

An aerial photograph of the Denver skyline, featuring several prominent skyscrapers and a mix of urban buildings. The sky is filled with scattered white clouds. A semi-transparent white rectangular box is centered over the image, containing the main title in a bold, blue, sans-serif font.

***2023 DENVER
SYRINGE ACCESS
PROGRAM NEEDS
ASSESSMENT***

FINAL REPORT

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ACKNOWLEDGEMENTS

The Denver Department of Public Health and Environment (DDPHE) led the Syringe Access Program Needs Assessment (SAPNA) project through survey design, survey dissemination, statistical analysis, and report development. The team consisted of Carina Stavish, a Master of Public Health (MPH) student at the Colorado School of Public Health, and Nalleli Ramirez-Salinas, MPH, who supervised the project in her role as Sexual Health and Harm Reduction Program Administrator. The project team conducted key informant interviews at Access Point at Denver Colorado Health Network (CHN) and survey pre-testing at two locations visited by Vivent Health's Lifepoint mobile unit and Access Point. DDPHE partnered with Access Point and Harm Reduction Action Center (HRAC) to disseminate the survey to program participants.

The DDPHE project team would like to thank syringe access program participants and service providers for making this project possible. Syringe access program participants shared their insights in survey pilot testing and shared their invaluable perspectives and experiences via the survey. We would like to thank Access Point staff for supporting survey pilot testing and their work promoting and distributing the survey. We thank HRAC staff for hosting DDPHE staff at their location during survey distribution. We would also like to extend our appreciation to the DDPHE staff members who helped with survey distribution efforts. Also, thank you to the Vivent Health staff for coordinating survey pilot testing. Staff at Denver's syringe access programs fostered a trusting and supportive environment for survey administration. Project success would not have been possible without their partnership. We sincerely thank everyone who helped coordinate survey pilot testing and survey dissemination.

EXECUTIVE SUMMARY

The Denver Department of Public Health and Environment (DDPHE) had four primary goals for the Denver Syringe Access Program Needs Assessment (SAPNA) Project:

1. Evaluate perceived ease of access to harm reduction and overdose prevention resources for people who use syringe access programs in the City and County of Denver.
2. Identify the top barriers to accessing harm reduction and overdose prevention resources for people who use syringe access programs in the City and County of Denver.
3. Summarize the role that syringe access programs play in assistance for or referrals to support services for people who use syringe access programs in the City and County of Denver.
4. Assess participant knowledge and skills regarding safe sharps disposal and awareness of DDPHE-sponsored sharps disposal kiosks.

The overall approach for the Denver SAPNA Project was to review scientific literature, design and disseminate a cross-sectional survey, gather quantitative data to inform project objectives, analyze and interpret results, and construct recommendations based on project findings. DDPHE staff reviewed secondary sources and scientific literature to generate an overview of the health problems associated with drug use, present health inequities, and describe Denver's syringe access programs, all providing context for the Denver SAPNA Project. The context and feedback from syringe access program staff and participants informed the quantitative survey design. Recommendations were based on the statistical analysis of survey results.

Below are the primary findings for the SAPNA project that are supported by analyses of quantitative data from the needs assessment survey. For each of these findings, examples are provided here, and greater detail is presented in the full report:

Harm Reduction Resources

1. Smoking-related resources were needed by the most participants compared to other harm reduction resources (e.g., clean smoke pipes, other smoking supplies, and information about being safe while smoking drugs were needed by 88.8%, 82%, and 77.9% of participants, respectively).
2. Sterile syringes, wound care supplies, and clean smoke pipes were the easiest resources to access compared to all other harm reduction resources (mean=3.4, SD=0.87; mean=3.39, SD=0.91; and mean=3.37, SD=0.9; respectively).
3. Harm reduction resources that were the hardest for participants to access were at-home testing kits for HIV or Hepatitis-C, training on ways to properly inject, testing for

sexually transmitted diseases (STDs), and vaccines to protect against Hepatitis A, Hepatitis B, and/or Tetanus compared to all other harm reduction resources (e.g., over 10% of participants reported that these harm reduction resources were very hard to get).

4. The top challenges for accessing harm reduction and overdose prevention resources were environmental barriers (e.g., lack of transportation (45.8%) and the program being too far away (40.2%) were the top barriers for participants who found it difficult to get harm reduction resources).

Overdose Prevention Resources

5. The drug overdose reversal medication, naloxone, and fentanyl test strips were the easiest resources to access compared to all other overdose prevention resources (mean=3.46, SD=0.85; mean=3.43, SD=0.88, respectively).
6. Fentanyl test strips, information about overdose prevention, and naloxone were the most needed overdose prevention resources (e.g., 79.5%, 79%, and 72.8%, respectively).
7. A referral for medication-assisted treatment (MAT) was the hardest resource to access compared to all other overdose prevention resources (e.g., One in four participants who needed a referral for MAT reported that it was somewhat hard or very hard to get).
8. Overdose prevention resources were not as easy to access for Latinx and Black participants compared to white participants (e.g., Average ease of access was significantly different for Latinx participants (mean = 3.2, SD = 0.89, $p=0.02$) and Black participants (mean = 3.19, SD = 0.93, $p=0.03$) compared to white participants (mean = 3.42, SD = 0.76).

Support Services

9. The main barriers to successful completion of referrals for support services and treatment for a substance use issue from syringe access programs were lack of transportation, limited knowledge of who to talk to or where to go, and not having help or support from family, peers, and friends. (e.g., 54% of participants reported that referrals were not always successful, and these were the top barriers).

Sharps Disposal

10. Syringe access programs were the primary location that participants used for sharps disposal (e.g., 63% of participants reported disposing of used syringes at HRAC, and 67% reported disposing of used syringes at Access Point in the past month).
11. Awareness and use of city-funded sharps disposal kiosks are limited. Almost half (45.7%) of participants were not at all familiar with the city-funded sharps disposal

kiosks, and more than half (53.7%) of participants reported never using the kiosks for sharps disposal in the past month.

Based on project findings, the project team recommends that DDPHE develop goals and strategies to act on the following topics:

Improve access to lifesaving harm reduction and overdose prevention resources

1. Prioritize education and supplies that help people to be safe while smoking drugs.
2. Address transportation and location barriers that limit access to resources, for example, through policy initiatives and additional funding for bus tickets, ride shares, outreach, and mobile units.
3. Focus overdose prevention resource distribution efforts on Latinx and Black communities in Denver.
4. Improve referrals for and access to medication-assisted treatment (MAT).
5. Increase the promotion of resources available at syringe access programs.

Support policy initiatives to reduce barriers to services

6. Support amending Denver City Ordinance Sec. 24-157 - *Registration of qualified needle exchange and treatment referral programs* by removing requirements that limit access to harm reduction and overdose prevention resources. Support an amendment to remove the cap on syringe access programs that can operate and support an amendment on the requirement for fixed syringe access program sites to operate 1,000 feet from elementary and secondary schools in Denver.

Strengthen referral pathways for support services

7. Strengthen referral pathways by addressing transportation issues and implementing strategies that support participants throughout the referral process. For example, build up provider capacity by increasing funding to hire additional staff who can support resource navigation and warm hand-offs for support services.

Increase knowledge and awareness around safe sharps disposal

8. Increase knowledge of safe and unsafe sharps disposal methods in Denver.
9. Collect more information on participant sharps disposal preferences.
10. Increase awareness of sharps disposal kiosks for SAP participants and the public.
11. Increase distribution of sharps disposal containers to community partners in Denver, along with information detailing safe container disposal locations (e.g., sharps disposal kiosks).

INTRODUCTION

This is the final report for the Denver Department of Public Health and Environment (DDPHE) Syringe Access Program Needs Assessment (SAPNA) Project. The purpose of the project was to conduct a community needs assessment for the DDPHE Syringe Access and Sharps Disposal Program to learn about current community capacities, gaps in service, and barriers affecting people who access harm reduction and overdose prevention resources in Denver. This report summarizes the project background, project methods, findings, and recommendations. Appendices that support the main body of the report are included. In this report, “Denver” refers to the entirety of the City and County of Denver unless otherwise noted.

The four primary goals for the Denver SAPNA Project were to:

1. Evaluate perceived ease of access to harm reduction and overdose prevention resources for people who use syringe access programs in Denver.
2. Distinguish the top barriers to accessing harm reduction and overdose prevention resources for people who use syringe access programs in Denver.
3. Summarize the role that syringe access programs play in assistance for or referrals to support services for people who use syringe access programs in Denver.
4. Assess participant knowledge and skills regarding safe sharps disposal and awareness of DDPHE-sponsored sharps disposal kiosks.

ACRONYMS

Abbreviation	Full Name
ACS	American Community Survey
AIAN	American Indian or Alaska Native
CDC	Centers for Disease Control and Prevention
DDPHE	Denver Department of Public Health and Environment
HIV	Human Immunodeficiency Virus
HCV	Hepatitis C
HRAC	Harm Reduction Action Center
MAT	Medication-assisted Treatment
NSDUH	National Survey on Drug Use and Health
PRAPARE	Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences
PWID	People who inject drugs
PWUD	People who use drugs
REDCap	Research Electronic Data Capture
SAMHSA	Substance Abuse and Mental Health Services Administration
SAP	Syringe Access Program

US	United States
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OVERVIEW OF HEALTH PROBLEMS

The national opioid epidemic has resulted in alarming increases in drug overdose deaths and rates of human immunodeficiency virus (HIV) and hepatitis C (HCV) among people who inject drugs (PWID) in the United States (US). In 2018, the estimated number of PWID was 3.7 million people, representing about 1.5% of the US adult population.¹ This estimate was more than five times the most recent US estimate of about 774,000 PWID in 2011.¹ Furthermore, HIV diagnoses among PWID in the US slightly increased from 2017 (2,400 new HIV diagnoses) to 2021 (2,500 new HIV diagnoses).² In Denver County, approximately 6% of HIV cases in 2020 were attributed to injection drug use.³ Additionally, HCV cases among PWID have seen a stark increase over the last decade. From 2010 to 2020, reported acute HCV infections increased in the U.S. by more than fivefold, primarily due to increased injection of opioids and other drugs.⁴ In Colorado, there was a 33% increase in reported cases of acute HCV from 2015 to 2019.⁵

Opioid overdose death rates have risen to astounding proportions over the past decade. Opioids are a class of drugs that reduce the feeling of pain and include heroin, synthetic opioids such as fentanyl, and pain medications such as oxycodone, hydrocodone, codeine, and morphine.⁶ The 2021 National Survey on Drug Use and Health reported that 3.3% (or 9.2 million people) of US adults misused opioids (heroin or prescription pain relievers) in the past year.⁷ Illicitly manufactured fentanyl is about 50 times as potent as heroin, and fentanyl contamination of other drugs has led to dangerous increases in overdose risk.⁸ From 2013 to 2019, the age-adjusted rate of deaths involving synthetic opioids (excluding methadone) increased by a staggering 1,040% nationally.⁹ In Colorado, rates of drug overdose deaths nearly doubled from 2018 to 2021, with 16.5 deaths per 100,000 Coloradans in 2018 and 31.7 deaths per 100,000 Coloradans in 2021.¹⁰ In Denver County, there were 594 drug-related deaths in 2023, 65% of which involved fentanyl (J. Jiao, personal communication, May 31, 2024). Additionally, fatal outdoor overdose deaths in Denver County nearly doubled in the last year, with a total of 82 people fatally overdosing outside in 2023 compared to 42 people in 2022.¹¹

Denver, in line with the nation, is experiencing an opioid overdose crisis that is also fueling increases in the transmission of HIV and HCV among people who inject drugs. Research shows that syringe access programs (SAPs) are highly effective at reducing HIV, HCV, and overdose deaths among PWID. SAPs are community-based programs that provide access to sterile syringes, facilitate safe disposal of used syringes, and link participants to important services like substance use disorder treatment, HIV and viral hepatitis prevention and treatment, and overdose prevention education.¹² SAPs are associated with an estimated 50% reduction in HIV and HCV incidence.¹³ Additionally, PWID who regularly use a

