

# Substance Use Trends in BC: A Survey of Harm Reduction Clients

**Overall Results for British Columbia** 2013

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# BACKGROUND

British Columbia has an established network of more than 300 harm reduction (HR) supply distribution sites. Prior to 2012, knowledge about high-risk drug use was based primarily on data from two major cities, Vancouver and Victoria. To obtain more comprehensive data, a province-wide survey was conducted through the existing HR supply distribution network in 2012. Regional differences in drug use were identified, informing HR planning to improve health in this marginalized population. Subsequently, a mixed-methods approach evaluated implementation and outcomes to refine the survey tool and process. The report on the 2012 survey can be found online here.<sup>1</sup>

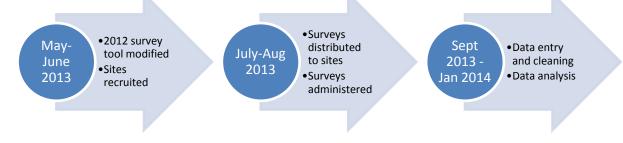
# **OBJECTIVES**

- 1. To expand on the initial 2012 survey by increasing the number of participating sites, and adding questions on crack pipes, equipment sharing, and overdose experiences
- 2. To describe regional differences in substance use and access to harm reduction services
- 3. To provide recommendations for improvement of HR service delivery

# **METHODS**

Figure 1 shows the timeline for the 2013 survey. The 2012 survey tool was amended to address common concerns raised during telephone interviews with a sample of staff and peers (people who have formerly used, or are presently using, illicit drugs). The 2013 survey tool is attached as <u>Appendix A</u>. Sites received revised surveys in July 2013 and had 8 weeks to recruit peers to complete a maximum of 40 surveys per site. Sites were provided \$5/survey to offer participant incentives or defray any costs of survey administration. Survey responses were entered into an MS Access database, and analyzed using SPSS for demographics, drug use by region, HR site usage, access to HR supplies, sharing behaviours and overdose experiences. Overall survey results were weighted to account for population differences in participating communities.

#### Figure 1. Timeline for 2013 Survey



<sup>&</sup>lt;sup>1</sup> http://www.bccdc.ca/NR/rdonlyres/46530CD9-C01A-4AE1-8D12-DB67AE9ED7FA/0/2012\_09\_21\_BCMargotSurveyreport\_FINAL.pdf

## RESULTS

# A. Interpretation of Results

Results from the analysis of the overall survey data for the 5 geographic health authorities<sup>2</sup> are summarized below. The overall survey results (denoted as Total (BC)) are included for comparison purposes. The results are descriptive only and no tests for statistical significance were performed. Because the survey used convenience samples, the characteristics of both the clients and sites that participated may not be representative of all people who use psychoactive substances in BC. Finally, note that the scales on the y-axis are different on each graph.

## **B. Survey Administration**

Across the five HAs, 779 surveys were completed at 34 HR supply distribution sites (Table 1). A map showing the geographic distribution of the participating sites can be found in <u>Appendix B</u>. After applying weights to adjust for the number of survey respondents relative to the total health service delivery area (HSDA) population, the relative contribution of VCH to the overall survey results increased, while the relative contributions of NHA and VIHA decreased (Table 1).

	SITES		SURVEYS		
HEALTH AUTHORITY	# %		#	Unweighted %	Weighted %
Fraser	7	20.6%	156	20.0%	24.7%
Interior	6	17.6%	156	20.0%	18.6%
Northern	8	23.5%	133	17.1%	7.0%
Vancouver Coastal	5	14.7%	103	13.2%	30.2%
Vancouver Island	8	23.5%	231	29.7%	19.5%
Total (BC)	34		779		

Table 1. Distribution of surveys and sites

## **C. Demographics of Survey Respondents**

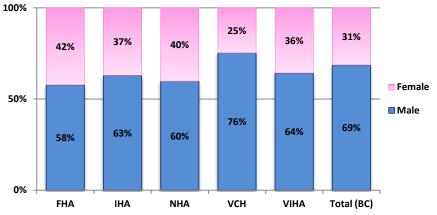
The age and gender distributions of survey respondents are summarized in Table 2 and Figure 2. Overall, the age of respondents ranged from 18 to 72 years. The average age was 41 years overall, and higher in males (42 years) than females (38 years). On average, participants were older in IHA and NHA (43 years) and younger in VCH (38 years). Nearly 70% of respondents were male, and there were more male respondents than female in all HAs. The highest proportion of female respondents was in FHA (42%), while the lowest was in VCH (25%).

