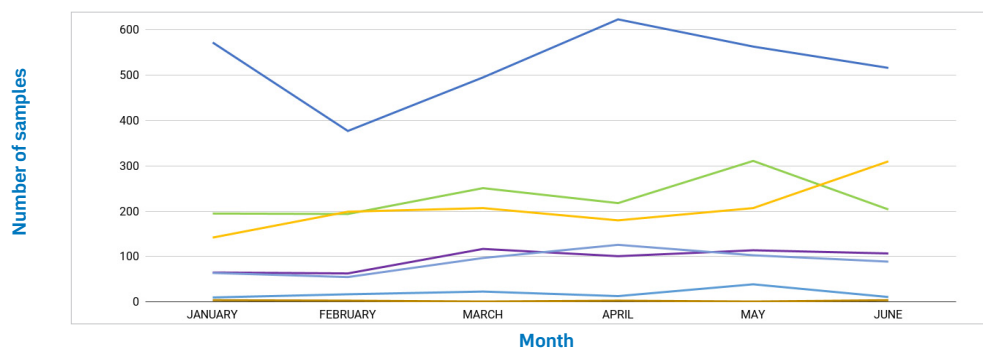


Key Findings

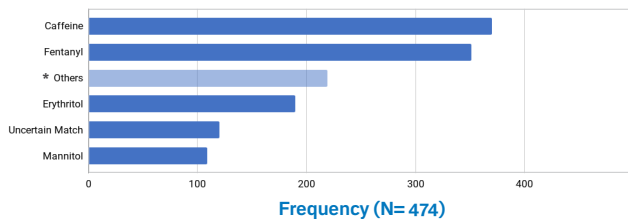
- The percentage of opioids testing positive for benzodiazepines at point-of-care has dropped to 16.9% after being on an upward trend since August. Etizolam, the predominant benzodiazepine in expected opioids, may be missed by drug checking technologies. This means that the true rate may be higher than reported here.
- Confirmatory analysis in June revealed that opioids contain etizolam from levels below 1% to as high as 8%.
- Carfentanil was detected in samples expected to be fentanyl and *down*. When carfentanil is detected, fentanyl is detected alongside it over half of the time. Fentanyl test strips may detect carfentanil if the concentration is high enough, but cannot differentiate it from regular fentanyl.
- Fentanyl was detected in six non-opioid drug samples: two in Vancouver Coastal, three in Interior Health, and one in Island Health. Among them, two samples of crack cocaine tested positive with fentanyl test strips.
- Nitazene opioids (e.g., metonitazene, isotonitazene) have been detected in samples sold as fentanyl or *down*. Not much information is available the potency of these opioids, and our results confirm these drugs are not detected by fentanyl test strips.
- The median fentanyl concentration of opioids checked was 12.6%, increasing from 11.9% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months

