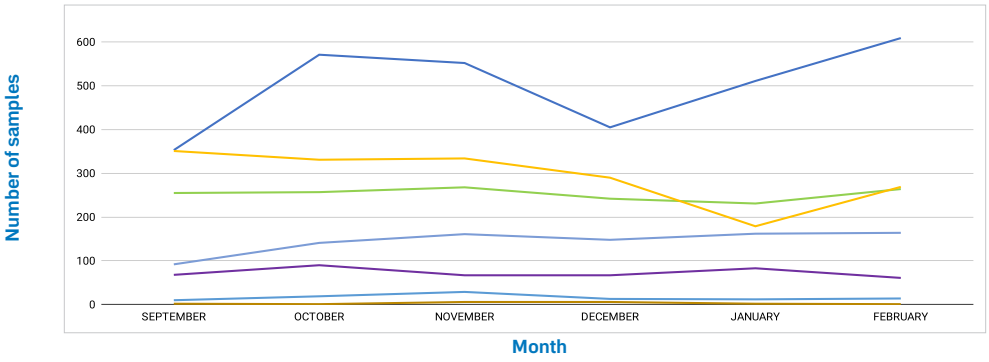
February 2022

Drug Checking in British Columbia

Key Findings

- The percentage of opioids testing positive for benzodiazepines across BC drug checking sites (37.9%) rose dramatically to the highest point since the start of the 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.
- There may be an ongoing shift from benzodiazepine-adulteration of opioids with etizolam to other benzodiazepines such as flualprazolam, flubromazolam, and flubromazepam, which are better detected with benzodiazepine test strips and cause the overall detection numbers to increase. These drugs are potent sedatives which can cause blackouts, memory loss, and make it difficult to tell when someone is experiencing opioid toxicity.
- Nitazene opioids (benzimidazole) are increasingly being detected by point-of-care and confirmatory methods. Metonitazene, isotonitazene, etodesnitazene, and protonitazene have been identified in samples submitted as opioids.
- 22 non-opioid drugs tested positive for fentanyl this month, the most ever in a single month. These included samples of cocaine and crack cocaine, methamphetamine, MDMA, and benzodiazepines.
- The median fentanyl concentration of opioids checked was 13.3%, increasing from 12.7% last month. See page 3 for more detailed results.

Number of drug samples checked in the past 6 months



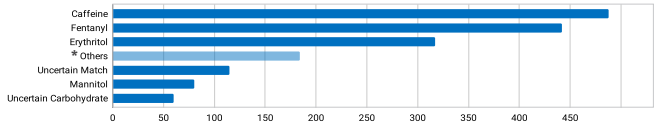
Number of samples by drug category in February

Opioid	609
Stimulant	264
Depressant	61
Psychedelic	269
Other	14
Polysubstance	1
Unknown	164

TOTAL: 1,382

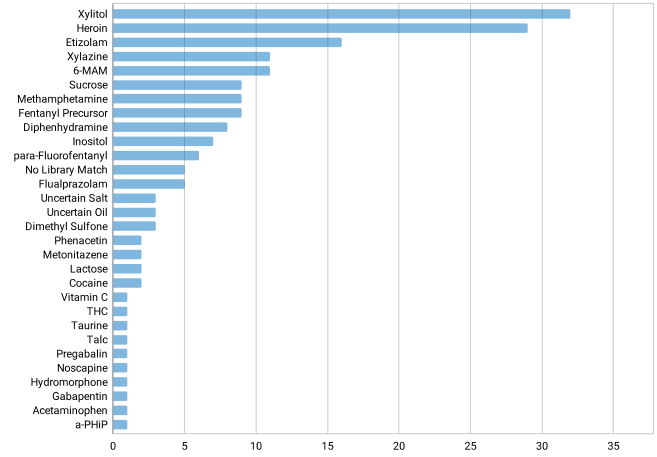
Components found in drug samples in February

Components in opioids



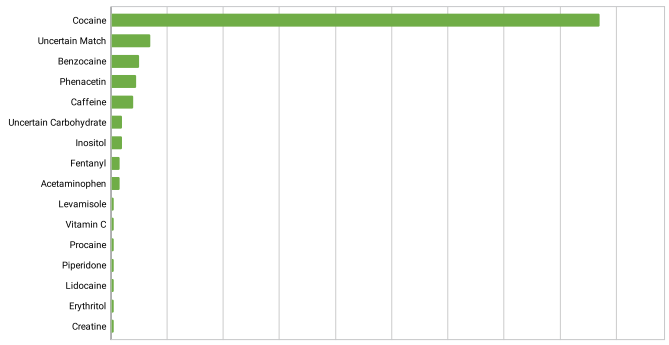
Frequency (N= 581)