SAP are five times as likely to enter treatment for a substance use disorder and three times as likely to report reducing or discontinuing injection drug use compared to those who have never used a SAP.¹⁴ Supervised injection sites, or facilities where people can use drugs safely in the presence of health care personnel, are another approach that successfully decreases disease transmission and reduces overdose death rates.¹⁵ One study found that a supervised injection site in Vancouver, Canada, prevented 35 new cases of HIV and almost three deaths per year.¹⁶ In Colorado, a House Bill to authorize safe injection sites or overdose prevention centers was indefinitely postponed in April 2024.¹⁷ Syringe access programs, also limited to three locations in Denver by city ordinance, have thus proven to be the most effective allowable public health approach for keeping people who use drugs in Denver safe and healthy.¹⁹

HEALTH INEQUITIES

People from minoritized racial and ethnic groups often experience structural barriers rooted in systematic discrimination and exclusion that result in less economic opportunity, less access to health care, worse living conditions, and historical trauma.¹⁹ These underlying social determinants of health, or conditions in which people live, work, and play, contribute to increased risk for health issues.¹⁹ People from minoritized races and ethnicities who inject and/or use drugs experience disproportionate rates of HIV, HCV, and drug overdose deaths compared to white PWID in the U.S. In 2019, African Americans constituted 13% of the US population and approximately 45% of PWID living with HIV, Latinx individuals constituted 18% of the US population and about 28% of PWID living with HIV, and non-Hispanic white individuals constituted 60% of the US population and about 22% of PWID living with HIV.^{2, 21} Racial/ethnic inequities in HIV transmission are associated with higher-risk injection networks, stigmatization, poverty, and less access to sterile injection equipment, not individual injection behaviors.²² Additionally, the prevalence of chronic HCV in the Latinx and Black populations is double that of the white population in the US.²³ Studies also show that chronic HCV treatment outcomes and access to care are poorer for racial minorities.²³ Finally, drug overdose death rates have drastically increased for the American Indian or Alaska Native (AIAN) and Black populations, further widening disparities compared to the white population.²⁰ Factors that exacerbate overdose-related disparities among marginalized racial and ethnic groups include income inequality and less access to opioid treatment programs.²⁰

DENVER SYRINGE ACCESS PROGRAMS

In 2011, Denver City Council voted to amend City Ordinance Sec. 24-157 - *Registration of qualified needle exchange and treatment referral programs*, allowing up to three needle exchange (syringe access) programs to operate in the City and County of Denver.^{19, 24} The three syringe access programs (SAPs) in Denver are Access Point at Colorado Health Network, Harm Reduction Action Center (HRAC), and Vivent Health's Lifepoint mobile unit. These three programs provided harm reduction resources to 6,398 unique individuals in 2021.²⁵ Resources provided at these locations include free sterile syringes, injection equipment, wound care supplies, meth/crack pipes, safer smoking kits, safe syringe disposal, referrals to other resources, the opioid overdose reversal medication naloxone, fentanyl testing strips, HIV/HCV/STI testing, education, hygiene products, food access,

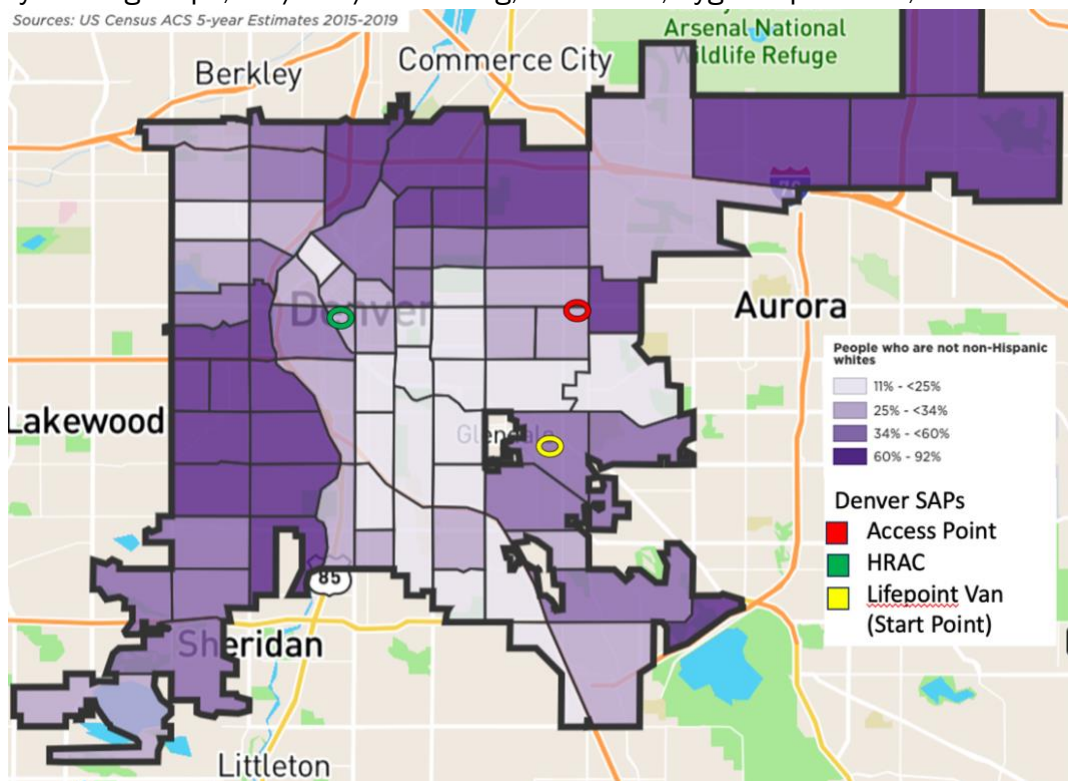


Figure 1. City and County of Denver map with SAP locations with Race and Ethnicity US Census ACS Estimates 2015-2019.²⁹

phone services, and community.^{26,27,28} Access Point and HRAC are fixed locations, while Lifepoint operates as a mobile unit. Figure one shows a map of Denver with darker shading representing more densely populated areas of people who do not identify as only white.²⁹ The approximate locations of SAPs in Denver are represented by circles. Denver Access Point is located at 6260 East Colfax Ave, Denver, CO 80220. The program is open weekly from 1-6 pm on Monday, Tuesday, Wednesday, and Thursday and 12-3 pm on Friday.²⁷ HRAC is located at 112 E 8th Ave, Denver, CO 80203, and is open from 9 am to 12 pm Monday through Friday.²⁶ The Lifepoint program at Vivent Health is a mobile unit that travels

to locations around the city four days per week (and at least one Saturday a month) to provide people with harm reduction resources.²⁸ City Ordinance Sec 24-157 specifies that needle exchange programs must be at least 1,000 feet from an elementary and/or secondary school, except for mobile outreach workers.¹⁹ The fixed location of Vivent Health is within 1,000 feet of a school; therefore, it cannot operate as a syringe access program.³⁰ Figure two shows a map of Denver from 2013 when the City Council voted to remove this constraint from the ordinance for mobile outreach workers. However, it persists for fixed sites.³¹

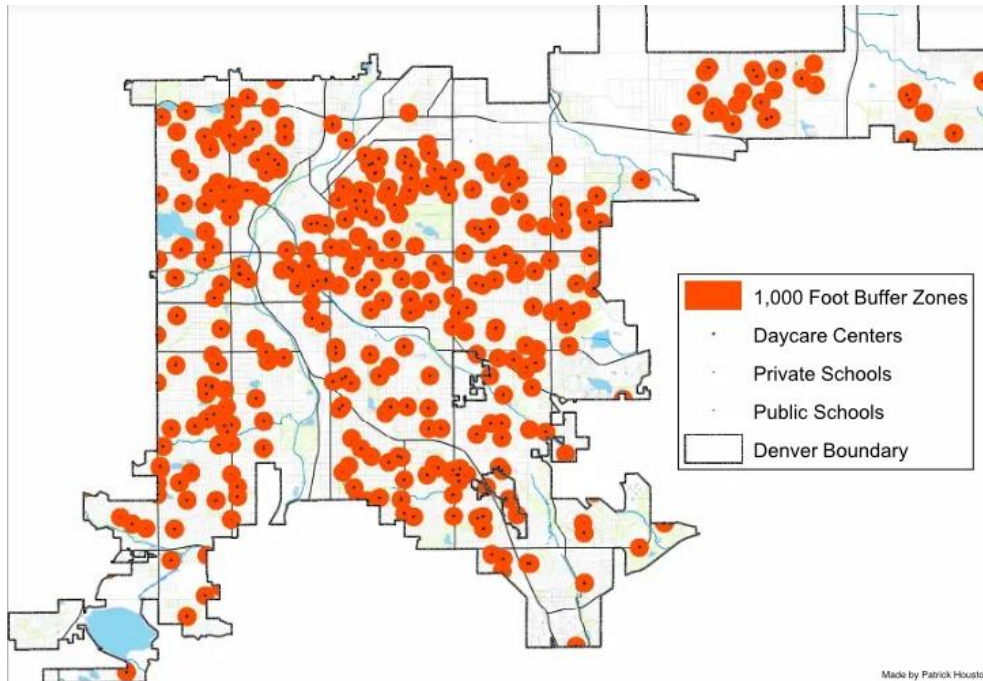


Figure 2. Denver County with 1,000-foot zones around schools and childcare centers in 2013.

EVALUATION FOCUS AREAS

Four evaluation focus areas were developed to guide survey design, data analysis, and interpretation of findings. These focus areas were: 1) HIV and hepatitis-C prevention, 2) drug overdose prevention, 3) support services, and 4) sharps disposal.

HIV and Hepatitis C Prevention. How do people who access harm reduction services in Denver perceive the accessibility of sterile syringes, injection supplies (cottons, cookers, waters, tourniquets), clean smoke pipes, safer smoking kits (including clean pipes, steel wool, rubber bands, and sanitizing wipes), testing for HIV and/or Hepatitis C, testing for sexually transmitted diseases (STDs), vaccinations to protect against Hepatitis A and Hepatitis B, wound care supplies, information about safely injecting drugs, training on ways to properly inject, information about being safe while smoking drugs, and treatment for a

substance use issue? How does the perception of access to these services differ by age, sex, race/ethnicity, and housing situation? What environmental, institutional, community, interpersonal, and individual-level barriers do people face when accessing these services?

Drug Overdose Prevention. How do people who access harm reduction services in Denver perceive the accessibility of medication-assisted treatment, naloxone, fentanyl test strips, overdose prevention education, and overdose prevention training? How does the perception of access to these services differ by age, sex, race/ethnicity, and housing situation? What environmental, institutional, community, interpersonal, and individual-level barriers do people face when accessing these services?

Support Services. To what extent do people who access harm reduction services in Denver get assistance with or referrals for food, housing, childcare, clothing, medicine or any health care (medical, dental, mental health, vision), phone services, and treatment for a substance use issue from syringe access programs? How does assistance with and referrals for these services from syringe access programs differ by age, sex, race/ethnicity, and housing situation? How successful or unsuccessful are referrals from SAPs that are intended to link participants to support services?

Sharps Disposal. Among people who access harm reduction resources, what is the level of knowledge and skills regarding individual-level and community-level health risks of unsafe disposal of sharps, the procedures for safe handling and disposal of used sharps, and awareness of the location of sharps disposal kiosks?

METHODS

PARTICIPANTS

Individuals were eligible to complete the survey if they were a syringe access program participant in Denver. Data was collected in person at two of Denver's syringe access programs, Access Point and HRAC. We obtained verbal consent from each eligible participant (N=946) and provided the online survey on an electronic tablet. Participants were invited to complete the survey on their own to maximize privacy or to complete the survey as an in-person interview with a staff member to address accessibility issues or literacy limitations. An interview guide was used to standardize interview protocols and aid in survey administration. Participants were compensated for their time with a \$25 gift card incentive.

