

**Topic:** Identifying demographic, substance use, and health services characteristics associated with obtaining Prescribed Safer Supply: analysis from the Harm Reduction Client Survey

Date: January 20th 2023

Data Source: Harm Reduction Client Survey

### **Key Findings:**

- Overall, a small proportion of HRCS respondents (N=81(16.5%)) received a prescribed safer supply (PSS) prescription.
  - Among those who received PSS, 68% (N=55) received an opioid, 33.3% (N=27) received a stimulant, and 10% (N=8) received a benzodiazepine.
- Compared to people who did not receive PSS, PSS recipients were:
  - Significantly more likely to both smoke and inject drugs in the last six months (46.9% vs 24.9%, p=0.001)
  - Significantly more likely to use substances daily (86.5% vs. 73.5%, p=0.043)
  - Younger ( $17\% \ge 50$  years old vs.  $35\% \ge 50$  years old, p=0.003)
- In logistic regression models controlling for demographics (age, sex, urbanicity), people already most engaged in services are the most likely to receive PSS. People who accessed drug checking services (OR:1.67 (95%CI: 1.00-2.79)), overdose prevention sites (OR: 2.08 (95%CI: 1.20-3.60)), and opioid agonist treatment (OR: 4.48(95% CI: 2.13-9.40) had significantly higher odds of PSS receipt compared to people who did not.

### Background

- The COVID-19 pandemic was preceded by an ongoing unregulated drug poisoning emergency, which has continued to worsen since the pandemic, with record number of illicit drug toxicity deaths in 2020 (N=1775) and in 2021 (N=2264)<sup>1</sup>.
- In March 2020, the BC Centre for Substance Use issued guidance for physicians and nurse practitioners to prescribe alternatives (opioids, stimulants, benzodiazepines) to the illicit drug supply for people at risk of overdose during COVID-19<sup>2</sup>.
  - In July 2021, the Ministry of Health released Prescribed Safer Supply (PSS) policy direction providing guidance for ongoing prescribing of these medications beyond "Risk Mitigation Guidance", which was introduced as an emergency COVID-19 pandemic-related response<sup>3</sup>.



- Data from the BCCDC suggests that 12,207 people received at least one dispensation of prescribed safer supply prescriptions between March 27 2020 and December 31 2021<sup>4</sup>.
- HRCS survey respondents are people who use drugs and access harm reduction services in BC. People who use drugs in BC (including people who access HR sites) face a risk of overdose and other drug-related harms from use of the illicit drug supply.
  - Contact with harm reduction programs serves as an opportunity for connection to other interventions, including prescribed safer supply.

This analysis aims to:

- 1) Describe the demographic, substance use, and service access characteristics associated with receiving a PSS prescription
- 2) Examine the association between last six month substance use service access and receiving a PSS prescription

### **Study Design and Methods:**

#### **Data Source:**

- Data come from the Harm Reduction Client Survey administered at 17 harm reduction sites across BC.
  - Participating sites covered each health authority in British Columbia, including communities in large urban centres (N=8), medium population centres (N=3), and small population centres (N=6) (See Figure 1).
- People aged 19 or older who used illicit substances in the last six-months were invited to complete this cross-sectional survey.
- Data were collected by staff at Harm Reduction sites and participants were compensated \$15.
- All data were collected between March 2021-January 2022.
- All data are self-reported through the survey, and have not been confirmed through other sources.

### Analytic sample

Participants were considered eligible for the present analysis if they used illicit opioids, illicit stimulants, or benzodiazepines (including licit benzodiazepines) in the last three days (N=491). This ensured all included participants were those who



would be eligible<sup>1</sup> to receive a prescribed opioid, stimulant, or benzodiazepine through PSS Guidance.

### Analysis:

- Descriptive statistics (Chi-square tests) were used to compare the substance use, demographic, and health and substance use services characteristics of people who did and did not obtain a PSS prescription.
- Logistic regression models were run to examine the association between each service use variable and receipt of PSS, adjusting for pre-determined confounding variables (i.e. age, sex, urbanicity).
- Indigenous ancestry was self-reported, as First Nations, Métis, or Inuit. The number of Métis respondents, and proportion who received PSS are reported with approval from Métis Nation BC. Future reporting of HRCS data among First Nations peoples may follow after further engagement with partners at the First Nations Health Authority in 2023.

