Preliminary Results for May 2021

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, 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:

- Fentanyl analogues found in 10 samples, including carfentanil (8) and fluorofentanyl (2)
- 97% of expected opioid-down samples contained fentanyl
- Median fentanyl concentration found of 10.4%, with a maximum of 62.2% found in an expected opioid-down sample
- Benzodiazepines and/or etizolam found in 45% of expected opioid-down samples
- The maximum concentration of etizolam found was 17.8 % in an expected opioid-down sample
- N-ethylpentylone was found in an expected MDMA sample

Read our blog for further interpretations of our May data.

What were people bringing to be tested?

Expected substance	n	
Stimulant (cocaine HCl or base, methamphetamine)	72	
Opioid Down (fentanyl and/or heroin)	66	
Psychedelic (MDMA, MDA, LSD, DMT)	25	
Dissociative (ketamine)	12	
Benzodiazepine (alprazolam, clonazepam)	9	
Other Opioid (OxyContin, Dilaudid, morphine)	8	
Other Depressant (GHB)	2	
Other (marijuana)	1	
Unknown/Missing	23	

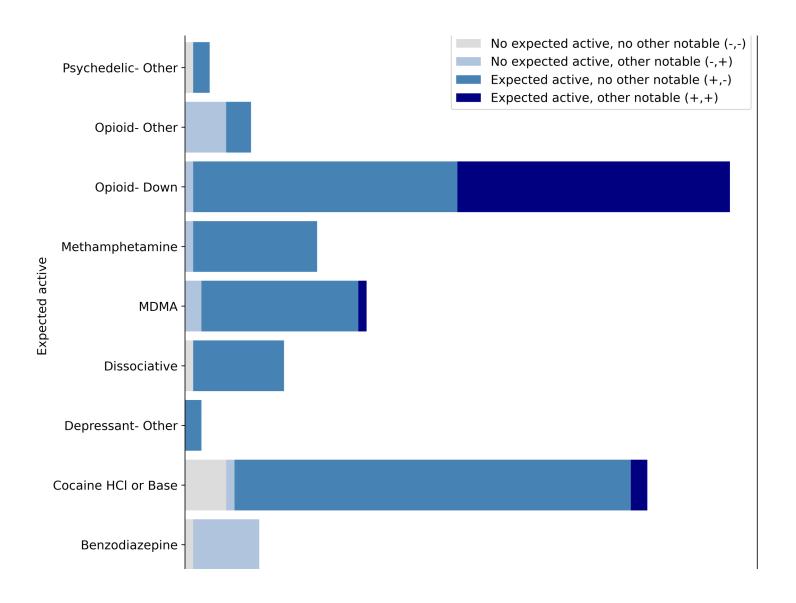
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Samples Tested 1 - 31 May 2021

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



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. 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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What did we find?

For each expected category we list the number of samples that contained the expected active or other notable components according to the following categorizations:

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

	Opioid Down	66
(+,-)	Expected active, no other notable	32
	Fentanyl	31
	Heroin	1
(-,+)	No expected active, other notable	1
	Cocaine	1
(+,+)	Expected active*, other notable	33
	Fentanyl [*]	33
	Etizolam	29
	Carfentanil	7
	Benzodiazepine (undifferentiated)	2
	Fluorofentanyl	2
	Flualprazolam	1
	Methamphetamine	1

	Methamphetamine	16
(+,-)	Expected active, no other notable	15
	Methamphetamine	15
(-,+)	No expected active, other notable	1
	Ketamine	1

	Cocaine HCI or Base	56
(+,-)	Expected active, no other notable	48
	Cocaine HCl	42
	Cocaine Base	6
(-,-)	No expected active, no other notable ¹	5
(-,+)	No expected active, other notable	1
	Fentanyl	1
(+,+)	Expected active*, other notable	2
	Cocaine HCI*	2
	Procaine	2

	Dissociative	12
(+,-)	Expected active, no other notable	11
	Ketamine	11
(-,-)	No expected active, no other notable	1

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	Psychedelic	25
(+,-)	Expected active, no other notable	21
	MDMA	19
	DMT	1
	LSD	1
(-,-)	No expected active, no other notable	1
(-,+)	No expected active, other notable	2
	MDA	1
	N-Ethylpentylone	1
(+,+)	Expected active [*] , other notable	1
	MDMA*	1
	MDA	1

	Benzodiazepine	9
(-,-)	No expected active, no other notable ¹	1
(-,+)	No expected active, other notable	8
	Etizolam	5
	Flualprazolam	3

	Other Depressant	2
(+,-)	Expected active, no other notable	2
	GHB	2

	Other Opioid	8
(+,-)	Expected active, no other notable	3
	Hydromorphone (Dilaudid)	3
(-,+)	No expected active, other notable	5
	Hydromorphone (Dilaudid)	4
	Lidocaine	1

	Other	1
(+,+)	Expected active [*] , other notable	1
	THC	1
	Fentanyl or analogue	1

Unknown / Missing	21
Fentanyl	9
Methamphetamine	4
Etizolam	3
MDMA	3
Benzodiazepine (undifferentiated)	2
Cocaine	2
Carfentanil	1
Cephalexin	1
Flualprazolam	1
Heroin	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 substances may be present in trace concentrations. *Expected active component. ¹May be due to limitations of technology to detect certain substances. ²Benzodiazepine (undifferentiated) results are based on a positive benzo strip test and are unconfirmed by paper spray. For these samples, etizolam was also present at low concentrations that are not believed to have caused of the positive strip result. We acknowledge there are limitations to these results, which we hope to improve upon with further method development.

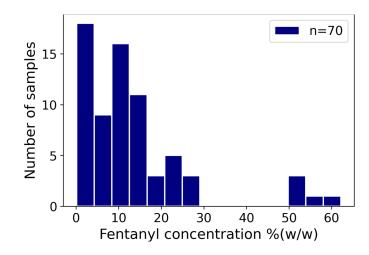
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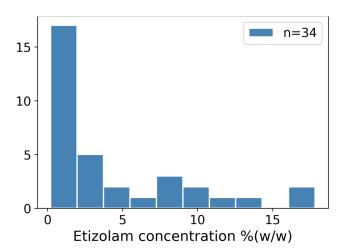
Quantification

Using paper spray mass spectrometry data included by our collaborators at Vancouver Island University, 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.

Substance	# quant	median	min	max
Fentanyl	70	10.4 %	0.1 %	62.2 %
Etizolam	34	1.8 %	0.2 %	17.8 %
Carfentanil	7	0.2 %	0.07 %	0.8 %
Fluorofentanyl	2	3.4 %	3.1 %	3.8 %
Heroin	2	43.5 %	3.0 %	83.9 %

Distribution of concentrations.





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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. We have now partnered with Dr. Chris Gill and the team at Vancouver Island University to improve detection and reporting using their paper spray - mass spectrometer. 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

We gratefully acknowledge our partners and funders on this project

Our Partners

Compute Canada SOLID Outreach **Agilent Technologies** IBM Canada **AVI Health and Community Services** STS Pharmacy Island Health Authority BC Ministry of Health University of Victoria Lantern Services BC Ministry of Mental Health and Addictions Vancouver Island University PerkinElmer Inc **BC Support Vancouver Island Centre** Westgrid Canadian Institute for Substance Use Research **ProSpect Scientific**

Our Funders

Health Canada Substance Use and Addictions Program

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