Due to the need to maintain the anonymity of the syringe access program (SAP) participants, we could not use a random sampling technique. Therefore, a convenience sampling method was used. At HRAC, individuals who visited the program between 9 am and 12 pm from September 12th to September 29th (excluding September 14th, 19th, and 20th) were invited to take the survey. Participants were invited to take the survey by HRAC staff, administered by DDPHE staff. Participant selection was not a uniform process due to the fast-paced service environment, though most visitors were asked to take the survey. The survey was not advertised at this location.

Survey dissemination efforts were contracted out to Access Point at Denver's Colorado Health Network. At Access Point, individuals who visited the program from 1 pm to 6 pm on Monday through Friday between September 11th and October 31, 2023, were invited to take the survey. The survey was advertised on promotional flyers throughout the facility. Most participants heard about the survey by word of mouth, and many survey participants in October were new intakes to the program. Awareness of the incentive led to high demand to take the survey. Three participants could take the survey at once, and a system was used to keep track of participants waiting. Ten surveys were collected during program outreach at homeless encampments, and all other surveys were completed on-site at Access Point or HRAC.

SURVEY DESIGN

Survey questions were developed to collect quantitative cross-sectional data and address the four evaluation focuses posed by DDPHE. Survey questions were constructed specifically for this study with minor elements adapted from other instruments.^{32,33} Survey questions were pre-tested with SAP participants using a cognitive interview approach, and survey questions were shared with SAP staff for review and feedback. The survey instrument

was then built into the Research Electronic Data Capture (REDCap) online system and pilot-tested at two SAP locations prior to finalization. The final SAPNA survey consisted of 40 survey questions (see Appendix II). The survey was accessible through an online public link. To reduce non-response errors from item-level missing data, all questions were required with an option to select “I choose not to answer.” The online survey was systematically and thoroughly tested to prevent skip logic errors.

MEASURES

Demographics. Participants were asked about their age, sex assigned at birth, gender identity, sexual orientation, housing status, and race and/or ethnicity. A single race/ethnicity variable was created from a “select all that apply” question. To effectively capture participants’ racial and/or ethnic identity, project staff assigned participants who selected multiple races into a single racial/ethnic category by the identity that was least represented in the survey: AIAN participants first, followed by Black participants, then Latinx participants, and finally white participants. Demographic subgroups of focus were determined based on literature review and sample sizes ($N > 100$), and included: female to male, under 35 years old to 35 years or older, housed at the time of survey or unhoused at the time of survey, and the four racial/ethnic groups; AIAN, Black, Latinx, and white populations.

Ease of Access. To assess respondents’ perceived ease of access to resources, we asked, “*In the past month, how easy or hard was it to get the following supplies or services when you really needed them?*” Resources were organized into two categories: HIV and hepatitis C prevention and drug overdose prevention. Thirteen harm reduction resources were listed, and five drug overdose prevention resources were listed. Response options included 4 = very easy, 3 = somewhat easy, 2 = somewhat hard, and 1 = very hard. Items were summed and averaged to create a total score, and scales were found to be internally consistent ($\alpha = .97$ for harm reduction resources, $\alpha = .93$ for overdose prevention resources).

Perceived Barriers. If a respondent indicated that any resource was somewhat hard or very hard to access, they were asked to select the barriers that made access difficult. Twelve barriers were listed and separated into levels of the socio-ecological model: the policy/environmental level, community level, organizational level, interpersonal level, and individual level. Response options included 1 = this reason did make it hard and 0 = this reason did not make it hard.

Support Services. To assess assistance with and referrals for support services from syringe access programs, we modeled the survey question structure off the PRAPARE tool.² Survey questions asked if the respondent had gotten assistance with or a referral for food, utilities, medicine or health care (medical, dental, mental health, vision), phone, clothing, childcare, or treatment for a substance use issue in the past 12 months. Responses options

included 1 = yes and 0 = no. We then asked participants how often a referral was successful. Response options included 4 = always, 3 = usually, 2 = sometimes, 1 = rarely, and 0 = never. If a respondent indicated that a referral did not always end with getting the things they needed, they were asked to select the barriers that made the referral unsuccessful. Eleven barriers were listed with response options: 1 = this reason did make it hard, and 0 = this reason did not make it hard.

Sharps Disposal. To assess knowledge of safe disposal of used sharps (i.e., syringes), participants were asked, “How confident are you that each place or way listed is safe for getting rid of used needles?” Response options were on a 5-point scale ranging from 1 = not at all confident to 5 = very confident. Next, to assess skills of safe sharps disposal, participants were asked in the past month how often they got rid of sharps in locations including syringe access programs, sharp disposal kiosks, a pharmacy, a doctor’s office or hospital, trash can, giving it to someone else, or leaving it where it was used. Response options were on a 5-point scale ranging from 0 = never to 4 = always. Participants were asked how familiar they were with the four DDPHE-sponsored kiosks around Denver to assess awareness of sharps disposal kiosks. A photo of a kiosk was provided. Response options included: 2 = very familiar, 1 = somewhat familiar, and 0 = not at all familiar.

DATA ANALYSIS

Data analyses were conducted using SPSS version 29 software.³⁴ Response distributions were inspected for all variables to assess variability, look for ceiling or floor effects, and determine the appropriate statistical test. Missing data were minimal since logical skips were coded into the survey. Descriptive statistics, either counts and percentages or means, and standard deviations were reported for study variables.

Average access to harm reduction resources and average access to overdose prevention resources were used to compare access between demographic subgroups. The response distributions were not normally distributed, so tests that do not require the assumption of normality (Mann-Whitney *U* tests and Kruskal-Wallis *H* tests) were used to compare differences in the distribution of average perceived access among demographic subgroups. For assistance with/referrals for support services, chi-square tests of independence were used to assess differences between demographic subgroups because the variable was binary. *P*-values were considered statistically significant at or below a significance level of 0.05 for all statistical tests.

RESULTS

The original survey sample included 946 syringe access program participants. Twenty-three survey responses were missing “access to supplies and services” data and all

following data, so they were excluded from the analysis. The final survey sample included 923 participants. Eight additional survey responses had missing data for demographic characteristics. Thus, analyses that included demographic variables were limited to 915 participants. Additionally, survey participants were not directed to answer all questions based on the skip-logic survey methodology. Therefore, not all data sets were complete.

Table one contains a summary of the demographic characteristics. Most participants were male (66%) and did not have housing at the time of the survey participation (66.2%). Almost half (48.4%) of participants identified as white, followed by Latinx (19.9%), Black (19.2%), and AIAN (10.7%).

Table 1. Demographic Characteristics of Survey Participants, N=915.

Characteristic		
Sex	n	%
Female	274	29.9
Male	604	66
Sexual Orientation	n	%
Straight/Heterosexual	681	74.4
Gay or Lesbian	53	5.8
Bisexual	97	10.6
I choose not to answer	54	5.9
Gender Identity (N=914)	n	%
Transgender	37	4
Age	n	%
17 years old or younger	12	1.3
18 to 24 years old	36	3.9
25 to 34 years old	166	18.1
35 to 44 years old	318	34.8
45 to 54 years old	199	21.7
55 to 64 years old	133	14.5
75 years or older	30	3.3
I choose not to answer	18	2
Race/Ethnicity	n	%
American Indian or Native Alaskan (AIAN)	101	10.7
Asian or Asian American	20	2.1
Black or African American	182	19.2
Hispanic or Latinx	188	19.9
Middle Eastern/North African or Arab Origin	11	1.2
Native Hawaiian or Other Pacific Islander Native	11	1.2
White	462	48.8
Identity not listed	26	2.7

I choose not to answer	48	5.1
Housing Status		
Did not have housing	606	66.2
Had housing	203	22.2
I choose not to answer	106	11.6

ACCESS AND BARRIERS TO HARM REDUCTION RESOURCES

Table two shows the results of survey participants' perceived accessibility of harm reduction resources in Denver. The sample size per resource varied based on the number of participants who did or did not need the resource. For example, 25.8% of participants said they did not need sterile syringes and were not included in the mean and standard deviation for perceived accessibility to sterile syringes. Overall, the average perceived ease of access to each harm reduction resource fell between 3 = somewhat easy and 4 = very easy on the measurement scale, indicating that all resources were easy to access, on average. The total average accessibility to harm reduction resources was 3.25 (SD = 0.81).

Table 2. Average perceived ease of access to harm reduction resources, N = 923.

	Average perceived ease of access	Needed resource	Did not need resource
Supply/Service	Mean (SD)	N (%)	N (%)
Sterile syringes	3.40 (0.87)	648 (70.2)	238 (25.8)
Wound care supplies	3.39 (0.91)	717 (77.7)	171 (18.5)
Clean smoke pipes	3.37 (0.90)	819 (88.8)	74 (8.0)
Testing for HIV and/or Hepatitis C	3.36 (0.90)	613 (66.4)	264 (28.6)
Other smoking supplies (steel wool, rubber bands, sanitizing wipes)	3.33 (0.90)	756 (82)	133 (14.4)
Information about safely injecting drugs	3.33 (0.95)	624 (67.6)	262 (28.4)
Injection supplies (cottons, cookers, waters, tourniquets)	3.32 (0.93)	636 (69)	247 (26.8)
Information about being safe while smoking drugs	3.27 (0.98)	713 (77.9)	166 (18.1)
Treatment for a substance use issue	3.23 (1.01)	645 (69.9)	234 (25.4)
Training on ways to properly inject	3.19 (1.06)	581 (64.2)	282 (31.1)
Vaccines to protect against Hepatitis A, Hepatitis B, and/or Tetanus	3.17 (1.03)	577 (62.5)	297 (32.2)
Testing for sexually transmitted diseases like chlamydia, gonorrhea, and syphilis	3.16 (1.03)	560 (60.7)	319 (34.6)
At-home testing kits for HIV or Hepatitis C	3.09 (1.06)	558 (60.4)	316 (34.2)
OVERALL MEAN	3.25 (0.81)		

Note: Scores range from 1 to 4. Higher score reflects greater perceived ease of access to supply or service. Means (SD) are based only on participants who needed resource. SD stands for standard deviation.

Of participants who indicated they needed a supply or service, the average perceived ease of access was greatest for sterile syringes (mean = 3.4, SD = 0.87), followed by wound care supplies (mean = 3.39, SD = 0.91) and clean smoke pipes (mean = 3.37, SD = 0.44). It was very hard to access at-home HIV or HCV testing kits for 11.5% of participants and very hard to access training on ways to properly inject for 11.4% of participants (see Appendix I, Table 1). Most (88.8%) participants indicated that they needed clean smoke pipes, other smoking supplies (82%), information about being safe while smoking drugs (77.9%), and wound care supplies (77.7%). The least needed resources were testing for STDs and at-home testing kits for HIV or HCV.

Table three shows results for the Mann-Whitney *U* tests and Kruskal-Wallis *H* tests comparing average access to harm reduction resources among demographic subgroups. There was no statistically significant difference in the distribution of average perceived access to harm reduction resources among any demographic subgroups (*p*-values all greater than 0.05).

Table 3. Comparison of distribution between average perceived ease of access to harm reduction resources among demographic subgroups.

Characteristic	Mean (SD)	Mean Rank	Sample Size (N)	Mann-Whitney <i>U</i> Statistic	<i>P</i> -value
Sex					
Female	3.23 (0.83)	404.36	259	71059	0.38
Male	3.28 (0.81)	419.84	570		
Age					
Under 35 years old	3.16 (0.91)	404.3	200	67840	0.23
35 years and older	3.29 (0.78)	427.51	643		
Housing Status					
Unhoused	3.28 (0.8)	384.12	575	55131	0.98
Housed	3.28 (0.84)	383.64	192		
Race/Ethnicity				Kruskal-Wallis <i>H</i> Statistic	
AIAN	3.17	403.84	99	5.561	0.23
Black or African American	3.23	411.82	149		
Hispanic or Latinx	3.22	427.06	150		
White	3.32	450.03	387		
Note: Non-parametric <i>t</i> -tests, <i>p</i> -value significant at ≤ 0.05 .					