### **Findings:**

- Overall, a small proportion of HRCS respondents eligible for PSS (N=81(16.5%)) received a PSS prescription.
- Among those receiving a PSS prescription, 67.9% (N=55) received an opioid, 33.3% (N=27) received a stimulant, and 9.9% (N=8) received a benzodiazepine. These exceed 100% as some people received more than one PSS medication.
- Among Métis respondents (N=56), 12.5 (N=7) reported receiving prescribed safer supply. This was similar to the proportion of respondents in the entire sample who reported receiving prescribed safer supply, 16.5% (N=81)<sup>2</sup>.

## In terms of the characteristics associated with receiving PSS, we found: (See Table 1)

- People who received PSS were significantly more likely to report using any illicit opioid (including prescription opioids not prescribed to them, heroin and fentanyl) compared to people who did not receive PSS (82.7% vs 68.3%).
- A higher proportion of PSS recipients used crystal meth compared to people who did not receive PSS (85.2% vs 77.1%, p=0.105), while both cocaine (7.4% vs 22.7%, p=0.002) and crack cocaine (23.5% vs 29.5%, p=0.270) were less common among PSS recipients compared to non-PSS recipients.

<sup>1</sup> Eligibility in this analysis is determined by illicit substance use. In practice, eligibility is determined by clinicians via patient interview (e.g. assessing for medical contrainidications).

<sup>&</sup>lt;sup>2</sup> Reporting of PSS receipt among Métis people was approved by Métis Nation BC.



- Among all respondents, 60% (N=296) used both opioids and stimulants in the prior 3 days, 28.7% (N=141) used a stimulant but no opioid, and 10.4% (N=51) used an opioid but no stimulant.
- Compared to people who did not receive PSS, PSS recipients were:
  - Significantly more likely to use their drugs by both smoking and injection in the last six months (46.9% vs 24.9%, p=0.001)
  - Significantly more likely to use substances daily (86.5% vs. 73.5%, p=0.043)

### In terms of the demographic profile of PSS recipients compared to people who did not receive PSS, we found: (See Table 2)

- PSS recipients were significantly younger than those who did not receive PSS.
  - For example, people aged 50 or older made up 35.6% of people who did not receive PSS, and 17.3% of those who did receive PSS (p=0.003).
- There were no significant differences in PSS receipt by gender, housing, or employment status.
- When considering health authority region of the harm reduction site where the respondent completed the survey, Interior Health contributed the most respondents (27.7%) followed by Island (22.4%), Northern (17.3%), Fraser (19.3%), and Vancouver Coastal (13.2%)
  - While respondents from VCH made up only 13% of the sample, they accounted for nearly one quarter (24.7%) of people who received PSS.
  - Respondents in Northern Health made up only 17.3% of the sample, and 35.8% of all people who received PSS.
- Overall, 43% of respondents in small population centres received PSS, compared to 37% in medium population centres, and 20% in large urban centres.
  - This finding is a reflection of the sites selected for inclusion in the HRCS and the connections these sites had with PSS prescribers/programs, and is not an accurate representation of PSS access in all small, medium and large population centres across the province.

### When considering services accessed in last six months (Table 2), we found:

- PSS recipients were significantly more likely than non-PSS recipients to access:
  - Drug checking services (50.6% vs. 36.8%, p=0.020)
  - Overdose prevention sites (44.0% vs. 28.3%, p=0.007)
  - Opioid agonist treatment (65.4% vs. 34.2%, p<0.001)

### In logistic regression models, we found:

- All forms of service access in the prior six months were associated with increased odds of PSS receipt:
  - People who accessed drug checking services had 1.67 (95%CI: 1.00-2.79) times the odds of receiving PSS compared to people who did not (Table 3).



- People who accessed overdose prevention sites had more than twice the odds (2.08 (95%CI: 1.20-3.60)) of receiving PSS compared to people who did not (Table 4).
- People who accessed OAT had more than 4.48 (95%CI: 2.13-9.40) the odds of receiving PSS compared to people who did not (Table 5).

