Vancouver Island Drug Checking Project

Key Indicators for 1 July - 30 September 2020

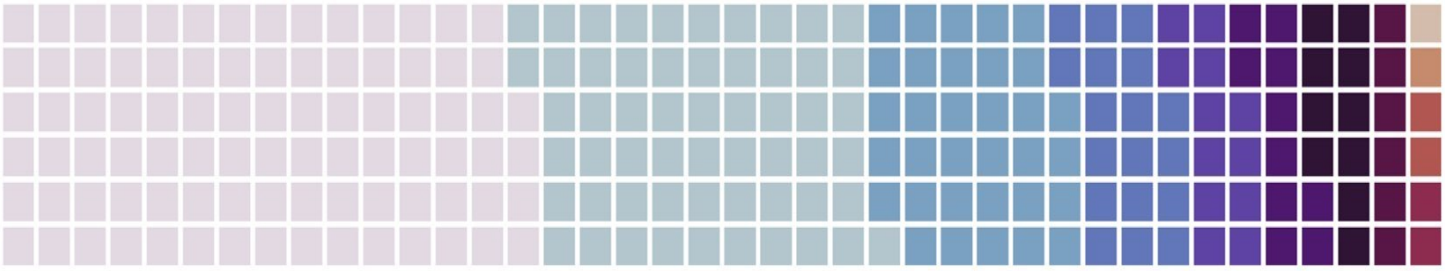
The Vancouver Island Drug Checking Project delivers drug checking services in Victoria, BC. Our service has been operating in partnership with SOLID Outreach, AVI Health and Community Services, Lantern Services and Island Health Authority. This free and confidential service provides information on composition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

- Fentanyl Immunoassay Strips
- Benzodiazepine Immunoassay Strips
- Infrared Absorption Spectroscopy
- Raman Spectroscopy
- Surface Enhanced Raman Spectroscopy (SERS)
- Gas Chromatography - Mass Spectrometry (GC-MS)

456
Samples Tested In 3rd Quarter

What were people bringing to be tested?

We asked people what drug they were bringing to be tested. In this three month period, we tested 456 samples. This shows an increase in uptake of testing from the prior quarter where we tested 269 samples, with an increase in uptake of testing for every expected category. Approximately one third were **expected to be** an opioid - down (168), and around a quarter a stimulant (109). The remaining substances were expected to be a psychedelic (62), dissociative (19), benzodiazepine (19) or other depressant (2), other opioid (12), polysubstance (4), other stimulant (1), other (3), or were unknown (34) or missing information (23).



168	**Opioid - Down**: heroin and/or fentanyl or analogue	109	**Stimulant:** methamphetamine, cocaine HCl, cocaine base	62	**Psychedelic:** LSD, MDMA, MDA, 2CB, DMT
34	**Unknown**	23	**Missing**	19	**Depressant - Benzodiazepine**
19	**Dissociative:** ketamine	12	**Opioid - Other:** pharmaceutical opioids, morphine, oxycodone, dilaudid	4	**Polysubstance:** down and benzodiazepine
3	**Other:** cannabis, phenacetin, unspecified.	2	**Depressant - Other:** GHB	1	**Stimulant - Other:** adderall

Data are preliminary. There were missing data for some samples.

