



# Report on the Activities and Outcomes of the Syringe Exchange Programs Operating in the State of Utah: December 1, 2016-June 30, 2021

STATE OF UTAH  
DISEASE CONTROL AND PREVENTION

To: Health and Human Services Interim Committee  
From: Department of Health - Bureau of Health Promotion  
Subject: Report on the Activities and Outcomes of the Syringe Exchange Programs Operating in the State of Utah: December 1, 2016 - June 30, 2021

## Executive Summary

This report is a summary of the activities as outlined in Utah Code 26-7-8, created by H.B. 308, *Disease Prevention and Substance Abuse Reduction Amendments* (2016 General Session), that requires the department to report to the Legislature every two years on the activities and outcomes of syringe exchange programs operating in the state, including:

- (a) 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 blood-borne 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.

## I. Background

In response to the passing of HB 308, the Utah Department of Health (UDOH) designated an employee within the Prevention, Treatment and Care Program (PTCP) as the Syringe Exchange Program Coordinator to oversee the requirements of the law and to help create effective and sustainable syringe exchange programs (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 HIV and STD Program within the Bureau of Epidemiology. The HIV and STD Program also collaborates with other states and jurisdictions, other state agencies and UDOH 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 the HIV and STD Program according to national guidelines and best practices.<sup>1,2,3</sup>

This report covers data collected December 1, 2016-June 30, 2021. Data collection methods have improved and expanded in that time; some data collected varies from year to year. The UDOH 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.

## **II. SEP Timeline**

<b>March 25, 2016:</b>	HB 308 signed into law
<b>May 10, 2016:</b>	Utah Code 26-7-8 goes into effect
<b>June 10, 2016:</b>	CDC approves Utah's "Determination of Need"
<b>November 7, 2016:</b>	Utah Syringe Exchange Administrative Rule goes into effect
<b>December 1, 2016:</b>	First syringe exchange encounter in Utah
<b>July 1, 2017:</b>	PTCP contracts with four agencies to provide syringe exchange and consequently begins enhanced data collection
<b>December 20, 2017:</b>	First monthly report of SEP activities
<b>July 1, 2018:</b>	PTCP renews contracts with two organizations to provide syringe exchange
<b>July 1, 2019:</b>	Revised Utah Syringe Exchange Administrative Rule goes into effect
<b>September 1, 2019:</b>	PTCP completes first Syringe Exchange Program Evaluation Report <sup>4</sup> PTCP receives funding from DHS/DSAMH to support SEPs
<b>January 1, 2020:</b>	Second revised Utah Syringe Exchange Administrative Rule goes into effect
<b>March 16, 2020:</b>	PTCP is reorganized and SEPs are now overseen by the newly created HIV and STD Program
<b>August 1, 2021:</b>	HIV and STD Program begins its second Syringe Exchange Program Evaluation
<b>September 1, 2021:</b>	HIV and STD Program awards funding to seven SEPs throughout Utah

## **III. Reported Syringe Exchange Activity**

To date, nine agencies have enrolled with UDOH to conduct syringe exchange activities (Table 1). Each agency supports syringe exchange differently and provides varying services, 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 UDOH on a quarterly basis (Table 2). Data collection and reporting follow the state fiscal year (July 1-June 30).

SEPs throughout the nation utilize different exchange models for making 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.<sup>5</sup>

**Table 1. Agencies enrolled with UDOH 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
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
Utah AIDS Foundation	7/1/17-3/13/20 (currently inactive due to COVID-19)	Salt Lake	Syringe Exchange, HIV Testing, HCV Testing
Southeastern Utah Health Department	6/1/2018-present	Carbon, Emery	Syringe Exchange, Naloxone Distribution, HIV Testing, HCV Testing
Soap 2 Hope	10/29/2019-present	Salt Lake	Syringe Exchange, Naloxone Distribution
Beyond Addiction Mosaic (BAM)	11/20/2020-present	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 Treatment

**Table 2. Total Syringe Exchange Activities by Year – December 1, 2016-June 30, 2021**

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
<b>Total SEP Activities</b>	<b>12/1/16-6/30/21</b>	6,570	6,612	59,511	2,617,179	3,416,856	1.31

\*Return Ratio: syringes distributed divided by syringes collected. \*\*Number does not include unique individuals served only at Utah Naloxone.

The return ratio metric is calculated by dividing the number of syringes distributed by the number of used syringes collected. A ratio closer to one is typically viewed as better because it indicates that the actual 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, 2021 was 1.31. This indicates that for every 131 syringes given out by SEP providers, 100 are returned and disposed of properly during exchange. Syringes can also be disposed of properly by clients at sharps collection boxes. These proper disposals are not included in the calculated return ratio.

The number of syringes collected and distributed have increased proportionally during each reporting period. As more agencies have begun operating, the reach and capacity of the program has grown.

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 no longer collects individual level data; the number of unique individuals served in the last reporting period does not include data from Utah Naloxone.

#### **IV. Impact of SEPs**

##### ***A. The impact of SEPs on blood-borne infection rates***

Viral hepatitis, HIV, and other blood-borne pathogens can spread through injection drug use if 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.<sup>6</sup>

During the last decade, the United States has seen an increase in injection drug use — primarily the injection of opioids. Outbreaks of hepatitis B, HCV and HIV infections have been correlated with these injection patterns and trends. The majority of new HCV infections are due to injection drug use, and the nation has seen a 3.5-fold increase in reported cases of HCV from 2010 to 2016, reaching a 15- year high. New HCV virus infections are increasing most rapidly among young people, with the greatest incidence among individuals under 30.<sup>6</sup>

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 white people who inject drugs, the group most affected by the expanding opioid epidemic, increased 10% from 2014 to 2015. The estimated lifetime cost of treating one person living with HIV is near \$450,000. Hospitalization in the US due to substance-use related infections alone costs over \$700 million annually. In the United States, the estimated cost of providing 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.<sup>6</sup>

SEPs are a tool that can help reduce transmission of viral hepatitis, HIV, and other blood-borne infections. SEPs are associated with an approximately 50% reduction in HIV and HCV incidence.<sup>6</sup> 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.