Table four shows the results for barriers that participants faced when trying to access harm reduction resources. Of 923 participants, 371 (40.7%) reported that at least one of the harm reduction resources was very hard or somewhat hard to access. Environmental factors were reported as barriers more often compared to community, organizational, interpersonal, and individual level barriers. Lack of transportation was the top barrier to accessing resources (45.8%), followed by the program being too far away (40.2%). Other notable barriers were the participant not knowing that the supply or service was available (38%) and the participant feeling too stressed (36.7%).

Table 4. Perceived barriers to accessing harm reduction supplies and services, N=371.

	This reason did NOT make it hard	This reason did make it hard	I choose not to answer
Reason/Barrier	N (%)	N (%)	N (%)
<i>Environmental/Policy Level</i>			
The program is too far away	181 (48.8)	149 (40.2)	41 (11.1)
I have no transportation (bus or car) to get to the program	167 (45)	170 (45.8)	34 (9.2)
The program is not open when I need it	208 (56.2)	111 (30)	51 (13.8)
<i>Community Level</i>			
I'm worried that I'll get arrested or stopped by police	217 (58.5)	114 (30.7)	40 (10.8)
The supplies and services I need are not offered by the program	244 (25.8)	81 (21.8)	46 (12.4)
<i>Organizational Level</i>			
I didn't know the supply or services was available	191 (51.5)	141 (38)	39 (10.5)
I didn't know the supply or service was free	209 (56.3)	123 (33.2)	39 (10.5)
<i>Interpersonal Level</i>			
I'm worried that I'll be judged	214 (57.7)	118 (31.8)	39 (10.5)
I don't want others to find out	211 (57)	116 (31.4)	43 (11.6)
<i>Individual Level</i>			
I am afraid	226 (60.9)	106 (28.6)	39 (10.5)
I am too stressed	202 (54.4)	136 (36.7)	33 (8.9)
I don't have time	213 (57.4)	116 (31.3)	42 (11.3)

ACCESS AND BARRIERS TO OVERDOSE PREVENTION RESOURCES

Table five contains results for survey participants' perceived accessibility of overdose prevention resources in Denver. The average perceived ease of access to overdose

prevention resources was 3.32 (SD = 0.83). Of participants who needed the supply or service, naloxone was the easiest supply to access (mean = 3.46, SD = 0.85), and a referral for medication-assisted treatment (MAT) was the least easy service to access (mean = 3.14, SD = 1). The most needed overdose prevention resources were fentanyl test strips (79.8%), followed by information about overdose prevention (79.5%), and naloxone (79%). The lowest percentage of participants indicated that they needed MAT (72.8%) compared to all overdose prevention resources. However, one in four participants who needed a referral for MAT reported that it was somewhat hard or very hard to get it (see Appendix I: Table 2).

Table 5. Average perceived ease of access to overdose prevention supplies and services, N=920.

	Average perceived ease of access	Needed resource	Did not need resource
Supply/Service	Mean (SD)	N (%)	N (%)
Naloxone or NARCAN to reverse an opioid overdose	3.46 (0.85)	730 (79)	140 (15.2)
Fentanyl test strips	3.43 (0.88)	735 (79.8)	135 (14.7)
Information about ways to prevent an overdose	3.36 (0.93)	731 (79.5)	137 (14.9)
Training to learn how to prevent an overdose	3.28 (0.97)	721 (78.4)	148 (16.1)
Referral for medication assisted treatment	3.14 (1.0)	669 (72.8)	194 (21.1)
OVERALL MEAN	3.32 (0.83)		

Note: Scores range from 1 to 4. Higher score reflects greater perceived ease of access to supply or service. Means (SD) are based only on participants who needed resource. SD stands for standard deviation.

Participants reported facing similar barriers when trying to access overdose prevention resources as the barriers faced when trying to access harm reduction resources. Of 920 participants, 255 (27.7%) reported that at least one of the overdose prevention supplies or services was somewhat or very hard to access. Environmental factors posed the greatest challenge for accessing overdose prevention resources, with 41.6% of participants reporting that lack of transportation was a barrier and 38.3% of participants reporting that the program was too far away (see Appendix I: Table 3). Another notable barrier was the participants not knowing that the supply or service was available (34.9%).

Table six shows results for the Mann-Whitney *U* tests and Kruskal-Wallis *H* tests comparing average ease of access to overdose prevention resources among demographic subgroups. There was no statistically significant difference in the distribution of average perceived access to overdose prevention resources for sex, age, and housing status. For race/ethnicity, there is evidence that not all distributions are equal ($H=9.5, p=0.05$). Pairwise comparisons show that distributions for white participants were significantly different for Latinx participants ($p=0.02$) and Black participants ($p=0.03$). The average

perceived ease of access to overdose prevention resources was lower for Latinx participants (mean = 3.2, SD = 0.89) and Black participants (mean = 3.19, SD = 0.93) compared to white participants (mean = 3.42, SD = 0.76) (see Table 6).

Table 6. Distribution of average perceived access to overdose prevention resources among demographic subgroups.

Characteristic	Mean (SD)	Mean Rank	Sample Size (N)	Mann-Whitney <i>U</i> Statistic	<i>P</i> -value
Sex					
Female	3.32 (0.83)	387.99	234	63295.5	0.63
Male	3.38 (0.78)	380.07	530		
Age					
Under 35 years old	3.27 (0.9)	380.92	182	55615.5	0.56
35 years and older	3.34 (0.82)	391.47	595		
Housing Status					
Unhoused	3.35 (0.8)	355.26	531	49245.5	0.69
Housed	3.35 (0.84)	362.08	182		
Race/Ethnicity				Kruskal-Wallis <i>H</i> Test	
AIAN	3.41 (0.77)	416.14	89	-1.19	0.96
Black or African American	3.19 (0.93)	368.79	131	-48.54	0.03
Hispanic or Latinx	3.20 (0.89)	365.19	142	-52.15	0.02
White	3.42 (0.76)	417.33	364		
<i>Note: Non-parametric t-tests, p-value significant at ≤ 0.05.</i>					

ASSISTANCE WITH AND REFERRALS FOR SUPPORT SERVICES

Figure three shows the extent to which survey participants got assistance with or referrals for support services from SAPs. Over half (60%) of participants got assistance with or a referral for food from SAPs in the past year. Additionally, 34.5% of participants got help with medicines or other health care, and more than a quarter (27%) got assistance with or a referral for treatment for a substance use issue at SAPs in the past year.

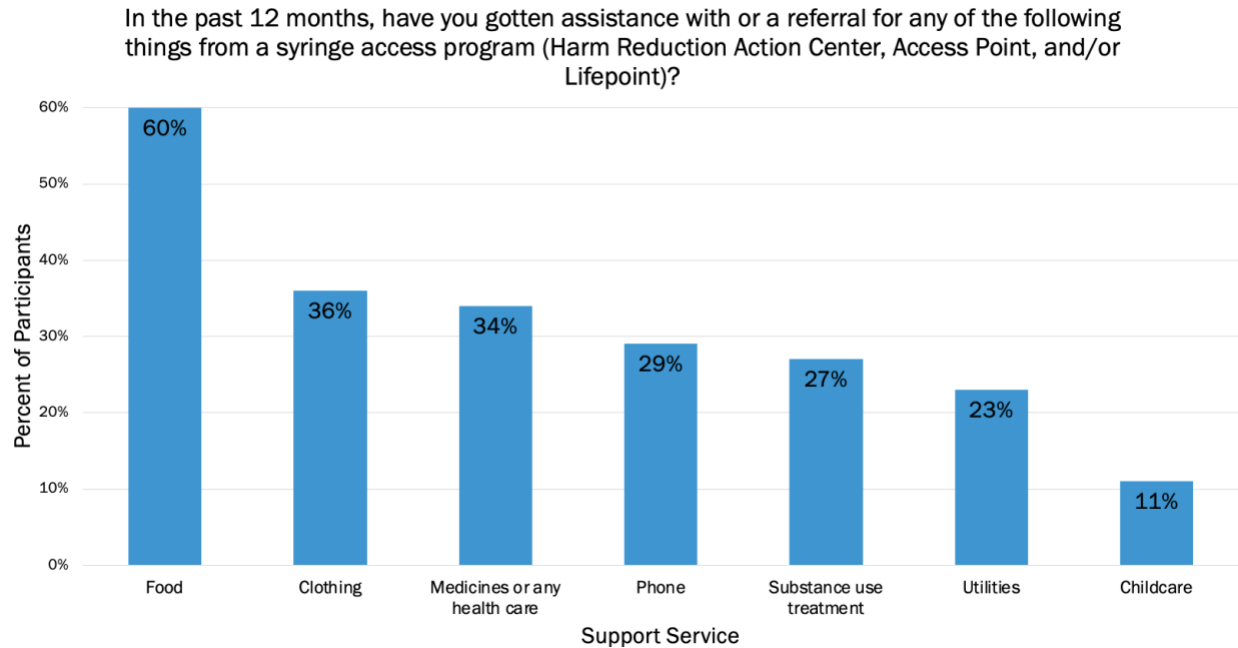


Figure 3. Assistance with or referrals for support services at Denver syringe programs, N=918.

Pearson chi-square tests of independence were used to assess how assistance with or referrals for food, health care, and substance use treatment differed among demographic subgroups. There was a significant association between assistance with food and sex. Female participants were less likely to get assistance with food while visiting a syringe access program compared to male participants ($\chi^2(1) = 6.801, p=0.009$). There was also a significant association between assistance with food and age. Participants under 35 years old were less likely to get assistance with food at Denver syringe access programs compared to participants 35 years and older ($\chi^2(1) = 4.922, p=0.027$). There was no significant association between assistance with and referrals for food, health care, and substance use treatment for all other demographic subgroups (p -values all greater than 0.05).

Figure four shows that participants reported success in referrals for support services from SAPs. Of participants who got a referral from a syringe access program in the past 12 months ($N = 738$), 45.4% reported that it always ended with them getting the things they needed. Of participants who reported that the referral(s) they got were not always successful ($N=401$), lack of transportation was a barrier for almost half (49%). In comparison, 40% indicated that they did not know who to call or talk to, 39% said they didn't know where to go for the support service, and 38% said that a barrier they experienced was not having help or support from a partner, family, or friends (see Appendix I: Table 4).

