

# Substance Drug Checking

## Preliminary Results for December 2025

Substance Drug Checking on Vancouver Island offers free and confidential drug checking services in Victoria, Port Alberni, Comox Valley, Campbell River, Duncan, Port Hardy, and at local events. This report presents data about the drug supply on Vancouver Island for December 2025.

### Highlighted findings:

- The median fentanyl concentration found across all drug categories was 14.4%
- The median fluorofentanyl concentration found across all drug categories was 7.9%
- Benzodiazepines were found in 32.7% (68/208) of expected Opioid - Down samples
  - Bromazolam was found in 32 Opioid - Down samples with a median concentration of 5.9% and maximum concentration of 44.7%
- Xylazine was found in 4 expected Opioid - Down samples with a median concentration of 1.4% and a maximum concentration of 11.3%
- Medetomidine was found in 21 expected Opioid - Down samples with a median concentration of 1.0% and a maximum concentration of 10.7%
- No nitazenes were detected in Opioid - Down samples during December

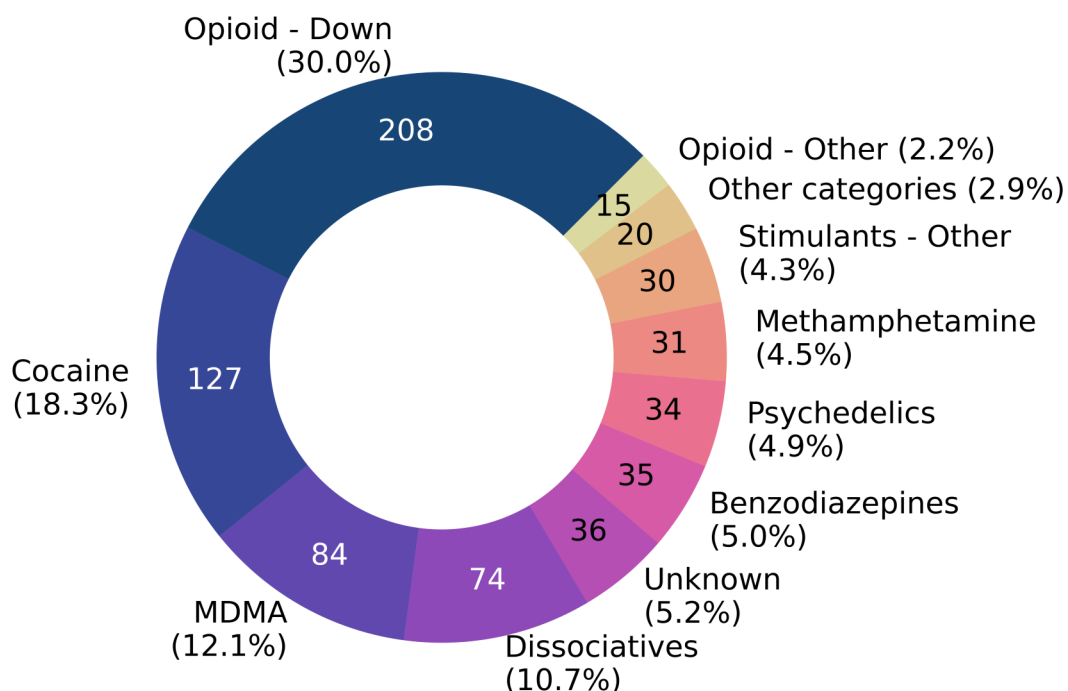
[Read our blog](#) for further interpretations of our December data.

# 694

Samples Tested  
December 2025

## What were people bringing to be checked?

Service users bring us a wide variety of substances that can be grouped into different drug classes. This pie chart aggregates the samples we checked by their “expected” substance (i.e. the drug category reported by the service user). The number of samples checked in each class is included inside each slice and the relative proportion of all samples checked is given in parentheses. These data are separated by collection location/method on the following page.