*Other components found in opioids



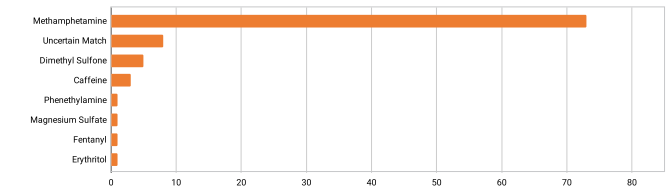
Frequency (N= 581)

Components in cocaine



Frequency (N= 179)

Components in methamphetamine



Frequency (N= 74)

February 2022

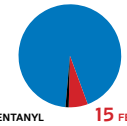
Drug Checking in British Columbia

Number of samples tested with fentanyl present

609 Opioid samples
555 FENTANYL POSITIVE (91%)

53 FENTANYL NEGATIVE (8%)
1 FENTANYL NOT TESTED (1%)

264 Stimulant samples
246 FENTANYL NEGATIVE (93%)

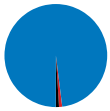


3 FENTANYL NOT TESTED (1%)
15 FENTANYL POSITIVE (6%)

61 Depressant samples
55 FENTANYL NEGATIVE (90%)

3 FENTANYL NOT TESTED (5%)
3 FENTANYL POSITIVE (5%)

269 Psychedelic samples
265 FENTANYL NEGATIVE (98%)



1 FENTANYL NOT TESTED (1%)
3 FENTANYL POSITIVE (1%)

164 Unknown samples
89 FENTANYL NEGATIVE (54%)

73 FENTANYL POSITIVE (45%)
2 FENTANYL NOT TESTED (1%)

14 Other samples
14 FENTANYL NEGATIVE (100%)

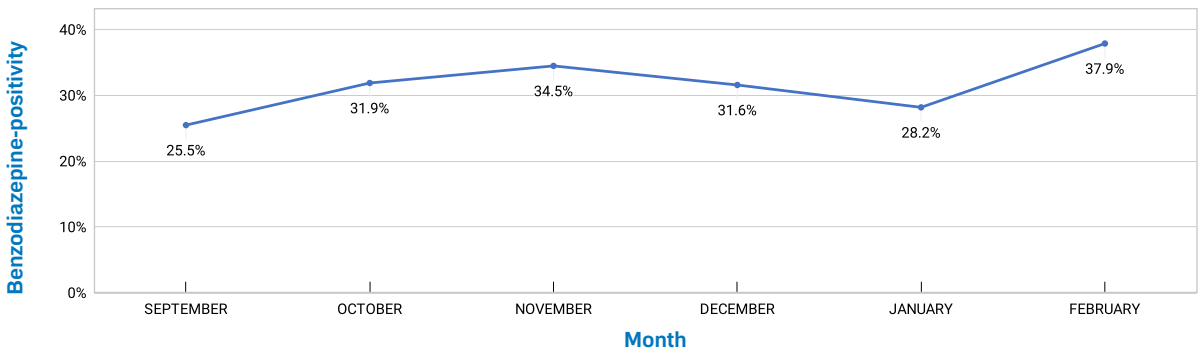
1 Polysubstance samples

1 FENTANYL POSITIVE (100%)

PUBLIC HEALTH NOTIFICATIONS

Date & Location	Expected Drug	Drugs Detected	Fentanyl Strip	Benzo Strip	Area Purchased	Alert Message
February 11 2022 ASK Wellness Merritt	Crack cocaine White granules with coloured flecks	Cocaine base, Caffeine, Erythritol, Fentanyl	Positive	Negative	Merritt	There is a risk of opioid toxicity when stimulants are contaminated with fentanyl.
February 15 2022 ASK Wellness Kamloops	Down or Fentanyl Purple pebbles	Caffeine, Fentanyl, Erythritol	Positive	Negative	Kamloops	Higher than normal concentration of fentanyl in a sample poses a risk of opioid toxicity.

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



During the month of February, **37.9%** of expected opioid samples tested positive for benzodiazepines in our partner sites around BC **(231 samples of 609 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.

