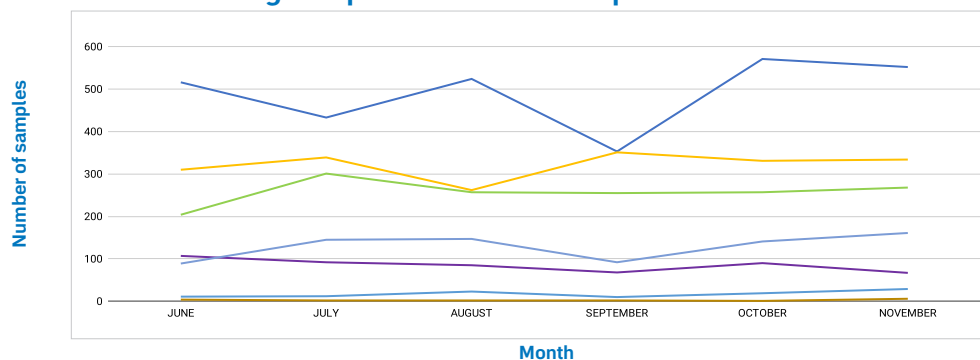


Key Findings

- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (34.5%) has increased once again 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.
- November 2021 was the month with the most drugs checked ever in British Columbia (1,417 samples). The previous highest month was October 2021 with 1,410.
- 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 November include para-fluorofentanyl, para-bromofentanyl, carfentanil, and metonitazene.
- The median fentanyl concentration of opioids checked was 11.4%, decreasing from 13.5% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



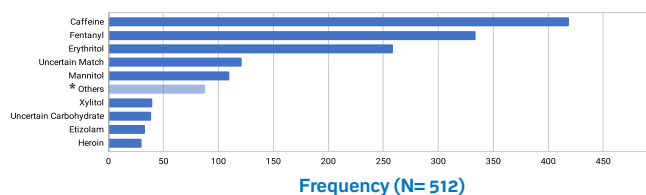
Number of samples by drug category in November

Opioid	552
Stimulant	268
Depressant	67
Psychedelic	334
Other	29
Polysubstance	6
Unknown	161