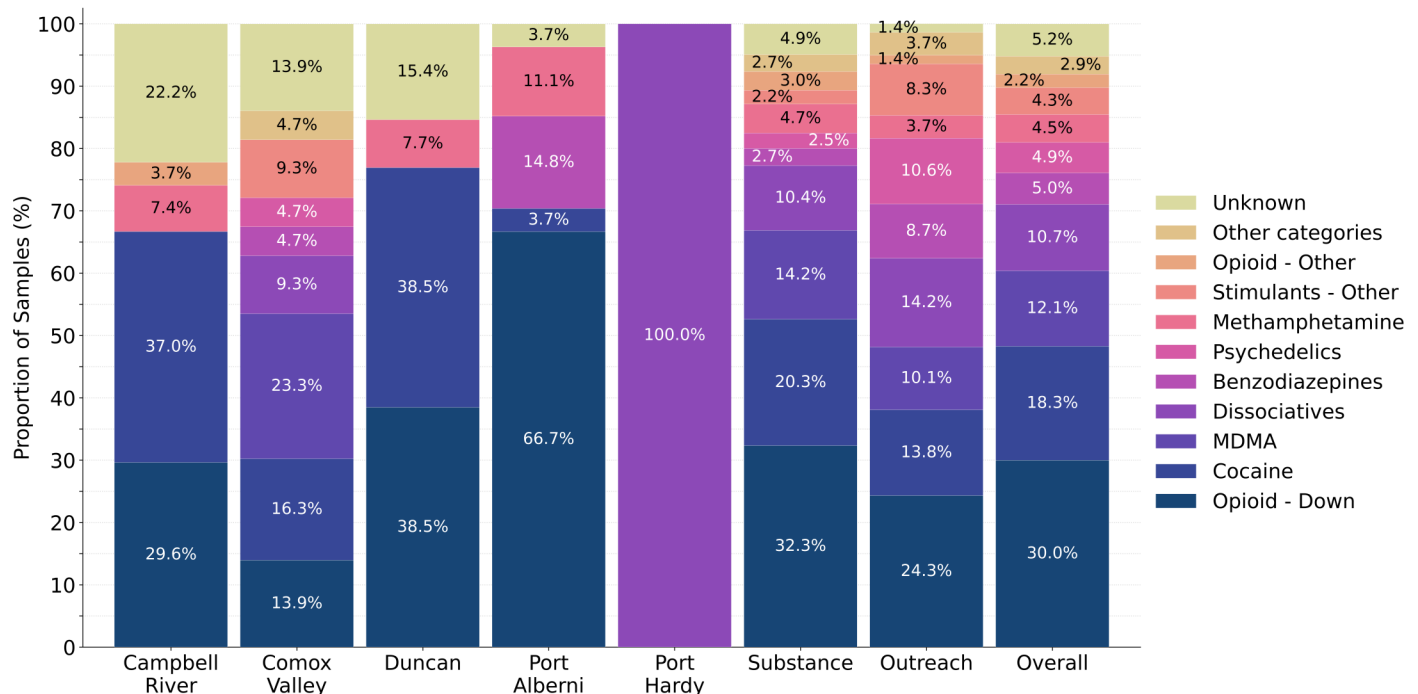


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## What were people bringing to be checked by service model?

The “expected substance” data presented on the previous page can be separated by sample collection location/method, where “Substance” samples are those brought directly to our Victoria storefront, “Campbell River”, “Comox Valley”, “Duncan”, “Port Alberni”, and “Port Hardy” are samples received through our distributed drug checking model, and “Outreach” samples are those collected at supported housing sites, at overdose prevention and supervised consumption locations, and through drop-off envelopes. The relative proportions of samples checked by expected class and location are shown in the figure below; sample counts are listed in the table at the bottom of this page.