<sup>&</sup>lt;sup>2</sup>Abbreviations: HA – Health Authority; FHA – Fraser Health Authority; IHA – Interior Health Authority; NHA – Northern Health Authority; VCH – Vancouver Coastal Health Authority; VIHA – Vancouver Island Health Authority

#### Table 2. Age characteristics of survey respondents (in years)

	MEAN AGE			
HEALTH AUTHORITY	Overall	Male	Female	Age Range
Fraser	41	43	37	20-63
Interior	43	43	43	19-68
Northern	43	44	40	21-72
Vancouver Coastal	38	39	35	18-64
Vancouver Island	41	42	39	19-67
Total (BC)	41	42	38	18-72

#### Figure 2. Gender distribution of survey respondents

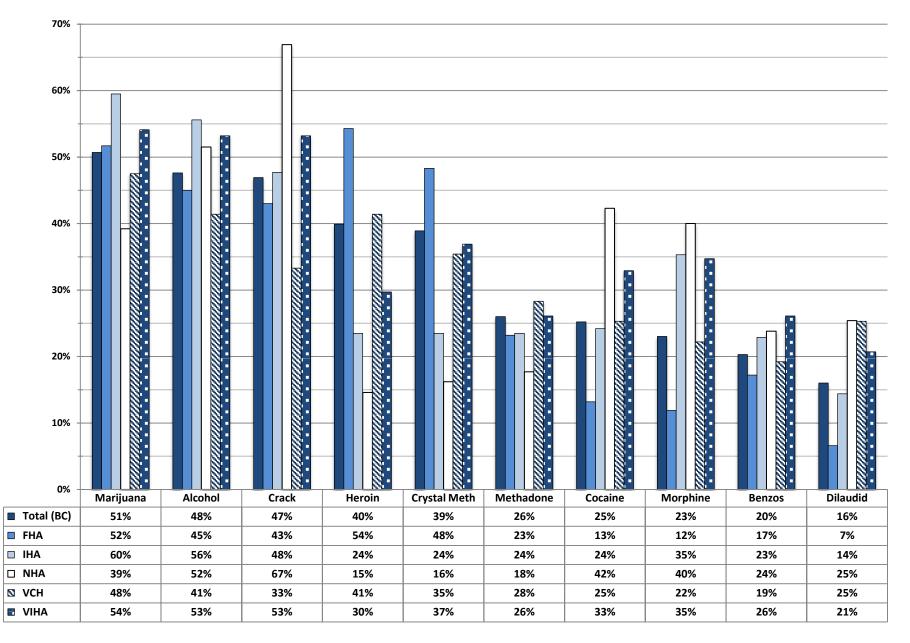


# D. Recent Substance<sup>3</sup> Use (within the past 7 days)

Nearly all (97.5%) of survey respondents reported using a substance in the past 7 days, and the proportion reporting recent substance use was similar across all HAs. The 10 most commonly reported substances used are summarized in Figure 3. Overall, marijuana (51%), alcohol (48%) and crack (35%) were the three most commonly used substances. Substance use patterns varied geographically, with crack use highest in NHA and heroin and crystal meth use highest in FHA. Maps showing the frequencies for each of the 10 most commonly reported substances used, by HSDA, can be found in a separate document here.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Substances include legal drugs and/or illicit drugs and/or alcohol

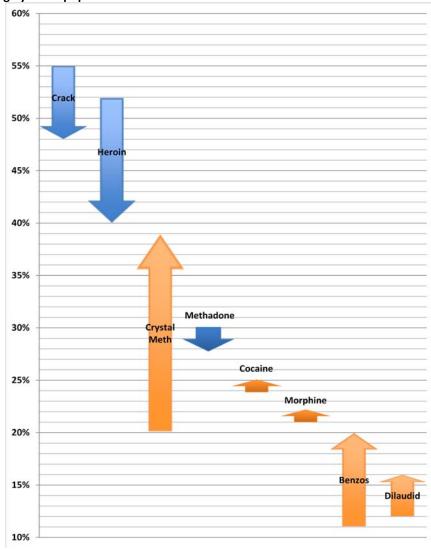
<sup>&</sup>lt;sup>4</sup> http://www.bccdc.ca/prevention/HarmReduction/SubstanceUseTrends/default.htm