### Interpretation:

- Overall, the proportion of people who have received PSS is low, reflecting that the current approach to PSS is not reaching all those in need
- There are high rates of concurrent substance use: >60% of respondents used both opioids and stimulants, and only 10% of respondents used opioids and no stimulants.
  - Access to a safe supply of different substance types (e.g. opioids and stimulants) must be prioritized to create separation from the illicit drug supply for the many people who engage in polysubstance use.
- People who had accessed Drug Checking Services, Overdose Prevention Sites, and OAT were also the most likely to have received PSS.
  - A broader range of medication sub-types might be required to be prescribed through PSS in order to reach and engage people who are not currently engaged in existing harm reduction and treatment services.
  - Additional outreach strategies and service models will be needed to reach people who are not already connected to services and to improve accessibility of harm reduction and treatment services (i.e. increased service hours, and reduced wait lists).
- Regional differences are not representative of provincial trends; however they do highlight the efforts in specific communities to reach and engage people at HR sites with access to PSS.
  - Rates of access to PSS in this survey were higher in Northern Health, as compared to other Health Authorities. This is due in large part to a peerled model at one of the HRCS sites in Northern Health, in which people with lived and living experience of substance use supported connection to a prescriber and low-barrier delivery of substances.

### Limitations:

- The HRCS reflects a convenience sample, and therefore is not representative of the distribution of PSS across the province.
- Because the HRCS samples people who are attending a harm reduction supply distribution site, these results reflect the responses of people who are already receiving some health system services. Particular caution should be taken in extending conclusions to populations with less connection to the health care system.



- Participants were eligible for the analysis if they reported any illicit opioid use, illicit stimulant use, or any benzodiazepine use in the prior 3 days. This inclusion criteria was applied to ensure the sample included only those who were eligible to receive an opioid, stimulant, or benzodiazepine PSS prescription at the time of survey completion. There were 7 participants who reported PSS receipt who did not report use of the substances listed above in the last 3 days, and thus were not included in the analysis. We cannot disentangle whether PSS had separated these participants from the illicit drug supply. Furthermore, because this was a crosssectional survey and the question about PSS receipt did not specify a time period for access (ever, yes vs. no), we could not determine whether use of illicit substances was reduced among participants included in the analysis following access to PSS.
- This is a cross-sectional survey and therefore we cannot draw any conclusions about temporal relationships between the receipt of PSS and illicit substance use.
- Because of the way the questions were posed, we don't know when participants received PSS medications (i.e. past, currently, etc), nor for how long they received PSS (i.e. one time prescription, long-term prescription).
- Other important data relative to the dispensation of PSS medication (e.g. daily dispense) is not available in this study.

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### Acknowledgement:

The authors would like to acknowledge members of Professionals for Ethical Engagement of Peers of Peers (PEEP) who revised this knowledge update and provided feedback.



### Please cite this document as:

Identifying demographic, substance use, and health services characteristics associated with obtaining Prescribed Safer Supply: analysis from the Harm Reduction Client Survey (Knowledge Update). Vancouver, BC: BC Centre for Disease Control; 2023.

All inferences, opinions, and conclusions drawn in this Knowledge Update are those of the authors, and do not reflect the opinions or policies of the Data Steward(s).

### **References:**

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3. Ministry of Health, Ministry of Mental Health and Addictions. Access to Prescribed Safer Supply in British Columbia: Policy Direction, 2021.