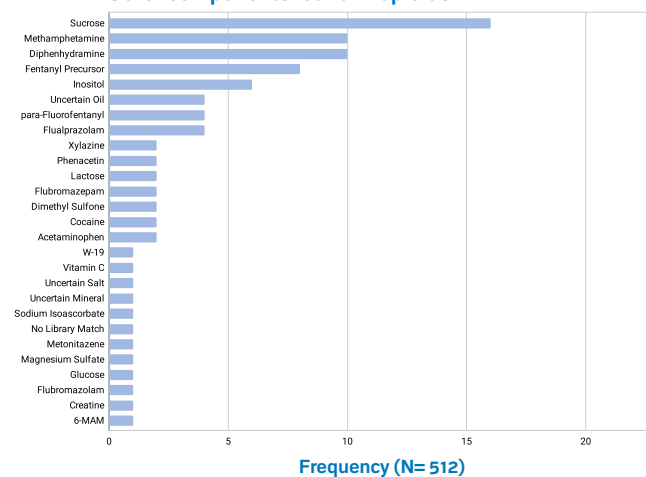
TOTAL: 1,417

Components found in drug samples in November

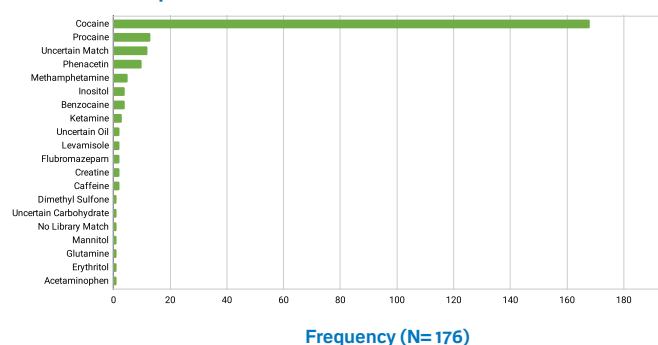
Components in opioids



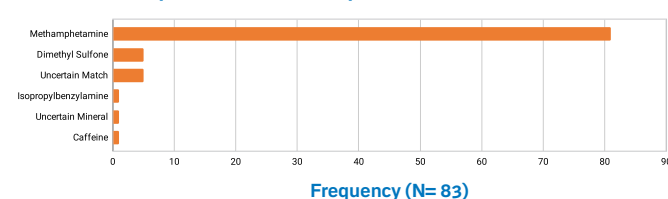
* Other components found in opioids



Components in cocaine



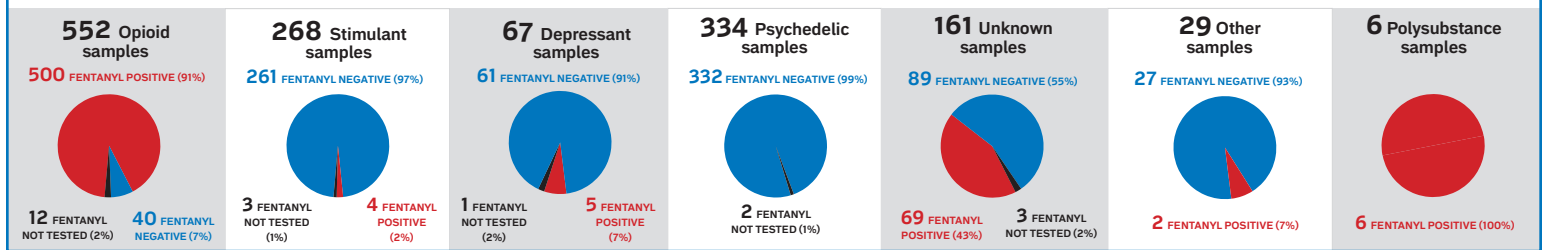
Components in methamphetamine



November
2021

Drug Checking in British Columbia

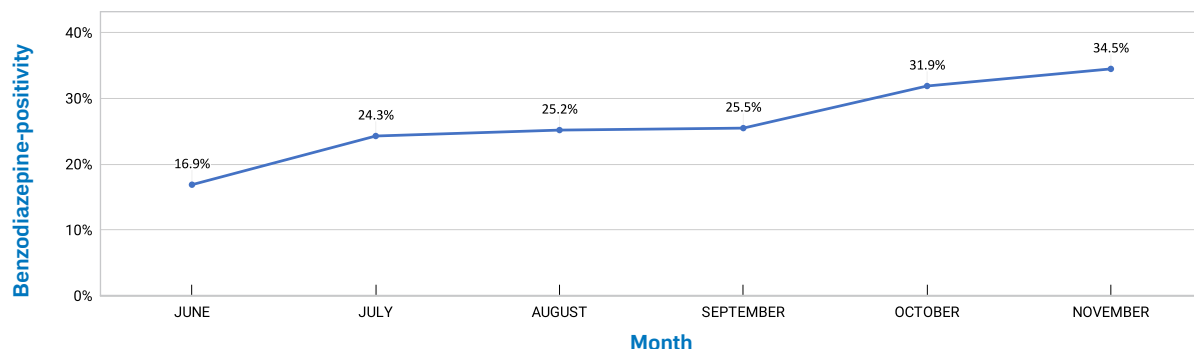
Number of samples tested with fentanyl present



PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
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.
November 2, 2021 ASK Wellness Kamloops	Ketamine	Methamphetamine	Negative	N/A	Kamloops	Methamphetamine is a powerful stimulant with different effects than ketamine.
November 2, 2021 Get Your Drugs Tested Vancouver	Cocaine	Flubromazepam	Negative	Positive	Vancouver	Flubromazepam is a new benzodiazepine with limited information on its toxicity and effects.
November 3, 2021 Cammy LaFleur Vernon	Down or fentanyl	Caffeine, Fentanyl	Positive	Positive	Vernon	Combining depressants such as opioids and benzodiazepines greatly increases your risk of overdose.
November 16, 2021 Overdose Prevention Society Vancouver	Down or fentanyl	Caffeine, Erythritol, Fentanyl, Flualprazolam	Positive	Positive	Vancouver	Flualprazolam is a potent benzodiazepine that can cause blackouts and when combined with opioids, increases the risk of overdose.
November 23, 2021 Overdose Prevention Society Vancouver	Down or fentanyl	Caffeine, Erythritol, Fentanyl	Positive	Positive	Vancouver	Combining depressants such as opioids and benzodiazepines greatly increases your risk of overdose.
November 25, 2021 Get Your Drugs Tested Vancouver	Ketamine	Xylazine	Negative	Negative	Vancouver	Xylazine is an animal tranquilizer with sedative effects and is linked to soft tissue injury.