#### Figure 3. Percent of respondents reporting recent use of substances overall and by health authority

When compared<sup>5</sup> to the <u>2012 survey</u>,<sup>6</sup> the proportion that reported using crystal meth, cocaine, morphine, benzodiazepines and dilaudid increased in 2013, while the proportion that reported using crack, heroin and methadone decreased (Figure 4).<sup>7</sup> However, these changes may simply reflect differences in methodology between the 2012 and 2013 surveys (time of year, number and geographical distribution of survey sites), rather than true increases or decreases in use.

Figure 4. Change in the proportion of survey respondents reporting recent drug use between the 2012 (N=698) and 2013 (N=755) Surveys on Drug Use Among Harm Reduction Clients in BC. Comparison involved weighting by HSDA population

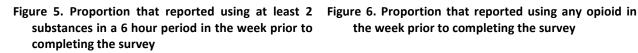


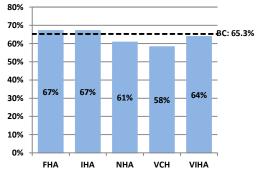
<sup>&</sup>lt;sup>5</sup> Comparison involved weighting each year's results by HSDA population

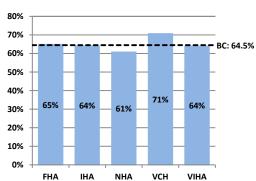
<sup>&</sup>lt;sup>6</sup>http://www.bccdc.ca/NR/rdonlyres/46530CD9-C01A-4AE1-8D12-DB67AE9ED7FA/0/2012\_09\_21\_BCMargotSurveyreport\_FINAL.pdf

<sup>&</sup>lt;sup>7</sup>Marijuana and alcohol do not appear in this figure, as they were not included on the 2012 survey.

Overall, nearly 2/3 of respondents (65%) reported recent polydrug use (Figure 5).<sup>8</sup> Reported polydrug use was lowest in VCH (58%) and highest in FHA and IHA (both 67%).

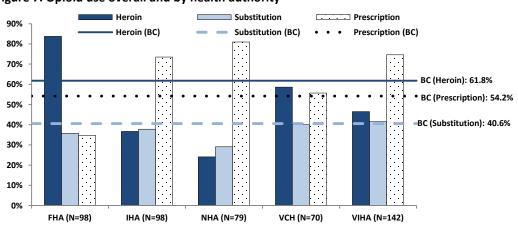






the week prior to completing the survey

# Almost 2/3 of survey respondents (65%) reported using any opioid<sup>9</sup> in the last week, and reported opioid use was lowest in NHA (61%) and highest in VCH (71%) (Figure 6). Of those that reported recent opioid use, 62% had used heroin, 54% had used prescription opioids (with or without a valid prescription), and 41% had used substitution opioids (with or without a valid prescription) (Figure 7). Compared to the BC total, a higher proportion of opioid users used heroin in FHA (84%), while a higher proportion of opioid users used prescription opioids in NHA (81%), VIHA (75%), and IHA (74%). A lower proportion of opioid users used substitution opioids in NHA compared to the rest of BC.



#### Figure 7. Opioid use overall and by health authority

<sup>9</sup>Opioids included heroin, morphine, methadone, Dilaudid (hydromorphone), oxycodone, Tylenol 3 (codeine), fentanyl, Suboxone (buprenorphine/naloxone), and Demerol (meperidine). Both illicit and licit use was included.

