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

Overall Results for British Columbia 2014

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BACKGROUND
British Columbia (BC) 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 information about drug use and related harms, and to evaluate the BC HR program, a province-wide survey was conducted through the existing HR supply distribution network in 2012. The survey was updated in 2013 following an evaluation using a mixed-methods approach. Regional differences in substance use were identified, informing HR planning to improve health in this marginalized population. Reports on the 2012 and 2013 surveys can be found here. The 2013 survey was further evaluated and people who use drugs (PWUD) and utilize HR supply distribution sites were engaged to help refine and enhance the cultural relevance and accessibility of the 2014 survey.

OBJECTIVES

1. To expand on the 2012 and 2013 surveys by increasing the number of participating sites, and adding questions about meth pipes, the February 2014 transition from the orange flavored methadone to the currently administered cherry flavored Methadose (dispensed in smaller volumes as it is ten times more concentrated), administration of naloxone and the possession of a naloxone kit, and to include metrics on aboriginal self-identification
2. To describe regional differences in self-reported substance use and access to HR services
3. To provide recommendations for improvement of HR service delivery

1 http://www.bccdc.ca/prevention/HarmReduction/Reported_substanceUseTrends/default.htm
METHODS

Figure 1 shows the timeline for the 2014 survey. Sites were identified by the health authority (HA) HR representatives and approved by the site staff. Vancouver Coastal Health (VCH) requested oversampling of their sites and the addition of VCH-specific questions. Each participating site received revised surveys in July 2014 and had eight weeks to recruit a maximum of 40 PWUD aged 19 years and over to complete the survey. Sites were provided $5/survey for participant incentives or to defray any costs of survey administration. Survey responses were entered into an online Fluid Survey database, and descriptive analysis was carried out using RStudio version 0.97.320 for demographics, reported substance use by region, HR supply distribution site usage, access to HR supplies, sharing of drug paraphernalia, and overdose experiences. To protect participant privacy, results with fewer than five observations are not reported. Overall survey results were weighted by the 2014 Health Service Delivery Area (HSDA) population to account for population differences in participating communities. Aboriginal self-identification will be reported for participants overall; however, in-depth analysis by ethnicity will be performed by the First Nations Health Authority. The results for questions about Methadose and questions specific to VCH will be presented elsewhere. The 2014 survey is attached as Appendix A.

Figure 1. Timeline for 2014 Survey

May-June 2014
- PWUD engagement
- 2013 survey tool modified
- Sites recruited

July-Aug 2014
- Surveys distributed to sites
- Surveys administered

Sept 2014-Mar 2015
- Data entry and cleaning
- Data analysis

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2 http://fluidsurveys.com/

RESULTS

A. Interpretation of Results

Results from the analysis of the survey data for the five geographic HAs\(^4\) 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. Exclusions in figures and tables are due to insufficient data: less than five observations per cell. 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 may differ on each figure.

B. Survey Administration

Across the five HAs, 1,322 surveys were completed at 50 HR supply distribution sites (Table 1), an increase from 779 surveys at 34 HR supply distribution sites in 2013. A map showing the geographic distribution of the participating sites can be found in Appendix B. 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 FHA and IHA to the overall survey results increased, while the relative contributions of NHA, VCH, VIHA decreased.

Table 1. Distribution of surveys and sites

| HEALTH AUTHORITY | SURVEYS | |
|------------------|---------|---|---|---|
|                  | Sites   | #  | %  | Unweighted % | Weighted % |
| FHA              | 6       | 210| 15.9%| 36.8% |
| IHA              | 9       | 181| 13.7%| 16.2% |
| NHA              | 6       | 117| 8.8% | 4.5%  |
| VCH              | 21      | 588| 44.4%| 25.9% |
| VIHA             | 8       | 226| 17.2%| 17.1% |
| Total (BC)       | 50      | 1,322| |

Abbreviations: FHA – Fraser Health Authority; IHA – Interior Health Authority; NHA – Northern Health Authority; VCH – Vancouver Coastal Health Authority; VIHA – Vancouver Island Health Authority
C. Characteristics of Survey Respondents

**Demographics**

The age and gender distributions of survey respondents are summarized in Table 2 and Figure 2, respectively. The “Other” category consisted of Trans* and any other reported gender identity. Overall, the age of respondents ranged from 19 to 74 years. The median age was 43 years overall, and was higher in males (44 years) than females (39 years). Median age was lowest among those reporting any other gender (37 years). Median age was greater in VCH (44 years) than the overall median age and lowest in FHA, NHA and VIHA (40 years). Overall, 60% of respondents were male, and there were more male respondents than female in all HAs. Compared to the 2013 annual survey this is an increase in the proportion of female respondents from 31%. The highest proportion of female respondents were in IHA and NHA (46%), while the lowest was in VCH (32%).