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

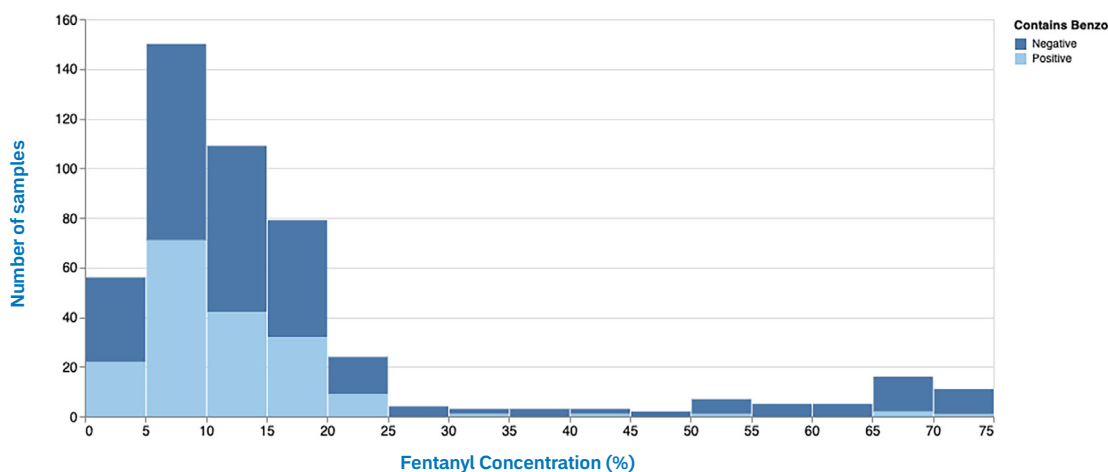


During the month of November, **34%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**190 samples of 551 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here are 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, November 2021



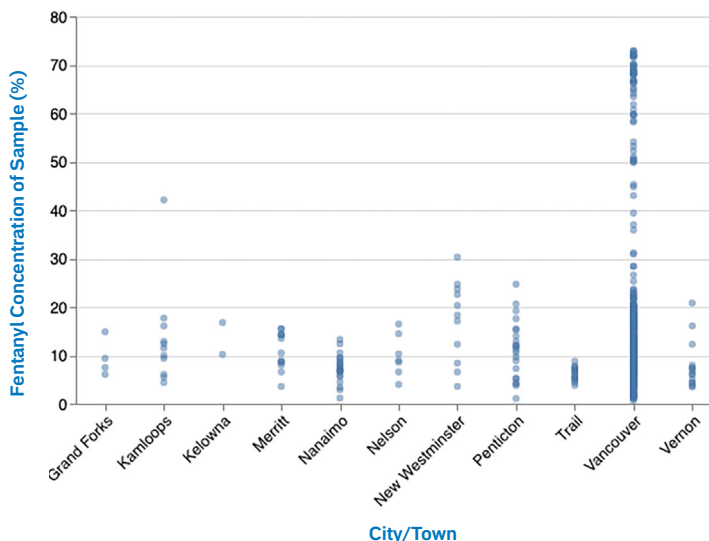
Two thirds (67%) of opioids checked have a concentration of fentanyl between 5% and 15%, but nearly 20% of samples are above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 11.4%, down from 13.5% last month. When purchasing 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 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, November 2021