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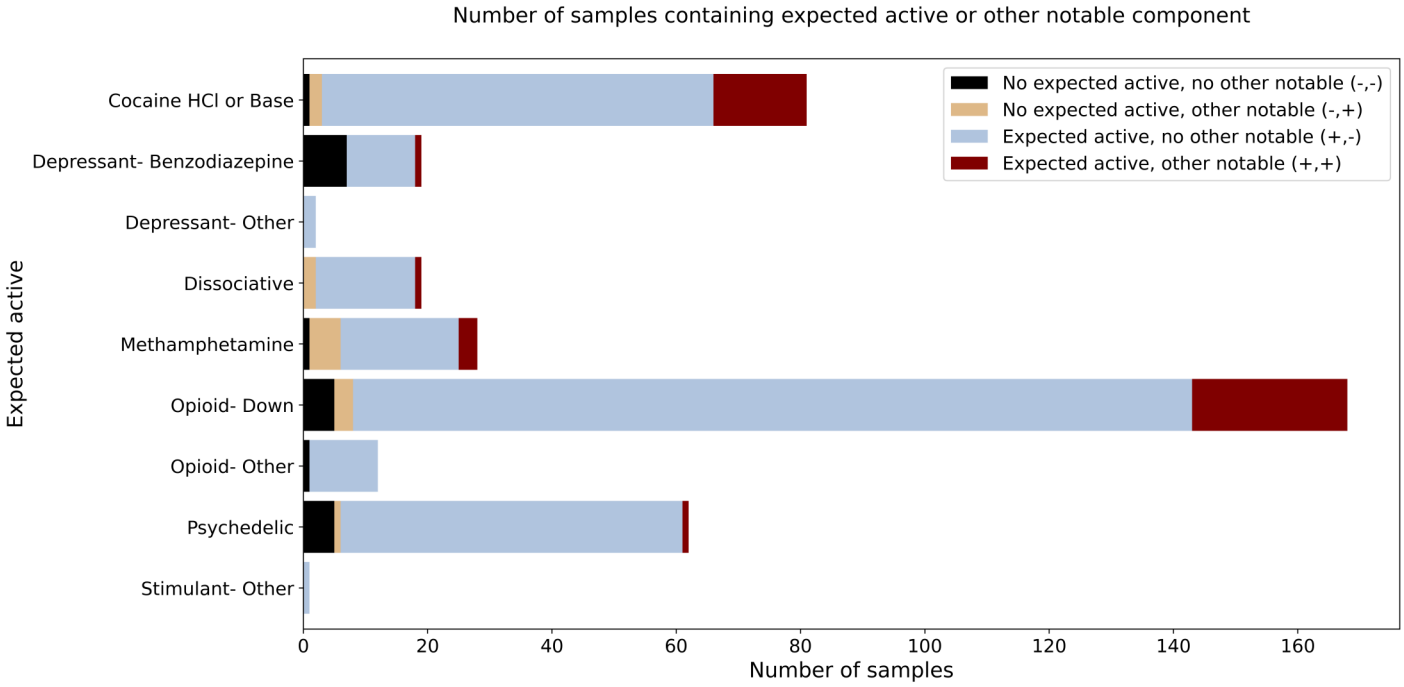
What did we find?

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.[1] However, we also detected a number of other notable components that may cause unexpected effects or impact the effectiveness of naloxone.



Highlighted Findings

⇒ **Adulteration** with other notable components was highest for samples expected to be methamphetamine (29%), cocaine HCl or base (21%), opioid - down (17%) or dissociative (16%).

⇒ **Benzodiazepines** were detected in 13% of samples expected to be opioid - down, and xylazine in one sample. These may impact effectiveness of naloxone.

⇒ **Fentanyl or fentanyl analogues** were detected in 93% of samples expected to be opioid - down, and 48% of samples that were unknown/missing/other. While fentanyl or analogues were detected in a small number of samples expected to be cocaine HCl or base, benzodiazepine, and methamphetamine, they were not detected in samples expected to be an other depressant, dissociative, other opioid, psychedelic, or other stimulant.

*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 substances may be present in trace concentrations. [1]Expected substances were grouped so that an expected active being present does not necessarily indicate precise agreement between expected and detected active. *Notable components: Includes all expected actives as well as unexpected components of note, such as those with the potential for unexpected effects or that impact the effectiveness of naloxone.*

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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 (81)

(-,-)

There was 1 sample that did not contain cocaine HCl or base or another notable component.

(-,+)

There were 2 samples that did not contain cocaine HCl or base, but contained a notable component. We detected: benzocaine (1), MDA (1).

(+,-)

There were 63 samples that contained cocaine HCl or base, and no other notable components. We detected: cocaine HCl (57), cocaine base (6).

(+,+)

There were 15 samples that contained cocaine HCl or base, and other notable components. We detected: cocaine HCl (12), phenacetin (7), cocaine base (3), benzocaine (2), fentanyl or analogue (2), levamisole (1), methamphetamine (1), procaine (1), scopolamine (1).

Expected Depressant – Benzodiazepine (19)

(-,-)

There were 7 samples that did not contain a benzodiazepine or another notable component.

(+,-)

There were 11 samples that contained a benzodiazepine, and no other notable components. We detected: benzodiazepine - undifferentiated (7), etizolam (4), flualprazolam (1).

Expected Depressant – Benzodiazepine (cont.)

(+,+)

There was 1 sample that contained a benzodiazepine and other notable components. We detected: benzodiazepine - undifferentiated (1), fentanyl or analogue (1).

Expected Depressant– Other (2)

(+,-)

There were 2 samples that contained a depressant – other, and no other notable components. We detected: GHB (2), GBL (1).

Expected Dissociative (19)

(-,+)

There were 2 samples that did not contain a dissociative, but contained a notable component. We detected: MDMA (1), methamphetamine (1).

(+,-)

There were 16 samples that contained a dissociative, and no other notable components. We detected: ketamine (15), fluorodeschloroketamine (1).

(+,+)

There was 1 sample that contained a dissociative, and other notable components. We detected: ketamine (1), procaine (1).

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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 Methamphetamine (28)

(-,-)

There was 1 sample that did not contain methamphetamine or other notable component.