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

<table>
<thead>
<tr>
<th>HEALTH AUTHORITY</th>
<th>MEDIAN AGE</th>
<th>MEDIAN AGE</th>
<th>MEDIAN AGE</th>
<th>MEDIAN AGE</th>
<th>MEDIAN AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Male</td>
<td>Female</td>
<td>Other</td>
<td>AGE RANGE</td>
</tr>
<tr>
<td>FHA</td>
<td>40</td>
<td>43</td>
<td>36</td>
<td>*</td>
<td>19-64</td>
</tr>
<tr>
<td>IHA</td>
<td>42</td>
<td>43</td>
<td>42</td>
<td>*</td>
<td>20-74</td>
</tr>
<tr>
<td>NHA</td>
<td>40</td>
<td>43</td>
<td>37</td>
<td>*</td>
<td>20-60</td>
</tr>
<tr>
<td>VCH</td>
<td>44</td>
<td>45</td>
<td>41</td>
<td>42</td>
<td>19-71</td>
</tr>
<tr>
<td>VIHA</td>
<td>40</td>
<td>43</td>
<td>39</td>
<td>*</td>
<td>19-63</td>
</tr>
<tr>
<td>Total (BC)</td>
<td>43</td>
<td>44</td>
<td>39</td>
<td>37</td>
<td>19-74</td>
</tr>
</tbody>
</table>

*Unreported due to insufficient data

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

[Chart showing gender distribution]
Overall, the majority of respondents (86%) reported their sexual orientation as Straight, with Bisexual comprising the second largest group (10%). This trend was observed in all HAs; however, the proportion identifying as “Gay or Lesbian” or “Queer” varied by HA. These results are summarized in Table 3.

Table 3. Sexual orientation of respondents

<table>
<thead>
<tr>
<th>HEALTH AUTHORITY</th>
<th>Straight</th>
<th>Bisexual</th>
<th>Gay or Lesbian</th>
<th>Queer</th>
<th>Other</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHA</td>
<td>85%</td>
<td>10%</td>
<td>*</td>
<td>0%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>IHA</td>
<td>87%</td>
<td>9%</td>
<td>0%</td>
<td>*</td>
<td>*</td>
<td>0%</td>
</tr>
<tr>
<td>NHA</td>
<td>90%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCH</td>
<td>79%</td>
<td>10%</td>
<td>5%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>VIHA</td>
<td>81%</td>
<td>10%</td>
<td>*</td>
<td>0%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Total (BC)</td>
<td>86%</td>
<td>10%</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Overall, 34% of respondents self-reported as Aboriginal Peoples, which is defined as First Nations, Métis and Inuit peoples. A higher proportion were non-Aboriginal in all HAs except NHA. Of NHA respondents, 73% self reported as Aboriginal Peoples, compared to a range of 20% to 37% in other HAs. These results are summarized below in Figure 3.

Figure 3. Distribution of Aboriginal Peoples compared to non-Aboriginal people among respondents

Housing Stability

Overall, 44% of respondents reported living in their current location for more than one year, with the highest proportion reported in VCH (54%) and the lowest reported in VIHA (37%). Overall, 21% of respondents reported no fixed address (NFA), with the highest proportion
reported in VIHA (31%) and the lowest reported in VCH (11%). These results are summarized in Figure 4 below.

Figure 4. Distribution of time living at current address among respondents

D. Recent Reported Substance Use (Past seven days)

Nearly all (93%) of survey respondents reported using a substance in the past seven days (see Figure 5; note, the y-axis scale begins at 82%), and is ranged from 92% in VCH to 97% in NHA. Overall, 89% reported using more than one substance in the past seven days, and this ranged from in FHA 88% to 92% in VIHA (see Figure 6 – note, the y axis scale begins at 82%). The number of reported substances used ranged from two to 13 substances, with a median of 3.6 substances.

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5 Reported substances include legal drugs and/or illicit drugs and/or alcohol
Results from the ten most reported substances surveyed, excluding tobacco, are summarized in Figure 7. Overall, marijuana (54%), alcohol (52%) and heroin (46%) were the three most commonly reported substances used in the past seven days. Reported substance use patterns varied geographically. Heroin was the most commonly reported substance in FHA (61%), marijuana was the most commonly reported substance in IHA (53%) and VIHA (58%), both alcohol and crack were the most commonly reported substance in NHA (57%), and both marijuana and heroin were the most commonly reported substances in VCH (54%). Among respondents that reported “Other” (n=70), the most frequent responses were LSD/acid (about 9%) and T3 (about 7%)6. Maps showing the proportions for each of these reported substances by HSDA can be found in a separate document here.7 Overall, 90% of survey respondents reported using tobacco within the past week, and this proportion was highest in VIHA (94%) and lowest in FHA (84%).

Almost 2/3 of survey respondents (64%) reported using any opioid8 in the last week, and reported opioid use was lowest in NHA (51%) and highest in VIHA (67%) (Figure 8).