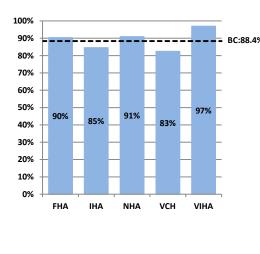
<sup>&</sup>lt;sup>8</sup>Recent polydrug use was defined as using 2 or more substances within a 6 hour period



# **E. Harm Reduction Site Use**

# Getting to the Harm Reduction Site

Most survey respondents (88%) reported living in the same community as the HR site (Figure 8). VIHA had the highest proportion of respondents from the same community as the HR site (97%) while VCH had the lowest proportion (83%). While most out-of-town respondents traveled from other communities within the same HSDA as the HR site, 11 respondents from VCH reporting travelling from communities in FHA.<sup>10</sup>



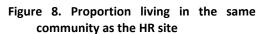
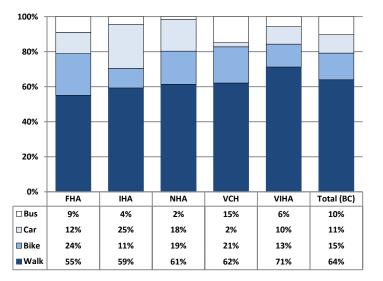


Figure 9. Method of getting to the HR site on the day of the survey



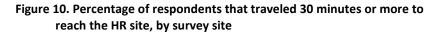
The most common way of getting to the HR site both overall and in each HA was walking (Figure 9). In addition, a higher proportion took the bus to the site in VCH (15%) and FHA (9%), while a higher proportion drove a car to the site in IHA (25%) and NHA (18%) (Figure 9).

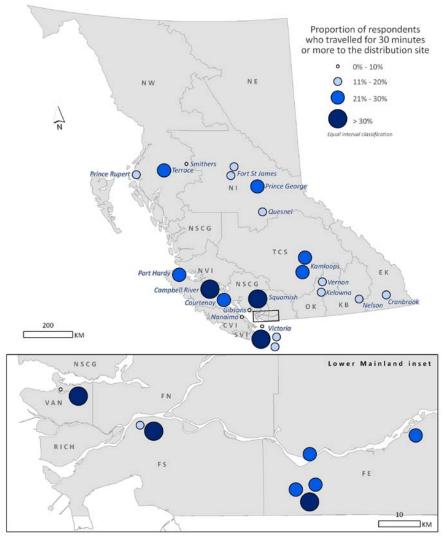
The median time travelled to reach the HR site was 10 minutes for the survey overall and in all HAs, except in FHA, where it was 15 minutes (Table 3). Despite the similarity in median travel time across the HAs, more than 30% of respondents at 6 of the participating survey sites reported travelling 30 minutes or more to reach the site (Figure 10).

<sup>&</sup>lt;sup>10</sup> These communities included Burnaby, Coquitlam, New Westminster and Surrey

Hoalth Authority	Travel Time to Site (h:mm)				
Health Authority	Median	Mean	Minimum	Maximum	
Fraser	0:15	0:21	0:00	2:00	
Interior	0:10	0:19	0:00	5:00	
Northern	0:10	0:18	0:01	3:20	
Vancouver Coastal	0:10	0:16	0:00	1:45	
Vancouver Island	0:10	0:16	0:00	1:30	
Total (BC)	0:10	0:18	0:00	5:00	

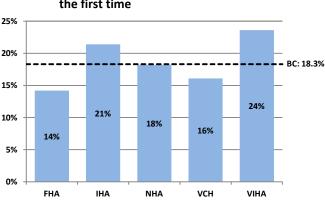
#### Table 3. Median, mean, and range of reported travel times to the HR site

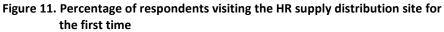




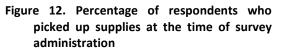
# Supply Pickup

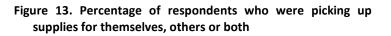
Overall, 18% of respondents were visiting the HR site for the first time at the time of the survey (Figure 11). Almost 3/4 of survey respondents had come to the site to pick up HR supplies when they completed the survey (Figure 12). The remaining respondents were likely accessing other healthcare or social support services at the site. The proportion of respondents picking up supplies was lower in VIHA (60%) and IHA (62%) and higher in NHA and VCH (both 80%).

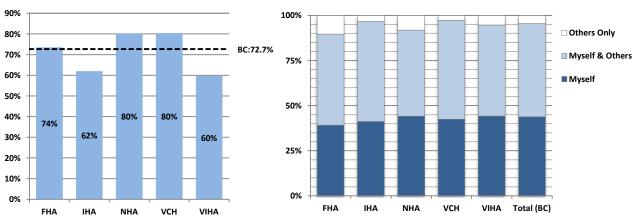




Including those who picked up supplies for both themselves and others, 95% of respondents reported picking up supplies for themselves, while 56% reported picking up supplies for others (Figure 13). FHA (10%) and NHA (8%) had the highest proportion of respondents who reported only picking up supplies for others.





