The Vancouver Island Drug Checking Project delivers drug checking services in Victoria, BC. Our service has been operating 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 analytical techniques as follows:

- Fentanyl Immunoassay Strips
- 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 a psychedelic (42), opioid-down (38), or a stimulant (32). The remaining substances were expected to be dissociatives (14), benzodiazepines (11) or other depressants (1), polysubstances (1), other (6), or were unknown (21) or missing information (3). As people test for others, bring multiple samples to be tested, or find substances this can sometimes result in confusion about the expected substance or lack of information.

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Data are not finalized and subject to change. There were missing data for some samples.
How many samples tested positive for fentanyl?

We tested all samples using fentanyl immunoassay strips to determine whether they contained fentanyl. Overall, 24% of all samples tested positive for fentanyl.¹ The majority of these were in samples expected to be opioid-down with 91% of samples testing positive. Notably, 82% of those who expected their sample to be opioid-down had reported that they expected it to contain fentanyl. It’s important to take into account that this expectation could reflect either knowledge of supply or preferences or both of these.

Fentanyl was detected in one sample where the person was unsure what it may be. There were no samples expected to be a psychedelic, stimulant, or dissociative that tested positive for fentanyl. These immunoassay strips have proved valuable for rapidly and reliably confirming the presence of fentanyl to direct further testing and inform harm reduction strategies.

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

- Psychedelic, n=37
- Opioid_Down, n=34
- Stimulant, n=31
- Unknown, n=18
- Dissociative, n=13

Data are not finalized and subject to change. There were missing data for some samples. ¹Rapid Response Immunoassay Strips used to test for presence of fentanyl. Categories are based on expected substance.
What other components did we find?

As well as screening for fentanyl, we tested each sample to determine what other active ingredients, adulterants, and cutting agents were present. Overall, the most common actives detected were fentanyl, MDMA, methamphetamine, cocaine HCl, ketamine and heroin.

Samples expected to be opioid-down were the most highly adulterated, containing a range of cutting agents and other psychoactive components that can have unexpected effects. Such information on composition is critical to inform harm reduction strategies.

### Expected Down\(^1,2\)

Of the 38 samples expected to be down, the most common actives detected were fentanyl (34) and heroin (16). Benzodiazepines (7) and methamphetamine (3) were detected in some samples. The most common cutting agent was caffeine (36). Erythritol (7) and mannitol (3) were also detected in some samples. \(^3\)

We detected other psychoactive components in a small number of samples such as fentanyl analogues, pharmaceutical opioids, and depressants. \(^4\) Synthetic cannabinoids were suspected but not confirmed.

### Expected Psychedelic\(^1,2\)

Of the 40 samples expected to be psychedelics, the most common active detected was MDMA (28). MDA (5), LSD (3), DMT (2), and ketamine (2) were detected in some samples. The most common cutting agent was mannitol (3) detected in some samples. \(^3\)

We detected other psychoactive components in a small number of samples such as benzodiazepines, and other stimulants. \(^4\)

### Expected Cocaine HCl or Base\(^1,2\)

Of the 16 samples expected to be cocaine HCl or base, the most common active was cocaine HCl (13). Cocaine base (2) and methamphetamine (2) were also detected. The most common cutting agents were dimethyl sulfone (2), caffeine (1), glucose (1), lactose (1), and phenacetin (1) present in some samples. \(^3\)

### Expected Methamphetamine\(^1,2\)

Of the 16 samples expected to be methamphetamine, the most common active detected was methamphetamine (14). MDMA was detected in one sample. The most common cutting agent was dimethyl sulfone (3) present in some samples. \(^3\)

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*Data are not finalized and subject to change. There were missing data for some samples. \(^1\) Instruments may not be able to detect all ingredients and certainty of interpretations may vary. \(^2\) Multiple substances may be present in one sample and substance may be present in trace concentrations. \(^3\) Includes cutting agents detected in >5% of samples. \(^4\) Includes psychoactive components detected in ≤5% of samples.*
* Drug checking during dual public health emergencies *

The Vancouver Island Drug Checking Project has been working to provide drug checking services during the COVID-19 pandemic in order to support communities that continue to be impacted by the ongoing overdose crisis. There are considerable concerns about increased toxicity of an already unpredictable and toxic drug supply, increased risk of overdose and other harms, and difficulty operating harm reduction services during this time.

In response, we have quickly transitioned to offering drug checking services that adhere to safe physical distancing guidelines while maintaining confidentiality, in order to provide information about the composition of substances circulating in the community at this time. We are also exploring new ways to deliver services to better reach others who may benefit from this service, particularly those most impacted by the parallel overdose emergency.

As risks and harms from substance use are increased within the context of COVID-19, we encourage people to continue to practice safer use strategies. BCCDC guidelines for safer use during COVID-19 can be found here:


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

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Our Partners

Agilent Technologies | Canadian Institute for Substance Use Research | ProSpect Scientific
AVI Health and Community Services | Compute Canada | SOLID Outreach
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