6 Results represent overall (BC) and are weighted. Qualitative analysis has not been applied to written responses and may not represent true proportions of results

7 http://www.bccdc.ca/prevention/HarmReduction/Reported substanceUseTrends/default.htm

8Reported opioids included heroin, methadone, morphine, Dilaudid (hydromorphone), oxycodone, and fentanyl. Both illicit and licit use was included.
Of the substances surveyed, reported use of prescription methadone was greatest overall (84%) and highest in VCH (93%). Reported prescription marijuana use was greatest in VCH (30%), reported prescription morphine use was greatest in IHA (61%), reported prescription Dilaudid was greatest in VCH (34%), and reported use of prescription benzodiazepines were greatest in NHA (71%). Prescription substance use was defined as the use of substances prescribed to the respondent and do not reflect diverted prescription substances. The results of reported prescription substance use are summarized below in Figure 9.
Figure 7. Proportion of respondents reporting recent substance use overall and by HA

<table>
<thead>
<tr>
<th>Substance</th>
<th>Total (BC)</th>
<th>FHA</th>
<th>IHA</th>
<th>NHA</th>
<th>VCH</th>
<th>VIHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>54%</td>
<td>52%</td>
<td>53%</td>
<td>48%</td>
<td>54%</td>
<td>58%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>52%</td>
<td>54%</td>
<td>51%</td>
<td>57%</td>
<td>50%</td>
<td>49%</td>
</tr>
<tr>
<td>Heroin</td>
<td>46%</td>
<td>61%</td>
<td>38%</td>
<td>25%</td>
<td>54%</td>
<td>55%</td>
</tr>
<tr>
<td>Crack</td>
<td>44%</td>
<td>33%</td>
<td>39%</td>
<td>57%</td>
<td>50%</td>
<td>47%</td>
</tr>
<tr>
<td>Meth</td>
<td>41%</td>
<td>53%</td>
<td>37%</td>
<td>28%</td>
<td>37%</td>
<td>47%</td>
</tr>
<tr>
<td>Methadone</td>
<td>32%</td>
<td>28%</td>
<td>25%</td>
<td>22%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>32%</td>
<td>16%</td>
<td>28%</td>
<td>45%</td>
<td>38%</td>
<td>29%</td>
</tr>
<tr>
<td>Morphine</td>
<td>28%</td>
<td>10%</td>
<td>28%</td>
<td>34%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>Benzos</td>
<td>22%</td>
<td>12%</td>
<td>43%</td>
<td>19%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Dilaudid</td>
<td>18%</td>
<td>7%</td>
<td>31%</td>
<td>23%</td>
<td>19%</td>
<td>28%</td>
</tr>
</tbody>
</table>
When compared\textsuperscript{9} to the previous surveys,\textsuperscript{10} the proportion reporting crystal meth use has increased and the proportion reporting crack use has decreased. Also of note is that the proportion reporting heroin use decreased from 52\% to 40\% between the 2012 and 2013 surveys, but increased to 46\% in 2014. These results are summarized in Figure 10 below; however, these differences may simply reflect differences in methodology between the three surveys (time of year, number and geographical distribution of survey sites), rather than true increases or decreases in use. It is also worth mentioning that due to the unregulated nature of the illicit drug market, self-reported substance use may not reflect the actual substances used.

Of respondents that reported whether or not they were taking prescription methadone during the February 2014 transition from the orange flavored methadone to the currently administered cherry flavored Methadose, 33\% of respondents reported that they were. The results of the methadone/Methadose-specific survey will be presented elsewhere.

\textsuperscript{9} Comparison involved weighting each year’s results by HSDA population

\textsuperscript{10} http://www.bccdc.ca/prevention/HarmReduction/ReportedSubstanceUseTrends/default.htm
Figure 10. Change in the proportion of survey respondents reporting recent substance use between the 2012-2014 Surveys on Drug Use Among Harm Reduction Clients in BC. Comparison involved weighting by HSDA population

<table>
<thead>
<tr>
<th>Substance</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td>52%</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>Crystal Meth</td>
<td>20%</td>
<td>39%</td>
<td>41%</td>
</tr>
<tr>
<td>Crack</td>
<td>55%</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>Methadone</td>
<td>28%</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>24%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>Morphine</td>
<td>22%</td>
<td>23%</td>
<td>28%</td>
</tr>
<tr>
<td>Benzos</td>
<td>11%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Dilaudid</td>
<td>12%</td>
<td>16%</td>
<td>18%</td>
</tr>
</tbody>
</table>
E. Harm Reduction Site Use

*Getting to the Harm Reduction Site*

Most survey respondents (87%) reported living in the same community as the HR supply distribution site at which they completed the survey (Figure 11). VIHA and VCH had the highest proportion of respondents from the same community as the site (93%) while FHA had the lowest proportion of respondents from the same community as the site (77%). The most common method of transportation to the HR supply distribution site both overall (60%) and in each HA was walking (Figure 12). The highest proportion reporting bicycling, driving and mobile site/outreach services was in IHA (30%, 15% and 8%, respectively), while the highest proportion reporting using public transportation was in VCH (18%).