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## Fig 1: Participating harm reduction sites by health authority region and Statistics Canada Population Centre Classification





	Total	Did not	Received	Chi square
	N= 491	receive PSS	PSS	p-value
		N = 410	N=81	
	N (%)	(83.5%) N (94)	(16.5%) N (%)	
Substance Use (Prior 3		IN (70)	IN (70)	
dev)				
Any illicit opioid (yes)	347(70.7)	280(68.3)	67(82.7)	0.009
Any illicit stimulant	437(89.0)	366(89.3)	71(87.7)	0.671
(ves)	137(09.0)	500(07.5)	/1(0/./)	0.071
No	54(11.0)	44(10.7)	10(12.4)	
Crystal Meth (yes)	385(78.4)	316(77.1)	69(85.2)	0.105
No	106(21.6)	94(22.9)	12(14.8)	0.100
Cocaine(ves)	99(20.2)	93(22.7)	6(7.4)	0.002
No	392(79.8)	317(77.3)	75(92.6)	
Crack(yes)	140(28.5)	121(29.5)	19(23.5)	0.270
No	351(71.5)	289(70.5)	62(76.54)	
MDMA(yes)	30(6.1)	25(6.10)	5(6.2)	0.979
No	461(93.9)	385(93.9)	76(93.8)	
Use any	125(25.5)	98(23.9)	27(33.3)	0.075
Benzodiazepines		× ,	× ,	
(yes)(a)				
No	366(74.5)	312(76.1)	54(66.7)	
Xanax(yes)	31(6.3)	25(6.10)	6(7.4)	0.658
No	460(93.7)	385(93.9)	75(92.6)	
Other Benzos(yes)	113(23.0)	88(21.5)	25(30.9)	0.066
No	378(77.0)	322(78.5)	56(69.1)	
Cannabis(yes)	232(47.3)	202(49.3)	30(37.0)	0.044
No	259(52.7)	208(50.7)	51(63.0)	
Tobacco(yes)	388(79.0)	319(77.8)	69(85.2)	0.136
No	103(21.0)	91(22.2)	12(14.8)	
Alcohol (yes)	209(42.6)	177(43.2)	32(39.5)	0.542
No	282(57.4)	233(56.8)	49(60.5)	
Stimulant and or				
opioid				
Neither opioid nor	3(0.6)	1(0.25)	2(2.5)	0.002
stimulant (benzo only)				
Opioid but not stimulant	51(10.4)	43(10.5)	8(9.9)	
Stimulant but not opioid	141(28.7)	129(31.5)	12(14.8)	
Both	296(60.3)	237(57.8)	59(72.8)	
Substance use practices				
Smoke and/or inject				
(L6M)				

### Table 1: Substance use in the last 3 days by Prescribed Safer Supply (PSS) medication receipt



	Total N= 491	Did not	Received PSS	Chi square
	11-471	N=410	N=81	p-value
	N (%)	(83.5%)	(16.5%)	
		N (%)	N (%)	
Neither	63(12.8)	56(13.7)	7(8.6)	0.001
Inject only	31(6.3)	27(6.6)	4(4.9)	
Smoke only	257(52.3)	225(54.9)	32(39.5)	
Both	140(28.5)	102(24.9)	38(46.9)	
Frequency of use				
Every day	342(69.7)	278(73.5)	64(86.5)	0.043
A few times a week	84(17.1)	75(19.8)	9(12.2)	
A few times a month	26(5.3)	25(6.61)	1(1.4)	
Use drugs alone				
Never	51(10.4)	38(9.64)	13(16.46)	0.290
Occasionally	157(32.0)	131(33.3)	26(32.9)	
Often	173(35.2)	145(36.8)	28(35.4)	
Always	92(18.7)	80(20.3)	12(15.2)	
Overdose (opioid)				
Yes	125(25.5)	98(26.3)	27(36.5)	0.076
No	321(65.4)	274(73.7)	47(63.5)	
Overdose (stimulant)				
Yes	52(10.6)	45(12.2)	7(9.2)	0.461
No	393(80.0)	324(87.8)	69(90.8)	
Overdose (op or stim)				
Yes	157(32.0)	126(30.7)	31(38.3)	0.184
No	334(68.0)	284(69.3)	50(61.7)	

**Footnote**: (a) Benzo use includes intentional use of benzos, and use of non-benzo drugs contaminated with benzodiazepines. Total is based on HRCS respondents who used illicit opioids, illicit stimulants, or any benzodiazepines in the last 3 days (and therefore who would be eligible to receive an opioid, stimulant, or benzodiazepine PSS prescription); SRO= single room occupancy; L6M= Last six months The N=81 PSS recipients include: Opioids (N=55); Stimulants (N=27); Benzo (N=8). Among the opioid group (N=35 opioid only; N=17 stimulant and opioid; N=3 opioid and benzo); Among the stimulant group (N=7 stimulant only; N=17 stimulant and opioid; N=3 stimulant and benzo); Among the benzodiazepine group (N=2 benzo opioid; N=3 stimulant and benzo).