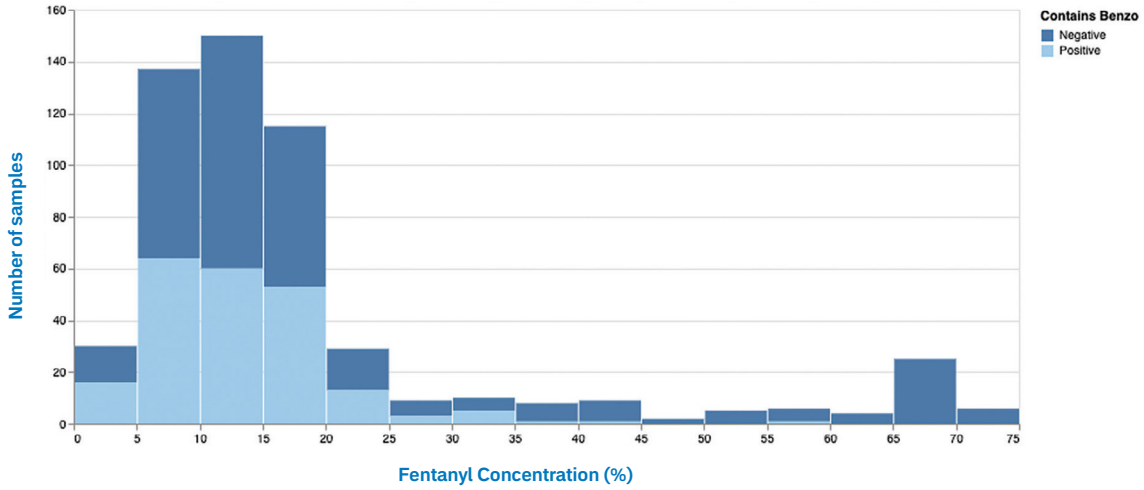
February 2022

Drug Checking in British Columbia

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 rage 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, February 2022



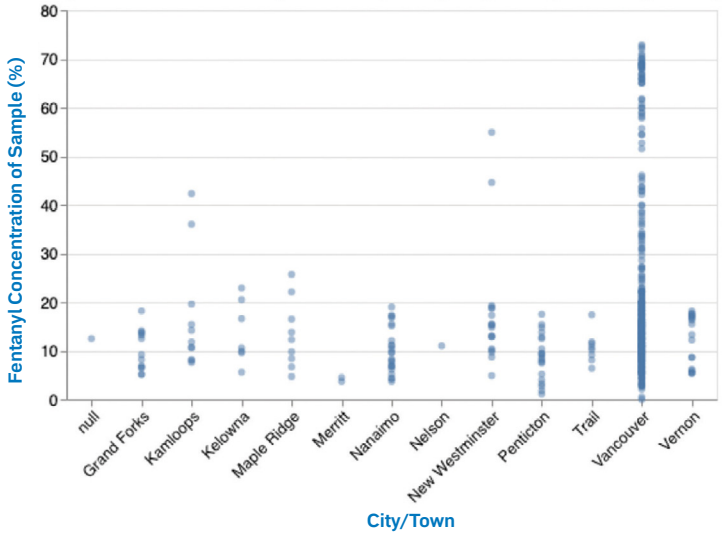
Two-thirds of opioids checked (66.5%) have a concentration of fentanyl between 5% and 15%, but 25% of samples are above 15% fentanyl-by-weight, and concentrations can approach 75% of the mixture. The median fentanyl concentration of all samples was 13.3%, up from 12.7% last month. When purchasing fentanyl 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."

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 carfentanil. Carfentanil 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, February 2022

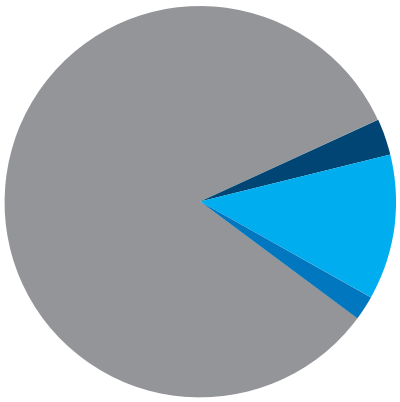


February 2022

Drug Checking in British Columbia

Number of samples tested by region:

Total #: 1,382



1,155: Vancouver Coastal Health region (83%)

36: Fraser Health region (3%)

163: Interior Health region (12%)

