Year End Report 2019

The Vancouver Island Drug Checking Project delivers drug checking services in Victoria, BC. We currently operate at SOLID Outreach, AVI Health and Community Services, and Lantern Services as well as festivals and community events. This free and confidential service provides information on composition of substances and harm reduction information. We employ five instruments as follows:

- Fentanyl Strip Tests
- Fourier Transformed Infrared Spectroscopy (FTIR)
- Raman Spectroscopy
- Surface Enhanced Raman Spectroscopy (SERS)
- Gas Chromatography Mass Spectrometry (GC-MS)



## What were people bringing to be tested?

We asked people what drug they were bringing to be tested. The majority of substances were **expected to be** heroin or fentanyl (362), a stimulant (234), or a psychedelic (139). Further, many brought unknown samples for testing (73) or did not provide information (56). This may be due in part to people testing for others and bringing multiple samples or having found substances. The remaining substances were expected to be dissociatives (31), benzodiazepines (16) or other depressants (5), other opioids (5), polysubstance (3) or other (11).



Data are not finalized and subject to change. There were missing data for some samples.

Year End Report 2019

## How many samples tested positive for fentanyl?

We tested all samples using Fentanyl Test Strips to determine whether they contained fentanyl. Overall, 38% of all samples tested positive for fentanyl.<sup>1</sup> The majority of these were in samples **expected to be** an opioid-down with 78% of samples testing positive. Notably, 54% of those who expected their sample to be opioid-down had reported that they expected it to contain fentanyl.

A comparatively high number of unknown samples also tested positive for fentanyl (24%). There were 4% of samples expected to be stimulants or dissociatives respectively, and no psychedelics, that tested positive for fentanyl. Presence of fentanyl in expected stimulants may have been due to cross contamination or confusion if a person brings multiple samples to be tested. These test strips have proved valuable for rapidly and reliably confirming the presence of fentanyl, and directing further testing.

#### Number of Samples with a Positive Test Strip Result by Expected Drug Category



Data are not finalized and subject to change. There were missing data for some samples. <sup>1</sup>Rapid Response Immunoassay Test Strips used to test for presence of fentanyl. Categories are based on expected substance.

Year End Report 2019

## What other ingredients did we find?

As well as checking for fentanyl, we tested each sample using three other instruments to determine what other active ingredients, adulterants and cutting agents were present.<sup>1</sup> Overall, the most common actives detected were fentanyl, methamphetamine, heroin, MDMA and cocaine HCl.<sup>2</sup>



### What was in the samples?

#### Expected Down<sup>1,2</sup>

The most common actives were fentanyl (80% of samples) and heroin (32%). Methamphetamine was detected in 5% of samples. The most common cutting agent was caffeine, present in the majority of samples (90%).

We also detected a wide range of other psychoactive components present in a small number of samples such as fentanyl analogues, fentanyl precursors, pharmaceutical or synthetic opioids, synthetic cannabinoids, benzodiazepines and other depressants, stimulants, and psychedelics.<sup>3</sup>

#### Expected Cocaine HCl or Base<sup>1,2</sup>

The most common actives were cocaine HCl (69%) and cocaine base (23%). Fentanyl was detected in 8% of samples. The most common cutting agents were phenacetin (18%) and caffeine (13%).

We also detected other psychoactive components present in a small number of samples such as other stimulants, and pyschedelics.<sup>3</sup>

#### **Expected Psychedelic**<sup>1,2</sup>

The most common active was MDMA (70%). MDA (10%), LSD (10%), DMT (5%) and 2CB (2%) were also detected. The most common cutting agents were mannitol (6%) and caffeine (4%).

We also detected other psychoactive components present in a small number of samples such as benzodiazepines, stimulants, synthetic psychedelics and psychedelic precursors.<sup>3</sup>

#### Expected Methamphetamine<sup>1,2</sup>

The most common active was methamphetamine, present in the majority of samples (98%). The most common cutting agent was dimethyl sulfone (14%).

We also detected other psychoactive components present in a small number of samples such as fentanyl, stimulants, and psychedelics.<sup>3</sup>

Data are not finalized and subject to change. There were missing data for some samples. <sup>1</sup> Instruments may not be able to detect all ingredients and certainty of interpretations may vary. <sup>2</sup> Multiple substances may be present in one sample and substance may be present in trace concentrations. <sup>3</sup> Present in <5% of samples.

Year End Report 2019

## What have we learned?

- There is a willingness to use drug checking in the community: We tested a wide range of substances with ~40% expected to be opioid-down, and ~60% expected to be other substances such as stimulants, psychedelics and dissociatives. This indicates interest in drug checking for people using different types of substances.
- 2. Fentanyl is common, but not in everything. Our testing showed that fentanyl was most commonly found in samples expected to be opioid-down, or where people did not know what the substance might be. However, it was not common in samples expected to be stimulants, psychedelics, or dissociatives. Such confirmation is useful for supporting harm reduction strategies.
- 3. 'Down' is highly adulterated. Samples expected to be opioid-down were the most highly adulterated, containing a wide range of cutting agents and other psychoactive components that can have unexpected effects. Drug checking technologies need to be able to determine sample composition to inform harm reduction strategies. This also points to the critical importance of safe supply initiatives that aim to protect health and well-being.

Our project respectfully acknowledges that we work as visitors on the traditional territory of the Lkwungen (Songhees), Wyomilth (Esquimalt), and WSÁNEĆ (Saanich) peoples of the Coast Salish Nation. We also acknowledge the inextricable links between research, colonization and racism against Indigenous peoples, which continue to this day. Ending the violence faced by people who use substances and the overdose crisis cannot be achieved without facing the legacy through which we have come to be in this territory.

### For more information visit: substance.uvic.ca

#### We gratefully acknowledge our partners and funders on this project

#### **Our Partners**

Agilent Technologies	Canadian Institute for Substance Use Research	ProSpect Scientific
AVI Health and Community Services	Compute Canada	SOLID Outreach
BC Ministry of Health	IBM Canada	STS Pharmacy
BC Ministry of Mental Health and Addictions	Island Health Authority	

#### **Our Funders**

Health Canada Substance Use and Addictions Program	Natural Sciences and Engineering Research Council
Vancouver Foundation	Canadian Institutes of Health Research

Suggested citation: Wallace B, van Roode T, Gozdzialski L, Burek P, Ramsay M, Garber I, & Hore D. Vancouver Island Drug Checking Project: Year End Report 2019. Victoria, BC: Vancouver Island Drug Checking Project; 2020.