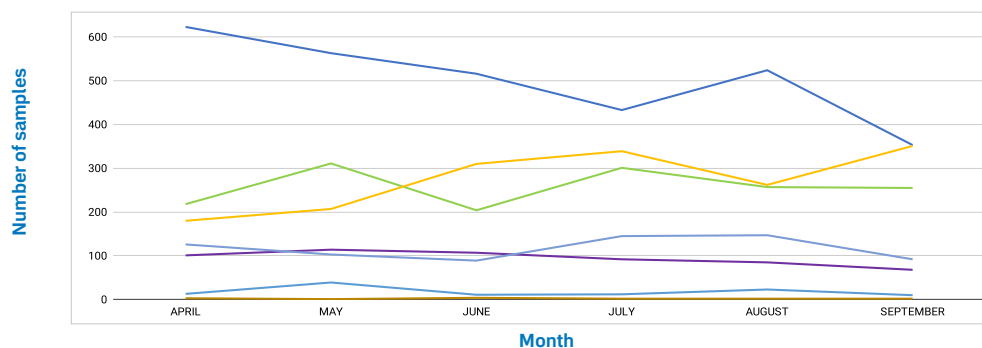


## Key Findings

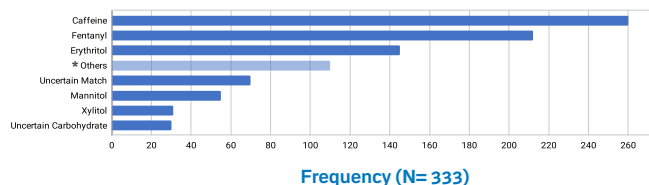
- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (26%) has increased to the highest since the start of this project. The true rate may be higher than reported here because etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies.
- Benzodiazepines confirmed in expected opioid samples in the last 3 months included etizolam, flualprazolam, and clonazepam. Both clonazepam and flualprazolam are potent unregulated benzodiazepines.
- Fentanyl was detected in 15 non-opioid drug samples: 12 in Vancouver Coastal and 3 in Interior Health. This represents a higher amount than normal amount in both the stimulant and depressant categories. While the increase is concerning, several of the findings can be explained by cross-contamination after purchase or other reasons. See the additional "Fentanyl-positive non-opioids" document for information about each of the samples.
- No drug checking occurred in the Fraser Health region this month.
- The BCCSU Drug Checking Project has launched a new interactive data dashboard to visualize drug checking results from around the province. Visit [www.drugcheckingbc.ca](http://www.drugcheckingbc.ca) and navigate to "Drug Checking Results" to explore!