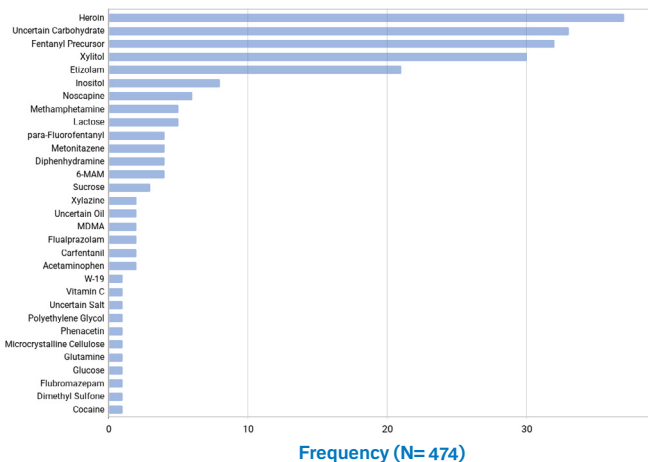


Components found in drug samples in June

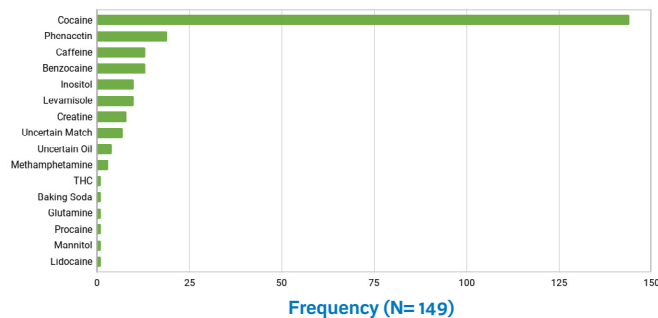
Components in opioids



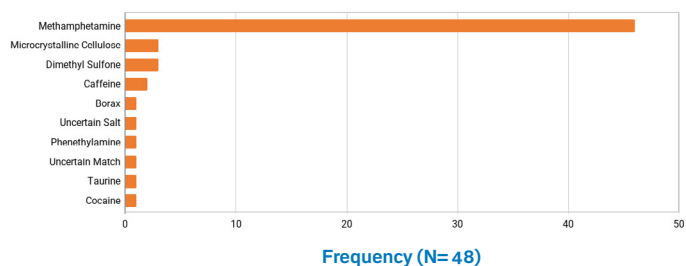
* Other components found in opioids



Components in cocaine



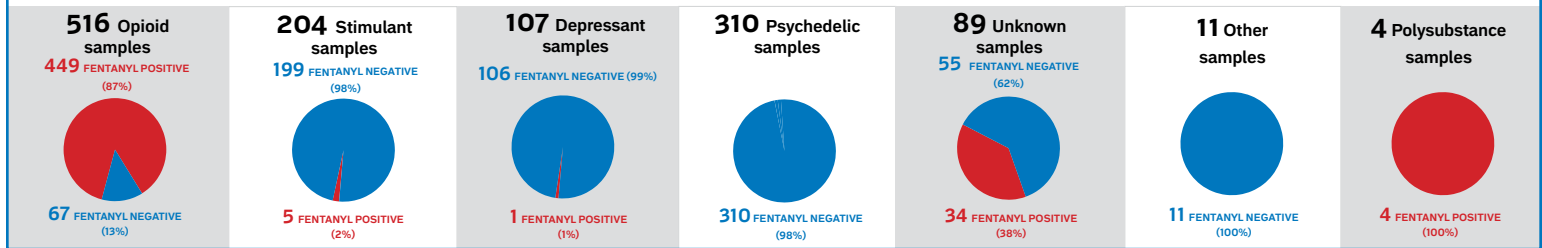
Components in methamphetamine



June
2021

Drug Checking in British Columbia

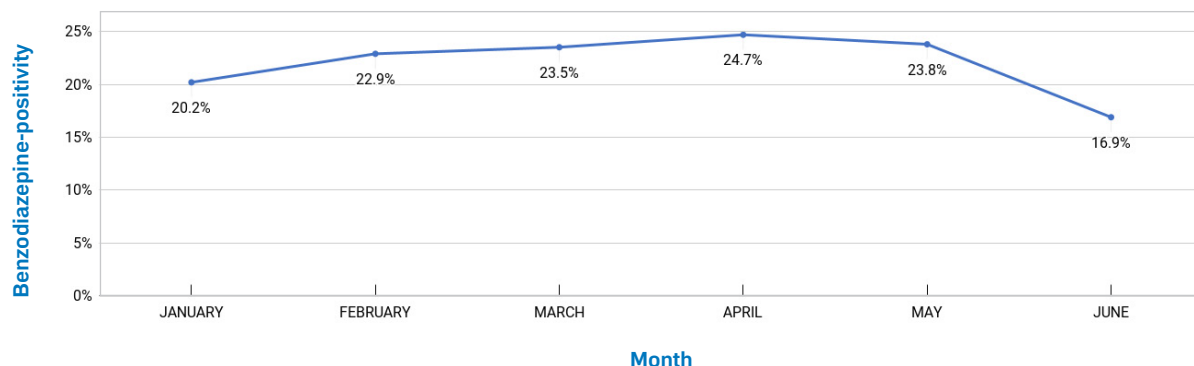
Number of samples tested with **fentanyl** present



PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
29 June 2021 ASK Wellness Kamloops	Fentanyl	Fentanyl, Flubromazepam, Erythritol	Positive	Positive	Kamloops	Flubromazepam is a benzodiazepine. Using even small amounts may increase the risk of overdose. Avoid combining depressants if possible.
4 June 2021 ASK Wellness Kamloops	Down (Unknown Opioid)	Fentanyl, Erythritol	Positive	Positive	Kamloops	The combination of opioids and benzodiazepines can cause prolonged sedation. Using even small amounts may cause overdose. Use with caution.