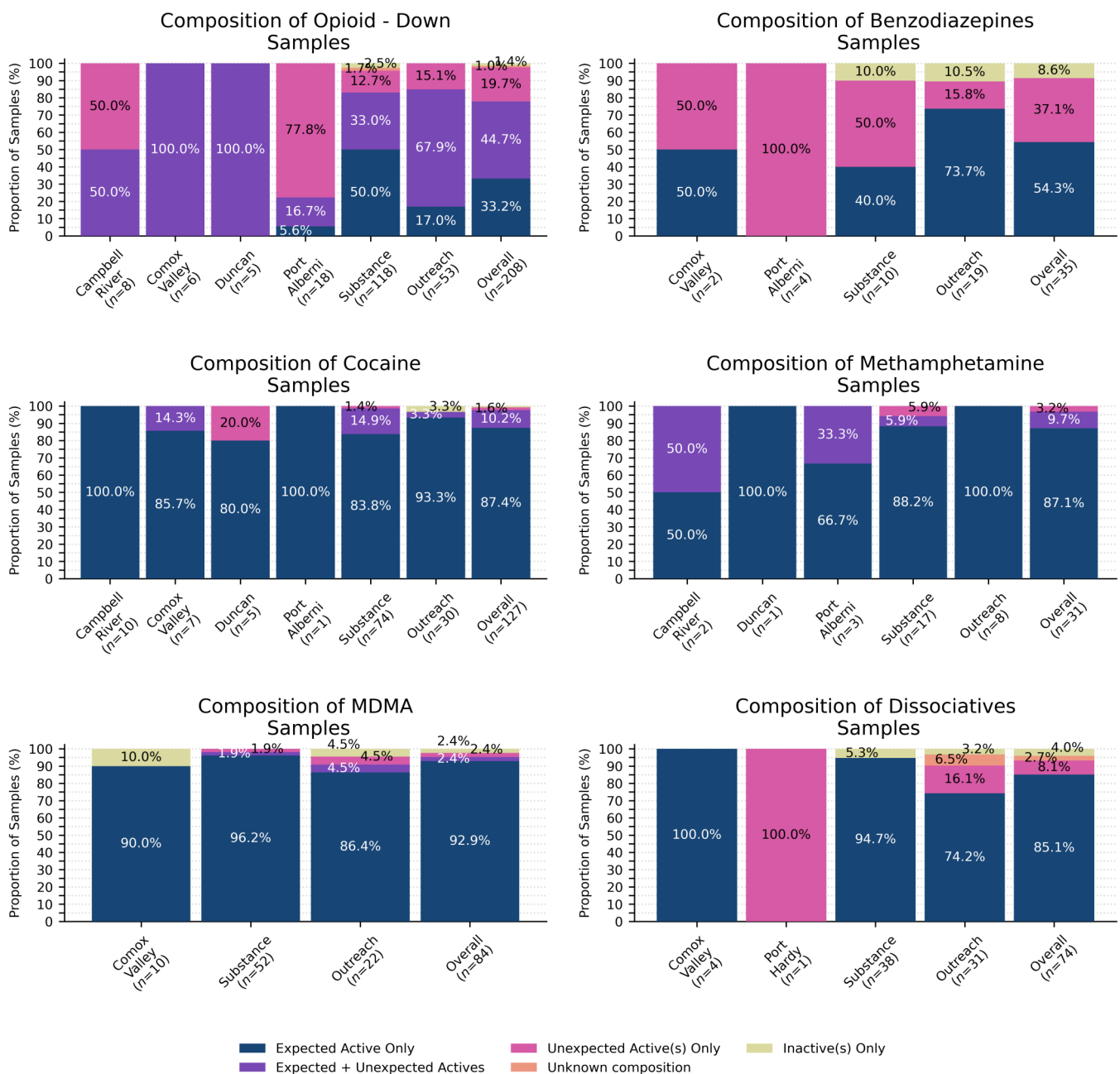
Expected Substance Class	Campbell River	Comox Valley	Duncan	Port Alberni	Port Hardy	Substance	Outreach	Overall
Opioid - Down	8	6	5	18	0	118	53	208
Cocaine	10	7	5	1	0	74	30	127
MDMA	0	10	0	0	0	52	22	84
Dissociatives	0	4	0	0	1	38	31	74
Benzodiazepines	0	2	0	4	0	10	19	35
Psychedelics	0	2	0	0	0	9	23	34
Methamphetamine	2	0	1	3	0	17	8	31
Stimulants - Other	0	4	0	0	0	8	18	30
Opioid - Other	1	0	0	0	0	11	3	15
Other categories	0	2	0	0	0	10	8	20
Unknown	6	6	2	1	0	18	3	36
Total	27	43	13	27	1	365	218	694