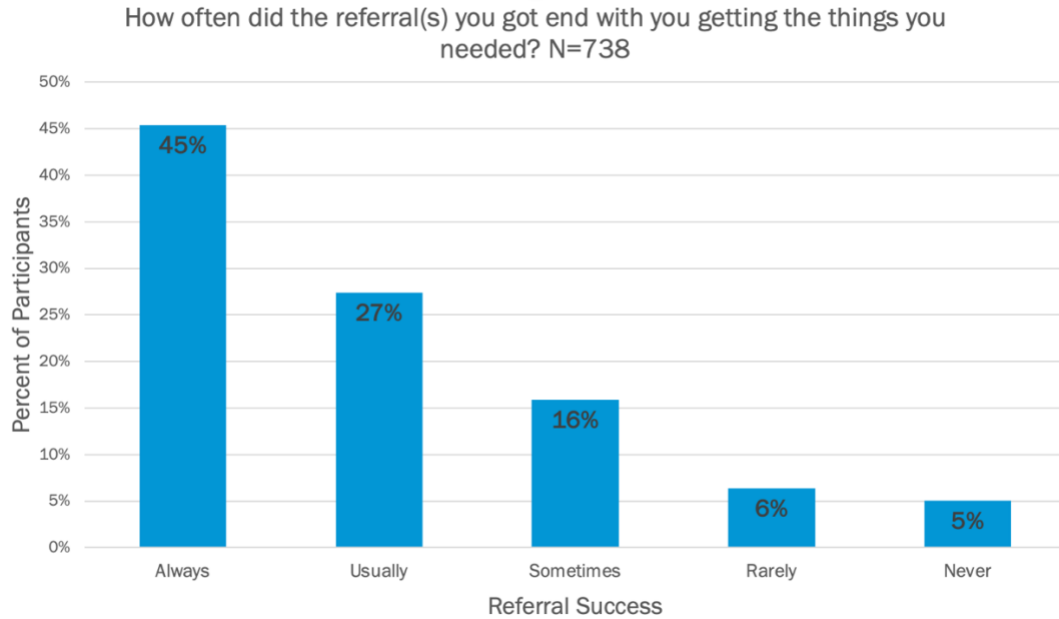
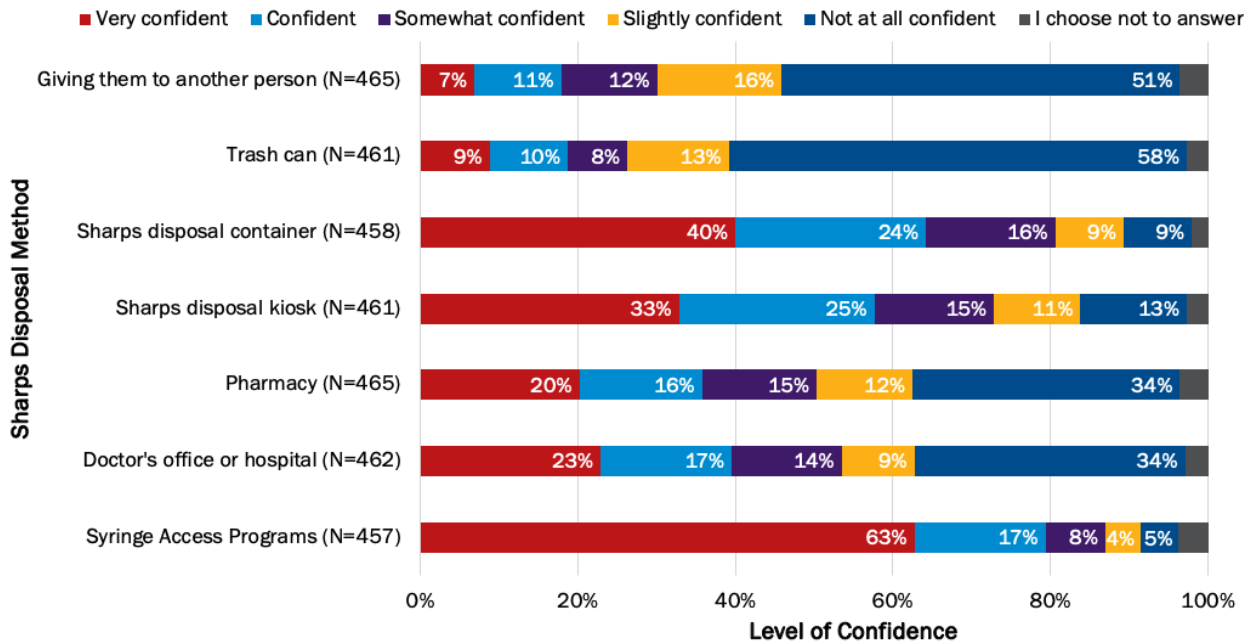


Figure 4. Frequency of success for support service referrals from Denver Syringe Access Programs,

SAFE SHARPS DISPOSAL METHODS

To assess knowledge of safe sharp disposal practices, participants who inject drugs (N=475) were asked to describe how confident they were that certain places or methods are safe for getting rid of used syringes (see Figure 5). A majority (79.3%) of participants felt confident or very confident that syringe access programs were safe locations for sharps disposal, while less than half (39.5%) were confident or very confident that a doctor's office or hospital were safe places for sharps disposal and even less (35.8%) were confident or very confident that a pharmacy was a safe place for sharps disposal. Most (58.1%) participants reported they were not at all confident that putting used syringes in a trash can was a safe disposal method, and half (50.5%) of participants were not at all confident that giving a used syringe to someone they knew was a safe disposal method. About 64% of participants were confident or very confident that a sharps container was a safe disposal method, while almost 58% of participants were confident or very confident that it was safe to dispose of sharps in a kiosk around the city.

Figure 5. Participant level of confidence that each sharps disposal method is safe.



To assess skills of safe sharps disposal practices, participants who inject drugs (N=475) were asked to report how often they used a list of places or methods to dispose of used sharps in the past month. Participants reported that they always or usually disposed of sharps in the two locations where survey dissemination took place, Access Point (41.1%) and Harm Reduction Action Center (39.8%) (see Table 7). Most participants reported that they never used doctor’s offices or hospitals (70.1%) or a pharmacy (67.4%) to dispose of used sharps. Most participants (70.1%) reported that they never left a used syringe where they used it. Of the 137 participants who said they disposed of sharps in another location, six people listed Points West in Lakewood, five people listed stores like King Soopers that have sharps disposal containers in the restroom, and four people mentioned Pueblo, likely referring to the Southern Colorado Access Point location.

Table 7. Participants self-reported frequency of sharps disposal method or location in the past month, N=475.

	Always or usually	Sometimes or rarely	Never	Chose not to answer
Location or Disposal Method	N (%)	N (%)	N (%)	N (%)
Harm Reduction Action Center	189 (39.8)	110 (23.2)	160 (33.7)	16 (3.4)
Access Point	195 (41.1)	123 (25.9)	141 (29.7)	16 (3.4)
Vivent Health “Lifepoint” van	63 (13.3)	88 (18.5)	308 (64.8)	16 (3.4)

Sharps disposal kiosk around the city	77 (16.2)	127 (26.7)	255 (53.7)	16 (3.4)
Pharmacy	40 (8.4)	98 (20.6)	320 (67.4)	17 (3.6)
Doctor's office or hospital	43 (9.1)	81 (17.1)	333 (70.1)	18 (3.8)
Put it in a trash can	82 (17.3)	159 (33.5)	219 (46.1)	15 (3.2)
Gave it to someone else	29 (6.1)	128 (26.9)	303 (63.8)	15 (3.2)
Left it where I used it	30 (6.3)	96 (20.2)	333 (70.1)	16 (3.4)
Other syringe access program or place	46 (9.7)	91(19.2)	318 (66.9)	20 (4.2)

To assess participant awareness of city-funded sharps disposal kiosks, participants who inject drugs (N=475) were asked to report their level of familiarity with the kiosks (the survey included a photo of a kiosk). Some (28.2%) participants were very familiar with the kiosks, while 25.1% were somewhat familiar with the kiosks, and 45.7% were not at all familiar with the kiosks.

FINDINGS

The findings section includes a discussion of survey results and recommendations based on these results. Recommendations are broken into four categories: 1) Improve access to lifesaving harm reduction and overdose prevention resources, 2) Support policy initiatives to reduce barriers to services, 3) Strengthen referral pathways for support services, and 4) Increase knowledge and awareness around safe sharps disposal.

IMPROVE ACCESS TO LIFESAVING HARM REDUCTION AND OVERDOSE PREVENTION RESOURCES

Harm reduction resources. Overall, syringe access program participants perceive harm reduction resources as easy to access. The easiest resources to get were sterile syringes, wound care supplies, and smoke pipes, on average, compared to all other harm reduction resources. There is no evidence that perceived accessibility to harm reduction resources differed between demographic subgroups. It also appears that resources of greatest need were some of the easiest to access on average. This finding underscores the strength of Denver SAPs in effectively prioritizing resources.

A larger number of participants needed smoking supplies compared to injection supplies. The most needed harm reduction resources were clean smoke pipes, other smoking supplies (including cottons, cookers, waters, and tourniquets), and information about being safe while smoking drugs. It is recommended that education and supplies that help people to be safe while smoking be prioritized to meet the needs expressed by the community. It appears that participants struggled the most to access at-home HIV and HCV testing kits and training on ways to properly inject. It is recommended that strategies be identified to increase access to these resources.

Overdose prevention resources. It appears that SAP participants perceive overdose prevention resources to be easy to access. There is evidence that perceived accessibility to overdose prevention resources was different between racial and ethnic groups. It appears that Latinx and Black participants had a lower perceived ease of access to overdose prevention resources on average compared to white participants. It is recommended that overdose prevention resource outreach be focused on Latinx and Black communities in Denver.

The majority of participants needed naloxone, fentanyl test strips, information about preventing overdose, and training on ways to prevent an overdose. The easiest resources to get were naloxone and fentanyl test strips. These findings highlight the high demand for overdose prevention resources in the community and the critical role that SAPs play in

providing these life-saving resources. The least easy resource to get was a referral for MAT. It is recommended that strategies be identified to increase SAP participants' access to MAT.

Barriers to accessing resources. The greatest perceived barriers to harm reduction and overdose prevention resources were a lack of transportation (bus or car) and the program being too far away. It is recommended that DDPHE address transportation and location barriers that limit access to resources, for example, through policy initiatives and additional funding for bus tickets, ride shares, outreach, and mobile units. Another barrier for many participants was not knowing that the listed resource was available. This barrier may indicate a need for increased promotion of available resources, a lack of funding for a resource, and/or a limited capacity to provide all resources. It is recommended that DDPHE convene provider meetings to further understand this challenge and identify strategies to increase participant awareness of the array of resources offered at syringe access programs. Finally, stress was a barrier that program participants faced when trying to access resources. It is recommended that DDPHE prioritize goals and strategies to reduce SAP participants' stress.

SUPPORT POLICY INITIATIVES TO REDUCE BARRIERS TO SERVICES

It is recommended that DDPHE propose to the Denver Mayor's Office and the City Council an amendment of City Ordinance Sec. 24-157 to remove the limit on the number of needle exchange and treatment referral programs that can operate in Denver.¹⁹ The limit was established in 2011, and since then, evidence has proven that syringe access programs effectively reduce the spread of HIV and HCV, prevent drug overdose deaths, and do not increase illegal drug use or crime in the area.³⁵ The efficacy of SAPs in supporting the public health needs of PWID partially depends on accessibility and consistent use of the programs.³⁶ PWID who regularly use SAPs are more likely to report seeking treatment for a substance use issue and reduced or discontinued injection drug use compared to PWID who do not regularly use SAP.¹⁴ Additionally, it is recommended that DDPHE propose removing the requirement for fixed sites to operate 1,000 feet from elementary and/or secondary schools. Research shows that buffer zone policies like this impose significant barriers to access to harm reduction services and exacerbate negative health outcomes among PWID.³⁶ Removing the limit on the number of SAPs and the buffer zone would eliminate barriers for participants needing access to resources and barriers for providers actively responding to the community's needs by providing lifesaving support and services.

STRENGTHEN REFERRAL PATHWAYS FOR SUPPORT SERVICES

Survey findings suggest that most participants got assistance with or a referral for support services at a Denver SAP. This result demonstrates the critical role that SAPs play in connecting participants to support services like food, clothing, health care, and treatment for a substance use issue. It appears that female participants got less assistance with food

than male participants. Additionally, it appears that participants under 35 got less food assistance than participants 35 years and older. It is recommended that strategies be identified to increase food assistance for female participants and participants under 35 years of age during syringe access program visits in Denver.

It appears that referrals from SAPs are successful most of the time. Survey findings suggest that when getting a referral for support services, almost 3 in 4 participants always or usually got the things they needed. When a referral did not work out, the greatest barrier was the lack of transportation. It is recommended that strategies be identified to address transportation issues associated with referral completion. Other substantial barriers to referral success were not knowing who to talk to and not knowing where to go. It is recommended that goals and strategies be developed to strengthen referral pathways and increase participant support throughout the referral process. Strategies may include building up provider capacity by increasing funding to hire additional staff to support resource navigation and warm hand-offs to support services. Another barrier to referral success was not having help or support from a partner, family, or friends. It is recommended that strategies be identified to increase emotional and informational social support networks for SAP participants in Denver.³⁷

INCREASE KNOWLEDGE AND AWARENESS AROUND SAFE SHARPS DISPOSAL

Survey findings suggest that most participants know syringe access programs are safe places to dispose of used sharps. It appears that most participants do not view pharmacies, hospitals, and doctor's offices as safe disposal locations. This finding emphasizes the importance of syringe access programs as locations for safe sharps disposal that support community health and safety. Furthermore, half of the participants did not know that giving used sharps to another person is an unsafe disposal method, and almost half did not know that a trash can is an unsafe disposal location. It is recommended that strategies be identified to increase knowledge of safe and unsafe sharps disposal methods in Denver.