28: Vancouver Island Health Region (2%)

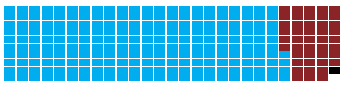
Number of samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:
Depressant
61 Samples Tested

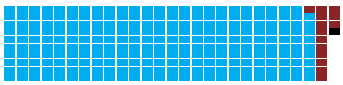
Matched: 27
Did not match: 33
Match not determined: 1

EXPECTED DRUG:
Psychedelic
269 Samples Tested



Matched: 224
Did not match: 44
Match not determined: 1

EXPECTED DRUG:
Stimulant
264 Samples Tested

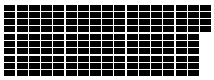


Matched: 249
Did not match: 14
Match not determined: 1

EXPECTED DRUG:
Other
14 Samples Tested

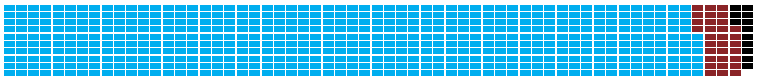
Matched: 5
Did not match: 1
Match not determined: 8

EXPECTED DRUG:
Unknown
164 Samples Tested



Match not determined: 164

EXPECTED DRUG:
Opioid
609 Samples Tested

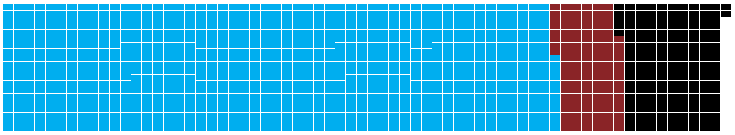


Matched: 566
Did not match: 31
Match not determined: 12

EXPECTED DRUG:
Polysubstance
1 Sample Tested

Matched: 1

Total
1,382 Samples Tested



Matched: 1,072
Did not match: 123
Match not determined: 187

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.*

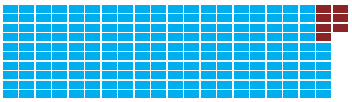
February 2022

Drug Checking in British Columbia

Number of opioid samples that matched expectation

using FTIR/test strip drug checking

EXPECTED DRUG:
Fentanyl
203 Samples Tested



Matched: 169
Did not match: 7

EXPECTED DRUG:
Heroin
31 Samples Tested

Matched: 17
Did not match: 13
Match not determined: 1

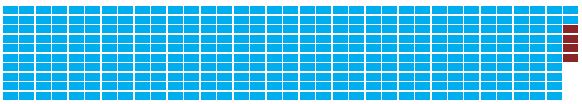
EXPECTED DRUG:
Opium
3 Samples Tested

Matched: 2
Did not match: 1

EXPECTED DRUG:
Fentanyl and Heroin
1 Samples Tested

Did not match: 1

EXPECTED DRUG:
Down
346 Samples Tested



Matched: 342
Did not match: 4

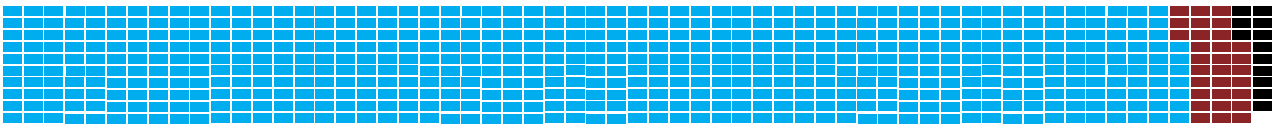
EXPECTED DRUG:
Pharmaceutical
23 Samples Tested

Matched: 8
Did not match: 4
Match not determined: 11

EXPECTED DRUG:
Other Opioid
2 Samples Tested

Matched: 2

Total
609 Samples Tested



Matched: 567
Did not match: 30
Match not determined: 12

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 benzodiazapine 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:

BRITISH COLUMBIA CENTRE ON SUBSTANCE USE · Health Canada · Santé Canada · Vancouver Coastal Health · fraserhealth · island health · Interior Health · ANKORS · CRISM | BRITISH COLUMBIA · Providence Health Care Research Institute · Providence Health Care · How you want to be treated. · St. Paul's Foundation · UBC · insite · ASK Wellness Society · O.P.S. · Canadian Mental Health Association · phs Community Services Society · Purpose · Lookout Housing + Health Society · GETYOURDRUGSTESTED.COM FAST. SAFE. ANONYMOUS.