Utah SEPs 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 are able to 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 out of 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 in identifying and halting disease transmission and outbreaks.

Additionally, the rapport and trust built with SEP participants allows providers to link these hard to reach populations with other services, such as vaccinations and disease investigations. UDOH 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	Reported HIV Positive at Intake
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
<b>Total HIV 7/1/17-6/30/21</b>	1,405	10	0.7%	54
HCV Tests Time Period	HCV Tests Conducted	Positive HCV Tests	HCV Positivity Rate	Reported HCV Positive at Intake
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
<b>Total HCV 7/1/17-6/30/21</b>	1,070	278	26.0%	689

All tests reported in the table above are rapid tests. 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.

**B. *The impact of SEPs on the number of individuals receiving treatment for a substance abuse disorder***

SEPs serve as a bridge to other health services including substance use treatment and MAT. People who inject drugs who regularly use an 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.<sup>6</sup> SEPs facilitate entry into treatment for substance use disorders by people who inject drugs. People who use SEPs show high readiness to reduce or stop their drug use. 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, also increasing access to MAT.<sup>6</sup>

SEPs offer a range of preventative services including vaccination, infectious disease testing, and linkage to healthcare services.

SEPs can reduce overdose deaths by teaching people who inject drugs how to prevent and respond to a drug overdose, providing them training on how to use naloxone (a medication used to reverse overdose), and providing naloxone to them. Many SEPs provide “overdose prevention kits” containing 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 with the goal of reversing and stopping 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 an SEP (Table 4). In addition, Utah SEP providers consistently provide educational materials and referrals for substance abuse treatment and overdose prevention, amongst many other services (Table 5-6).

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 below. We do not believe that naloxone distribution changed significantly during different reporting periods. Reversals are defined as survival of an individual who experienced an opioid overdose when one or more naloxone doses were administered.

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
<b>Total</b> 8/1/18-6/30/21	5,886	244

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
<b>Total</b> 12/1/16-6/30/21	79,926	70,566	88,431

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	29,436	10,381	29,755
<b>Total</b> 12/1/16-6/30/21	79,267	34,956	63,936

While every syringe exchange encounter requires that the client receives a referral, participants may receive a verbal, written or active referrals 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 number of referrals or educational materials across different types as shown above.

## V. Potential Impact if SEP Receives Funding

### A. *The potential for additional reductions in the number of syringes contaminated with blood-borne disease if SEP receives funding.*

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

### B. *The potential for additional reductions in state and local government spending if SEP receive additional funding.*

Dedicated and consistent funding would permit UDOH 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 would allow for comparisons with overdose rates, substance abuse treatment usage, and other related areas.

## **VI. Outcomes**

### **A. *Whether SEP promotes illicit use of drugs***

SEPs are proven and effective community-based prevention programs that can provide a range of services, including access to and disposal of sterile syringes and injection equipment, testing, and linkage to infectious disease care and substance use treatment. SEPs reach people who inject drugs, an often hidden and marginalized population. Nearly 30 years of research has shown 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.<sup>6</sup>

UDOH is currently unable to assess the full impact of Utah SEPs on 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 abuse 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 and know if the participant successfully completed treatment. However, many former SEP clients have returned to SEPs to volunteer after quitting using substances. The HSP is working to identify funding to better assess this impact.

### **B. *Whether the programs should be continued, continued with modifications, or terminated***

The nation is currently experiencing an opioid crisis involving the misuse of prescription opioid pain relievers, as well as heroin and fentanyl. The increase in substance use has resulted in concomitant increases in injection drug use across the country. This has caused not only large increases in overdose deaths, but also tens of thousands of viral hepatitis infections annually, and is threatening recent progress made in HIV prevention. 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 2017, 14% of high school students reported using opioids without a prescription and 1.5% reported having ever injected drugs.<sup>6</sup>

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 community 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.<sup>6</sup>

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 that there was not a significant increase in crime rates. The study in New York City assessed whether proximity to an SEP was associated with experiencing violence in an inner-city neighborhood and found no association<sup>6</sup>

**The Utah SEPs should be continued** as the program has largely been a success, and close monitoring and oversight has provided many opportunities for changing and adapting services to meet the growing need in Utah. Future plans of the HIV and STD Program include expansion of SEPs into more rural areas that were hardest hit by the opioid epidemic. This will entail integrating services into community-based clinics, and working with local partners to provide more services for high risk populations.

Reasons for UDOH to continue overseeing and funding SEPs include:

- Current SEP participants report less sharing and reusing of drug injection equipment.<sup>4</sup>
- SEPs are an opportunity for HIV and HCV outbreak prevention, identification, and response.<sup>10,11</sup>
- 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.<sup>7,8</sup>
- Health and Human Services has named SEPs as essential tools in both the HIV and HCV Disease Elimination Plans.<sup>9,10,11</sup>
- Data collection and further analysis needs to continue to study impacts of SEPs. There is a need to integrate and identify new data sources to better understand the impact on infectious disease and treatment.

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