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## What did we find?

We checked each sample to determine what active compounds and cutting agents were present. While a majority of samples contained the expected active drug, we also detected a number of other notable compounds that December cause unexpected effects. The figures below illustrate the proportions and numbers of samples checked in each drug category, separated by collection location/method, colour coded by their composition. **Dark Blue** groups samples that were “as expected” with no other notable compounds *detected*, **Purple** groups samples that contained the expected drug *and* other unexpected active(s), **Magenta** groups samples that only contained unexpected active(s) (the expected drug was not found), **Salmon** groups samples where we were unable to determine the composition, and **Lime** displays samples where no active compounds were detected.



# Substance Drug Checking

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## What did we find?

Expanding on the figures shown on the previous page, for each drug category and collection location/model, we list the number of samples that contained the expected active and/or other notable components. Samples where no detected actives have been excluded for brevity.

Opioid - Down	Campbell River	Comox Valley	Duncan	Port Alberni	Substance	Outreach
<b>Expected Active(s) Only</b>				1	59	9
Fentanyl				1	59	9
<b>Expected* + Unexpected Active(s)</b>	4	6	5	3	39	36
Acetylcodeine					2	3
Acetylmorphine (MAM, 6-MAM)					7	6
Benzodiazepine (unknown type)	3				1	4
Bromazolam	1	2	4	1	11	7
Carfentanil					1	2
Cocaine HCl					2	
Desalkylgidazepam					1	4
Ethylbromazolam					5	5
Etizolam						5
Fentanyl	4	6	5	3	39	35
Flubromazepam		1				1
Fluorofentanyl	2	2	1	2	25	16
Heroin					7	6
Ketamine		1				
Levamisole						2
Lidocaine						2
Medetomidine	1	3	1	1	2	9
Methamphetamine					1	
Xylazine					1	3
ortho-Methyl fentanyl					1	1

*Expected Opioid - Down data continued on next page*

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> "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.

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Opioid - Down	Campbell River	Port Alberni	Substance	Outreach
<b>Unexpected Active(s) Only</b>	<b>4</b>	<b>14</b>	<b>15</b>	<b>8</b>
Acetaminophen (Tylenol)			2	
Benzodiazepine (unknown type)		1		
Bromazolam	2	3	1	
Carfentanil			1	2
Cocaine Base (crack, rock, hard)		1		1
Cocaine HCl		3		
Desalkylgidazepam	2	1		
Despropionyl para-fluorofentanyl			1	
Ethylbromazolam		3	4	2
Fentanyl or analogue		1	1	
Fluorofentanyl	4	10	10	5
Lorazepam (Ativan)			1	
Medetomidine		2	1	1
Methamphetamine		1		
Phenacetin			1	2
<b>Unknown Composition</b>			<b>2</b>	
Unknown			2	

MDMA/MDA	Comox Valley	Substance	Outreach
<b>Expected Active Only</b>	<b>9</b>	<b>50</b>	<b>19</b>
MDA	1	4	4
MDMA	8	46	15
<b>Expected* + Unexpected Active(s)</b>		<b>1</b>	<b>1</b>
MDA* + MDMA			1
MDMA* + Methamphetamine		1	
<b>Unexpected Active(s) Only</b>		<b>1</b>	<b>1</b>
MDA (MDMA Expected)		1	
MDMA (MDA Expected)			1

