

Activities and outcomes of the syringe exchange programs operating in the state of Utah

State of Utah Division of Population Health October 1, 2023

To: Health and Human Services Interim Committee

From: Janae Duncan, Division Director, Population Health

Subject: Report on the activities and outcomes of the syringe exchange programs:

December 1, 2016 - June 30, 2023

Purpose

As required by 26B-7-117(3), the Department of Health and Human Services submits the following report regarding the activities and outcomes of the syringe exchange programs operating in the state of Utah.

- (3) No later than October 1, 2017, and every two years thereafter, the department shall report to the Legislature's Health and Human Services Interim Committee on:
 - (a) the activities and outcomes of syringe programs operating in the state, including:
 - (i) the number of individuals who have exchanged syringes;
 - (ii) the number of used syringes exchanged for new syringes;
 - (iii) the number of new syringes provided in exchange for used syringes;
 - (iv) the impact of the programs on blood-borne infection rates; and
 - (v) the impact of the programs on the number of individuals receiving treatment for a substance use disorder:
 - (b) the potential for additional reductions in the number of syringes contaminated with bloodborne disease if the programs receive additional funding;
 - (c) the potential for additional reductions in state and local government spending if the programs receive additional funding;
 - (d) whether the programs promote illicit use of drugs; and
 - (e) whether the programs should be continued, continued with modifications, or terminated.

Executive summary

The nation is currently experiencing an opioid crisis involving the misuse of prescription opioid pain relievers, as well as fentanyl and xylazine. The increase in substance use has resulted in increases in injection drug use across the country. This has caused increases in overdose deaths, tens of thousands of viral hepatitis infections annually, and is threatening recent progress made in HIV prevention.

In response to the increases in drug misuse and injection drug use in Utah, Utah's syringe exchange programs (SEPs) have evolved and grown since the state's first syringe exchange encounter in 2016. As of the publication of this report, Utah has a total of 12 syringe exchange programs. Although many service providers are based in Salt Lake County, there are positive developments in rural parts of the state that have the greatest need for these services. One such development is the enrollment of Moab Regional Recovery Center's syringe exchange program, which is the first of its kind in Grand County.

Syringe exchange programs reduce blood-borne infection rates and connect people who inject drugs to health care services. These health care services include, but are not limited to, on-site and at-home STI testing, basic wound care, and treatment for substance use disorder. With every visit to a syringe exchange program, participants benefit from written or verbal referrals based on their specific needs. They can also receive life-saving supplies for safer substance use, such as fentanyl test strips and naloxone.

Utah's syringe exchange programs continue to use the one-for-one-plus model for exchange, which enables participants to meet their injection needs and still reduce the need for participants to carry used injection equipment. Syringe exchange programs also consistently report data related to overdose prevention, safe syringe disposal, and client encounters. Among other encouraging findings, this data shows that as the number of syringes that are distributed increases there is a parallel increase in the number of syringes collected and safely disposed of during each reporting period.

Although further analysis and data collection is needed to understand the true impact of syringe exchange programs, these peer-driven, community-based resources are a fundamental piece of Utah's response to the opioid crisis. The Utah Department of Health and Human Services (DHHS) Violence and Injury Prevention Program (VIPP) intends to continue responsible expansion of syringe exchange programs in parts of the state with demonstrated need.

Reasons for DHHS to continue overseeing and funding SEPs include:

- A 2022 survey of Utah SEP participants self-report less sharing and reusing of drug injection equipment. SEPs are a Health and Human Services endorsed essential tool for infectious disease control and facilitate delivery of substance treatment and overdose prevention in an opioid epidemic.^{7,8}
- The Health and Human Services has named SEPs as essential tools in both the HIV and HCV Disease Elimination Plans.^{9,10,11}
- SEPs are an opportunity for HIV and HCV outbreak prevention, identification, and response. 10,11

Data collection and further analysis need to continue to study the impacts of SEPs. Currently there is little integration of SEP data with other data sources such as overdose and communicable

disease data. In addition, it is difficult to identify successful referrals due to privacy rules and lack of funding and data integration to track referrals. There is a need to integrate and identify new data sources to better understand the impact on infectious disease and treatment.