Overall, the majority (47%) of respondents traveled under ten minutes to the HR supply distribution site, and this was also the majority across each HA. Proportions reporting traveling 31-60 minutes or greater than one hour were comparable across HAs. The results of travel time to the HR supply distribution site are summarized in Figure 13 and Appendix C below.
Supply Pickup

The greatest proportion of all respondents (63%) reported picking up supplies for themselves as their reason for accessing the HR supply distribution site, and this was also true for each HA. Other reasons for accessing HR supply distribution sites varied across HAs. Picking up supplies for others was the second greatest reported reason in FHA (25%) and IHA (28%) while accessing health or other services was the second greatest reported reason in VCH (27%) and VIHA (31%). These results are summarized in Figure 14 below (note: results are not mutually exclusive and do not sum to 100% as respondents were encouraged to choose all answers that applied).
Overall, the largest proportion (29%) of all respondents reported accessing HR supply distribution sites about once a week. VCH reported the highest proportion of respondents accessing HR supply distribution sites every day (16%) while FHA reported the lowest (2%). IHA reported the highest proportion that accessed HR supply distribution sites once a month (29%). These results are summarized in Figure 15 below.

Figure 15. Distribution of the frequency that respondents accessed HR sites

![Distribution chart](image)

The proportion of respondents that reported difficulty accessing HR supplies is summarized in Figure 16 below. Overall, 30% of respondents reported difficulty accessing HR supplies and this was reflected in most of the HAs except for FHA, where only 23% of respondents reported difficulty accessing HR supplies. Of those that reported difficulty accessing HR supplies (n=379), the largest proportion (44%) reported the HR supply distribution site being closed as a reason for this difficulty. A lower proportion of respondents from VCH reported difficulty because the site was closed (37%), compared to the BC total. However, a higher proportion in VCH reported that the site didn’t have the supplies that the respondent was looking for (32%), compared to the BC total (14%). NHA was the only region to report concerns about confidentiality (19%) greater than the BC average (13%). This may reflect that within these small communities there may only be one HR site, as opposed to larger communities where PWUD may visit sites outside of their neighbourhood or rotate between sites. Regional variations for other reasons are noted, as summarized in Figure 17 below.

![Graph showing regional variations](image)
**Feelings of Respect**

When respondents were asked how respected they felt when accessing HR supplies from a distribution site the majority of all respondents (84%) reported that they did feel respected. The HA with the largest proportion of respondents who reported feeling respected was VIHA (92%) while the HA with the lowest proportion was VCH (79%). The highest proportion of respondents reporting not feeling respected was in NHA (6%). In VCH, a larger proportion of
respondents reported sometimes feeling respected (10%) or not knowing whether they felt respected (5%) when compared to other HAs. These results are summarized in Table 4 below.

Table 4. Proportion of respondents that felt respected when accessing HR supplies

<table>
<thead>
<tr>
<th>Health Authority</th>
<th>Yes</th>
<th>Sometimes</th>
<th>No</th>
<th>I don’t know</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHA</td>
<td>87%</td>
<td>6%</td>
<td>3%</td>
<td>3%</td>
<td>*</td>
</tr>
<tr>
<td>IHA</td>
<td>91%</td>
<td>*</td>
<td>3%</td>
<td>3%</td>
<td>*</td>
</tr>
<tr>
<td>NHA</td>
<td>83%</td>
<td>*</td>
<td>6%</td>
<td>*</td>
<td>5%</td>
</tr>
<tr>
<td>VCH</td>
<td>79%</td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>VIHA</td>
<td>92%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Total (BC)</td>
<td>84%</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
</tbody>
</table>

F. Access to Harm Reduction Supplies

Needles: Injection Drug Use, Needle Availability and Sharing

Overall, 62% of respondents reported injecting any substance within the past week (Figure 18). The proportion of respondents that reported recent injection was highest in FHA and VCH (66%) and lowest in NHA (46%).

Figure 18. Proportion of respondents reporting recent injection

Of respondents reporting recent injection substance use (n=784), 14% reported having difficulty finding new rigs (needles) within the past month (Figure 19; note NHA not presented due insufficient data as defined previously). The proportion of respondents that reported difficulty finding new rigs was highest in IHA and VIHA (20%), and lowest in VCH (13%). Of respondents
that experienced difficulty finding new rigs (n=248), the most common reported barrier was that the HR supply distribution site was closed (56%). These results are summarized in Table 5 below.