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

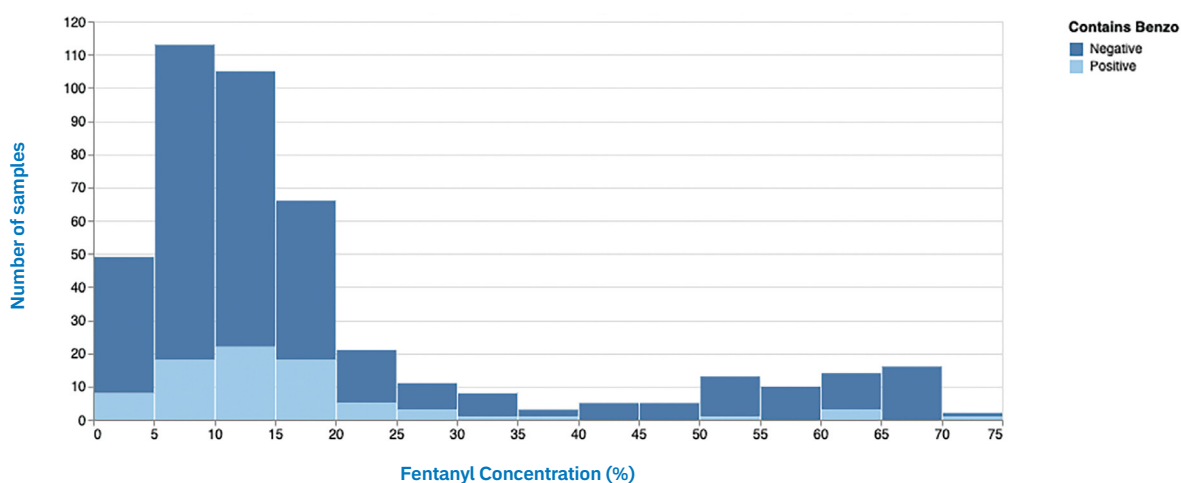


During the month of June, **16.9%** of expected opioid samples tested positive for benzodiazepines using test strips in our partner sites around BC (**87 samples of 516 checked**). Opioid samples are checked for benzodiazepine-positivity using BTNX test strips and the FTIR spectrometer. The results presented 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 (Tobias et al., 2021; Tobias & Ti, 2021). While point-of-care drug checking technicians can attempt to quantify fentanyl during a drug check, 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, June 2021



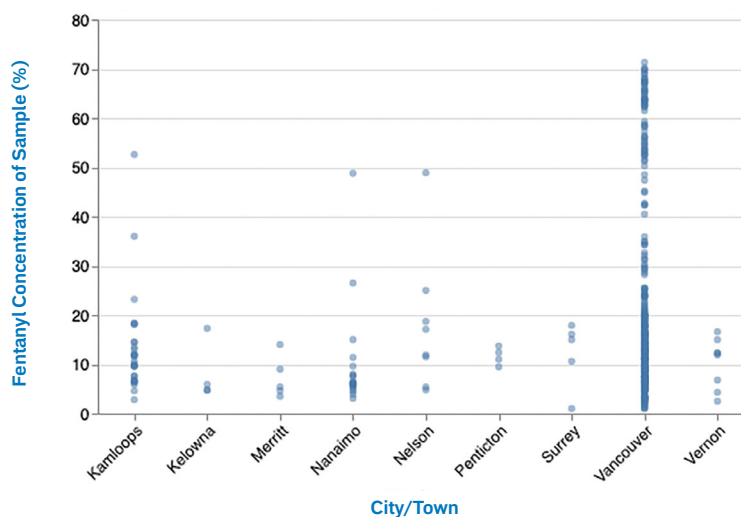
While half of all samples fall between 5% and 15% concentration of fentanyl, over a third of samples are above 15% fentanyl-by-weight, and concentrations can approach 80% of the mixture. The median fentanyl concentration of all samples was 12.6%, up from 11.9% last month. Fentanyl concentration is not associated with benzodiazepine-positivity: samples at all fentanyl concentrations tested positive for benzodiazepines. 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.