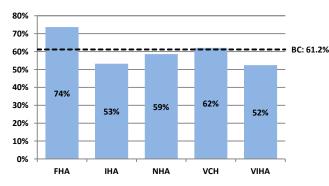


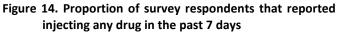


# F. Access to Harm Reduction Supplies

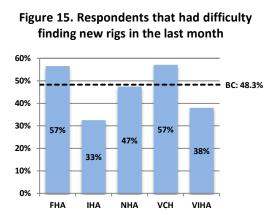
### Needles: Injection Drug Use, Needle Availability and Sharing

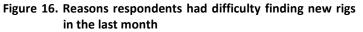
Overall, 61% of respondents reported injecting any drug within the past week (Figure 14). Rates of injection drug use were highest in FHA (74%) and lowest in VIHA (52%) and IHA (53%).

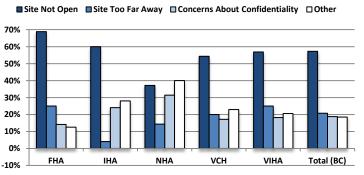




Nearly half of respondents who inject drugs reported having difficulty finding new rigs (needles) within the past month (Figure 15). A higher proportion reported difficulty finding new rigs in FHA and VCH (both 57%), while a lower proportion reported difficulty in IHA (33%) and VIHA (38%). Of those who reported difficulty, the most common barrier to obtaining new rigs was that the site was not open, both overall (57%), and in all HAs (Figure 16). In addition, a higher proportion reported that the site was too far away in FHA (25%), VCH (20%) and VIHA (25%), while a higher proportion reported concerns about confidentiality in IHA (24%) and NHA (31%).



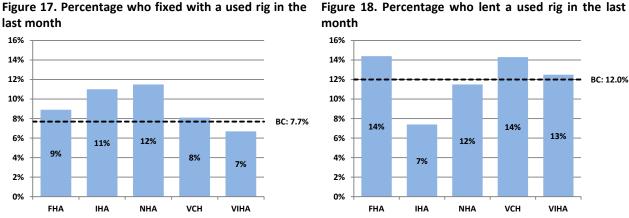


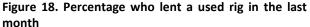


Overall, nearly 8% of respondents reported injecting with a used needle in the last month, and the proportion that reported ever sharing a needle was highest in NHA (12%) and IHA (11%) and lowest in VIHA (7%) (Figure 17). In addition, 12% of respondents reported lending a used



needle in the past month (Figure 21). The proportion that reported lending a needle was highest in FHA and VCH (both 14%) and lowest in IHA (7%)





# Crack Pipes: Use, Disposal, Availability and Sharing

More than half of respondents reported smoking crack in the last month (Figure 22).<sup>11</sup> Use varied considerably between HAs, with the highest proportion reporting smoking crack in NHA (72%) and VIHA (63%). The lowest proportion reporting crack use was in VCH (34%). Although this is a much lower prevalence than reported in the 2012 Vancouver High Risk Drug Survey (86%) conducted by the Centre for Addictions Research of BC,<sup>12</sup> the Urban Health Research Initiative noted a decline in crack cocaine use to 26.9% in 2011.<sup>13</sup> This discrepancy may also reflect our small sample size (63 in Vancouver/Richmond) and that the sites selected in Vancouver were not distributing crack pipes at the time of the survey.

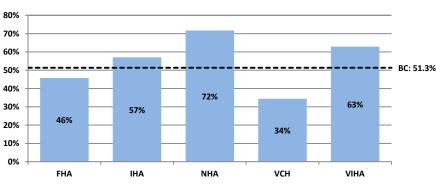


Figure 19. Percentage of survey respondents who reported smoking crack with a pipe in the month prior to the survey, overall and by health authority

<sup>&</sup>lt;sup>11</sup>The proportion of crack smokers may be underrepresented in the sample if the participating sites do not provide safer smoking supplies.