Figure 19. Respondents reporting difficulty finding new rigs among respondents reporting injection reported substance use (n=784)

Table 5. Reason of difficulty picking up new rigs among respondents reporting recent injection drug use (n=248)

<table>
<thead>
<tr>
<th>Health Authority</th>
<th>Site not Open</th>
<th>Site too far away</th>
<th>Concerns about confidentiality</th>
<th>Negative attitude (staff)</th>
<th>Supplies not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHA</td>
<td>55%</td>
<td>18%</td>
<td>*</td>
<td>0%</td>
<td>*</td>
</tr>
<tr>
<td>IHA</td>
<td>57%</td>
<td>31%</td>
<td>*</td>
<td>0%</td>
<td>17%</td>
</tr>
<tr>
<td>NHA</td>
<td>73%</td>
<td>0%</td>
<td>*</td>
<td>*</td>
<td>0%</td>
</tr>
<tr>
<td>VCH</td>
<td>42%</td>
<td>22%</td>
<td>10%</td>
<td>11%</td>
<td>24%</td>
</tr>
<tr>
<td>VIHA</td>
<td>59%</td>
<td>20%</td>
<td>*</td>
<td>*</td>
<td>8%</td>
</tr>
<tr>
<td>Total (BC)</td>
<td>56%</td>
<td>21%</td>
<td>11%</td>
<td>8%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Overall, 9% of respondents reported injecting with a needle previously used by another individual in the past month (Figure 20; note, NHA not presented due to insufficient data as defined previously). The proportion was highest in FHA (13%) and lowest in VCH (8%). Overall, 10% of respondents reported giving a used needle to another individual in the past month (Figure 21; note, NHA not presented due to insufficient data as defined above). This proportion was highest in FHA (14%) and lowest in IHA (9%).
**Pipes: Use, Availability and Sharing**

Overall, 42% of respondents reported smoking crystal meth with a pipe in the last month while 50% of respondents reported smoking crack with a pipe in the last month. The proportion of respondents that reported smoking crystal meth with a pipe was greatest in VIHA (48%) and lowest in VCH (35%), while the proportion of respondents reporting smoking crack with a pipe was greatest in NHA (66%) and lowest in IHA (43%). These results are summarized in Figure 22 below.

*Figure 22. Proportion of respondents reporting smoking meth or crack with a pipe in the last month*
Overall, of respondents reporting smoking crystal meth with a pipe in the past month (n=481), the greatest proportion reported using a modified glass stem (Pyrex) acquired from a HR supply distribution site (58%). This proportion was greatest in NHA (76%) and lowest in VCH (41%). Of VCH and VIHA respondents that reported smoking crystal meth with a pipe, the largest proportion reported using a modified glass stem (Pyrex) acquired from elsewhere (head shop, corner store, pipe seller) (54%). Overall, of respondents reporting smoking crystal meth with a pipe in the last month, 21% reported using another material as a pipe. These results are summarized in Figure 23 below. It is worth mentioning that safer smoking supplies are not provided at all HR supply distribution sites and regional variations may reflect this. Furthermore, during the time of the survey very few sites were providing pipes shaped specifically for smoking crystal meth, necessitating users to modify glass stems that were intended for crack use.

Figure 23. Crystal meth smoking pipe material used among the proportion of respondents reporting smoking crystal meth (n=481)

Overall, of respondents reporting smoking crack with a pipe in the past month (n=634), the greatest proportion reported using a glass stem (Pyrex) acquired from a HR supply distribution site (66%). This proportion was greatest in NHA (84%) and lowest in FHA (46%). Overall, of respondents reporting smoking crack with a pipe in the last month, 18% reported using another material as a pipe. This proportion was greatest in IHA (25%). Again, it is worth mentioning that not all HR distribution supply sites sampled for the survey provided glass stems. These results are summarized in Figure 24 below.
Figure 24. Crack smoking pipe material used among the proportion of respondents reporting smoking crack (n=634)

Overall, of respondents that reported smoking crack with a pipe (n=569\textsuperscript{11}), 78% used Brillo as a screen compared to 34% that used a brass screen supplied from a HR supply distribution site. The proportion of respondents that reported using Brillo as a screen was highest across all HAs except NHA. The proportion of respondents that reported Brillo use was highest in VIHA (84%) and lowest in FHA (69%). The proportion of respondents that reported brass screen use was highest in IHA and VCH (35%) and lowest in FHA (24%). Overall, the reported use of a wooden push stick was 66%. The proportion of respondents reporting the use of a wooden push stick was greatest in VIHA (78%) and lowest in FHA and IHA (63%). These results are summarized in Figure 25 below.