Findings

In response to the passage of HB 308 (2016 General Session), DHHS designated an employee within the Prevention, Treatment, and Care Program (PTCP) to be the syringe exchange program coordinator to oversee the requirements of the law and to help create effective and sustainable SEPs in the state of Utah. In collaboration with community stakeholders and local partners, the syringe exchange program coordinator created the Utah Syringe Exchange Network (USEN) to gather community input and garner support.

SEPs operating in Utah are currently overseen by the DHHS Office of Health Promotion and Prevention, Violence and Injury Prevention Program (VIPP). VIPP also collaborates with other states and jurisdictions, other state departments and DHHS programs, local health departments, health care providers, law enforcement, city and county governments, and community partners to identify ways to improve and support SEPs. SEP providers in Utah receive guidance and support from VIPP according to national guidelines and best practices.^{1,2,3}

This report covers data collected from December 1, 2016–June 30, 2023. Data collection methods have improved and expanded in that time; some data collected varies from year to year. The DHHS began funding SEPs in July 2017 resulting in more oversight, quality control, and consistent data collection. Additional information and resources can be found at the end of this document.

SEP timeline

Date	SEP highlight
March 25, 2016	HB 308 signed into law
May 10, 2016	Utah Code 26-7-8 goes into effect
June 10, 2016	CDC approves Utah's "Determination of Need"
November 7, 2016	Utah Syringe Exchange Administrative Rule goes into effect
December 1, 2016	First syringe exchange outreach event in Utah
July 1, 2017	UDOH contracts with four agencies to provide syringe exchange and consequently begins enhanced data collection
July 1, 2019	Revised Utah Syringe Exchange Administrative Rule goes into effect
September 1, 2019	Syringe Exchange Program Evaluation Report published
January 1, 2020	Second revised Utah Syringe Exchange Administrative Rule goes into effect
January 1, 2022	HB 178 Pharmacy Practice Modifications goes into effect
May 3, 2023	SB 86 Drug Testing and Paraphernalia Amendments goes into effect
July 1, 2023	DHHS syringe exchange oversight moved from HIV and STD Program to Violence and Injury Prevention Program

(3)(a) Reported syringe exchange activity

To date, 12 agencies have enrolled with DHHS to conduct syringe exchange activities (Table 1). Each agency supports syringe exchange differently and provides varying services depending on community needs, including syringe exchange, syringe disposal services, naloxone distribution, human immunodeficiency virus (HIV) testing, hepatitis C virus (HCV) testing, and HCV treatment. Enrolled SEPs are required to report the number of SEP encounters, syringes collected, and syringes distributed to the DHHS quarterly (Table 2). Data collection and reporting follow the state fiscal year (July 1–June 30).

SEPs throughout the nation utilize different exchange models to make sterile syringes available including needs-based syringe distribution, one-for-one exchange, and one-for-one-plus exchange. Needs-based syringe distribution does not require the collection of used syringes, while exchange models require the collection of at least one used syringe to provide new syringes. While each exchange model has merits, the SEPs currently operating in Utah utilize a one-for-one-plus exchange model, which more efficiently enables participants to meet their injection needs, while reducing the need for participants to carry used injection equipment.⁵