## Number of drug samples checked in the past 6 months

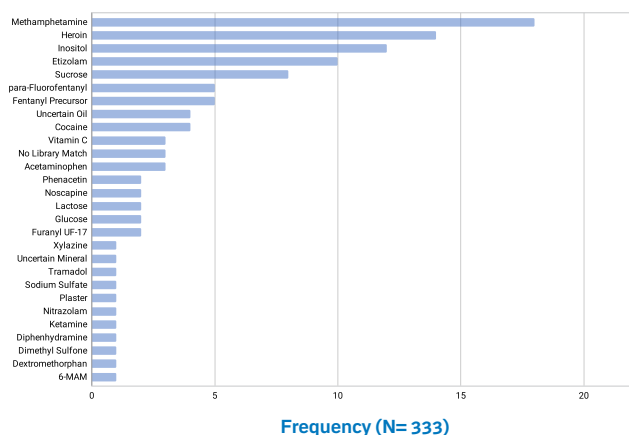


## Components found in drug samples in September

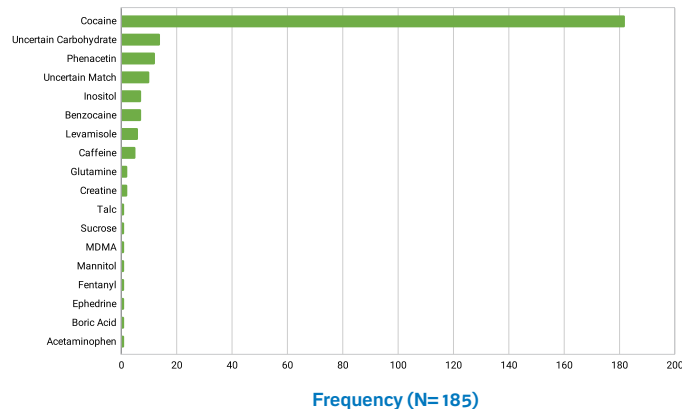
### Components in opioids



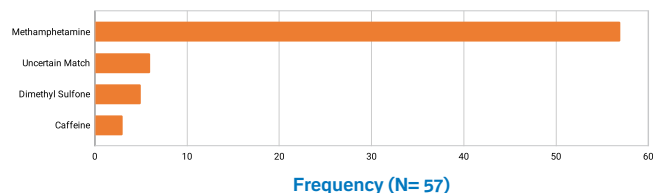
### \* Other components found in opioids



### Components in cocaine



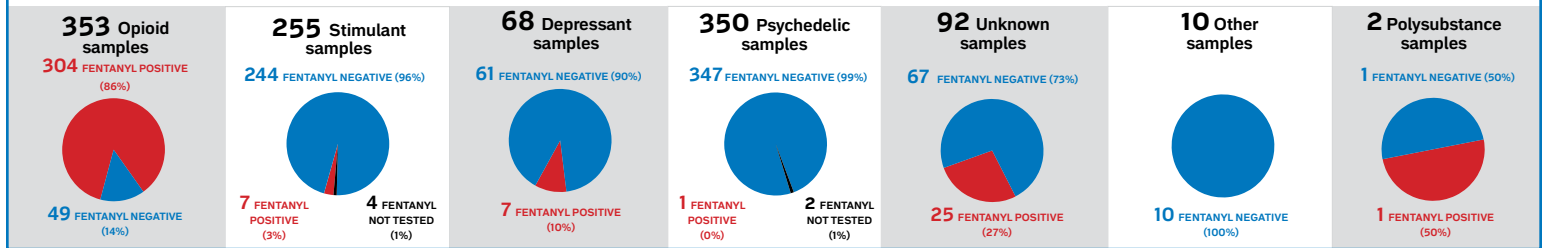
### Components in methamphetamine



September  
2021

# Drug Checking in British Columbia

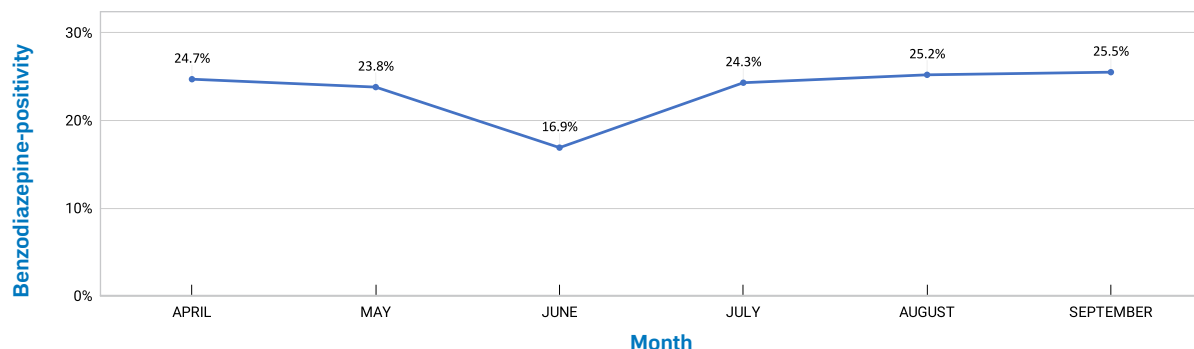
## Number of samples tested with **fentanyl** present



## PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
September 23, 2021 Kamloops & Merritt	Down (unknown opioid)	Caffeine, Xylitol, Fentanyl, Possible synthetic cannabinoid	Positive	Negative	Merritt	Although this sample was not confirmed by laboratory testing, synthetic cannabinoids are known to cause hallucinations and disorientation if ingested accidentally.
September 13, 2021 Kamloops	Down (Unknown Opioid)	Cocaine base, Phenacetin	Positive	Positive	Kamloops	Combining depressants increases the risk of overdose, and stimulants don't decrease that risk. Phenacetin and cocaine base don't dissolve well in water which could lead to vein damage.
September 13, 2021 Get Your Drugs Tested Vancouver	Alprazolam (XANAX)	Microcrystalline cellulose	Positive	Negative	Vancouver	Fentanyl can cause opioid toxicity especially for opioid-naïve individuals. Combining depressants also increases the risk of overdose.
September 13, 2021 Get Your Drugs Tested Vancouver	Flualprazolam	Flualprazolam, Uncertain match	Positive	Positive	Unknown	Fentanyl can cause opioid toxicity especially for opioid-naïve individuals. Combining depressants also increases the risk of overdose.
September 7, 2021 Get Your Drugs Tested Vancouver	MDMA	Dimethyl sulfone, N-ethylpentylone	Negative	Negative	Vancouver	This synthetic cathinone is associated with health harms including overdose.
September 3, 2021 Overdose Prevention Society Vancouver	Alprazolam (XANAX)	Microcrystalline cellulose	Positive	Positive	Vancouver	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

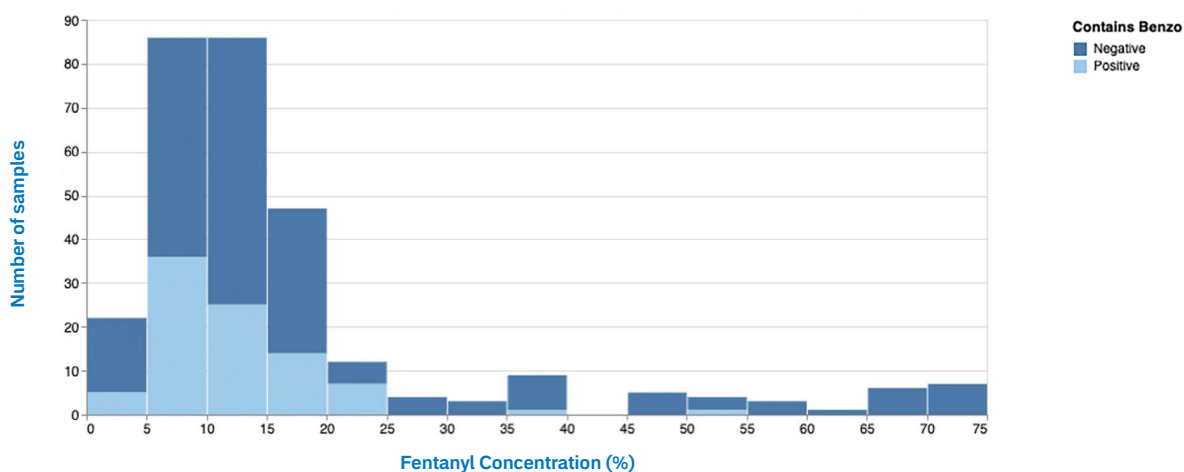


During the month of September, **25.5%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC (**90 samples of 353 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented here 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, September 2021



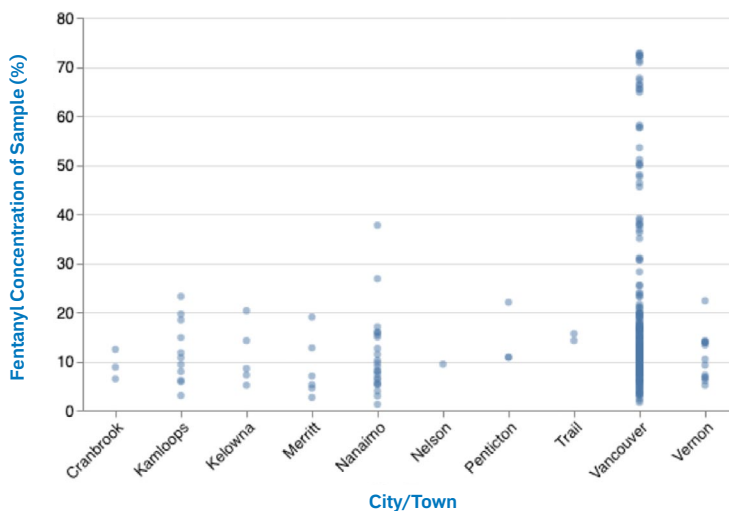
Nearly 60% of opioids checked have a concentration of fentanyl between 5% and 15%, but about a third of samples are above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 11.9%, down from 12.7% last month. When purchasing 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."