# Table 2. Health service and demographic characteristics by Prescribed Safer Supply (PSS) medication receipt

	Total N= 491	Did not receive	Received PSS	Chi square
	N (%)	PSS N= 410 (83.5%) N (%)	N=81 (16.5%) N (%)	p-value
<b>Demographics</b>				
Age				
< 30 years	63(12.8)	44(19.7)	19(23.5)	0.003
30-39 years	128(26.1)	107(26.1)	21(25.9)	
40-49 years	127(25.9)	102(24.9)	25(30.9)	
$\geq$ 50 years	158(32.2)	144(35.1)	14(17.3)	
Unknown	15(3.1)	13(3.2)	2(2.5)	
Gender				
Cis man	307(62.5)	256(62.3)	51(65.4)	0.126
Cis woman	168(34.2)	144(35.6)	24(30.8)	
Transgender and gender diverse	8(1.6)	5(1.2)	3(3.9)	
Missing				
Housing	15(3.1)			
Stable	267(54.4)	227(55.4)	40(49.4)	0.100
Unstable	210(42.8)	169(41.2)	41(50.6)	
Unknown	14(2.9)	14(3.4)	0	
Employment status		. ,		
Employed	94(19.1)	78(19.0)	16(19.8)	0.887
Unemployed	367(74.7)	306(74.6)	61(75.3)	
Unknown	30(6.1)	26(6.3)	4(4.94)	
Urbanicity				
Large urban population centre	167(34.0)	151(36.8)	16(19.8)	0.003
Medium population centre	179(36.5)	149(36.3)	30(37.0)	
Small population centre	145(29.5)	110(26.8)	35(43.2)	
Health Authority				
Fraser Health	95(19.3)	89(21.7)	6(7.4)	< 0.001
Interior Health	136(27.7)	121(29.5)	15(18.5)	
Island Health	110(22.4)	99(24.2)	11(13.6)	
Northern Health	85(17.3)	56(13.7)	29(35.8)	
Vancouver Coastal Health	65(13.2)	45(11.0)	20(24.7)	
L6M service access		, , , , , , , , , , , , , , , , , , ,	<u>&gt;</u>	
Overdose prevention site				
Yes	137(27.9)	104(28.3)	33(44.0)	0.007
No	306(62.3)	264(71.7)	42(56.0)	
Drug checking services		、		
Yes	192(39.1)	151(36.8)	41(50.6)	0.020
No	299(60.9)	259(63.2)	40(49.4)	
			. /	



	Total N= 491 N (%)	Did not receive PSS N= 410 (83.5%) N (%)	Received PSS N=81 (16.5%) N (%)	Chi square p-value
Opioid agonist treatment				
Yes	193(39.3)	140(34.2)	53(65.4)	< 0.001
No	234(47.7)	214(52.2)	20(24.7)	
NA, do not use opioids or PNTA	64(13.0)	56(13.7)	8(9.9)	

**Footnote**: Total is based on HRCS respondents who used illicit opioids, illicit stimulants, or any benzodiazepines in the last 3 days (and therefore who would be eligible to receive an opioid, stimulant, or benzodiazepine PSS prescription); PNTA= Prefer not to answer; L6M= Last six months; OAT= opioid agonist treatment; OPS= overdose prevention site. The N=81 PSS recipients include: Opioids (N=55); Stimulants (N=27); Benzo (N=8); Stable housing includes the following response options: private residence alone or with someone else, other residence (hotels, motels, rooming houses, single room occupancy (SRO), shelters, social/supportive housing etc.); Unstable housing includes shelter, no regular place to stay (homeless, couch surf, No Fixed Address); Employed; yes= paid full or part time or volunteer work; No= unemployed. Urbanicity is based on Statistics Canada Population Centre Classification. Participating sites are mapped in Figure 1.



Table 3. Unadjusted and adjusted odds ratios for associations between L6M Drug Checking and PSS Receipt (N=491)

	Unadjusted OR	Adjusted OR
L6M Drug Checking services access		
No	Reference	Reference
Yes	1.76(1.09-2.84)	1.67(1.00-2.79)
Gender		
Cis Man	Reference	Reference
Cis Woman	0.84(0.49-1.41)	0.75(0.43-1.30)
Transgender and Gender Diverse	3.01(0.70-13.00)	4.56(0.99-21.10)
Age		
<30 years	Reference	Reference
30-39 years	0.45(0.22-0.93)	0.47(0.22-1.00)
40-49 years	0.57(0.28-1.14)	0.60(0.29-1.22)
$\geq$ 50 years	0.23(0.10-0.49)	0.22(0.10-0.51)
Unknown	0.36(0.07-1.73)	0.33(0.06-1.78)
Urbanicity		
Small population centre	Reference	Reference
Medium population centre	0.63(0.37-1.10)	0.75(0.42-1.34)
Large urban population centre	0.33(0.18-0.63)	0.37(0.19-0.73)

**Footnote**: Adjusted models are adjusted for age, sex, urbanicity; Drug checking unadjusted model = N=491; Adjusted model= N=483; N=8 missing on gender.



 Table 4. Unadjusted and adjusted odds ratios for associations between L6M OPS use and PSS

 Receipt (N=491)

	Unadjusted OR	Adjusted OR
L6M Overdose prevention site access		
No	Reference	Reference
Yes	1.99(1.20-3.31)	2.08(1.20-3.60)
Gender		
Cis Man	Reference	Reference
Cis Woman	0.84(0.49-1.41)	0.75(0.42-1.32)
Transgender and Gender Diverse	3.01(0.70-13.00)	4.40(0.92-20.98)
Age		
<30 years	Reference	Reference
30-39 years	0.45(0.22-0.93)	0.55(0.25-1.21)
40-49 years	0.57(0.28-1.14)	0.58(0.27-1.26)
$\geq$ 50 years	0.23(0.10-0.49)	0.25(0.11-0.58)
Unknown	0.36(0.07-1.73)	0.19(0.01-1.88)
Urbanicity		
Small population centre	Reference	Reference
Medium population centre	0.63(0.37-1.10)	0.68(0.37-1.25)
Large urban population centre	0.33(0.18-0.63)	0.34(0.16-0.70)

**Footnote**: Adjusted models are adjusted for age, sex, urbanicity; OPS unadjusted model= 443, N=48 (9.8%) missing on OPS variable; N=8 missing on gender, Adjusted model run on N=435;



Table 5: Unadjusted and adjusted odds ratios for associations between last six month opioid agonist treatment and PSS receipt among people who used opioids in the prior 3 days (N=361)

	Unadjusted OR	Adjusted OR
Opioid agonist treatment		
No	Reference	Reference
Yes	3.69(1.88-7.23)	4.48(2.13-9.40)
Gender		
Cis Man	Reference	Reference
Cis Woman	0.78(0.43-1.41)	0.65(0.34-1.26)
Transgender and Gender Diverse	2.06(0.37-11.58)	2.49(0.40-15.65)
Age		
<30 years	Reference	Reference
30-39 years	0.51(0.23-1.11)	0.51(0.21-1.24)
40-49 years	0.63(0.29-1.38)	0.60(0.25-1.40)
$\geq$ 50 years	0.33(0.14-0.76)	0.25(0.10-0.65)
Unknown	0.41(0.09-2.10)	0.34(0.06-2.05)
Urbanicity		
Small population centre	Reference	Reference
Medium population centre	0.74(0.41-1.34)	0.78(0.40-1.54)
Large urban population centre	0.40(0.19-0.83)	0.48(0.21-1.10)

**Footnote**: Adjusted models are adjusted for age, sex, urbanicity; N=361 used opioids (and thus were eligible for the analysis); No= 128(35.46%); Yes N=192(53.19); Missing, N=41 (11.36%); Adjusted model run on N=314 due to N=6 missing on gender.