

Drug Checking in Vancouver Coastal Health January 2019

This report summarizes key indicators for Fourier Transform Infrared (FT-IR)/fentanyl test strip combination drug checking done in Vancouver Coastal Health in January 2019.

As the FT-IR spectrometer has a detection limit of 3-4% by weight (Sherman 2018), unless otherwise stated, a drug check on any given sample consists of **both** Bruker ALPHA Fourier-Transform Infrared (FT-IR) spectrometer **and** BTNX fentanyl immunoassay test strip testing done in combination. When applicable, BTNX benzodiazepine or lysergic acid diethylamide (LSD) immunoassay test strips were also used.

Please note that these data are not finalized and are subject to change.

- In January 2019, 530 drug checks were completed on samples in Vancouver Coastal Health. Drug checking was performed at the following sites:
 - Insite
 - Molson OPS
 - St. Paul's Hospital OPS
 - Powell Street Getaway
 - SisterSpace
- The majority of samples tested were expected by clients to be either opioids (357 or 67.4%), stimulants (75 or 14.2%), or psychedelics (39 or 7.4%).

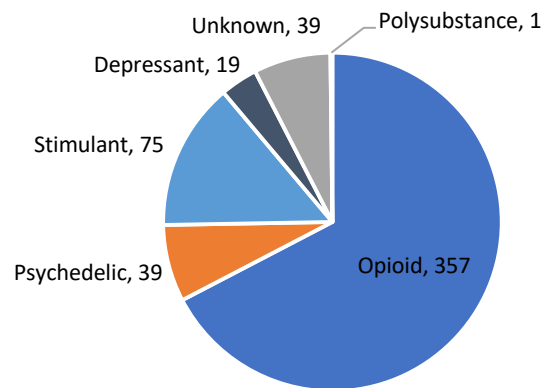


Figure 1. Number of drug checks performed in Vancouver, in January 2019, by expected drug category

Depressant may include: benzodiazepines, GHB, zopiclone
Opioid may include: “down,” heroin, fentanyl, fentanyl analogues, pharmaceutical opioids
Polysubstance includes: cross-category mixtures
Psychedelic may include: 2C-family, tryptamines, ketamine, MDMA, LSD, cannabis
Stimulant may include: “speed”, crystal meth, cocaine, cathinones
Unknown includes: all samples in which the client could not identify the expected substance



Figure 2. Number of samples that matched client expectation using FTIR/test strip drug checking in Vancouver Coastal Health in January 2019, by expected drug category

| | Depressant | Opioid | Polysubstance | Psychedelic | Stimulant | Unknown | Total |
|-------|------------|--------|---------------|-------------|-----------|---------|-------|
| True | 13 | 318 | 1 | 35 | 70 | 0 | 437 |
| False | 6 | 34 | 0 | 2 | 3 | 0 | 45 |
| N/A | 0 | 5 | 0 | 2 | 2 | 39 | 48 |
| Total | 19 | 357 | 1 | 39 | 75 | 39 | 530 |

Please note that the presence of the expected substance does not imply purity, as samples frequently contain adulterating cutting agents

Figure 3. Number of opioid samples that matched client expectation using FTIR/test strip drug checking in Vancouver Coastal Health in January 2019, by expected drug

| | Fentanyl | Heroin | Fentanyl & Heroin | Fentanyl analogue | Pharmaceutical | 'Down'* | Total |
|-------|----------|--------|-------------------|-------------------|----------------|---------|-------|
| True | 237 | 15 | 2 | 1 | 0 | 63 | 318 |
| False | 13 | 11 | 3 | 1 | 2 | 4 | 34 |
| N/A | 2 | 0 | 0 | 0 | 2 | 1 | 5 |
| Total | 252 | 26 | 5 | 2 | 4 | 68 | 357 |

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*

- 217 opioid samples (60.8%) tested positive for fentanyl using the FT-IR spectrometer
- **The total fentanyl positivity rate in opioid samples was 89.1%**
- Of the 75 stimulant samples and 39 psychedelic samples, none tested positive for fentanyl using the FT-IR spectrometer or test strips