Drug supplies vary by location in the province. While samples in smaller communities cluster around 10% fentanyl, outliers present in the results reflect the unpredictability of the supply.

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, June 2021



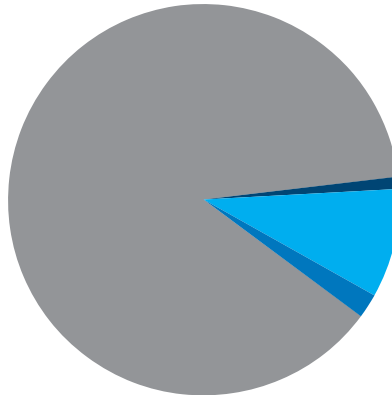
June
2021

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 1,241

1099: Vancouver Coastal
Health region (88%)



10: Fraser Health region (1%)

110: Interior Health region (9%)

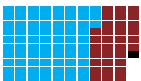
22: Vancouver Island
Health Region (2%)

Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG: Depressant

107 Samples Tested



Matched: 73
Did not match: 33
Match not determined: 1

EXPECTED DRUG: Psychedelic

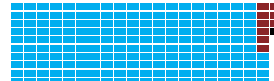
310 Samples Tested



Matched: 271
Did not match: 36
Match not determined: 3

EXPECTED DRUG: Stimulant

204 Samples Tested



Matched: 194
Did not match: 9
Match not determined: 1

EXPECTED DRUG: Other

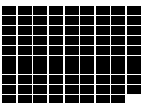
11 Samples Tested



Matched: 7
Match not determined: 4

EXPECTED DRUG: Unknown

89 Samples Tested



Match not determined: 89

EXPECTED DRUG: Opioid

516 Samples Tested



Matched: 466
Did not match: 36
Match not determined: 14

EXPECTED DRUG: Polysubstance

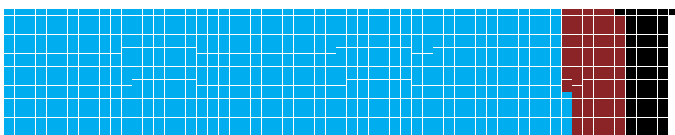
4 Sample Tested



Matched: 4

Total

1,241 Samples Tested



Matched: 1,015
Did not match: 114
Match not determined: 112

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.

June
2021

Drug Checking in British Columbia

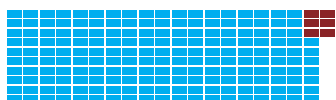
Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:

Fentanyl

193 Samples Tested

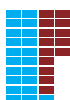


Matched: 187
Did not match: 6

EXPECTED DRUG:

Heroin

35 Samples Tested



Matched: 21
Did not match: 14

EXPECTED DRUG:

Fentanyl and Heroin

3 Samples Tested

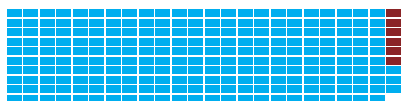


Matched: 1
Did not match: 2

EXPECTED DRUG:

Down

243 Samples Tested



Matched: 238
Did not match: 5

EXPECTED DRUG:

Pharmaceutical

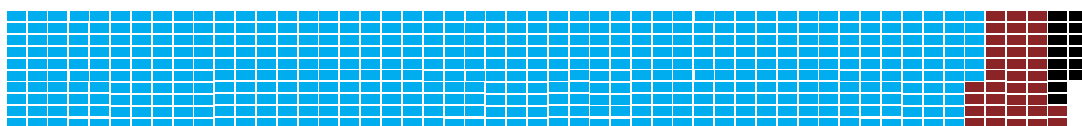
42 Samples Tested



Matched: 19
Did not match: 9
Match not determined: 14

Total

516 Samples Tested



Matched: 466
Did not match: 36
Match not determined: 14

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 a 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 test strip checking done in combination. When applicable, BTNX benzodiazepine test strips are also used.

BCCSU gratefully acknowledges the contributions of the following partners:

