

Vancouver Island Drug Checking Project

Key Indicators for 1 April - 30 June 2020

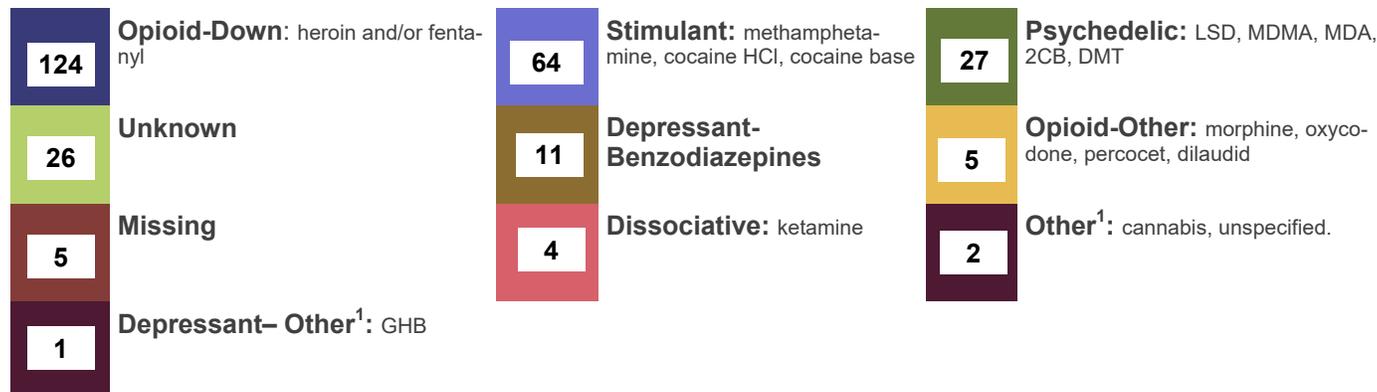
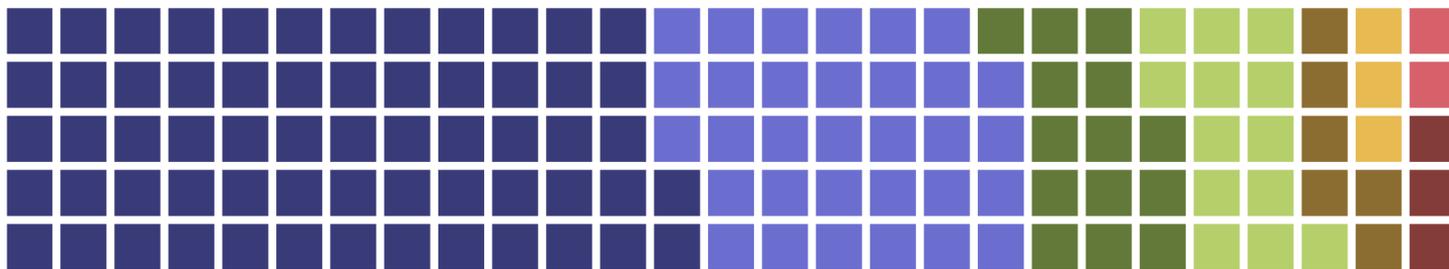
The Vancouver Island Drug Checking Project delivers drug checking services in Victoria, BC. Our service has been operating in partnership with SOLID Outreach, AVI Health and Community Services, and Lantern Services. This free and confidential service provides information on composition of substances and harm reduction information. We employ six analytical techniques as follows:

- Fentanyl Immunoassay Strips
- Benzodiazepine Immunoassay Strips
- Fourier Transformed Infrared Spectroscopy (FTIR)
- Raman Spectroscopy
- Surface Enhanced Raman Spectroscopy (SERS)
- Gas Chromatography – Mass Spectrometry (GC-MS)

269
Samples Tested
In 2nd Quarter

What were people bringing to be tested?

We asked people what drug they were bringing to be tested. Nearly half of all substances were **expected to be** an opioid down (124), and around a quarter a stimulant (64). The remaining substances were expected to be a psychedelic (27), benzodiazepine (11) or other depressant (1), other opioid (5), dissociative (4), other (2), or were unknown (26) or missing information (5). This shows an increase in uptake from the prior quarter where we tested 169 samples, with a considerable increase in the number (and proportion) of expected down samples to be tested (from 38/169 to 124/269).