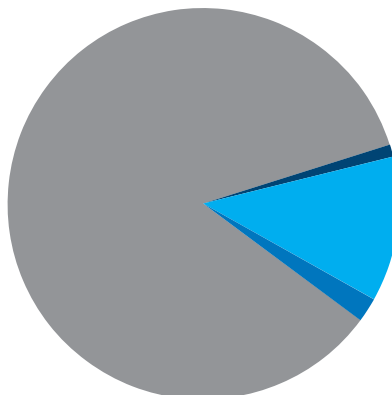
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Drug Checking in British Columbia

Number of samples tested by region:

Total #: 1,417

1,208: Vancouver Coastal
Health region (85%)



19: Fraser Health region (1%)

162: Interior Health region (12%)

28: Vancouver Island
Health Region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG: Depressant

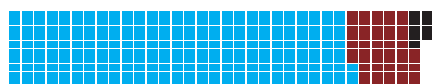
67 Samples Tested



Matched: 44
Did not match: 21
Match not determined: 2

EXPECTED DRUG: Psychedelic

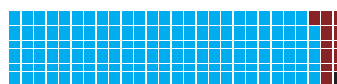
334 Samples Tested



Matched: 273
Did not match: 52
Match not determined: 9

EXPECTED DRUG: Stimulant

268 Samples Tested



Matched: 246
Did not match: 20
Match not determined: 2

EXPECTED DRUG: Other

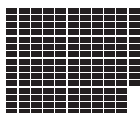
29 Samples Tested



Matched: 12
Did not match: 9
Match not determined: 8

EXPECTED DRUG: Unknown

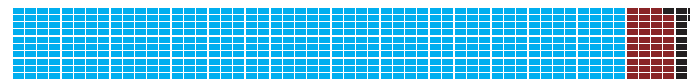
161 Samples Tested



Match not determined: 161

EXPECTED DRUG: Opioid

552 Samples Tested



Matched: 500
Did not match: 39
Match not determined: 13

EXPECTED DRUG: Polysubstance

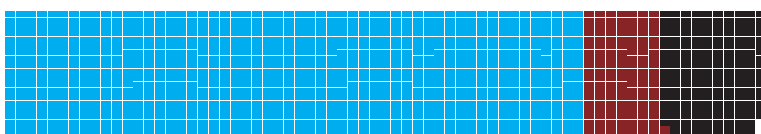
6 Sample Tested



Matched: 5
Did not match: 1

Total

1,417 Samples Tested



Matched: 1,080
Did not match: 142
Match not determined: 195

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.

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Drug Checking in British Columbia

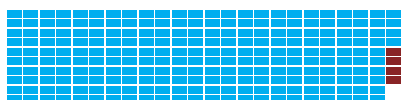
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

238 Samples Tested



Matched: 234

Did not match: 4

EXPECTED DRUG:

Heroin

26 Samples Tested



Matched: 17

Did not match: 9

EXPECTED DRUG:

Fentanyl and Heroin

3 Samples Tested



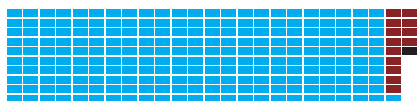
Matched: 2

Did not match: 1

EXPECTED DRUG:

Down

245 Samples Tested



Matched: 231

Did not match: 13

Match not determined: 1

EXPECTED DRUG:

Pharmaceutical

33 Samples Tested



Matched: 10

Did not match: 11

Match not determined: 12

EXPECTED DRUG:

Other Opioid

2 Samples Tested



Did not match: 1

Match not determined: 1

EXPECTED DRUG:

Opium

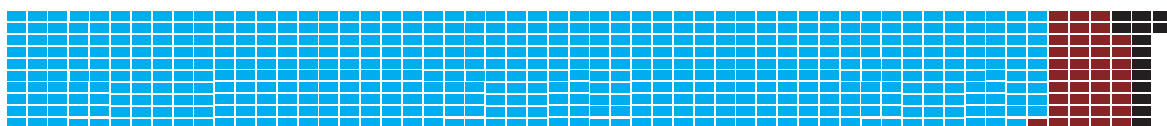
5 Samples Tested



Matched: 5

Total

552 Samples Tested



Matched: 500

Did not match: 39

Match not determined: 13

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:

