

# Vancouver Island Drug Checking Project

Preliminary Results for December 2021

The Vancouver Island Drug Checking Project delivers drug checking services in Victoria, BC, with pop-up drug checking services in Duncan during December. Our service has been operating in partnership with SOLID Outreach, AVI Health and Community Services, Lantern Services, Dr. Chris Gill and the team at Vancouver Island University, and the Island Health Authority. This free and confidential service provides information on composition of substances and harm reduction information.

## Highlighted findings:

- Carfentanil was found in four samples, all expected opioid-down
- 85% of expected opioid-down samples contained fentanyl
- The median fentanyl concentration found was 8.0%, with a maximum of over 80%
- Benzodiazepines and/or etizolam were found in 52.0% of expected opioid-down samples
- The maximum concentration of etizolam found was >25%, in an expected opioid-down sample
- Xylazine was detected in 6 samples: 3 expected opioid-down samples and 3 unknown samples, with a maximum concentration of 12.3%

# 260

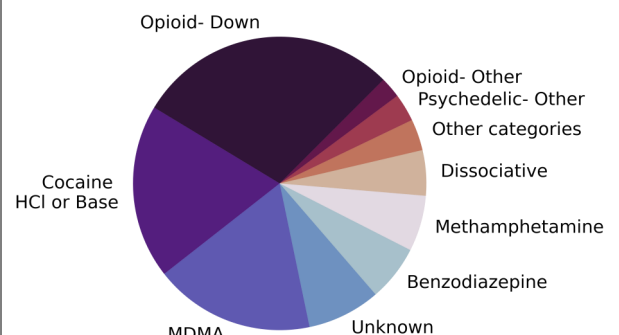
Samples Tested  
1 - 31 December  
2021

[Read our blog](#) for further interpretations of our December data.

## What were people bringing to be tested?

Service users bring us a wide variety of substances that can be grouped into different drug classes. The table below aggregates the total number of samples we tested by their “expected” substance (i.e. the drug category reported by the service user). These data are visually represented in the pie chart below, and are separated by collection location on the following page.

Expected substance	Number of Samples
Opioid Down (fentanyl and/or heroin)	75
Psychedelic (MDMA, MDA, LSD, 2C-B)	54
Cocaine (HCl or Base)	50
Benzodiazepine (alprazolam, diazepam, etizolam)	16
Methamphetamine	16
Dissociative (ketamine)	13
Other Opioid (Dilaudid, oxycodone)	6
Other (cannabinoids, “research chemicals”)	9
Unknown/Missing	21

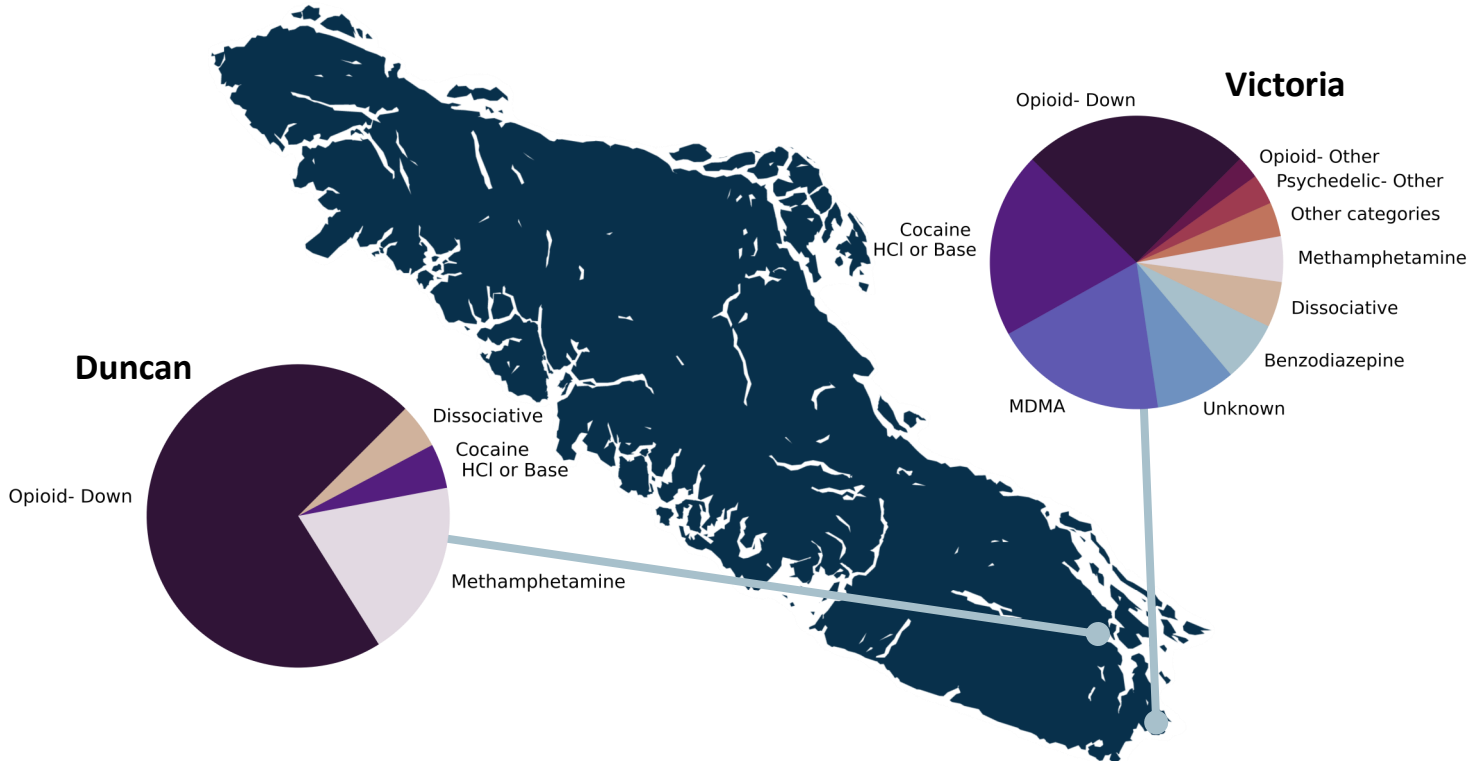


# Vancouver Island Drug Checking Project

Preliminary Results for December 2021

## What were people bringing to be tested at each location?

In December, we ran pop-up drug checking services in Duncan in addition to our regular services in Victoria. The “expected substance” data presented on the front page of this document can be separated by sample collection location; these data are tabulated and visualized below. \* The samples checked in Duncan were collected during a single day of drug checking and thus only provide a very limited snapshot of the market in the community.



Expected substance	Duncan	Victoria	Overall
Opioid Down (fentanyl and/or heroin)	15	60	75
Psychedelic (MDMA, MDA, LSD, 2C-B)		54	54
Cocaine (HCl or Base)	1	49	50
Benzodiazepine (alprazolam, diazepam, etizolam)		16	16
Methamphetamine	4	12	16
Dissociative (ketamine)	1	12	13
Other Opioid (Dilaudid, oxycodone)		6	6
Other (cannabinoids, “research chemicals”)		9	9
Unknown/Missing		21	21
<b>Total samples checked</b>	<b>21*</b>	<b>239</b>	<b>260</b>

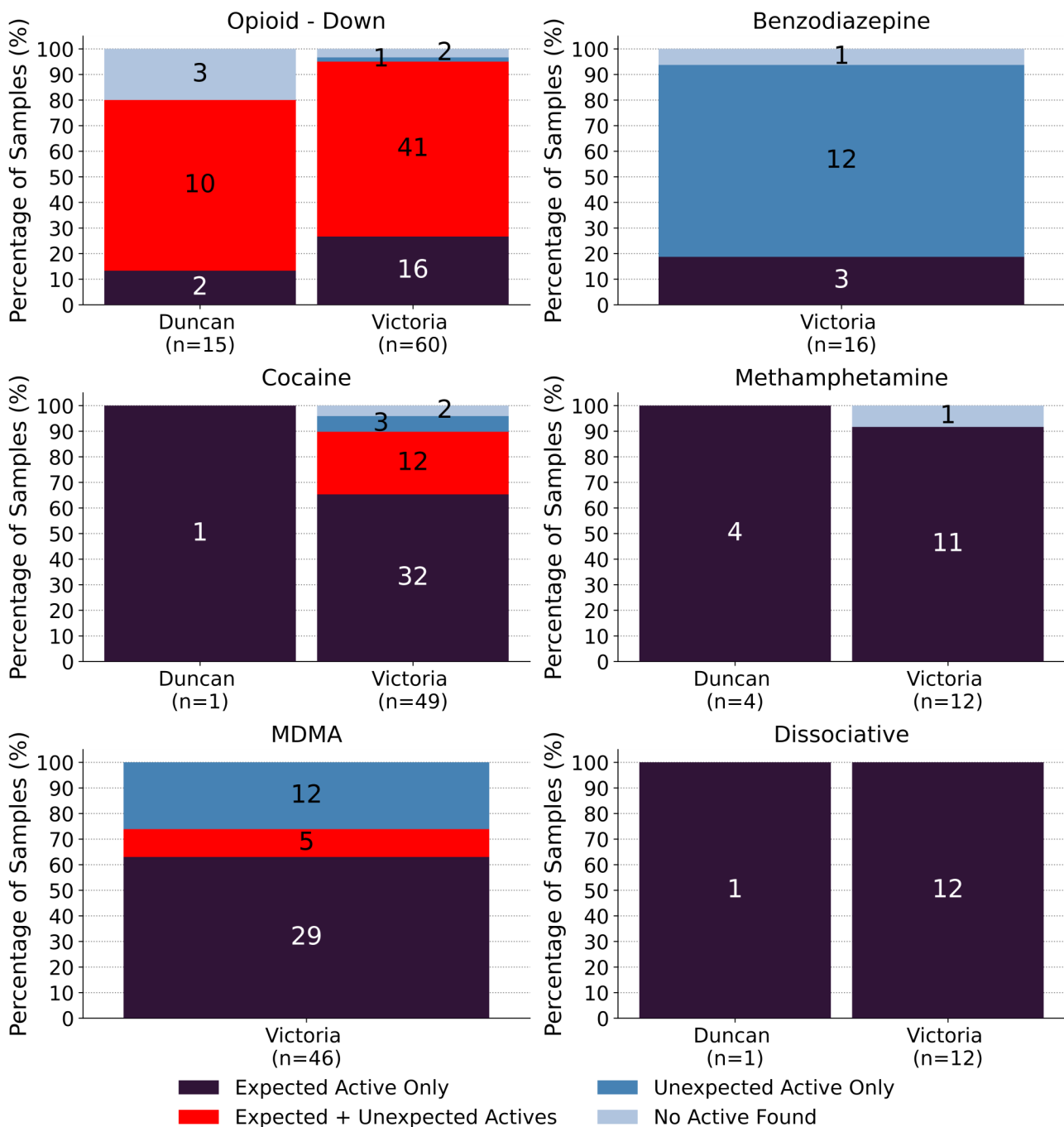
# Vancouver Island

## Drug Checking Project

Preliminary Results for December 2021

### What did we find?

We tested each sample to determine what active ingredients, adulterants, and cutting agents were present. The majority of samples contained the expected active drug. However, we also detected a number of notable components that may cause unexpected effects. The figures below illustrate the percentages and numbers of samples tested in each drug category at each location, color coded by their composition. **Dark Purple** regions group samples that were simply as expected with no other notable compounds detected, **Red** shows samples that contained the expected drug *and* were contaminated with an unexpected active, **Dark Blue** groups samples that only contained an unexpected active (the expected drug was not found), and **Light Blue** displays samples where no active compounds were detected.



# Vancouver Island Drug Checking Project

Preliminary Results for December 2021

## What did we find?

Expanding on the figures shown on the previous page, for each drug category and location we list the number of samples that contained the expected active and/or other notable components.

<b>Opioid Down</b>	Duncan	Victoria
<b>Expected Active Only</b>	<b>2</b>	<b>16</b>
Fentanyl	2	16
Heroin		1
<b>Expected* + Unexpected Active(s)</b>	<b>10</b>	<b>41</b>
Fentanyl*	10	37
Heroin*		5
Acetylcodeine		6
Acetylfentanyl	3	4
Acetylmorphine		6
Benzodiazepine (undifferentiated) <sup>2</sup>	5	5
Carfentanil		4
Dextromethorphan		2
Etizolam	5	20
Flualprazolam	2	8
Flubromazolam		2
Fluorofentanyl	3	3
Hydromorphone		5
Isotonitazene		1
Lidocaine		1
Morphine		2
Xylazine	1	2
<b>Unexpected Active(s) Only</b>		<b>1</b>
N-ethylpentylone		1

<b>Cocaine (HCL or Base)</b>	Duncan	Victoria
<b>Expected Active Only</b>	<b>1</b>	<b>32</b>
Cocaine Base	1	2
Cocaine HCl		31
<b>Expected* + Unexpected Active(s)</b>		<b>12</b>
Cocaine Base*		1
Cocaine HCl*		11
Levamisole		8
Methamphetamine		1
Phenacetin		4
<b>Unexpected Active(s) Only</b>		<b>3</b>
Methamphetamine		1
MDMA		1
Ketamine		1

<b>Methamphetamine</b>	Duncan	Victoria
<b>Expected Active Only</b>	<b>4</b>	<b>11</b>
Methamphetamine	4	11

<b>Dissociatives</b>	Duncan	Victoria
<b>Expected Active Only</b>	<b>1</b>	<b>12</b>
Ketamine	1	12

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. As unexpected components of note, such as those with the potential for unexpected effects or that impact the effectiveness of naloxone. \*Expected active component. <sup>2</sup>Benzodiazepine (undifferentiated) results are based on a positive benzo strip test and are unconfirmed by paper spray.

# Vancouver Island Drug Checking Project

Preliminary Results for December 2021

Psychedelics	Victoria
<b>Expected Active Only</b>	<b>35</b>
DMT	1
LSD	3
MDMA	29
Mescaline	1
Methallylescaline	1
<b>Expected* + Unexpected Active(s)</b>	<b>5</b>
Fentanyl	1
MDA	4
MDMA	5
<b>Unexpected Active(s) Only</b>	<b>12</b>
Fentanyl	1
MDA	11

Opioid Other	Victoria
<b>Expected* + Unexpected Active(s)</b>	<b>1</b>
Acetaminophen	1
Oxycodone	1
<b>Unexpected Active(s) Only</b>	<b>3</b>
Acetaminophen	2
Fentanyl	1
Isotonitazene	1

Other	Victoria
<b>Expected Active Only</b>	<b>1</b>
Sildenafil	1
<b>Unexpected Active(s) Only</b>	<b>5</b>
5-MAPB	1
Acetaminophen	1
Amphetamine	3

Benzodiazepines	Victoria
<b>Expected Active Only</b>	<b>3</b>
Clonazepam	1
Lorazepam	1
Nitrazolam	1
<b>Unexpected Active(s) Only</b>	<b>12</b>
Etizolam	9
Sertraline	2
Trazodone	1

Unknown/Missing	Victoria
<b>Unexpected Active(s) Only</b>	<b>16</b>
Acetaminophen	1
Cocaine Base	2
Cocaine HCl	1
Diphenhydramine	1
Etizolam	5
Fentanyl	6
Flualprazolam	4
Ketamine	1
MDMA	1
Methamphetamine	2
THCA-A	1
Xylazine	3

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. \*Expected active component. <sup>1</sup>May be due to limitations of technology to detect certain substances. <sup>2</sup>Benzodiazepine (undifferentiated) results are based on a positive benzo strip test and are unconfirmed by paper spray.