Survey findings suggest that more than half of participants were familiar or somewhat familiar with sharps disposal kiosks, while less than half used kiosks as a disposal method. Participants likely use other sharps disposal methods instead of kiosks, like exchanging used syringes for sterile syringes at SAPs; however, it is recommended that more information be collected on participant sharps disposal preferences. It is also recommended that DDPHE identify strategies to increase awareness of sharps disposal kiosks among syringe access program participants as well as the public. Sharps disposal kiosks are available to Denver residents who inject drugs, as well as Denver residents who use syringes for medical purposes and other needs. It should be noted that though a photo

of a DDPHE-sponsored sharps disposal kiosk was provided as a visual in the survey, participants may use or be familiar with other sharps disposal kiosks in Denver. For example, Access Point operates a kiosk in front of their location.

Sharps disposal containers are portable boxes that range in size and serve as a safe personal or community sharps disposal method if disposed of properly at a syringe access program, sharps disposal kiosk, or health-care facility. Survey results suggest that more participants knew that a sharps disposal container was a safe disposal method compared to participants who knew that a sharps disposal kiosk around the city was a safe disposal method. It is recommended that DDPHE continue distributing sharps disposal containers to community partners in Denver, along with providing information detailing safe container disposal locations (e.g., sharps disposal kiosks), thus promoting safe sharps disposal methods.

LIMITATIONS AND STRENGTHS

A limitation of this study was the sampling method. We originally wanted to hear from a hard-to-reach population, all people who use drugs in Denver. We quickly realized that capacity would limit our population of focus to people who use syringe access programs to get harm reduction and overdose prevention resources. Due to the anonymity of the syringe access program participation, there was no way to sample from the focus population randomly. Therefore, we used a convenience sampling method. Survey dissemination efforts were contracted out to one syringe access program, and DDPHE conducted survey dissemination at the second location. A systematic method for inviting people to participate was not used. During the early stages of survey dissemination, participants were arbitrarily invited to take the survey. In the later stage of survey dissemination, information about the gift card incentive was spread by word-of-mouth, and participants traveled to the syringe access program to participate in the survey opportunity. This limitation introduces bias into the study, and findings must be interpreted with caution.

A second limitation is the inability to cross-check survey participation at both locations. About 85 survey responses were collected at HRAC, while the remaining surveys were collected at Access Point. At each location, unique IDs were collected to prevent duplication of participation. However, there was no way to compare participant IDs between locations to identify overlap. This limitation introduces a potential violation of the assumption of independence in the study.

A strength of the study was its large sample size. Access Point at Colorado Health Network successfully surveyed almost 840 program participants over the course of a month and a half. A large sample size better represents the focus population and improves data quality.

NEXT STEPS

The SAPNA Report will be distributed and presented to harm reduction stakeholders, City and County of Denver leadership, and other interested parties. Additionally, project staff will analyze survey data related to eight additional evaluation focus areas posed by DDPHE staff to further understand trends in drug use, sharps disposal, health care access, wound care methods, perceived program cultural and linguistic responsiveness, and program experience and program satisfaction among survey participants. Data visualizations of the pertinent data will be organized into infographics to be presented and/or distributed to stakeholders.

Another next step is to convene a group of subject matter experts consisting of community members, syringe access program providers, local and state public health agency representatives, and other interested parties to create a plan to address community needs assessment survey findings. The group will identify goals and prioritize strategies while accounting for workforce capacity and available resources to improve access to harm reduction and overdose prevention resources for syringe access program participants.

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APPENDIX I: ADDITIONAL TABLES

Table 1. Perceived ease of access to harm reduction supplies and services, N = 923.

	Very hard	Somewhat hard	Somewhat easy	Very easy
Supply/Service	N (%)	N (%)	N (%)	N (%)
Sterile syringes (N = 648)	29 (4.5)	83 (12.8)	139 (21.5)	397 (61.3)
Wound care supplies (N = 717)	43 (6)	79 (11)	148 (20.6)	447 (62.3)
Clean smoke pipes (N = 819)	43 (5.3)	107 (13.1)	175 (21.4)	494 (60.3)
Testing for HIV and/or Hepatitis C (N = 613)	37 (6)	66 (10.8)	148 (24.1)	362 (59.1)
Other smoking supplies (steel wool, rubber bands, sanitizing wipes) (N = 756)	43 (5.7)	91 (12)	193 (25.5)	429 (56.7)
Information about safely injecting drugs (N = 624)	47 (7.5)	73 (11.7)	130 (20.8)	374 (59.9)
Injection supplies (cottons, cookers, waters, tourniquets) (N = 636)	43 (6.8)	81 (12.7)	140 (22)	372 (58.5)
Information about being safe while smoking drugs (N = 713)	58 (8.1)	98 (13.7)	150 (21)	407 (57.1)
Treatment for a substance use issue (N = 645)	61 (9.5)	87 (13.5)	141 (21.9)	356 (55.2)
Training on ways to properly inject (N = 581)	66 (11.4)	83 (14.3)	109 (18.8)	323 (55.6)
Vaccines to protect against Hepatitis A, Hepatitis B, and/or Tetanus (N = 577)	58 (10.1)	90 (15.6)	124 (21.5)	305 (52.9)
Testing for sexually transmitted diseases like chlamydia, gonorrhea, and syphilis (N = 560)	60 (10.7)	81 (14.5)	127 (22.7)	292 (52.1)
At-home testing kits for HIV or Hepatitis C (N = 558)	64 (11.5)	100 (17.9)	114 (20.4)	280 (50.2)
<i>Note: Total number (N) in supply/service column represents participants who needed the supply or service.</i>				

Table 2. Perceived ease of access to overdose prevention supplies and services, N = 920.

	Very hard	Somewhat hard	Somewhat easy	Very easy
Supply/Service	N (%)	N (%)	N (%)	N (%)
Naloxone or NARCAN to reverse an opioid overdose	36 (4.9)	64 (8.8)	157 (21.5)	473 (64.8)
Fentanyl test strips	40 (5.4)	74 (10.1)	150 (20.4)	471 (64.1)
Information about ways to prevent an overdose	55 (7.5)	67 (9.2)	168 (23)	441 (60.3)
Training to learn how to prevent an overdose	59 (8.2)	88 (12.2)	163 (22.6)	411 (57)
Referral for medication assisted treatment (N = 669)	64 (9.6)	104 (15.5)	173 (25.9)	328 (49)

Note: Total number (N) in supply/service column represents participants who needed the supply or service.

Table 3. Perceived barriers to accessing overdose prevention supplies and services, N=255.

	This reason did NOT make it hard	This reason did make it hard	I choose not to answer
Reason	N (%)	N (%)	N (%)
The program is too far away	125 (49)	99 (38.3)	31 (12.2)
I have no transportation (bus or car) to get to the program	120 (47.1)	106 (41.6)	29 (11.4)
The program is not open when I need it	137 (53.7)	81 (31.8)	37 (14.5)
The supplies and services I need are not offered by the program	165 (64.7)	55 (21.6)	35 (13.7)
I didn't know the supply or services was available	132 (51.8)	89 (34.9)	34 (13.3)
I didn't know the supply or service was free	149 (58.4)	74 (29)	32 (12.5)
I'm worried that I'll get arrested or stopped by police	150 (58.8)	64 (25.1)	41 (16.1)
I'm worried that I'll be judged	141 (55.3)	83 (32.5)	31 (12.2)
I don't want others to find out	149 (58.4)	74 (29)	29 (11.4)
I am afraid	173 (67.8)	53 (20.8)	29 (11.4)
I am too stressed	148 (58)	80 (31.4)	27 (10.6)
I don't have time	151 (59.2)	73 (28.6)	31 (12.2)

Table 4. Perceived barriers to successful referrals for support services including substance use treatment, N=401.

	This reason did NOT make it hard	This reason did make it hard	I choose not to answer
Reason	N (%)	N (%)	N (%)
I had no transportation (car or bus)	160 (39.9)	197 (49.1)	44 (11)
I couldn't afford it or was worried about the cost	202 (50.4)	148 (36.9)	51 (12.7)
I didn't have insurance	232 (57.9)	109 (27.2)	60 (15)
I needed to work	219 (54.6)	131 (32.7)	51 (12.7)
I didn't have help or support (from a partner, family, or friends)	193 (48.1)	152 (37.9)	56 (14)
I didn't know who to call or talk to	191 (47.6)	160 (39.9)	50 (12.5)
I didn't hear back from the program	241 (60.1)	106 (26.4)	54 (13.5)
I didn't know where to go	192 (47.9)	158 (39.4)	51 (12.7)
I didn't have time	221 (55.1)	126 (31.4)	54 (13.5)
I was too stressed out	200 (49.9)	144 (35.9)	57 (14.2)
I was afraid	233 (58.1)	111 (27.7)	57 (14.2)
Other	196 (58.7)	39 (11.7)	99 (29.6)

APPENDIX II: SURVEY INSTRUMENT

Denver Syringe Access Program Community Needs Assessment

Introduction

Thank you for taking the Denver Syringe Access Program Community Needs Assessment survey! The purpose of the survey is to learn about things that people need to be safe while using drugs. The survey asks about your experience at this program, how easy or hard it is to get the services and supplies you need, and challenges that you face when trying to get supplies and services. Your answers to this survey will be used to understand what syringe access programs in Denver are doing well and what can be done to better serve participants. Your answers to this survey will be used to understand what syringe access programs are doing well and what can be done to better serve participants.

Your answers to this survey are private and anonymous. Please be as honest as possible so that we can fully understand the current needs. This survey is completely voluntary, and you can decide to stop taking it at any time. You will get a gift card when you are done answering the survey. If you have any questions, please ask the staff member who gave you this survey.

We will begin by asking you about where you are today.

Q1. Where are you taking this survey today?

- 1, Access Point at Colorado Health Network (Colfax Ave and Krameria St)
- 2, Harm Reduction Action Center (Lincoln St and 8th Ave)
- 3, The Vivent Health “Lifepoint” van came to you today
- 8, Other (please write): _____

Q2. How did you get here today?

- 1, I took the bus and/or light rail
- 2, I walked
- 3, I drove a car
- 4, I was dropped off in a car by someone else
- 5, The Vivent Health “Lifepoint” van came to me
- 9, I choose not to answer
- 8, Other (please write): _____

Q3. In the **past month**, how often did you visit this location?

- 5, Once a day or more often
- 4, Several times a week
- 3, Once a week
- 2, Several times
- 1, Once
- 0, Never
- 9, I choose not to answer

Next, we will ask you about drug use. Remember that all responses are anonymous and private. This means that your answers will never be connected to you.

Q4. In the **past month**, how often did you use the following drugs? *Note: Drugs may be cut with other drugs, or the drug supply may be a combination of drugs. Please answer according to what drug(s) you intended to use.*

	Once a day or more often	Several times a week	Once a week	Several times	Once	Never	I choose not to answer
Benzos or bars (Xanax, Klonopin, Ativan)	0	0	0	0	0	0	0
Cocaine or crack	0	0	0	0	0	0	0
Fentanyl or blues	0	0	0	0	0	0	0
Heroin, dope, black, or smack	0	0	0	0	0	0	0
Meth, clear, ice (methamphetamine)	0	0	0	0	0	0	0
Prescription pain killers not prescribed to you (oxycodone, hydrocodone, codeine, or morphine)	0	0	0	0	0	0	0

Skip Logic

- If respondent answers *once a day or more often, several times a week, once a week, several times, or once* -> **Ask Q5 for each [type of drug]**
- If respondent answers *never and I choose not to answer* for all drugs -> **Skip to Q17**

Q5. In the **past month**, how often did you use [type of drug] in the ways that are listed below?

	Always	Usually	Sometimes	Rarely	Never	I choose not to answer
Injected it	0	0	0	0	0	0
Smoked it	0	0	0	0	0	0
Snorted it	0	0	0	0	0	0
Drank/Swallowed it	0	0	0	0	0	0

Skip Logic

- If respondent answers *injected it always, usually, or sometimes* -> **Ask Q6**
- If respondent answers *rarely, never, or I choose not to answer* for *injected it* -> **Skip to Q17**

The next questions ask about “needles.” This means syringes, needles, and/or points used for injecting drugs. Remember that all responses are anonymous and private. This means that your answers will never be connected to you.

Q6. In the **past month**, how often did you get clean needles from the following places?

	Once every day or more often	Several times a week	Once a week	Several times	Once	Never	I choose not to answer
Harm Reduction Action Center (Lincoln St and 8 th Ave	o	o	o	o	o	o	o
Access Point at Colorado Health Network (Colfax Ave and Krameria St)	o	o	o	o	o	o	o
Vivent Health “Lifepoint” van	o	o	o	o	o	o	o
Pharmacy	o	o	o	o	o	o	o
Doctor’s Office	o	o	o	o	o	o	o
Someone you know (Example: drug dealer or a friend)	o	o	o	o	o	o	o
A place that is not listed	o	o	o	o	o	o	o

Skip Logic

- If respondent answers once every day or more often, several times a week, once a week, once for a *place that is not listed* -> **Ask Q8**
- If respondent answers never or I choose not to answer for a *place that is not listed* -> **Skip to Q9**

Q7. Please list the other places that you go to get clean needles or clean syringes.

Q8. In the **past month**, how many times did you share needles or other injecting supplies with someone else?

Q9. At your visit today, how many clean needles did you get? (Ex. If you got 10 needles, please write 10)

Q10. Of the needles you got today, how many are for personal use? (Ex. If you got 10 needles, please write 10)

Q11. In the **past month**, how often did you re-use a needle?

- 4, Always
- 3, Usually
- 2, Sometimes
- 1, Rarely
- 0, Never
- 9, I choose not to answer

Next, we will ask about how you get rid of your used needles.

Q12. In Denver, there are 4 sharps disposal kiosks around the city for people to throw away their used needles. This is what they look like.



Q13. How familiar are you with these sharps disposal kiosks?

- 3, Very familiar
- 2, Somewhat familiar
- 1, Not at all familiar
- 9, I choose not to answer

The next question will talk about **sharps disposal containers**. This is what they usually look like:



Q14. How confident are you that each place or way listed is safe for getting rid of used needles?

	Very confident	Confident	Somewhat confident	Slightly confident	Not at all confident	I choose not to answer
Syringe Access Programs like Access Point at the Colorado Health Network, Harm Reduction Action Center, or the Vivent Health “Lifepoint” van	0	0	0	0	0	0
Trash can	0	0	0	0	0	0
Sharps disposal kiosk around the city (green image)	0	0	0	0	0	0
Sharps disposal container (red image)	0	0	0	0	0	0
Giving them to a friend or someone I know	0	0	0	0	0	0
Pharmacy	0	0	0	0	0	0
Doctor’s office or hospital	0	0	0	0	0	0

Q15. In the **past month**, how often did you get rid of used needles at the following places?
Remember that all responses are anonymous and private. This means that your answers will never be connected to you.

	Always	Usually	Sometimes	Rarely	Never	I choose not to answer
Harm Reduction Action Center	0	0	0	0	0	0
Access Point at Colorado Health Network	0	0	0	0	0	0
Vivent Health “Lifepoint” van	0	0	0	0	0	0
Other syringe access program or other location	0	0	0	0	0	0

	Always	Usually	Sometimes	Rarely	Never	I choose not to answer
Sharps disposal kiosk around the city (green image)	0	0	0	0	0	0
Pharmacy	0	0	0	0	0	0

Doctor's office or hospital	0	0	0	0	0	0
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	Always	Usually	Sometimes	Rarely	Never	I choose not to answer
Put it in a trash can	0	0	0	0	0	0
Gave it to someone else	0	0	0	0	0	0
Left it where I used it	0	0	0	0	0	0

Skip Logic

- If respondent answers always, usually, sometimes, or rarely for *other syringe access program* -> **Ask Q16**
- If respondent answers never or I choose not to answer for *other syringe access program* -> **Skip to Q17**

Q16. What other syringe access program or place do you use to get rid of used needles?

The next question asks about supplies and services that are usually available at Syringe Access Programs like those at Access Point at the Colorado Health Network, Harm Reduction Action Center, or the Vivent Health "Lifepoint" van.

Q17. In the **past month**, how easy or hard was it to get the following supplies or services when you really needed them?

	Very easy	Somewhat easy	Somewhat hard	Very hard	I did not need this service	I choose not to answer
Clean syringes	0	0	0	0	0	0
Injection supplies (cottons, cookers, waters, tourniquets)						
Clean smoke pipes	0	0	0	0	0	0
Other smoking supplies (steel wool, rubber bands, sanitizing wipes)	0	0	0	0	0	0
Testing for HIV and/or Hepatitis C	0	0	0	0	0	0
At-home testing kits for HIV or Hepatitis C	0	0	0	0	0	0
Testing for sexually transmitted diseases like	0	0	0	0	0	0

chlamydia, gonorrhea, and syphilis						
Vaccines to protect against Hepatitis A and/or Hepatitis B	0	0	0	0	0	0
Wound care supplies	0	0	0	0	0	0
Information about safely injecting drugs	0	0	0	0	0	0
Training on ways to properly inject	0	0	0	0	0	0
Information about being safe while smoking drugs	0	0	0	0	0	0
Treatment for a substance use issue	0	0	0	0	0	0

Skip Logic

- If respondent answers *somewhat hard* or *very hard* at least once -> **Ask Q18**
- If respondent answers *somewhat easy*, *very easy*, or *I did not need this resource for all supplies and services* -> **Skip to Q19**

Q18. You said it was somewhat or very hard to get one or more supplies or services in the past month. Please tell us whether **each reason** below made it hard to get them.

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
The program is too far away	0	0	0
I have no transportation (bus or car) to get to the program	0	0	0
The program is not open when I need it	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
The supplies and services I need are not offered by the program	0	0	0
I didn't know the supply or service was available	0	0	0
I didn't know the supply or services was free	0	0	0
I'm worried that I'll get arrested or stopped by police	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
I'm worried that I'll be judged	0	0	0
I don't want others to find out	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
I am afraid	0	0	0
I am too stressed out	0	0	0
I don't have time	0	0	0

Q19. What reasons, if any, do **people you know** (your friends or peers) say are reasons that they don't use syringe access programs like Harm Reduction Action Center, Access Point at Colorado Health Network, or the Vivent Health "Lifepoint" van.

	This reason did make it hard for other people.	This reason did NOT make it hard for other people.	I'm not sure.	My peers use syringe access programs	I choose not to answer.
The program is too far away	0	0	0	0	0
They have no transportation (bus or car) to get to the program	0	0	0	0	0
The program is not open when they need it	0	0	0	0	0

	This reason did make it hard for other people.	This reason did NOT make it hard for other people.	I'm not sure.	My peers use syringe access programs	I choose not to answer.
The supplies and services they need are not offered by the program	0	0	0	0	0
They didn't know the supplies or services were available.	0	0	0	0	0
They didn't know the supplies or services were free.	0	0	0	0	0
They're worried that they'll get arrested or stopped by police	0	0	0	0	0

	This reason did make it hard for other people.	This reason did NOT make it hard for other people.	I'm not sure.	My peers use syringe access programs	I choose not to answer.
They are worried they'll be judged	0	0	0	0	
They don't want others to find out	0	0	0	0	

	This reason did make it hard for other people.	This reason did NOT make it hard for other people.	I'm not sure.	My peers use syringe access programs	I choose not to answer
They are afraid	0	0	0	0	0
They are too stressed out	0	0	0	0	0
They don't have time	0	0	0	0	0
They say they can handle use on their own	0	0	0	0	0
They don't think it would help them	0	0	0	0	0

The next question asks about supplies and services used to **prevent drug overdoses** that are usually offered at programs like Harm Reduction Action Center, Access Point at Colorado Health Network, or the Vivent Health "Lifepoint" van.

Q20. In the **past month**, how easy or hard was it to get the following drug overdose prevention supplies or services when you really needed them?

	Very easy	Somewhat easy	Somewhat hard	Very hard	I did not need this service	I choose not to answer
Referral for getting medication prescribed to you to help cut back or stop using drugs (medication assisted treatment)	0	0	0	0	0	0
Naloxone or NARCAN to reverse an opioid overdose	0	0	0	0	0	0
Fentanyl test strips	0	0	0	0	0	0
Information about ways to prevent an overdose	0	0	0	0	0	0

Training to learn how to prevent an overdose	0	0	0	0	0	0
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Skip Logic

- If respondent answers *somewhat hard* or *very hard* -> **Ask Q21**
- If respondent answers *somewhat easy*, *very easy*, or *I did not need this for all supplies and services* -> **Skip to Q22**

Q21. You said it was somewhat or very hard to get one or more drug overdose prevention supplies or services in the past month. Please tell us whether each reason below made it hard to get them.

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
The program is too far away	0	0	0
I have no transportation (bus or car) to get to the program	0	0	0
The program is not open when I need it	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
The supplies and services I need are not offered by the program	0	0	0
I didn't know the supply or service was available			
I didn't know the supply or services was free	0	0	0
I'm worried that I'll get arrested or stopped by police	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
I'm worried that I'll be judged	0	0	0
I don't want others to find out	0	0	0

	This reason did make it hard.	This reason did NOT make it hard.	I choose not to answer.
I am afraid	0	0	0
I am too stressed out	0	0	0
I don't have time	0	0	0

Q22. In the **past 12 months**, have you gotten assistance with or a referral for any of the following things from a syringe access program (Harm Reduction Action Center, Access Point, and/or Lifepoint)?

	Yes	No	I choose not to answer
Food	0	0	0
Utilities	0	0	0
Medicine or any health care (medical, dental, mental health, vision)	0	0	0
Phone	0	0	0
Clothing	0	0	0
Child care	0	0	0
Treatment for a substance use issue	0	0	0
Other (please write):			

Skip Logic

- If respondent indicated “Yes” to any options -> **Ask Q23**
- If respondent indicated “No” or “I choose not to answer” to all options -> **Skip to Q25**

Q23. How **often** did the referral(s) you got end with you getting the things you needed?

- 4, Always
- 3, Usually
- 2, Sometimes
- 1, Rarely
- 0, Never
- 8, I did not get a referral
- 9, I choose not to answer

Skip Logic

- If respondent answers usually, sometimes, rarely, or never -> **Ask Q24**
- If respondent answers always, I did not get a referral, or I choose not to answer-> **Skip to Q25**

Q24. You said that the referral(s) you got did not always end with you getting the things you needed. Please tell us whether **each reason** below made it hard to get the things you needed.

	This reason did make it hard	This reason did NOT make it hard	I choose not to answer
I had no transportation (car or bus)	0	0	0
I couldn't afford it or was worried about the cost	0	0	0
I didn't have insurance	0	0	0

I needed to work	0	0	0
I didn't have help or support (from a partner, family, or friends)	0	0	0

	This reason did make it hard	This reason did NOT make it hard	I choose not to answer
I didn't know who to call or talk to	0	0	0
I didn't hear back from the program	0	0	0
I didn't know where to go	0	0	0
I didn't have time	0	0	0
I was too stressed out	0	0	0
I was afraid	0	0	0
Other (please write)			

Next, we are going to ask about your experience with visiting a doctor.

Q25. How likely or unlikely are you to go to a doctor for a yearly check-up?

- 4, Very Likely
- 3, Somewhat Likely
- 2, Somewhat Unlikely
- 1, Very Unlikely
- 9, I choose not to answer

Skip Logic

- If respondent answers somewhat or very unlikely -> **Ask Q26**
- If not -> **Skip to Q27**

Q26. You said that it is somewhat unlikely or very unlikely that you go to a doctor for a yearly check-up. Please tell us whether **each reason** below made it unlikely.

	This is a reason	This is NOT a reason	I choose not to answer
I have no transportation (car or bus)	0	0	0
I can't afford it or am worried about the cost	0	0	0
I don't have insurance	0	0	0
I need to work	0	0	0
I don't have help or support (from a partner, family, or friends)	0	0	0

	This is a reason	This is NOT a reason	I choose not to answer
I don't know where to go	0	0	0
I don't know who to call or talk to	0	0	0
I don't hear back from the doctor's office	0	0	0
I had a bad experience with a doctor or nurse	0	0	0
I don't have time	0	0	0
I am too stressed out	0	0	0
I am afraid	0	0	0
Other (please write)			

Q27. How likely or unlikely are you to go to a doctor or other health care staff to take care of wounds that become irritated, painful, or infected?