\textsuperscript{11} This number is lower than the total number of respondents that reported smoking crack with a pipe presented above due to the exclusion of missing data.
Of respondents reporting being unable to acquire an unused pipe to smoke any substance in the past month (n=536), 42% of all respondents reported using a pipe previously used by another individual, and this was the most frequently reported response across all HAs. The proportion reporting smoking with a used pipe was greatest in IHA (59%) and smallest in VCH (38%). Overall, 17% of respondents unable to acquire an unused pipe reported injecting instead of smoking while 17% of respondents unable to acquire an unused pipe reported that they waited until they could acquire an unused pipe. There was considerable regional variation seen in responses. Of respondents reporting using “Other” methods to smoke substance when unable to acquire an unused pipe (n=129) about 22% reported using a can as a pipe, about 10% reported smoking with tin foil while about 5% reported using a light bulb as a pipe. These results are summarized in Figure 26 below.

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12 Results represent overall (BC) and are unweighted. Qualitative analysis has not been applied to written responses and may not represent true proportions of results.
Figure 26. Method of reported substance use among respondents unable to acquire an unused pipe (n=536)

Of respondents who reported smoking any substance with a pipe in the last month (n=972), the majority (55%) reported not sharing, lending or selling a pipe or mouthpiece. This proportion was greatest in VCH and NHA (62%) and lowest in VIHA (39%). Of respondents reporting smoking any substance with a pipe in the last month, 24% reported sharing, lending or selling a mouthpiece. The proportion of respondents reporting smoking any substance with a pipe in the last month that reported sharing, lending or selling a used pipe was 38% overall. These results are summarized in Figure 27 below.

Figure 27. Proportion of respondents reporting sharing, lending or selling a mouthpiece or pipe in the last month (n=972)

Of respondents that reported smoking any substance in the past month with supplies previously used by another individual (n=351), 51% reported that they did so “to be social”, while 39% of respondents reported that they did so because they needed supplies. Of
respondents that reported “Other” as a reason for sharing any used smoking supplies in the past month (n=60) about 43% reported that another person did not have smoking supplies at the time as a reason for sharing used smoking supplies. These results are summarized in Figure 28 below.

Figure 28. Reason for sharing any used smoking supplies among the proportion of respondents that smoked reported substance with used supplies in the past month (n=351)

G. Overdoses

Of all respondents, 8% reported experiencing an opioid overdose (OD) in the six months prior to completing the survey (Figure 29). The proportion reporting opioid OD was highest in VIHA (12%) and lowest in FHA, IHA and NHA (8%). More than 1/4 of all survey respondents reported witnessing an opioid OD in the 6 months prior to completing the survey (Figure 30). The highest proportion of witnessed opioid ODs was reported in VCH and VIHA (28% and 36%, respectively), while the lowest proportion of witnessed opioid ODs was reported in NHA (12%).

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13 Results represent overall (BC) and are unweighted. Qualitative analysis has not been applied to written responses and may not represent true proportions of results.
Of respondents that experienced an opioid OD (n=113), the proportion that reported receiving naloxone, an opioid-antagonist/reversal agent, varied considerably across HAs, as did the proportion that were not sure if they had received naloxone. Overall, 1/3 of respondents reported receiving naloxone by either medical or non-medical personnel. The proportion was below the BC total in FHA and IHA and was highest in VCH (61%). Overall, 9% of respondents that experienced an OD reported not knowing if they had received naloxone, and the proportion that reported not knowing if they had received naloxone was highest in FHA and IHA (values not presented due to insufficient data). These results are summarized in Figure 31 below (note, the y-axis scale begins at 30%).
Figure 31. Proportion of naloxone administered among respondents that reported experiencing an OD event (n=113)

Of respondents that reported witnessing an opioid OD in the past six months (n=295), overall 19% reported administering naloxone. The proportion was lowest in NHA (0%) and highest in IHA (24%). Overall, of respondents that did not administer naloxone, 46% identified that they did not know how to use naloxone while 36% stated that naloxone was not available. These results are summarized in Figure 32 below.

Figure 32. Proportion of respondents that administered naloxone among those that witnessed an OD

Of the respondents that reported receiving naloxone during an OD (n=52), 73% received naloxone administered by a paramedic, nurse or health care worker.

Of all respondents (n=1250), 12% reported having a take home naloxone (THN) kit. This proportion was greatest in IHA (21%) and lowest in NHA (proportion masked due to insufficient data as defined previously). Overall, the most commonly reported reason for not having a THN
kit (36%) was not knowing how to use one. The same was true across all HAs, except in VIHA, where the largest proportion of respondents (31%) reported that they did not have a THN kit but would like to have one. When restricted to respondents that reported recent opioid use (within the past seven days, n=852), 18% reported having a THN kit (Figure 33). The proportion was highest in IHA and VIHA (24%) and lowest in NHA (too few data to report). Again, the greatest reported reason overall (35%), as well across all HAs, for not having a THN kit was not knowing how to use one.

Figure 33. Proportion of respondents restricted to recent opioid use (n=852) that reported having a THN kit
RECOMMENDATIONS

Based on the survey data, we recommend the following:

- Over 1/4 (26%) of respondents reported witnessing an OD. Only 12% of respondents reported owning a THN kit. Of respondents reporting recent opioid use, nearly 1/4 (24%) reported a desire to be trained on the use of a THN kit. THN access and education should be expanded to exceed the proportion of respondents that report witnessing an OD.

- Sites should provide HR supplies based on the documented regional drug use trends

- Nearly 1/3 (30%) of survey respondents reported experiencing difficulty finding both needles or 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.

- 9% reported injecting with a used needle and 10% reported sharing their needles. Reiterate the dangers of using and lending needles, and provide PWUD 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 paraphernalia 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 pre-packaged safer smoking kits, or by harm reduction workers when providing supplies.

- In light of recent reports specific research into fentanyl use is warranted. As the illicit substance market is unregulated, reported substance may not reflect the actual substance used; therefore, research to ascertain the actual substance used compared to the substance perceived to have been taken is also warranted.

- 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.

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14 [http://towardtheheart.com/fentanyl/]
• 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:

- Staff and Peers at Participating Sites
- Regional Harm Reduction Coordinators
- Centre for Addictions Research of BC
- Staff at the BC Centre for Disease Control, Communicable Disease Prevention and Control Services
  - Mieke Fraser, Jayson Shurgold, Sarah Moreheart
### Appendix A: 2014 Survey Tool

**SITE ID**

Harm Reduction Services & Strategies is conducting a survey to help improve harm reduction services across BC. No personal identifying information will be collected and your responses will be kept confidential. Your participation is completely voluntary and you are free to only answer the questions you are comfortable with. The survey will take less than 15 minutes of your time. Please note that you can only complete the survey once.


<table>
<thead>
<tr>
<th>CODE: summer 2014</th>
</tr>
</thead>
</table>

1. **What is your gender?**
- [ ] Male
- [ ] Female
- [ ] Trans*  
- [ ] Other: __________
- [ ] Prefer not to say

2. **How old are you? (in years):** __________ years old
- [ ] Prefer not to say

3. **Please identify the group below that best describes you:**
- [ ] First Nations
- [ ] Métis
- [ ] Inuit
- [ ] Non-Aboriginal
- [ ] Other: __________
- [ ] Prefer not to say

3a. If you identified as First Nations, please specify the following:
- [ ] Status First Nations
- [ ] Non-status First Nations
- [ ] Other: __________
- [ ] Prefer not to say

4. **Do you feel respected when you access harm reduction supplies from this site / outreach team?**
- [ ] Yes
- [ ] No
- [ ] Sometimes
- [ ] I don’t know
- [ ] Prefer not to say

5. **Which best describes your sexual orientation?**
- [ ] Straight
- [ ] Gay or Lesbian
- [ ] Bisexual
- [ ] Queer
- [ ] Prefer not to say

6. **Do you currently live in LOCATION?**
- [ ] Yes
- [ ] No, I live in (specify): __________
- [ ] Prefer not to say

7. **How long have you lived at your current address?**
- [ ] More than 1 year
- [ ] 7-12 months
- [ ] 1-6 months
- [ ] Less than 1 month
- [ ] No regular place to stay (homeless, shelter, couch surf, NFA)
- [ ] Prefer not to say

8. **How did you get here today?**
- [ ] Walked
- [ ] Bus / Skytrain / Transit
- [ ] Mobile site / Outreach came to me
- [ ] Prefer not to say

9. **How long did it take you to get here today?**
- [ ] Under 10 minutes
- [ ] 11-30 minutes
- [ ] 31-50 minutes
- [ ] Over 1 hour
- [ ] No time, mobile site / Outreach came to me
- [ ] Prefer not to say

10. **INTERVIEWER: CHECK-IN WITH THE PARTICIPANT**

11. **Over last month, how often would you say you picked up supplies?**
- [ ] Every day
- [ ] A few times per week
- [ ] About once a week
- [ ] Once a month
- [ ] Didn’t pick up any supplies
- [ ] Other (specify): __________
- [ ] Prefer not to say

12. **In the last month, did you ever have any difficulty picking up any supplies?**
- [ ] Yes
- [ ] No
- [ ] Prefer not to say

13. **In the last month, what made it difficult to get supplies?**
- [ ] Had no trouble getting supplies
- [ ] Didn’t pick up any supplies in the last month
- [ ] Site not open
- [ ] Site was too far away
- [ ] Concerned about confidentiality
- [ ] Felt staff had negative attitudes
- [ ] Site didn’t have the supplies I needed (specify what was missing)
- [ ] Other (specify): __________
- [ ] Prefer not to say

14. **In the last month, have you injected any type of drug?**
- [ ] Yes
- [ ] No
- [ ] Prefer not to say