<sup>&</sup>lt;sup>12</sup> http://www.carbc.ca/FactsStats/AODMonitoring/ProjectComponents/tabid/94/agentType/View/PropertyID/80/Default.aspx

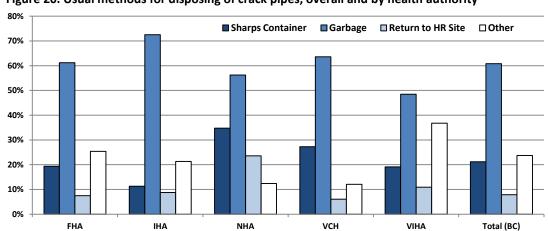
<sup>&</sup>lt;sup>13</sup> http://uhri.cfenet.ubc.ca/images/Documents/dsiv2013.pdf

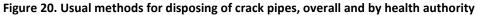
The median lifespan of crack pipes was 4 days for the survey overall, while the most common response was that crack pipes usually last less than 1 day (Table 4). The median lifespan of crack pipes was higher in NHA compared to the other HAs.

	TIME (DAYS)			
	Median	Mean	Mode	Interquartile Range <sup>14</sup>
Fraser	3	14	0	(1-7)
Interior	3	20	0	(1-14)
Northern	4	9	7	(2-7)
Vancouver Coastal	3	24	1	(1-30)
Vancouver Island	3	14	1	(1-14)
Total (BC)	4	19	0	(1-14)

Table 4. The your liferner of mark nines	overall and by beatth outbouity
Table 4. The usual lifespan of crack pipes,	overall and by health authority

Overall, the most common method of crack pipe disposal was the garbage (61%), followed by unspecified "other" (24%), sharps container (21%), and return to HR site (8%) (Figure 20). The proportion that reported use of sharps containers was highest in NHA (35%) and lowest in IHA (11%), while the proportion that reported using the garbage was highest in IHA (73%) and lowest in VIHA (49%).





One half of all survey respondents who smoke crack reported experiencing difficulty finding crack pipes within the past month (Figure 21). The proportion that reported difficulty finding crack pipes was highest in VCH (59%) and FHA (57%) and lowest in VIHA (39%) and IHA (42%).

<sup>&</sup>lt;sup>14</sup> Interquartile range = (25<sup>th</sup> percentile – 75<sup>th</sup> percentile)

When unable to get a new pipe, using pop cans (51%) and sharing a pipe (50%) were the most common alternatives (Figure 22). Sharing was more common in FHA (60%), while pop cans were more common in NHA (69%), VCH (60%), VIHA (60%), and IHA (58%).

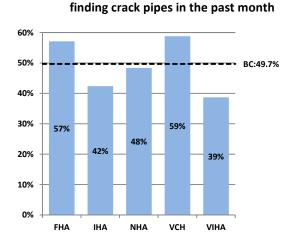
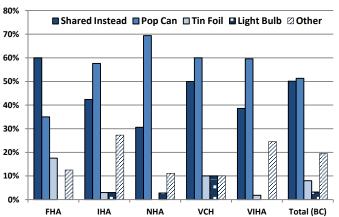
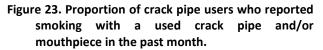


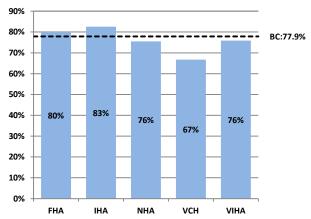
Figure 21. Percentage experiencing difficulty

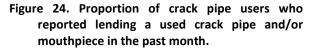
Figure 22. Alternatives used when new crack pipes were not available

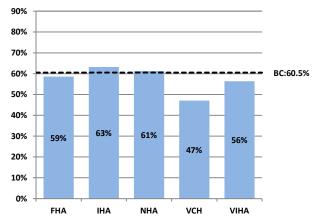


Overall, 78% of survey respondents who smoke crack reported having smoked with a used crack pipe or mouthpiece in the last month (Figure 23), and 61% reported lending a used crack pipe or mouthpiece (Figure 24). The proportion sharing and lending was lowest in VCH and highest in IHA.