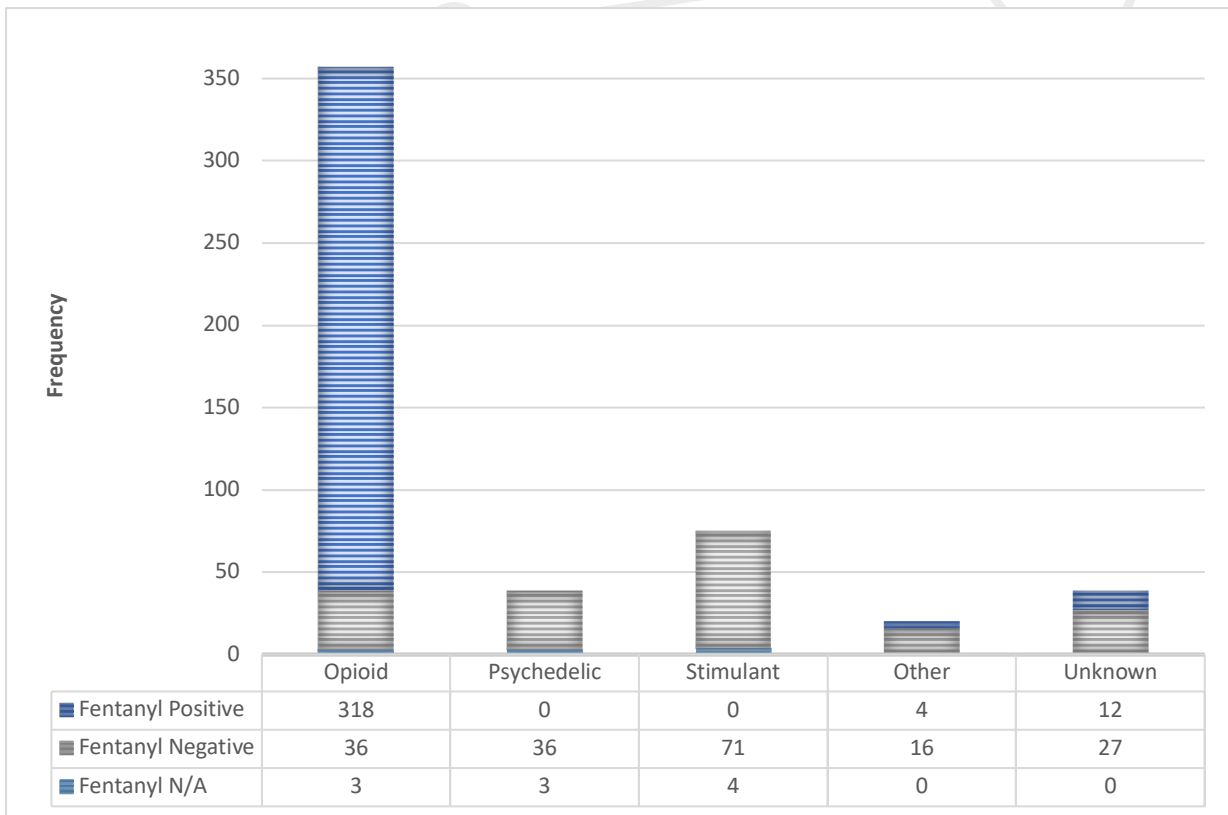


Figure 4. Number of drug checking samples that tested positive and negative for fentanyl in Vancouver Coastal Health in January 2019, by expected drug category

Figure 5. Public health notifications of drug checking results in Vancouver in January 2019

| Date & Location | Expected Drug | FT-IR Drugs Detected | Fentanyl Strip | Lab Analysis | Outcome |
|-----------------------|--------------------|-------------------------------|----------------|--------------|--------------------|
| 8-Jan 2019 MOPS | 'Down' | AMB-FUBINACA | Positive | N/A (MOPS) | RADAR alert |
| 10-Jan 2019 MOPS | Alprazolam (Xanax) | None | Positive | N/A (MOPS) | Email notification |
| 14-Jan 2019 Insite | 'Down' | AMB-FUBINACA | Positive | TBD | RADAR alert |
| 15-Jan 2019 MOPS | Alprazolam (Xanax) | None | Positive | N/A (MOPS) | Email notification |
| 23-Jan 2019 Insite | Unknown | N-ethylpentylone & trace MDMA | Negative | TBD | RADAR alert |