Data are preliminary. There were missing data for some samples. ¹Does not display on chart

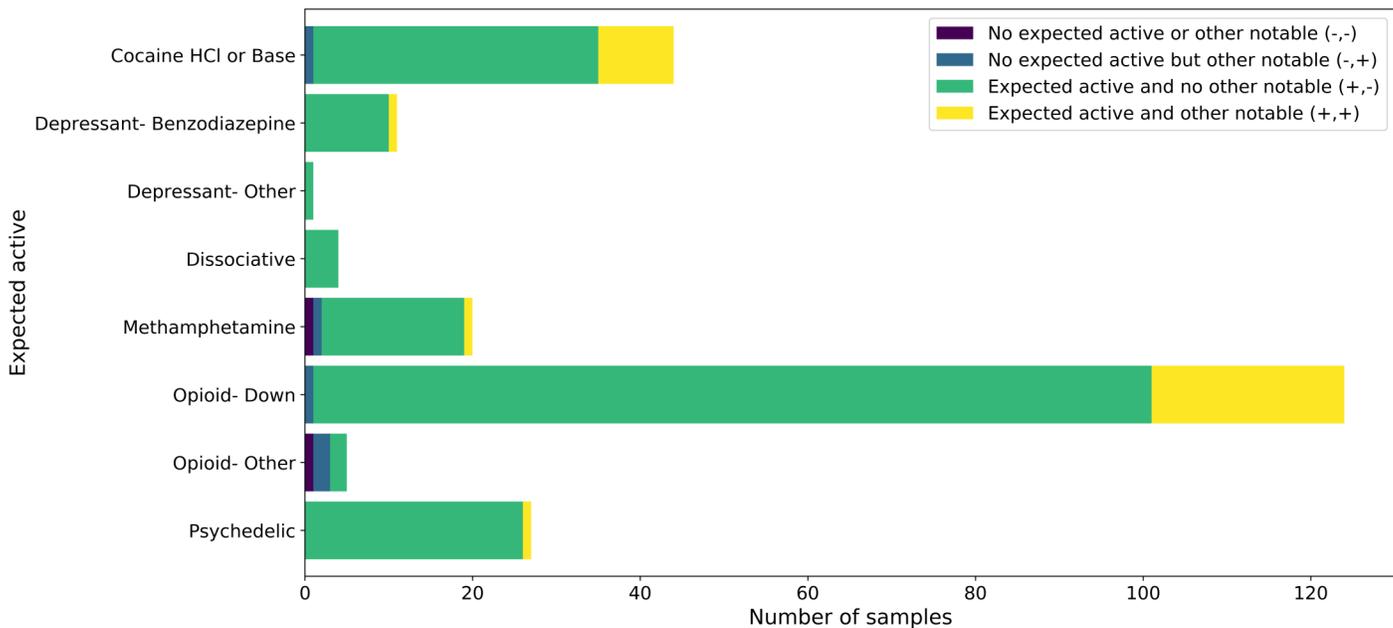
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What did we find?

We tested each sample to determine what active ingredients, adulterants, and cutting agents were present. The majority of samples did contain an active that fit into each expected category.² However, we also detected a number of other notable components that may cause unexpected effects or impact the effectiveness of naloxone.

Number of samples containing expected active or other notable component



Highlighted Findings

- ⇒ **Fentanyl or fentanyl analogues** were detected in samples expected to be opioid-down, opioid-other, and in unknown samples. They were not detected in samples expected to be stimulants, depressants, psychedelics, or dissociatives.
- ⇒ **Adulteration** was high for samples expected to be opioids or cocaine HCl or base. Comparatively few samples expected to be psychedelics, methamphetamine, depressants or dissociatives contained other notable components.
- ⇒ **Expected down:** Fentanyl (or unspecified analogue) was detected in 97% of samples, and heroin in 10%. Other notable components were detected in 19% of samples including benzodiazepines, stimulants, xylazine, and other opioids including the novel fentanyl analogue N-(3-methoxyphenyl)-N-(1-phenethyl-4-piperidyl) formamide.
- ⇒ **Expected cocaine HCl or base:** Cocaine HCl was detected in 93% of samples, other notable components were detected in 23% of samples.

Data are preliminary. There were missing data for some samples. Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substance may be present in trace concentrations. ²Expected substances were grouped so that an expected active being present does not necessarily indicate precise agreement between expected and found active.

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For each expected category, we list the number of samples that contained an expected active or other notable components.

(-,-) no expected active, no other notable component

(-,-) no expected active, other notable component

(+,-) expected active, no other notable component

(+,+) expected active, other notable component

Expected Cocaine HCl or Base (44)

(-,-)

There was 1 sample that contained no cocaine HCl or base, but contained a notable component. We detected: methamphetamine (1).

(+,-)

There were 34 samples that contained cocaine HCl or base, and no other notable components. We detected: cocaine HCl (33) and cocaine base (1).

(+,+)

There were 9 samples that contained cocaine HCl or base, and other notable components. We detected: cocaine HCl (8), methamphetamine (6), phenacetin (3), cocaine base (1), gabapentin (1).