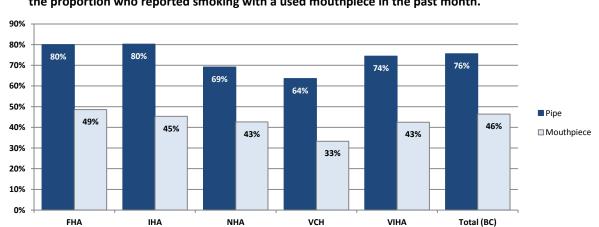


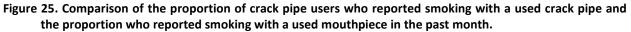






A higher proportion shared pipes than mouthpieces overall, and in each HA (Figure 25). Sharing of mouthpieces was lowest in VCH (33%) and highest in FHA (49%). Similarly, pipe sharing was lowest in VCH (64%), and highest in FHA (80%) and IHA (80%).





# **G. Overdoses**

Overall, nearly 16% of survey respondents reported experiencing an overdose in the 6 months prior to completing the survey (Figure 26). The proportion reporting overdosing was higher in VIHA (18%) and FHA (17%), and lower in IHA (10%), NHA (11%) and VCH (13%).

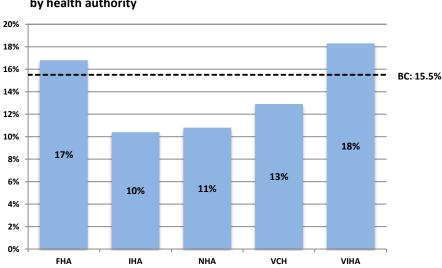
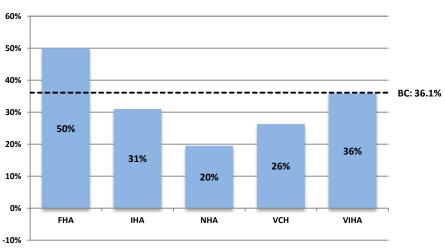


Figure 26. Percentage of survey respondents that reported having experienced a drug overdose in the 6 months prior to completing the survey, overall and by health authority

More than 1/3 of all survey respondents reported witnessing an overdose in the 6 months prior to completing the survey (Figure 27). In each HA, at least 1/5 of respondents had witnessed an overdose in the past 6 months, the highest proportion reporting witnessing an overdose was in FHA (50%) and the lowest was in NHA (20%).



# Figure 27. Percentage of survey respondents that reported having witnessed a drug overdose in the 6 months prior to completing the survey, overall and by health authority

# RECOMMENDATIONS

Based on the survey data, we recommend the following:

- Health authorities and contracted agencies should continue implementing programs that support provincial policy direction on harm reduction supply distribution, such as Healthy Minds, Health People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia and From Hope to Health: Towards an AIDS-free Generation.
- Sites should provide HR supplies based on the documented regional drug use trends
- Nearly 1/2 of survey respondents reported experiencing difficulty finding both needles and crack pipes. Based on client feedback, expanding HR site operating hours, increasing the number of locations or creating mobile sites, and taking steps to respect client confidentiality may improve access to the HR sites.
- 8% reported injecting with a used needle and 12% reported sharing their needles. Reiterate the dangers of using and lending needles, and provide peers with the skills to educate those they inject with on why they should avoid receiving used needles. Ensure that clients have sufficient needles and other drug paraphenalia so that new supplies can be used for every injection.
- Increase awareness and provide educational materials on safer crack smoking to address the high rates of sharing of crack pipes and mouthpieces. Information about the risks of sharing smoking equipment can be provided through pamphlets included in prepackaged safer smoking kits, or by harm reduction workers when providing supplies.
- Provide education about proper crack pipe disposal, since only 21% of respondents who smoke crack disposed of their pipes in sharps containers, while 61% disposed of used pipes in the garbage. Ensure sharps containers are available for appropriate disposal
- Over 1/3 of respondents had witnessed an overdose in the past 6 months, highlighting the need to increase the reach of the BC Take Home Naloxone programs, which train people to prevent, recognize and respond to an opioid overdose.
- Continue to repeat the survey annually to assess whether interventions are effective, and to identify changes in drug use patterns

# ACKNOWLEDGEMENTS

This project would not be possible without the support of:

- Regional Harm Reduction Coordinators
- Staff and Peers at Participating Sites
- Centre for Addictions Research of BC
- Students and Staff at the BC Centre for Disease Control, Communicable Disease Prevention and Control Services
  - Rob Balshaw, Donna Bradley, Mieke Fraser, Charles Fritz, Chris Jang, Margot Kuo, Sunny Mak, Arash Shamsian, Raymond Su, Wrency Tang & Despina Tzemis

# APPENDICES

# Appendix A: 2013 Survey Tool

SITE	PAGE 1 of 2 ID: DATE: INTERVIEWER INITIALS:				
	Anonymous Client Survey				
redu	se take a moment to complete this <b>confidential</b> survey. The information will be used to improve harm ction services in your area. (Only complete if you have not done it before or it has been at least 30 days) <b>hk you</b> . BC Harm Reduction Services and Strategies (HRSS)				
1.	Is this the first time you have visited this harm reduction site? Yes D No D				
2.	Did you pick up supplies here today? Yes  No				
	If Yes, who are the supplies for? only for myself  mu myself & others  mu only for others  mu				
3.	What is your gender? Male 🛛 Female 🖵 Transgendered 🖵 Other 🗆				
4.	What is your age? years				
5.	How did you get to this site today? Walk 🔲 Bicycle 🖬 Bus 🖬 Car 🗖				
6.	How long did it take you to get to this site today?minutes orhours				
7.	Do you live in the city/town where you are picking up supplies today? Yes 🖵 No 🖵				
	If No, where do you live?				
8. In the last month, did you find it hard to get new rigs when you needed them?					
	Yes 🔲 Sometimes 🔲 No 🖵				
	If Yes/Sometimes, why? Site not open when I needed them D Site too far away D I am concerned about confidentiality D Other D				
9.	In the last month, have you fixed with a rig used by someone else? Yes D No D				
10.	In the last month, have you lent a used rig to someone else? Yes D No D				
11.	In the last month, have you smoked crack? Yes 🔲 No 🖵				
	If Yes, did you use a crack pipe? Yes 🖵 No 🗖				
	If Yes, how long does the pipe usually last?(days)				
	How do you usually dispose of crack pipes? Garbage 🗖 Sharp Containers 🗖				
10	Returned to Harm Reduction Site  Other  Othe				
12.	In the <b>last month</b> , did you find it hard to get new pipes when you needed them?				
	If Yes/Sometimes, what did you use if you were unable to get a crack pipe?				
	Shared a pipe  Pop can  Tin foil  Light Bulb  Other				
13.	In the last month, have you shared? A pipe A mouthpiece Both a pipe and a mouthpiece				
14.	In the <b>last month</b> , have you lent a used crack cocaine pipe or mouthpiece to someone else? Yes D No D				
15.	In the <b>last six months</b> , have you overdosed by accident? (i.e., where you had a negative reaction from using too much drugs)? Yes D No D				
16.	Have you witnessed an OD in the last 6 months? Yes D No D				
	Please complete both sides				

ve can provide better Drug Type	# days you used drug in <u>PAST</u> <u>7 DAYS?</u> (write 1—7)	The way you took it? (circle all that apply)	Did you have a prescription? (write YES or No)	
Cocaine (powder)		Swallow/ Smoke/ Inject / Snort Other:		
Crack		Swallow/ Smoke/ Inject / Snort Other:		
Heroin		Swallow/ Smoke/ Inject / Snort Other:		
Alcohol		Swallow/Drink: Other:		
"Speedballs"		Swallow/ Smoke/ Inject / Snort Other:		
Amphetamines dexedrine, preludin		Swallow/ Smoke/ Inject / Snort Other:		
Marijuana		Smoke / Swallow Other:		
Barb's phenobarb, amobarb		Swallow/ Smoke/ Inject / Snort Other:		
Benzo's valium, ativan		Swallow/ Smoke/ Inject / Snort Other:		
Crystal Meth		Swallow/ Smoke/ Inject / Snort Other:		
Methadone		Swallow/ Smoke/ Inject / Snort Other:		
Morphine		Swallow/ Smoke/ Inject / Snort Other:		
Oxycontin/codone		Swallow/ Smoke/ Inject / Snort Other:		
Dilaudid		Swallow/ Smoke/ Inject / Snort Other:		
Are there any <b>other d</b> i /es		DABOVE that you used IN THE P	AST 7 DAYS?	
Drug Type	# days used	The way you took it?	Did you have a Prescription?	