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Cocaine	Campbell River	Comox Valley	Duncan	Port Alberni	Substance	Outreach
<b>Expected Active Only</b>	<b>10</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>62</b>	<b>28</b>
Cocaine Base (crack)	7	3	1		15	7
Cocaine HCl	3	3	3	1	47	21
<b>Expected* + Unexpected Active(s)</b>		<b>1</b>			<b>11</b>	<b>1</b>
Cocaine HCl* + Acetaminophen (Tylenol)					1	
Cocaine HCl* + Ketamine					1	
Cocaine HCl* + Levamisole					9	
Cocaine HCl* + MDMA						1
Cocaine Base (crack)* + Phenacetin		1				
<b>Unexpected Active(s) Only</b>			<b>1</b>		<b>1</b>	
Bromazolam			1			
Fentanyl			1		1	
Fluorofentanyl			1			

Dissociatives	Comox Valley	Port Hardy	Substance	Outreach
<b>Expected Active Only</b>	<b>4</b>		<b>36</b>	<b>23</b>
DMXE (Deoxymethoxetamine)				1
Ketamine	4		36	20
MXiPr (Methoxisopropamine)				1
O-PCE (Deschloro-N-ethyl-ketamine)				1
<b>Unexpected Active(s) Only</b>		<b>1</b>		<b>5</b>
2-fluoro-2-oxo-PCE (2F-NENDCK, CanKet)				1
3-Me-PCP				3
Arylcyclohexylamine (unknown type)				1
Ketamine Base		1		
Unknown				1
<b>Unknown Composition</b>				<b>2</b>
Unknown				2

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# Substance Drug Checking

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Benzodiazepines	Comox Valley	Port Alberni	Substance	Outreach
<b>Expected Active Only</b>	<b>1</b>		<b>4</b>	<b>14</b>
Alprazolam (Xanax)			1	4
Avizafone				1
Bretazenil				1
Bromazolam			1	1
Diazepam (Valium)			2	2
Ethylbromazolam				1
Ethylflualprazolam				1
Etizolam	1			2
Flualprazolam				1
<b>Unexpected Active(s) Only</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>3</b>
3-hydroxy Desalkylgidazepam				1
Acetaminophen (Tylenol)				1
Benzodiazepine (unknown type)	1	1	1	1
Bromazolam			1	
Clonazepam (Klonopin)				1
Ethylbromazolam		1	1	
Etizolam			1	
Flualprazolam			1	
Fluorofentanyl		4		
Medetomidine		1		
Xylazine		1		

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Opioid - Other	Substance	Outreach
<b>Expected Active Only</b>	<b>9</b>	<b>3</b>
Acetaminophen (Tylenol)		1
Hydromorphone (Dilaudid)	4	
MGM-15		1
Morphine	1	
Oxycodone (Oxycontin)	4	2
<b>Expected* + Unexpected Active(s)</b>	<b>1</b>	
Acetaminophen (Tylenol)	1	
Oxycodone (Oxycontin)	1	
<b>Unexpected Active(s) Only</b>	<b>1</b>	
Hydromorphone (Dilaudid)	1	

Methamphetamine	Campbell River	Duncan	Port Alberni	Substance	Outreach
<b>Expected Active Only</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>15</b>	<b>8</b>
Methamphetamine	1	1	2	15	8
<b>Expected* + Unexpected Active(s)</b>	<b>1</b>		<b>1</b>	<b>1</b>	
Methamphetamine* + Cocaine Base (crack)				1	
Methamphetamine* + Fentanyl or analogue	1				
Methamphetamine* + Fluorofentanyl			1		
<b>Unexpected Active(s) Only</b>				<b>1</b>	
Ketamine				1	