The drug supply varies 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](mailto:drugchecking@bccsu.ubc.ca).

### Fentanyl Concentration of Opioid Samples by City/Town, September 2021



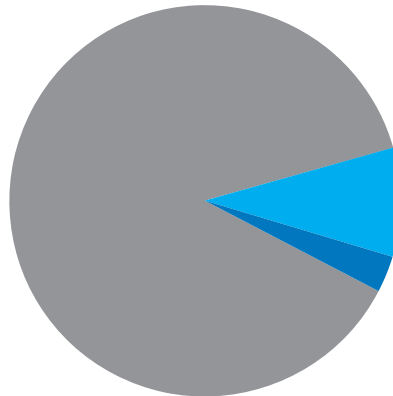
September  
2021

# Drug Checking in British Columbia

## Number of samples tested by region:

Total #: 1,131

995: Vancouver Coastal  
Health region (88%)


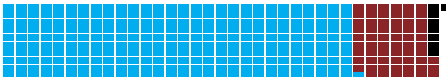


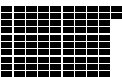
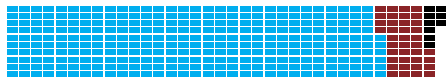



104: Interior Health region (9%)

32: Vancouver Island  
Health Region (3%)

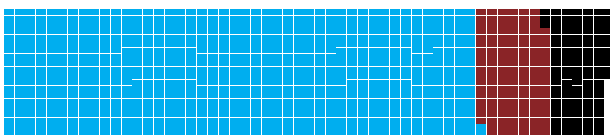
## Number of samples that matched expectation

using FTIR/test strip drug checking

<div>EXPECTED DRUG: Depressant</div> <div>68 Samples Tested</div> <div></div> <div>Matched: 39 Did not match: 28 Match not determined: 1</div>	<div>EXPECTED DRUG: Psychedelic</div> <div>351 Samples Tested</div> <div></div> <div>Matched: 281 Did not match: 62 Match not determined: 8</div>	<div>EXPECTED DRUG: Stimulant</div> <div>255 Samples Tested</div> <div></div> <div>Matched: 250 Did not match: 5</div>	<div>EXPECTED DRUG: Other</div> <div>10 Samples Tested</div> <div></div> <div>Matched: 5 Did not match: 1 Match not determined: 4</div>
<div>EXPECTED DRUG: Unknown</div> <div>92 Samples Tested</div> <div></div> <div>Match not determined: 92</div>	<div>EXPECTED DRUG: Opioid</div> <div>353 Samples Tested</div> <div></div> <div>Matched: 306 Did not match: 38 Match not determined: 9</div>	<div>EXPECTED DRUG: Polysubstance</div> <div>2 Sample Tested</div> <div></div> <div>Matched: 1 Did not match: 1</div>	

### Total

1,131 Samples Tested



Matched: 882  
Did not match: 135  
Match not determined: 114

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.

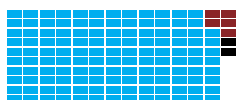
## Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

**Fentanyl**

135 Samples Tested



Matched: 128

Did not match: 5

Match not determined: 2

EXPECTED DRUG:

**Heroin**

21 Samples Tested



Matched: 7

Did not match: 14

EXPECTED DRUG:

**Fentanyl and Heroin**

2 Samples Tested

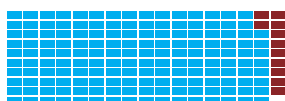


Did not match: 2

EXPECTED DRUG:

**Down**

169 Samples Tested



Matched: 158

Did not match: 11

EXPECTED DRUG:

**Pharmaceutical**

25 Samples Tested



Matched: 13

Did not match: 5

Match not determined: 7

EXPECTED DRUG:

**Other Opioid**

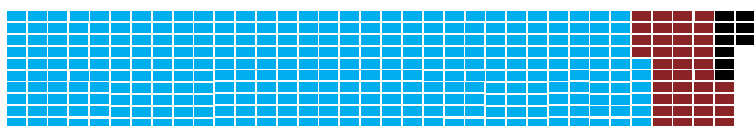
1 Samples Tested



Did not match: 1

**Total**

353 Samples Tested



Matched: 306

Did not match: 38

Match not determined: 9

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



Canadian Mental  
Health Association