- 4, Very Likely
- 3, Somewhat Likely
- 2, Somewhat Unlikely
- 1, Very Unlikely
- 8, I do not need this service
- 9, I choose not to answer

Skip Logic

- If respondent chooses *very likely* or *somewhat likely* -> **Ask Q28**
- If respondent chooses *very unlikely* or *somewhat unlikely* -> **Skip to Q29**
- If respondent chooses *I do not need this service* or *I choose not to answer* -> **Skip to Q30**

Q28. When you go to a doctor or other health care staff to take care of your wounds, who or what program do you go to?

Q29. You said it is somewhat unlikely or very unlikely that you go to a doctor to take care of wounds that get irritated, painful, or infected. Please tell us whether **each reason** below makes it unlikely.

	This is a reason	This is NOT a reason	I choose not to answer
I have no transportation (car or bus)	0	0	0
I can't afford it or am worried about the cost	0	0	0
I don't have insurance	0	0	0
I'm worried that I'll get in trouble	0	0	0

I am worried that I'll be judged	0	0	0
I don't want people to find out about my drug use	0	0	0
I had a bad experience with a doctor or nurse	0	0	0
I don't have time	0	0	0
I am too stressed out	0	0	0
I am afraid	0	0	0
Other (please write)			0

Q30. How do you usually take care of wounds? (Choose all that apply)

- 1, I get wound supplies (bandaids, alcohol, antibiotic) on my own
- 2, I go to a syringe access program to get wound supplies (bandaids, alcohol, antibiotic)
- 3, I ask a friend or someone I know to care for my wound
- 4, I go to a doctor or nurse at a health care clinic
- 5, I do not need wound care
- 6, Other (please write):
- 9, I choose not to answer

The following questions ask about your experience at a Syringe Access Program, referred to as "program." Please think about your experience at the program where you are now.

Q31. Please tell us how much you **agree or disagree** with the following statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I choose not to answer
I feel listened to during visits to the program	0	0	0	0	0	0
I feel like staff understand my culture and/or community	0	0	0	0	0	0
I can talk to staff in the language I am most comfortable speaking	0	0	0	0	0	0

Q32. Please tell us how **satisfied or dissatisfied** you are with your experience at this program.

- 5, Very satisfied
- 4, Somewhat satisfied
- 3, Neither satisfied nor dissatisfied
- 2, Somewhat dissatisfied
- 1, Very dissatisfied
- 9, I choose not to answer

Q33. Please tell us how likely it is, if at all, that you would recommend this program to someone you know.

- 5, Very likely
- 4, Somewhat likely
- 3, Neither likely nor unlikely
- 2, Somewhat unlikely
- 1, Very unlikely
- 9, I choose not to answer

Q34. Please use the space below to list other supports and services that you would like to see that this program.

Short paragraph comment box

We are now going to ask you about yourself, so that we know who we are reaching out to with this survey.

Q35. What is your age?

- 1, 17 years old or younger
- 2, 18 to 24 years old
- 3, 25 to 34 years old
- 4, 35 to 44 years old
- 5, 45 to 54 years old
- 6, 55 to 64 years old
- 7, 65 to 74 years old
- 8, 75 years or older
- 9, I choose not to answer

Q36. What is your race and/or ethnicity? (Check all that apply)

- 1, American Indian or Alaska Native
- 2, Asian or Asian American
- 3, Black or African American
- 4, Hispanic or Latino/a/x
- 5, Middle Eastern/North African
- 6, Native Hawaiian or Other Pacific Islander Native
- 7, White
- 8, My identity is not listed above (please write): _____
- 9, I choose not to answer

Q37. What is your housing situation today?

- 1, I have housing (rent or own home)
- 0, I do not have housing (staying with others, in a hotel, in a shelter, living outside on the street, in a car, or in a park)
- 9, I choose not to answer

Q38. What sex were you assigned at birth?

- 1, Female
- 0, Male
- 2, Prefer to self-describe (please write):
- 9, I choose not to answer

Q39. Are you transgender?

- 1, Yes
- 0, No
- 9, I choose not to answer

Q40. Which sexual orientation do you identify with?

- 1, Straight or Heterosexual
- 2, Gay or lesbian
- 3, Bisexual
- 4, Queer
- 5, Questioning or unsure
- 8, My identity is not listed above (please write): _____
- 9, I choose not to answer

Thank you so much for taking this survey! Please remember to collect your gift card. Have a great day.

APPENDIX III: SURVEY INTERVIEW GUIDE

2023 Syringe Access Program (SAP) Needs Assessment

INTERVIEW GUIDE

Introduction

The Denver Auditor's Office conducted an audit of the Denver Department of Public Health and Environment's (DDPHE's) Syringe Access and Sharps Disposal Programs in 2020. The recommendations from the audit asked that DDPHE take steps to improve data management and program evaluation, "particularly regarding needs assessment, data collection, periodic evaluation, and documentation of evaluation results to inform decision-making" and appropriately allocate resources to services that reduce harm (Denver Office of the Auditor, 2020).

The Syringe Access Program Community Needs Assessment is a program evaluation effort to collect primary quantitative and qualitative data that describes the current needs of people who access harm reduction services in Denver County.

Primary Needs Assessment Questions

The following questions were developed to guide the Syringe Access Program Community Needs Assessment process. The four population health components being addressed are a) HIV and HCV prevention, b) drug overdose prevention, c) access to support services, and d) syringe disposal in Denver County.

HIV and Hepatitis C Prevention

How do people who access harm reduction services in Denver County perceive the accessibility of clean syringes, injection supplies (cottons, cookers, waters, tourniquets), clean smoke pipes, safer smoking kits (including clean pipes, steel wool, rubber bands, and sanitizing wipes), testing for HIV and/or Hepatitis C, testing for sexually transmitted diseases, vaccinations to protect against Hepatitis A and Hepatitis B, wound care supplies, information about safely injecting drugs, training on ways to properly inject, information about being safe while smoking drugs, and treatment for a substance use issue? How does the perception of access to these services differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation? What environmental, institutional, community, interpersonal, and individual-level barriers do people face when trying to access these services? How does the experience of socio-ecological barriers differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation?

Drug Overdose Prevention

How do people who access harm reduction services in Denver County perceive the accessibility of medication assisted treatment, naloxone, fentanyl test strips, overdose prevention education, and overdose prevention training? How does the perception of access to these services differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation? What environmental, institutional, community, interpersonal, and individual-level barriers do people face when trying to access these services? How does the experience of socio-ecological barriers differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation?

Access to Support Services

To what extent do people who access harm reduction services in Denver County get assistance with or referrals for food, housing, childcare, clothing, medicine or any health care (medical, dental, mental health, vision), and phone services from syringe access programs? How does access to these services through syringe access programs differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation? How successful or unsuccessful are referrals from SAPs that are intended to link participants to substance use treatment and social support services? What environmental, institutional, community, interpersonal, and individual-level barriers do people face when getting referrals for these services? How does the experience of socio-ecological barriers differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation?

Syringe Disposal

Among people who access harm reduction services, what is the level of knowledge and skills regarding individual-level and community-level health risks of improper disposal of sharps, the procedures for proper handling and disposal of used sharps, and awareness of the location of syringe disposal sites? How does knowledge, awareness, and skills differ by age, gender identity, sexual orientation, race/ethnicity, and housing situation?

Survey Modes

The survey is designed to take between 30-45 minutes to complete. Participants will have the option to complete the survey on their own via tablet or with the help of staff to complete as an interview.

Interview Process

Overview

It is important to understand the interview from the respondent's point of view. The interviewer should not expect an answer or reasoning to be the same for each participant. Some questions may be considered sensitive to the participant. The interviewer should not

assume that the respondent is comfortable with everything being asked and is ready to answer every question effectively.

- *Building Rapport:* One of the main tasks as an interviewer is to establish rapport with the participant. The respondent's first impression will influence their willingness to participate in the survey. It is advised to avoid long discussion on issues not related to the survey which could take time away from completing the survey.
- *Confidentiality:* Inform the participant that their confidentiality and anonymity will be maintained throughout the process.
- *Respecting Participant's Time:* The participant is answering the survey on their free time. Please ensure they are not kept longer than needed.
- *Approach:* Do not require participants to answer questions they do not feel comfortable answering, simply select 'I choose not to answer' option and move on to the next question. Ensure that there are no right or wrong answers and that the interview is not a test.
- *Pace of Interview:* Do not rush the interview. Maintain a comfortable and appropriate pace.
- *Patience:* It may take participants a few moments to comprehend and answer the questions being asked. Questions may have to be repeated, be patient with the participant. Ensure participants do not feel rushed or uncomfortable during the process.
- *Acceptance:* Never judge or be critical of participant's answers.

Conducting the Interview

1. Screen participants to ensure they have not taken this survey before at the current location or any other syringe service provider. Please note we are not recording any personal identifiable information and will therefore, rely on their response.
2. Describe the project, goals for the survey, confidentiality, and the type of information that that will be covered in the survey, estimated time to complete survey, and incentives provided.
3. Do not deviate from the survey questions. Ask all questions in the survey as written. Read through all answer options. Do not change wording or ordering of questions, even small changes in wording can alter the meaning of a question.
4. You may repeat the question if necessary.
 - a. *Questions may need to be repeated if the participant:*
 - i. Is taking a long time to answer the questions
 - ii. Asks about a specific part of the question to be repeated
 - iii. Asks for one, a few, or all the options to be repeated
 - iv. Asks for the clarification of a word or phrase
5. Do not make assumptions about the answers or questions, such as "I know this doesn't apply to you, but..."

6. Help participants to feel comfortable, but make sure you do not suggest answers to the survey questions.
7. Throughout the survey, interviewers should take notes about any issues or questions participants have.
 - a. This may include but is not limited to whether participants feel some questions are repetitive, if there are certain words or phrases that are unclear or difficult to understand, or specific questions that participants do not feel comfortable answering
 - b. Record the approximate time it takes participants to complete the survey
8. Close the interview by soliciting any final questions, thanking the participant for their honesty and willingness to participate.

Materials Needed

- Tablet & Tablet Charger
- Incentives
- Incentive Tracking Sheet
- Interview Guide for Reference
- Notepad
- Pen

Link to survey - <https://redcap.link/2ylhhu3>

*** Please note:

- The tablet will need to be connected via Wi-Fi or a Hot Spot connection
- Browser should be set to PRIVATE or COGNITO mode before taking the survey
- Survey skip logic is provided below for reference only. The survey is designed to automatically follow logic flow based on participant's answers.

Introduction

Hello. Thank you for taking the time to meet with me today. My name is _____ and I am with _____. Before we start, I'd like to explain what we'll be doing during the interview, which will take no longer than 45 minutes as well as answer any questions you may have.

The purpose of the survey is to learn about things that people need to be safe while using drugs. The survey asks about your experience at this program, how easy or hard it is to get the services and supplies you need, and challenges that you face when trying to get supplies

and services. Your answers to this survey will be used to understand what syringe access programs in Denver are doing well and what can be done to better serve participants. Your answers to this survey will be used to understand what syringe access programs in Denver are doing well and what can be done to better serve participants.

We can only have each person take this survey once. Can I please have your code so we can know who we have reached with this survey? (Record code)

Thank you!

Your answers are anonymous and private. There are no right or wrong answers, this interview is not a test. Please be as honest as possible so that we can fully understand the current needs. This survey is completely voluntary, and you can decide to stop taking it at any time. You will get a \$30 gift card when you are done answering the survey.

Do you have any questions before we begin?

Do you agree to participate in this interview?

If **“yes”** say, “Thank you so much.” *Begin survey interview.*

If **“no”** say, “No problem, thank you for your time. Have a nice day!”