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Psychedelics	Comox Valley	Substance	Outreach
<b>Expected Active(s) Only</b>	<b>2</b>	<b>9</b>	<b>14</b>
2C-B		5	6
2C-D			1
3C-P			1
4-HO-MET (Metocin, Colour)	1		1
5-MeO-DMT			1
Allylescaline			1
Ketamine		1	
LSD (acid)	1	3	2
MDMA		1	
Mescaline			1
<b>Expected* + Unexpected Active(s)</b>			<b>7</b>
2C-I* + 2C-B, Unknown			1
5-MeO-DMT* + Unknown			1
5-MeO-MiPT (Moxy)* + Unknown			1
DMT (Dimethyltryptamine)* + Unknown			3
LSD (acid)* + Unknown			1

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# Substance Drug Checking

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Other	Comox Valley	Substance	Outreach
<b>Expected Active(s) Only</b>	<b>5</b>	<b>13</b>	<b>18</b>
2-MMC	1		
3-MMC (Metaphedrone)	1		2
4-MMC (Mephedrone)	1	5	7
5-APB			1
Amphetamine			1
Cannabidiol (CBD)	1		
Clomiphene			1
GHB		2	1
Ivermectin		1	
Lisdexamfetamine dimesylate (Vyvanse)		1	2
Mebendazole		1	
Methylphenidate (Ritalin)		1	
Oxandrolone			1
Phenibut			1
THCA	2		
Tadalafil (Cialis)		1	1
Zolpidem (Ambien)		1	
<b>Expected* + Unexpected Active(s)</b>		<b>1</b>	<b>4</b>
4-MMC (Mephedrone)* + 4-MDMC (4-Methyldimethcathinone)			3
4-MMC (Mephedrone)* + Unknown			1
GHB* + GBL		1	
<b>Unexpected Active(s) Only</b>	<b>1</b>	<b>1</b>	<b>2</b>
4-MMC (Mephedrone)	1		
Methamphetamine		1	1
Trenbolone enanthate			1

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# Substance Drug Checking

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Unknown	Campbell River	Duncan	Port Alberni		Substance	Outreach
<b>Unexpected Active(s) Only</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>3</b>
4-MMC (Mephedrone)						1
Benzodiazepine (unknown type)	1			1		
Bromazolam	1				1	
Chlorphine		1				
Cocaine Base (crack)					1	
Cocaine HCl		2	1		2	
Deschloroetizolam		1				
Fentanyl	2				2	
Fentanyl or analogue				1		
Fluorofentanyl	2		1			
Ketamine		1			1	2
Levamisole			1			
MDMA		1				
Methamphetamine	1				1	
THCA					1	
Xylazine					2	

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>“Benzodiazepine (unknown type)” and “Fentanyl or analogue” results are based on a positive strip test and are unconfirmed by paper spray.

# Substance Drug Checking

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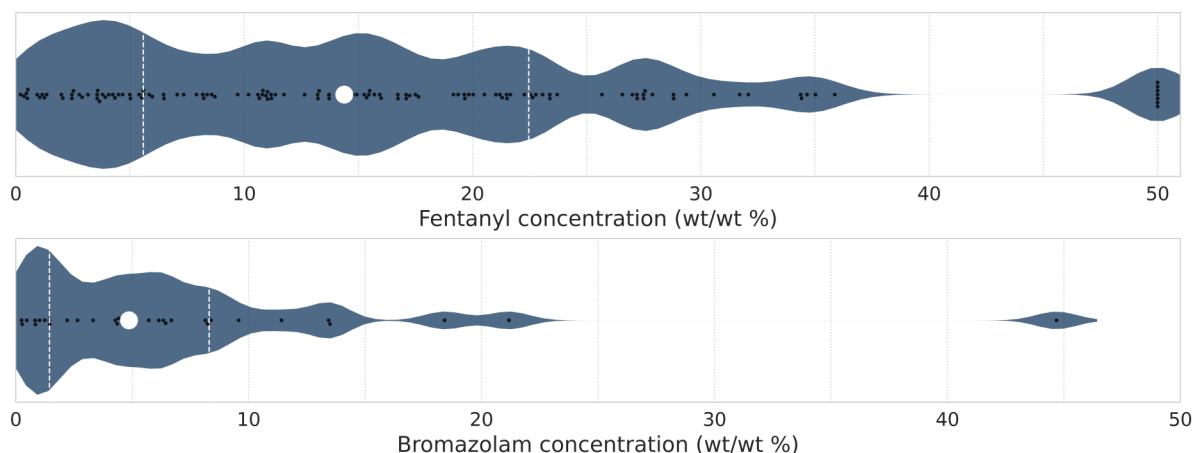
## Quantification

