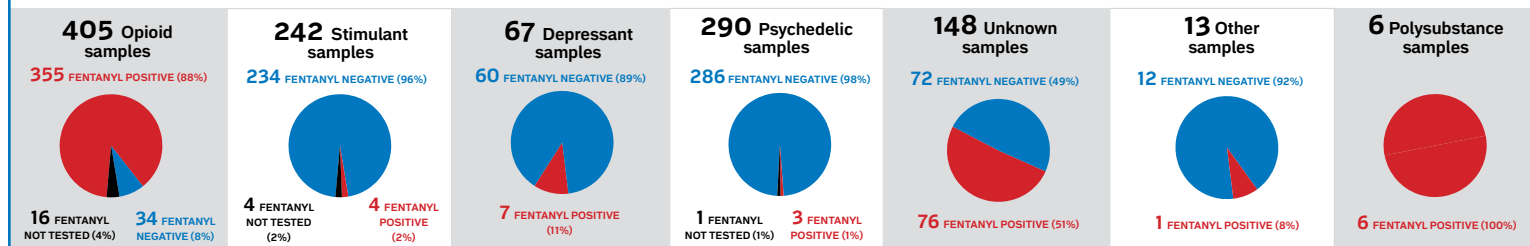


Frequency (N= 56)

December
2021

Drug Checking in British Columbia

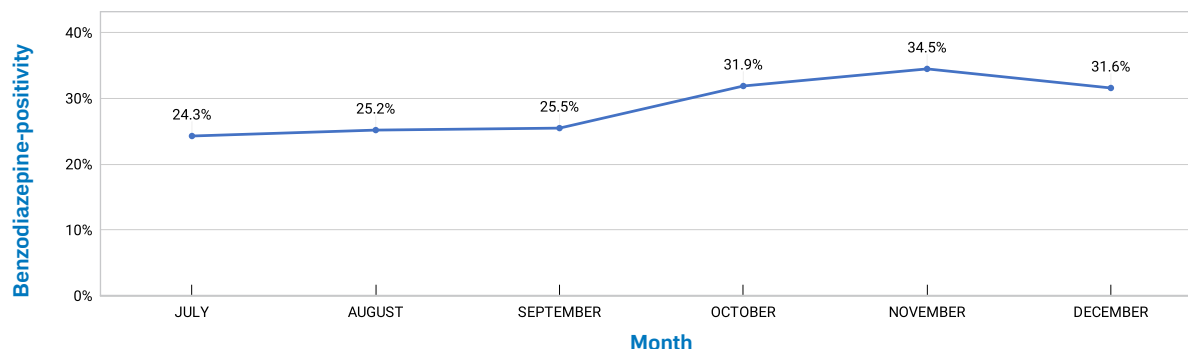
Number of samples tested with fentanyl present



PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
December 2, 2021 ANKORS West Kootenay	Fentanyl and down	Various components including carfentanil, flualprazolam	Positive	Positive	West Kootenays/ Kootenay Boundary	This general alert of describes a trend of toxic drugs associated with increased risk of overdose.
December 10, 2021 Get Your Drugs Tested Vancouver	Xanax (alprazolam)	Microcrystalline cellulose	Positive	Negative	Vancouver	Fentanyl is a potent opioid that can cause opioid toxicity (overdose) especially in people with little opioid tolerance.
December 21, 2021 ANKORS West Kootenays	Fentanyl and down	Various components including carfentanil, flualprazolam	Positive	Positive	West Kootenays	Reissued: this general alert of describes a trend of toxic drugs associated with increased risk of overdose.
December 29, 2021 ANKORS Nelson	Cocaine	Cocaine HCl	Positive	Negative	Nelson	Overdose risk is very high when stimulants are contaminated with fentanyl.

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

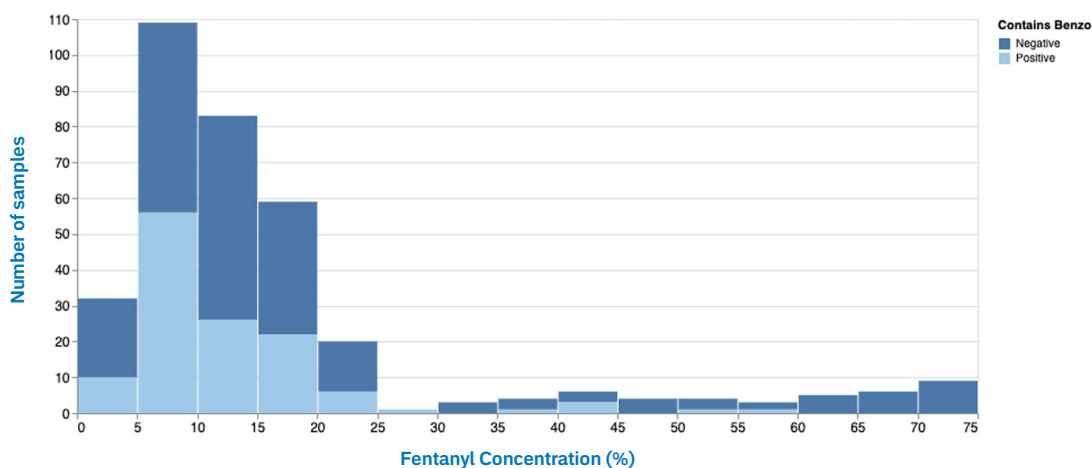


During the month of December, **31.6%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**128 samples of 405 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, December 2021



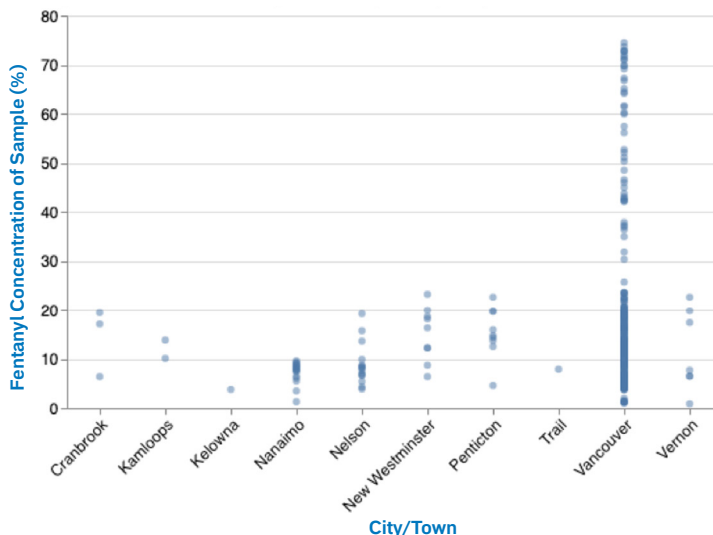
Nearly 3 of 5 of opioids checked (58.9%) have a concentration of fentanyl between 5% and 15%, but nearly 30% of samples are above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 12.2%, up from 11.4% last month. When purchasing 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, December 2021



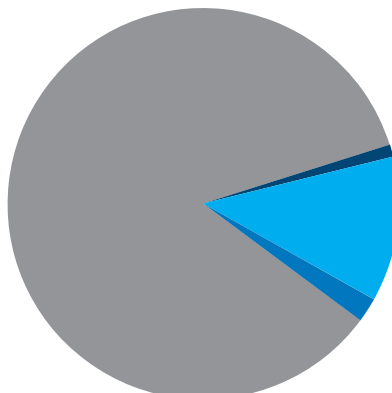
December
2021

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 1,171

1,043: Vancouver Coastal
Health region (89%)



17: Fraser Health region (2%)

91: Interior Health region (7%)

18: Vancouver Island
Health Region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG: Depressant

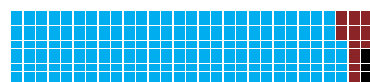
67 Samples Tested



Matched: 39
Did not match: 27
Match not determined: 1

EXPECTED DRUG: Psychedelic

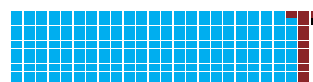
290 Samples Tested



Matched: 256
Did not match: 29
Match not determined: 5

EXPECTED DRUG: Stimulant

242 Samples Tested



Matched: 229
Did not match: 12
Match not determined: 1

EXPECTED DRUG: Other

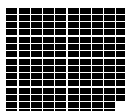
13 Samples Tested



Matched: 5
Did not match: 4
Match not determined: 4

EXPECTED DRUG: Unknown

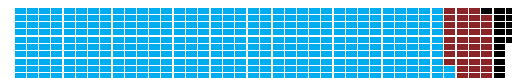
148 Samples Tested



Match not determined: 148

EXPECTED DRUG: Opioid

405 Samples Tested



Matched: 352
Did not match: 37
Match not determined: 16

EXPECTED DRUG: Polysubstance

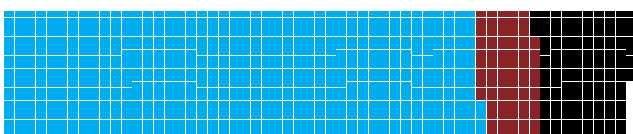
6 Sample Tested



Matched: 5
Did not match: 1

Total

1,171 Samples Tested



Matched: 886
Did not match: 110
Match not determined: 175

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.

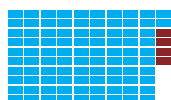
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

96 Samples Tested

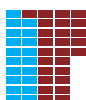


Matched: 92
Did not match: 4

EXPECTED DRUG:

Heroin

45 Samples Tested



Matched: 19
Did not match: 26

EXPECTED DRUG:

Opium

5 Samples Tested

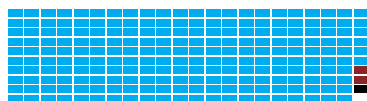


Matched: 5

EXPECTED DRUG:

Down

219 Samples Tested



Matched: 216
Did not match: 2
Match not determined: 1

EXPECTED DRUG:

Pharmaceutical

29 Samples Tested



Matched: 11
Did not match: 4
Match not determined: 14

EXPECTED DRUG:

Other Opioid

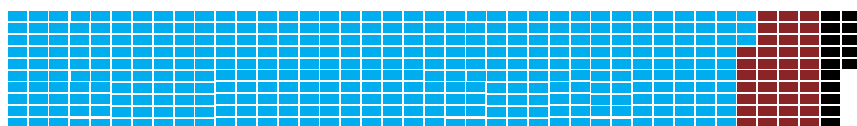
11 Samples Tested



Matched: 10
Did not match: 1

Total

405 Samples Tested



Matched: 353
Did not match: 37
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