# Vancouver Island Drug Checking Project

Preliminary Results for December 2021

## Quantification

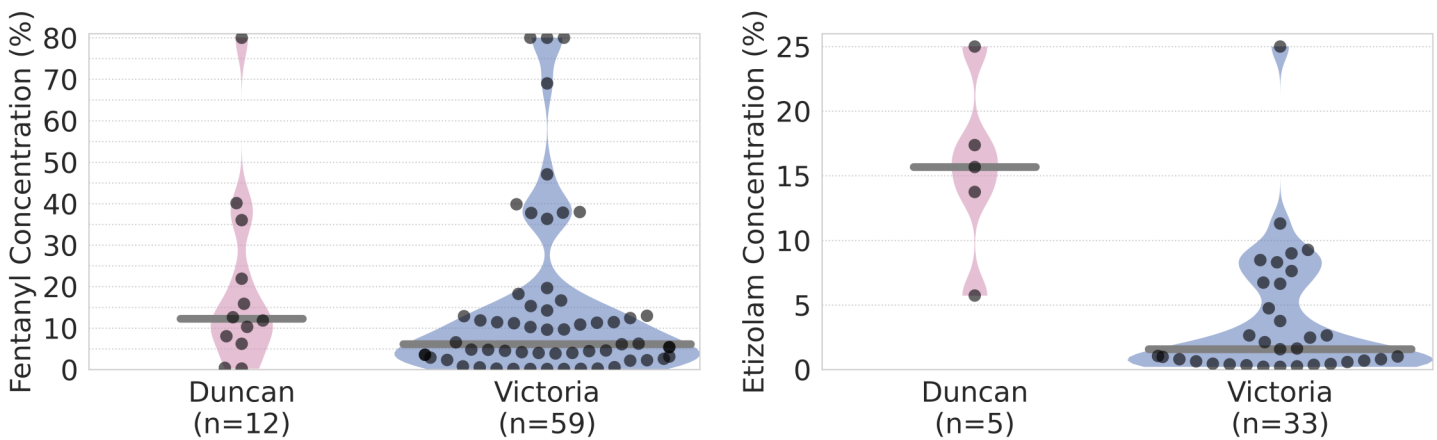
Using paper spray mass spectrometry (PS-MS) data, we were able to quantify low level actives. These aggregate values are inclusive to all expected drug categories in which the active drugs are found, and to all locations across Vancouver Island where we collected samples. Weight percentage is reported below.

Substance	# quant	median	min	max
Fentanyl	71	8.03%	0.1%	> 80%*
Etizolam	38	2.29%	0.2%	> 25%*
Flualprazolam	14	0.5%	0.1%	2.2%
Fluorofentanyl	7	1.7%	0.3%	27.0%
Heroin	6	32.0%	12.2%	> 80%*
Xylazine	6	1.1%	0.3%	12.3%
Carfentanil	4	0.2%	0.1%	0.3%
Flubromazolam	2	1.3%	1.2%	1.4%
Isotonitazene	2	4.1%	0.3%	8.0%

\*There is a maximum concentration limit for each compound of interest that the PS-MS can report. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the limit will be reported. For example, the upper limit of reporting for etizolam on the PS-MS is 25% - any sample containing more than 25% etizolam will be flagged as ">25%".

## Distribution of Concentrations by Location

The concentrations of fentanyl and etizolam for every sample quantified, grouped by service location, are illustrated below to highlight the regional variability in the unregulated drug market. **Black Dots** are individual samples, **Grey Lines** mark the median concentration of the fentanyl/etizolam positive samples checked at each location, and the **width** of the colored regions is proportional to the number of samples in a concentration range.



Some guiding examples from the figure: • the median concentration of fentanyl in samples collected in Duncan (12%) was higher than in Victoria (6%) • the fentanyl positive samples checked in both Duncan and Victoria show similar concentration distributions with samples ranging from 0.1% to >80% • the lowest concentration etizolam positive sample that was collected in Duncan (6%) was higher than the median etizolam concentration seen in Victoria (2%)

# Vancouver Island Drug Checking Project

## Preliminary Results for December 2021

The Vancouver Island Drug Checking Project is based out of the University of Victoria and operates community-wide drug checking services within Victoria, BC. We are continuing to offer drug checking services in response to the dual public health emergencies, and exploring new ways to better reach those who may benefit from this service. In December, the Vancouver Island Drug Checking Project went to the Cowichan Valley to provide pop-up drug checking services in Duncan at the Cowichan Overdose Prevention Site operated by Lookout Housing and Health Society. The trip served as an opportunity to showcase our services to healthcare providers and community members in the region. We are grateful for the opportunity to collaborate and look forward to sustaining the relationships we have built.

See the blog portion of our website to view our more detailed interpretations of our reports.

*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 please visit: [substance.uvic.ca](https://substance.uvic.ca)

We gratefully acknowledge our partners and funders on this project

### Our Partners



### Our Funders