15. **In the last month, did you have any trouble getting needles?**
- [ ] Yes
- [ ] No
- [ ] Didn’t use needles in the last month
- [ ] Prefer not to say

16. **In the last month, have you ever fixed a rig that had been used by someone else?**
- [ ] Yes
- [ ] No
- [ ] Prefer not to say

17. **In the last month, have you ever given a used needle to someone else to inject with?**
- [ ] Yes
- [ ] No
- [ ] Prefer not to say

18. **In the last month, have you used a pipe to smoke crack or meth?**
- [ ] Yes
- [ ] No
- [ ] Prefer not to say

19. **In the last month, what types of pipe did you use to smoke CRYSTAL METH?**
- [ ] Didn’t use a pipe
- [ ] Didn’t smoke meth
- [ ] Modified glass stem (Pyrex) from harm reduction site
- [ ] Modified stem (Pyrex) from elsewhere (head shop, corner store, pipe seller)
- [ ] Used other material (e.g. light bulb, cam) (ask what they used): __________
- [ ] Prefer not to say

**TURN ME OVER! THERE ARE 2 SIDES TO THIS SURVEY**
20. In the last month, what types of pipe did you use to smoke CRACK? (choose all that apply)
- Did you use a pipe
- Did you use crack
- Glass stem (Pyrex) from harm reduction site
- Glass stem from elsewhere (head shop, corner store, pipe seller)
- Used other material (e.g., light bulb, can) (ask what they used):
  - Other (specify): □ Prefer not to say

21. In the last month, which of the following did you use to smoke CRACK? (choose all that apply)
- Did you use crack
- Mouthpiece (tubing) from harm reduction site
- Brillo
- Wooden push stick
- Brass screens from harm reduction site
□ Prefer not to say

22. In the last month, what did you do when you couldn’t get new (unused) pipes to smoke any drug?
- No difficulty getting pipes
- Did you use pipes in last month
- Injected instead
- Waited to smoke until I could find a pipe
- Shared, bought or borrowed a used pipe
- smoked without a pipe using (specify):
□ Prefer not to say

23. In the last month, have you ever shared, lent or sold a mouthpiece or pipe you have used?
- Don’t smoke
- No
- Yes – mouthpiece only
- Yes – both stem and mouthpiece
□ Prefer not to say

24. In the last month, why did you share any used smoking supplies? (choose all that apply)
- Didn’t smoke
- Didn’t share supplies
- To be social
- Needed supplies
- Other (specify):
□ Prefer not to say

25. Please ask ALL the questions and circle the best response

<table>
<thead>
<tr>
<th>Substance</th>
<th>Did you use it?</th>
<th>Did you use it every day?</th>
<th>How did you use it?</th>
<th>Did you typically have a prescription for it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Tobacco (cigarettes)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Crystal Meth</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Cocaine (powder)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Crack</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Heroin</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Marijuana / Hash</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Methadone / Methadone</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Morphine</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Dilaudid</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Oxycodeine</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Benzos (Xanax / Valium)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sedatives (Sedatives / Adderall)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Any other drugs for NON-MEDICAL purposes?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

26. In the last 6 months, have YOU overdosed by accident from using any opioids such as heroin or morphine?
- □ Yes
- □ No
- □ I don’t know
- □ Prefer not to say

27. In the last 6 months, when you had the most recent overdose or negative reaction were you given Naloxone / Narcan?
- □ Did not overdose
- □ Yes
- □ No
- □ I don’t know
- □ Prefer not to say

28. When you were given Naloxone / Narcan most recently, was it given to you by:
- □ Did not have an overdose
- □ Wasn’t given Naloxone / Narcan
- □ Paramedic or nurse or health worker
- □ Friend or family member
- □ Housing Worker
- □ Stranger who happened to be there
- □ I don’t know
- □ Prefer not to say

29. In the last 6 months, have you SEEN an accidental overdose in someone using any opioids?
- □ Yes
- □ No
- □ I don’t know
- □ Prefer not to say

30. In the last 6 months, have you given Naloxone / Narcan to someone experiencing an overdose?
- □ Yes
- □ No
- □ I don’t know
- □ Prefer not to say

31. Do you have a Naloxone / Narcan kit?
- □ Yes
- □ No
- □ I don’t know
- □ Prefer not to say

32. Were you taking prescription methadone when it changed from orange to cherry flavour?
- □ Yes
- □ No
- □ Prefer not to say

□ Yes (PROCEED ON METHADONE SURVEY)
Appendix B: Geographical Distribution of 2014 Annual Reported Substance Use Survey Sites
Appendix C1: Geographical distribution of travel time less than 10 minutes to HR supply distribution sites in the 2014 Annual Reported Substance Use Survey Sites
Appendix C2: Geographical distribution of travel time greater than 30 minutes to HR supply distribution sites in the 2014 Annual Reported Substance Use Survey Sites