Table 1. Agencies enrolled with DHHS to conduct syringe exchange activities

Agency	Active dates	Counties	Services
Utah Harm Reduction Coalition	12/1/16-present	Salt Lake, Weber, Tooele	Syringe exchange, naloxone distribution, HIV testing, HCV testing
Utah Naloxone	1/1/17–present	Salt Lake	Syringe exchange, naloxone distribution
Salt Lake Lake Harm Reduction Project (formerly One Voice Recovery)	3/1/17–present	Salt Lake	Syringe exchange, naloxone distribution, HIV testing, HCV testing
Salt Lake County Health Department	3/1/17–present	Salt Lake	Sharps disposal services
UAF Legacy Health (formerly Utah AIDS Foundation)	7/1/17–present	Salt Lake	Syringe exchange, HIV testing, HCV testing
Southeast Utah Health Department	6/1/2018-present	Carbon, Emery	Syringe exchange, naloxone distribution, HIV testing, HCV testing
Soap2Hope	10/29/2019-present	Salt Lake	Syringe exchange, naloxone distribution
Beyond Addiction Mosaic (BAM)	11/20/2020- 7/30/2022	Salt Lake	Syringe exchange, naloxone distribution
Odyssey House Martindale Clinic	12/4/2020-present	Salt Lake	Syringe exchange, naloxone distribution, HIV testing, HCV testing, HCV
TriCounty Health Department	8/11/2021-present	Uintah	Syringe exchange, naloxone distribution, HIV testing, HCV testing
Hand in Hand Support Services	11/15/2021-present	Washington	Syringe exchange, naloxone distribution, HIV testing, HCV

			testing
George E. Wahlen VA Medical Center	5/18/2022-present	Salt Lake	Syringe exchange, naloxone distribution, HIV testing, HCV testing
Moab Regional Recovery Center	5/1/2023-present	Grand	Syringe exchange, naloxone distribution, HIV testing, HCV testing

Table 2. Total syringe exchange activities by year—December 1, 2016–June 30, 2023							
Number of SEPs reporting	Time period	New participants	Unique participants served	Exchange encounters	Syringes collected	Syringes distributed	Return ratio*
3	12/1/16- 6/30/17	28	N/A	5,605	58,792	180,197	3.06
4	7/1/17- 6/30/18	1,930	N/A	12,739	256,488	414,994	1.62
4	8/1/18- 6/30/19	1,249	1,868	9,225	379,845	493,657	1.30
6	7/1/19- 6/30/20	1,456	2,590	13,576	644,764	732,523	1.14
7	7/1/20- 6/30/21	1,907	3,541**	18,366	1,277,290	1,595,485	1.25
8	7/1/21- 6/30/22	2,215	4,116**	24,928	1,444,371	1,709,128	1.18
10	7/1/22-23 6/30/23	1,713	3,332***	21,309	1,347,312	1,382,320	0.97
Total SEP activities	12/1/16- 6/30/23	10,498	10,521	105,748	5,408,862	6,508,304	1.20

^{*}Return ratio: syringes distributed divided by syringes collected.

The return ratio metric is calculated by dividing the number of syringes distributed by the number of used syringes collected. The lower the ratio is, the better, because it indicates exchange activity more closely resembles a one–for–one exchange model. The return ratio for all SEPs operating in Utah from inception through June 30, 2023, was 1.20. This indicates that for every 131 syringes given out by SEP providers, 100 are returned and disposed of properly during an exchange. The number of syringes collected and distributed has increased proportionally during each reporting period.

People who are enrolled in syringe exchange may not always need to access syringe exchange or the associated services. It is expected that syringe exchange will consistently enroll new clients because of the transient nature of the specific population served. The number of unique individuals served is only available after the first two reporting periods, due to improvements in data collection. Utah Naloxone and Soap2Hope no longer collect individual–level data; the number of unique individuals served in the last reporting period does not include data from Utah Naloxone and Soap2Hope.

(3)(a)(iv) The impact of SEPs on bloodborne infection rates

Viral hepatitis, HIV, and other bloodborne pathogens can spread through injection drug use if

^{**}Number does not include unique individuals served only at Utah Naloxone.

^{***}Number does not include unique individuals served only at Utah Naloxone or Soap 2 Hope.

people use needles, syringes, or other injection materials that were previously used by someone who has one of these infections. Injecting drugs can also lead to other serious health problems, such as skin infections, abscesses, and endocarditis. The best way to reduce the risk of acquiring and transmitting disease through injection drug use is to stop injecting drugs. For people who do not stop injecting drugs, using sterile injection equipment for each injection can reduce the risk of infection and prevent outbreaks.⁶

During the last decade, the United States has seen an increase in injection drug use—primarily the injection of opioids. Outbreaks of hepatitis B, hepatitis C (HCV), and HIV infections correlate with these injection patterns and trends. Injection drug use was the most commonly reported risk factor for persons with acute hepatitis C (57%) with risk information present. The number of acute hepatitis C cases has doubled during 2014–2020, and the rate increased 7% from 2020 to 2021. New HCV virus infections are increasing most rapidly among young people, with the greatest incidence among individuals younger than 30.6

Until recently, CDC had observed a steady decline since the mid–1990s in HIV diagnoses attributable to injection drug use. However, recent data show progress has stalled. Notably, new HIV infections among people who are White who inject drugs, the group most affected by the expanding opioid epidemic, increased by 10% in the past decade.

The estimated lifetime cost to treat one person living with HIV is nearly \$450,000. Hospitalization in the US due to substance-use-related infections alone costs more than \$700 million annually. In the US, the estimated cost to provide health care services for people living with chronic HCV infection is \$15 billion annually. SEPs can help reduce these healthcare costs by preventing viral hepatitis, HIV, endocarditis, and other infections.⁶

SEPs are a tool that can help reduce the transmission of viral hepatitis, HIV, and other bloodborne infections. SEPs are associated with an approximately 50% reduction in HIV and HCV incidence by removing used needles from the community and providing people with clean, safe options. SEPs serve as a bridge to other health services, including medication-assisted treatment for opioid use disorder, HCV testing and treatment, and HIV testing and treatment.

SEPs in Utah began offering testing for HIV and HCV during exchange activities in July 2017. Many participants were able to get tested for the first time. SEPs can identify people with HIV or HCV who otherwise would not be tested and/or receive services, including treatment. Identifying current participants living with HIV or HCV who are not in care, linking them to services, and ensuring they are not sharing equipment is another important activity performed by SEPs. Routine testing, identification, and linkage to care are essential steps to identify and halt disease transmission and outbreaks.

Additionally, the rapport and trust built with SEP participants allow providers to link these hard-to-reach populations with other services, such as vaccinations and disease investigations. DHHS monitors processes that are indicators of this harm reduction strategy, including HIV and HCV testing referrals and the provision of educational materials (Table 3, Table 5, and Table 6).

Table 3. HIV and HCV tests and identified positive by disease and by year				
HIV tests time period	HIV tests conducted	Positive HIV tests	HIV positivity rate	Client self–reported HIV positive at ontake
7/1/17–6/30/18	175	1	0.6%	N/A
7/1/18–6/30/19	686	4	0.6%	20
7/1/19–6/30/20	294	2	0.7%	21
7/1/20-6/30/21	250	3	1.2%	13
7/1/21-6/30/22	634	3	0.6%	10
7/1/22-6/30/23	193	0	0.0%	15
Total HIV 7/1/17-6/30/23	2,232	13	0.6%	79
HCV tests time period	HCV tests conducted	Positive HCV tests	HCV positivity rate	Client self–reported HCV positive at ontake
7/1/17–6/30/18	161	33	20.5%	N/A
7/1/18-6/30/19	431	114	26.5%	251
7/1/19–6/30/20	248	49	19.8%	233
7/1/20-6/30/21	230	82	35.7%	205
7/1/21-6/30/22	590	197	33.4%	190
7/1/22-6/30/23	254	65	25.6%	189
Total HCV 7/1/17-6/30/23	1,914	540	28.2%	1,068

All tests reported in the table above are rapid tests which only give preliminary results; additional testing and follow up is needed. SEPs also provide referrals and support to link clients to care and treatment. Through providing testing for individuals with active risk for transmission of HIV and HCV, especially those who may not have had access to regular medical care, positivity rates for both HIV and HCV are higher in this specific population.

(3)(a)(v) The impact of SEPs on the number of individuals who receive treatment for a substance use disorder

SEPs serve as a bridge to other health services including substance use treatment and medication assisted treatment (MAT). SEPs facilitate entry into treatment for substance use disorders for people who inject drugs. People who use SEPs show high readiness to reduce or stop their drug use. People who inject drugs who regularly use a SEP are more than five times as likely to enter treatment for a substance use disorder and nearly three times as likely to report reducing or discontinuing injection as those who have never used an SEP.⁶ There is also evidence that people who inject drugs who work with a nurse at an SEP or other community-based venue are more likely to access primary care than those who don't, which also increases access to MAT. ⁶ Many comprehensive community-based SEPs offer a range of preventive services including vaccination, infectious disease testing, and linkage to healthcare services.

SEPs teach people who inject drugs how to prevent and respond to a drug overdose, provide them with training on how to use naloxone (a medication used to reverse overdose) and provide

naloxone to them which in turn reduces overdose deaths. Many SEPs provide "overdose prevention kits" which contain naloxone to people who inject drugs. SEPs are an efficient way to distribute overdose prevention information and naloxone directly to the people who need it most. This occurs by utilizing their relationship with persons who inject drugs to distribute naloxone to reverse and stop opioid overdoses. Many Utah SEP participants report either surviving an overdose or saving a friend or family member with naloxone and other tools obtained at a SEP (Table 4). In addition, Utah SEP providers consistently provide educational materials and referrals for substance abuse treatment and overdose prevention, among many other services (Table 5-6).

Table 4. Naloxone distribution and overdose reversals reported to SEP by year				
Time period	Naloxone kits distributed	Reversals reported		
7/1/18-6/30/19	1,434	109		
7/1/19–6/30/20	825	38		
7/1/20-6/30/21	3,627	97		
7/1/21-6/30/22	3,556	174		
7/1/22-6/30/23	5,300	171		
Total 7/1/18-6/30/23	14,742	589		

Table 5. Referrals provided by referral type, by year				
Time period	HIV/HCV testing	Substance abuse Tx	Overdose/naloxone	
12/1/16-6/30/17	3,409	3,377	5,413	
7/1/17-6/30/18	12,489	12,368	12,490	
7/1/18-6/30/19	8,988	9,201	9,220	
7/1/19–6/30/20	25,176	19,548	27,837	
7/1/20-6/30/21	29,864	26,072	33,471	
7/1/21-6/30/22	33,838	31,163	33,257	
7/1/22-6/30/23	29,241	30,758	30,909	
Total 12/1/16-6/30/23	143,005	132,487	152,597	

Table 6. Educational materials provided by type, by year					
Time period	HIV/HCV testing	Substance abuse Tx	Overdose/naloxone		
12/1/16-6/30/19	25,516	12,066	13,969		
7/1/19-6/30/20	24,315	12,509	20,212		
7/1/20-6/30/21	17,811	17,821	17,814		
7/1/21-6/30/22	16,538	16,558	15,639		
7/1/22-6/30/23	13,898	13,933	13,895		
Total 12/1/16–6/30/23	79,267	34,956	63,936		

It is important to note that while Utah Naloxone is enrolled as a syringe exchange provider, any

naloxone kits they distribute themselves or provide to the other SEP providers to distribute, are not represented in the data in Table 4. Reversals are defined as the survival of an individual who experienced an opioid overdose when one or more naloxone doses were administered.

While every syringe exchange encounter requires the client to receive a referral, participants may receive a verbal, written, or active referral due to the nature of the visit. Different environments where syringe exchange occurs (for example, a clinic or office compared to outreach in a more public setting), provide different opportunities to connect with clients. Some clients may receive printed referrals about HIV/HCV testing and also schedule an appointment with a testing clinic through the SEP provider, which would be documented as two separate types of referrals. It is not abnormal to see differences in many referrals or educational materials across different types as shown above.

(3)(b) The potential for additional reductions in the number of syringes contaminated with bloodborne disease if SEP receives funding.