Using paper spray mass spectrometry (PS-MS) data, we were able to quantify low concentration compounds. These aggregate values are *inclusive to all expected drug categories* in which the active drugs are found. Weight percentage is reported below. “IQR” is the interquartile range: the concentration range that contains half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	134	14.4%	0.2%	>50.0%*	5.6% - 22.5%
Fluorofentanyl	70	7.9%	0.2%	>50.0%*	3.2% - 18.4%
Bromazolam	31	4.9%	0.2%	44.7%	1.5% - 8.3%
Medetomidine	22	1.0%	0.3%	10.7%	0.5% - 1.8%
Ethylbromazolam	22	3.1%	0.6%	>50.0%*	1.6% - 6.6%
Acetylmorphine (MAM, 6-MAM)	13	0.4%	0.2%	5.1%	0.4% - 1.3%
Heroin	13	1.9%	0.6%	10.1%	1.3% - 6.2%
Etizolam	9	3.2%	<0.1%	>50.0%*	0.4% - 18.3%
Oxycodone (Oxycontin)	7	6.5%	1.2%	>50.0%*	2.9% - 13.1%
Methamphetamine	6	7.7%	1.8%	>50.0%*	5.8% - 39.8%
Carfentanil	6	0.6%	0.1%	1.4%	0.2% - 0.8%
Desalkylgizapam	6	0.8%	0.1%	8.6%	0.3% - 0.9%
Xylazine	5	0.8%	0.6%	11.3%	0.7% - 2.0%

## Distribution of Fentanyl and Bromazolam Concentrations

The concentrations of fentanyl and bromazolam for every sample quantified across *all expected drug categories and service models* are illustrated below to highlight the variability in the unregulated drug market. **Black Dots** are individual samples, the large **white dot** marks the median concentration, the **dashed white lines** bound half of the quantified samples (IQR), and the **width** of the coloured region is proportional to the number of samples in a concentration range.



\*There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.

# Substance Drug Checking

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## Opioid - Down Quantification by Service Model

Here we examine the regional variability in the unregulated market. The table below expands on the data presented on the previous page and focuses only on select actives within *expected opioid-down samples*, separated by collection site. Weight percentage is reported; “IQR” is the interquartile range: the range that contains half of the quantified samples.