(-,+)

There were 5 samples that did not contain methamphetamine, but contained a notable component. We detected: MDA (2), methylamine HCl (2), phenylpropylmethylamine (1).

(+,-)

There were 19 samples that contained methamphetamine and no other notable components. We detected: methamphetamine (19).

(+,+)

There were 3 sample that contained methamphetamine, and other notable components. We detected: methamphetamine (3), DMSO (1), fentanyl or analogue (1), phenethylamine HCl (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. Cross-contamination may be a possible explanation for adulteration.

Expected Opioid – Down (168)

(-,-)

There were 5 samples that did not contain an opioid down or other notable component.

(-,+)

There were 3 samples that did not contain an opioid down, but contained a notable component. We detected: cocaine HCl (2), benzodiazepine- undifferentiated (1).

(+,-)

There were 135 samples that contained an opioid-down, and no other notable components. We detected: fentanyl or analogue (132), heroin (9).

(+,+)

There were 25 samples that contained an opioid-down, and other notable components. We detected: fentanyl or analogue (25), benzodiazepine- undifferentiated (17), etizolam (4), methamphetamine (2), procaine (1), xylazine (1).

Expected Opioid – Other (12)

(-,-)

There was 1 sample that did not contain an other opioid or other notable component.

(+,-)

There were 11 samples that contained an opioid– other and no other notable components. We detected: hydromorphone (6), oxycodone (4), morphine (1).

We are now releasing monthly reports on our blog– Check them out here!

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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 Psychedelic (62)

(-,-)

There were 5 samples that did not contain a psychedelic or other notable component.

(-,+)

There was 1 sample that did not contain a psychedelic, but contained a notable component. We detected: 3,4-MDPBP (1), ethylone (1).

(+,-)

There were 55 samples that contained a psychedelic and no other notable components. We detected: MDMA (38), LSD (8), MDA (7), DMT (2), 2C-B (1), 5-MeO-MiPT (1).

(+,+)

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

Expected Stimulant– Other (1)

(+,-)

There was 1 sample that contained a stimulant, and no other notable components. We detected: amphetamine sulphate (1).

Polysubstance[2,3] (4)

There were 4 samples that were expected to be a polysubstance. We detected: fentanyl or analogue (4).

Other/Unknown/Missing[3] (60)

In samples where the expected substance was other, unknown or missing, we detected a number of notable components. We detected: fentanyl or analogue (29), cocaine HCl (6), heroin (4), methamphetamine (4), benzodiazepine – undifferentiated (1), cannabis (1), cocaine base (1), etizolam (1), gabapentin (1), hydromorphone (1), levamisole (1), MDA (1), MDMA (1), phenacetin (1).

Highlighted Findings

⇒ **The majority of samples contained an expected active**.

Expected Cocaine HCl or Base: 96% contained cocaine HCl or base

Common cuts[4]: phenacetin (9%)

Expected Methamphetamine: 79% contained methamphetamine

Common cuts[4]: caffeine (7%)

Expected Opioid-Down: 95% contained fentanyl/analogue/heroin

Common cuts[4]: caffeine (94%), mannitol (8%), erythritol (7%)

Expected Psychedelic: 90% contained a psychedelic

Common cuts[4]: mannitol (5%)

⇒ Some samples did not contain an expected active or notable component. Findings should be interpreted with caution, as testing has limitations and data are preliminary.

*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. [2]Expected to be fentanyl and/or heroin with possible benzodiazepines . [3]All notable components detected for these categories reported together. [4] Present in ≥5% of samples. *Notable components: Includes all expected actives as well as unexpected components of note, such as those with the potential for unexpected effects or that impact the effectiveness of naloxone.*

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Increasing demand for drug checking services

As the overdose emergency and COVID-19 pandemic continues within BC, our service continues to see a highly variable and unpredictable supply containing a wide range of notable components with potential for unexpected effects. As in the prior quarter, this includes detection of benzodiazepines and xylazine in samples expected to be opioid - down. We detected benzodiazepines in 13% of expected down samples. With these ongoing concerns, there has been increasing demand for drug checking. We experienced increased uptake across the last two quarters from 169 samples in the first quarter to 456 in this third quarter. We also had an increase in testing for every substance category, showing this demand extends across a wide range of substances and is not limited to opioid - down.

This continues to demonstrate the importance of community wide drug checking services and the need to extend the reach of such services to areas where drug checking is not currently available and to other people who may benefit. This remains challenging due to rapidly shifting circumstances for delivery of harm reduction services within the COVID -19 response, as well as the cost and complexity of delivering drug checking services more generally. Locating drug checking services within OPS continues to be one of the more effective strategies for delivery of drug checking and should be considered more broadly.

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
AVI Health and Community Services
BC Ministry of Health
BC Ministry of Mental Health and Addictions
BC Support Vancouver Island Centre
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