Funding to support SEPs increase their ability to reduce bloodborne pathogens and increase community safety.

DHHS has created an online database to collect individual-level data for all SEP activities throughout the state. The database allows DHHS to create monthly and yearly reports, monitor agencies, ensure funding requirements are met, and show changes in individuals and across the program. However, DHHS does not receive any direct funding to develop, monitor, perform quality assurance, or perform analysis on this data. Dedicated funding for SEP would permit DHHS to utilize the data collected to enhance the monitoring and evaluation of SEPs. These enhanced efforts could include assessments of temporal trends in syringe exchange, evaluation of the success rates of substance use referrals, and direct assessments of the impact of SEPs on bloodborne infection rates.

(3)(c) The potential for additional reductions in state and local government spending if SEP receives additional funding

Dedicated and consistent funding permits DHHS to evaluate SEPs and estimate the number of cases of HCV and HIV averted due to SEP participation, as well as other health issues. Each infection averted represents reductions in state and local spending tied to treatment and care. It allows for comparisons with overdose rates, substance use treatment usage, and other related areas

(3)(d) Whether SEP promote illicit use of drugs

Nearly 30 years of research shows that comprehensive SEPs are safe, effective, and cost-saving, do not increase illegal drug use or crime, and play an important role in reducing the transmission of viral hepatitis, HIV, and other infections. SEPs that provide naloxone also help decrease opioid overdose deaths. SEPs protect the public and first responders by facilitating the safe disposal of used needles and syringes.

Evidence demonstrates that SEPs do not increase illegal drug use or crime. Studies in Baltimore and New York City have found no difference in crime rates between areas with and areas without

SEPs. In Baltimore, trends in arrests were examined before and after a SEP was opened, and found there was not a significant increase in crime rates. The study in New York City assessed whether proximity to a SEP was associated with experiencing violence in an inner-city neighborhood and found no association.⁶

DHHS is currently unable to assess the full impact of Utah SEPs on the illicit use of drugs, given the lack of dedicated funding needed to do this type of analysis. However, the law does require that SEP participants receive information and referrals to substance use treatment options, and that is reflected in the quarterly reports from providers. Although SEPs report many successful links to treatment, privacy and confidentiality laws prohibit the ability to follow up to know if the participant completed treatment. However, many former SEP clients have returned to SEPs to volunteer after quitting using substances.

(3)(e) Whether the programs should be continued, continued with modifications, or terminated

SEP programs should be continued and improved to prevent infections and deaths in Utah communities.

The most effective way for individuals who inject drugs to avoid the negative consequences of injection drug use is to stop injecting. Many people are unable or unwilling to do so or have little or no access to effective treatment. Approximately 775,000 Americans report having injected a drug in the past year. In 2019, 14.3% of high school students reported using opioids without a prescription and 1.6% reported having ever injected drugs.⁶

Syringe exchange programs can benefit communities and public safety by reducing needlestick injuries and overdose deaths, without increasing illegal injection of drugs or criminal activity. Studies show that SEPs protect first responders and the public by providing safe needle disposal and reducing the community's presence of needles. A study compared the prevalence of improperly disposed of syringes and self-reported disposal practices in a city with SEPs (San Francisco) to a city without SEPs (Miami) and found eight times as many improperly disposed of syringes in Miami, the city without SEPs. People who inject drugs in San Francisco also reported higher rates of safe disposal practices than those in Miami. Data from CDC's National HIV Behavioral Surveillance system in 2015 showed that the more syringes distributed at SEPs per people who inject drugs in a geographic region, the more likely people who inject drugs in that region were to report safe disposal of used syringes.⁶

The Utah SEPs should be continued as the program has largely been a success, and close monitoring and oversight have provided opportunities to change and adapt services to meet the growing need in Utah. Plans of the DHHS Violence and Injury Prevention Program include the continued expansion of SEPs into more rural areas that are hardest hit by the opioid epidemic. This entails integrating services into community-based clinics and working with local partners to provide more services for high-risk populations.

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