Service Model	Compound	# Quant.	Median	Min	Max	IQR
<b>Campbell River</b> 8 total down samples 100% (8/8) benzo-positive	Fentanyl	1		4.5%		
	Fluorofentanyl	1		11.7%		
	Medetomidine	1		1.4%		
<b>Comox Valley</b> 6 total down samples 50% (3/6) benzo-positive	Bromazolam	2		6.4%	8.4%	
	Fentanyl	6	12.6%	0.9%	23.4%	6.8% - 18.0%
	Fluorofentanyl	2		3.7%	5.5%	
	Medetomidine	3	0.6%	0.3%	10.7%	
<b>Duncan</b> 5 total down samples 80% (4/5) benzo-positive	Bromazolam	4	12.4%	5.7%	18.4%	10.0% - 14.7%
	Fentanyl	5	21.5%	6.5%	34.4%	15.5% - 29.4%
	Fluorofentanyl	1		0.3%		
	Medetomidine	1		1.7%		
<b>Port Alberni</b> 18 total down samples 33% (6/18) benzo-positive	Bromazolam	3	3.3%	0.3%	6.3%	
	Ethylbromazolam	3	2.5%	0.9%	3.6%	
	Fentanyl	4	13.3%	0.5%	>50.0%*	8.1% - 24.5%
	Fluorofentanyl	8	11.8%	0.2%	28.0%	5.7% - 14.2%
	Medetomidine	3	1.0%	0.6%	1.1%	
<b>Substance</b> 118 total down samples 19% (22/118) benzo-positive	Bromazolam	10	5.5%	1.4%	44.7%	4.4% - 7.8%
	Carfentanil	2		0.6%	0.6%	
	Ethylbromazolam	9	2.5%	0.6%	6.6%	1.5% - 5.8%
	Fentanyl	74	13.5%	0.2%	>50.0%*	5.1% - 22.0%
	Fluorofentanyl	31	10.5%	0.2%	>50.0%*	4.7% - 19.4%
	Medetomidine	3	1.8%	0.5%	2.2%	
	Xylazine	1		0.7%		
<b>Outreach</b> 53 total down samples 47% (25/53) benzo-positive	Bromazolam	7	2.7%	0.8%	21.2%	1.1% - 8.9%
	Carfentanil	4	0.4%	0.1%	1.4%	0.1% - 1.0%
	Ethylbromazolam	7	4.1%	1.3%	14.1%	1.9% - 7.3%
	Fentanyl	41	15.4%	0.4%	35.9%	7.3% - 23.1%
	Fluorofentanyl	21	4.0%	0.3%	>50.0%*	2.8% - 10.3%
	Medetomidine	10	0.8%	0.3%	8.9%	0.4% - 3.0%
	Xylazine	3	2.0%	0.6%	11.3%	

\*There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.

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## Additional Services

At Substance we provide access to other services in addition to drug checking. These include but are not limited to access to harm reduction supplies (bubble pipes, naloxone, test strip kits, etc.), general support, referrals to substance use programs and to other agencies. During the month of December, our staff handled 821 of these interactions, in addition to, checking 694 samples.

Substance Drug Checking is based out of the University of Victoria and operates community-wide drug checking services within Campbell River, the Comox Valley, Duncan, Port Alberni, Port Hardy, and 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 December benefit from this service. We have partnered with Dr. Chris Gill and the team at Vancouver Island University to improve detection and reporting using their methods for the paper spray - mass spectrometer.

See the [blog portion](#) of our website to view our more detailed interpretations of our reports.

*Our project works on Indigenous land. We provide drug checking, harm reduction education and support across many territories on what is colonially known as 'Vancouver Island.' We also act as a resource for these services across the province colonially known as 'British Columbia.' We honour and offer respect to many nations for their stewardship, care and leadership on these lands.*

*Our project originated on the territories of the lək̓ʷəŋən speaking peoples, including the Songhees and Xwsepsum (Esquimalt) Nations, and the W̱SÁNEĆ (Saanich) Nations on whose land the University of Victoria is located. Some of the territories we are honoured to work across specifically include: Halalt, Lyackson, Meluxulh (Malahat), Punelux-utth', Quw'utsun, Stz-uminus, and Ts'uubaa-asatx; Hupačasath and Tsessaht; K'ómoks; and Laich-kwil-tach.*

*We acknowledge the inextricable links between research, colonization and racism against Indigenous peoples, which continue to this date. Ending the violence faced by people who use drugs cannot be achieved without actively working on decolonization.*

For more information please visit: [substance.uvic.ca](https://substance.uvic.ca)

We gratefully acknowledge our partners on this project



Agilent Technologies



AVI Health and Community Services



BC Ministry of Health



BC Ministry of Mental Health and Addictions



BC SUPPORT Unit Vancouver Island Centre



Canadian Institute for Health Research



Canadian Institute for Substance Use Research



Digital Research Alliance of Canada



Island Health Authority



NSERC Canada



SOLID Outreach



University of Victoria



Vancouver Island University



Victoria Hospitals Foundation



Vancouver Foundation



Westgrid