Expected Depressant– Benzodiazepine (11)

(+,-)

There were 10 samples that contained a benzodiazepine, and no other notable components. We detected: benzodiazepine- undifferentiated (7), alprazolam (2), chlorodiazepoxide (1), etizolam (1).

(+,+)

There was one sample that contained a benzodiazepine and other notable components. We detected: diazepam (1), lidocaine (1).

Expected Depressant– Other (1)

(+,-)

There was 1 sample that contained a depressant– other, and no other notable components. We detected: GHB (1).

Expected Dissociative (4)

(+,-)

There were 4 samples that contained a dissociative, and no other notable components. We detected: ketamine (4).

Expected Methamphetamine (19)³

(-,-)

There was 1 sample that did not contain methamphetamine, but contained a notable component. We detected: MDMA (1).

(+,-)

There were 17 samples that contained methamphetamine and no other notable components. We detected: methamphetamine (17).

(+,+)

There was 1 sample that contained methamphetamine, and other notable components. We detected: MDMA (1), methamphetamine (1).

Data are preliminary. There were missing data for some samples. Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substance may be present in trace concentrations. ³ Total does not sum to expected as results not available for all samples.

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(-,-) no expected active, no other notable component

(-,-) no expected active, other notable component

(+,-) expected active, no other notable component

(+,+) expected active, other notable component

Expected Opioid– Down (124)

(-,-)

There was 1 sample that did not contain an opioid down, but contained a notable component. We detected: methamphetamine (1).

(+,-)

There were 100 samples that contained an opioid-down, and no other notable components. We detected: fentanyl or unspecified analogue (99), heroin (8).

(+,+)

There were 23 samples that contained an opioid-down, and other notable components. We detected: fentanyl or unspecified analogue (21), benzodiazepine - undifferentiated (6), heroin (4), methamphetamine (4), cocaine HCl (3), etizolam (3), methorphan (3), xylazine (3), alprazolam (1), hydromorphone (1), lorazepam (1), N-(3-methoxyphenyl)-N-(1-phenethyl-4-piperidyl) formamide (1).

Expected Opioid– Other (4)³

(-,-)

There were 2 samples that did not contain an expected opioid- other, but did contain other notable components. We detected: fentanyl or unspecified analogue (1), heroin (1), U-47109 (1).

(+,-)

There were 2 samples that contained an opioid– other and no other notable components. We detected: morphine (1), oxycodone (1).

Expected Psychedelic (27)

(+,-)

There were 26 samples that contained a psychedelic and no other notable components. We detected: MDMA (19), DMT (3), MDA (2), 2C-B (2), 2C-H (1), LSD (1).

(+,+)

There was 1 sample that contained a psychedelic, and other notable components. We detected: cocaine HCl (1), MDA (1), methamphetamine (1).

Other/Unknown/Missing⁴ (33)

In samples where the expected substance was other, unknown or missing, we detected a number of notable components. We detected: methamphetamine (5), alprazolam (4), fentanyl or unspecified analogue (4), ketamine (4), benzodiazepine- undifferentiated (3), cocaine HCl (3), lidocaine (2), benzocaine (1), etizolam (1), heroin (1), medazepam (1), 3,4-methylenedioxy-substituted cathinone (1), 3-methylmethcathinone (1).

As people test for others, bring multiple samples to be tested, or find substances, this can result in confusion or lack of information about the expected substance. The wide range of notable components we detected highlights the importance of being able to provide information on composition.

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Drug checking during COVID-19

During the COVID-19 pandemic, many people have become more isolated or displaced and essential harm reduction services have been reduced, closed or shifted. This has exacerbated risk factors for overdose and created challenges navigating harm reduction services. In response, we adapted our delivery and aimed to provide services where people were being relocated, pair with other critical harm reduction services, and find ways to address safety concerns related to COVID-19. Despite challenges, we had an increase in service uptake compared to the prior quarter, showing the success of these approaches and demand for drug checking for a wide range of substances.

We continue to see a highly variable and unpredictable supply, with increased potential for harms within this context. We found a wide range of substances that have the potential for unexpected effects or to impact the effectiveness of naloxone. We detected fentanyl (or unspecified analogue) in 97% of all samples **expected to be down**, with heroin detected in only 10%. As well, we continued to detect benzodiazepines in down. Benzodiazepine immunoassay strips may be a rapid and affordable temporary intervention where drug checking is not available. Systemic responses with integrated and accessible harm reduction services must be prioritized. Further, improved technologies and methods for drug checking that can determine fentanyl concentration are needed to support harm reduction.

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

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	University of Victoria
BC Support Vancouver Island Centre	PerkinElmer Inc	Westgrid

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