

**Interest in a Safe Injection Facility  
Among Injection Drug Users in King County, WA**

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**Abstract**

Interest in a Safe Injection Facility Among Injection Drug Users in King County, WA

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**Background:** Ninety Safe Injection Facilities (SIFs) operate worldwide spanning many developed nations. None operate within the United States. There is a growing body of research that supports the public health effectiveness and cost savings of SIFs. Harm reduction advocates in large US cities are exploring the possibility of operating SIFs in the US. This study is intended to characterize injection drug users who expressed a desire to use a SIF if it were made available in the Seattle area.

**Methods:** Anonymous street intercept survey data were gathered at area syringe exchanges operated by Public Health-Seattle & King County in 2013. Descriptive statistics, bi-variate analyses, and logistic regression models were used to examine these data to understand characteristics associated with interest in a SIF.

**Results:** A large majority, 87%, of those surveyed indicated interest in using a SIF if one were available (among the 420 who responded to the question with an explicit yes or no). Individuals who reported injecting into femoral veins (OR 5.36 95%CI 1.23-23.32) or into a muscle (OR 2.52 95%CI 1.17-5.45) were more likely to report they would use a SIF. Those who have witnessed an overdose (OR 2.56 95%CI 1.24-5.27) and those without permanent housing (OR 1.57 95%CI 0.81-3.03) were also more likely to report they would use a SIF. The results of this study indicate that injection drug user interest in a SIF is high.

**Conclusion:** A significant portion of injection drug users in King County have expressed interest in using a SIF. Individuals with high risk behaviors related to injecting drugs indicated greater interest in using a SIF than IDUs that engage in safer injection practices. Interventions with these high risk individuals have more potential of improving public health than interventions targeting lower risk IDUs. Drug users, medical and social service providers and public health professionals should consider meeting to plan a pilot SIF locally. Other communities may want to explore the level of interest for a SIF among injection drug users.

## INTRODUCTION

Injection drug use (IDU) is associated with a number of maladies and threats to public health. HIV, hepatitis C virus, skin infections, and overdose death are all associated with injection drug use (Kral et al., 2001, Vlahov et al., 2004, Sherman et al, 2007, Debeck, et al., 2007). Unsafe injection practices among injection drug users (IDUs) are related to acute medical problems and contribute to the spread of disease (Binswanger et al., 2000). Additionally, unsafe injection practices are related to an increase in emergency room visits and treatment costs for IDUs (French et al., 2000).

A wide variety of practices and interventions have been used to reduce these maladies and address threats to individual and public health from IDU. Interventions at the individual level include overdose education, medication assisted drug treatment therapies, such as buprenorphine and methadone, and non-medication assisted drug abuse treatment therapies. There are extensive research and intervention strategies for primary and secondary treatment for IDU, this paper focuses on an emergent approach for tertiary treatment and harm reduction.

Syringe Exchange Programs (SEP) are an important IDU intervention. A SEP allows IDUs to safely dispose of used syringes and obtain new sterile ones. Syringe exchange programs began in several cities in the late 1980s and expanded to 36 states by 2002 (CDC, 2007). By 2009 the number of states with SEP remained at 36 (CDC, 2010 ). SEPs are recognized by the CDC as effective in reducing the spread of HIV and other blood borne-disease (CDC, 2007). Growth in SEPs has stagnated with significant legal barriers in many states (Burris, 2009). Availability of SEPs are inadequate to meet the need despite the strong evidence that SEPs benefit public health, promote entry into drug treatment, are cost-effective and do not increase drug use (Burris, 2009).

To specifically address overdose death, naloxone – an opiate antagonist, or antidote – has proven effective (Coffin and Sullivan, 2013, Walley, et al., 2013). Naloxone, more popularly known by the trademark name Narcan, reduces the chances of an overdose death when administered quickly after an overdose. Naloxone is a prescription drug that comes in the form of a nasal spray, needle and vial for intravenous or intramuscular use or auto-injector for intramuscular use. Naloxone has become increasingly available in multiple states. Naloxone distribution to opiate users began in Chicago in 1996 and uptake in King County began in 2010. A 2010 survey of U.S. naloxone distribution found at least 188 opioid overdose prevention programs distribute naloxone in 15 states and the District of Columbia. This resulted in more than 53,000 people receiving training and naloxone, and more than 10,000 overdose reversals (CDC, 2012). Access and distribution of naloxone has been greatly increasing nationally, including expanding distribution and reducing legal restrictions (Clark et al., 2014, Davis et al., 2013). Although highly effective to reduce overdose death, naloxone is not known to directly reduce other harms related to IDU.

Supervised Injection Facilities (SIFs) are another tertiary intervention strategy. SIFs differ from heroin maintenance programs because the facility does not provide any drugs. SIFs provide a potentially safer, clean place to inject drugs. People accessing a SIF first obtain their drugs in the community, then bring them to the SIF to use them. A SIF is staffed with nurses and other medical professionals that supervise injections and respond to medical emergencies. SIF staff may also teach safer injection practices, provide wound care and treat IDU related illness. Often in conjunction with a syringe exchange, SIFs provide sterile equipment, syringes and an environment in which to inject drugs. Supervised Injection Facilities are known by several other names including, safe injection facilities, safer injection facilities, medically supervised injection centers, and drug consumption rooms. The term facility is also substituted with site or center.

The purpose of SIFs are to reduce the risk of overdose, spread of disease, improperly discarded syringes, public injection, and unsafe injection practices. SIFs aim to reduce this risk of harm to self and the broader community and improve injection safety. SIFs may also provide related social services, referrals to treatment and partnerships with supportive housing providers. SIFs may range from small standalone mobile units to comprehensive facilities providing syringe exchange, IDU related health services, detox and transitional and permanent housing.

The first SIF was conceived and implemented by a church and social service provider in Rotterdam, Netherlands in the 1970s. Although not officially sanctioned by the government until 1996 it operated openly and in cooperation with law-enforcement since the 1970s (Dolan et al., 2000). Prior to the official sanction of that site in 1996, a different facility became the first fully government sanctioned SIF with medical staff, opening in 1986, in Bern, the Netherlands (Haemmig, et al., 2005). Similar legal facilities began operation in the 1990s in other cities in the Netherlands, Switzerland and Germany (Hedrich et al., 2010). Australia, Spain, Norway and Canada sanctioned facilities in the 2000s (Hedrich et al., 2010).

Today, at least 90 SIFs operate worldwide, three of which are self-contained mobile facilities (Semaan et al., 2011, Kral et al., 2010). SIFs are located throughout Europe and Australia. No SIFs legally operate within the United States (Semaan, et al., 2011). There is currently one SIF that operates in North America. This facility, named Insite, is located in Vancouver, BC, Canada. It has been operating since 2003 and has been heavily researched. It operates under special exemption from federal and state law. Informal SIFs not sanctioned by local or federal government are believed to operate in a few US cities, such as San Francisco and New York (Downing et al., 2005). The Drug Policy Alliance and other interest groups are currently advocating for pilot facilities in New York and San Francisco (Drug Policy Alliance,

2014). Other studies have been conducted which concluded by supporting the opening of facilities in Ottawa and Montreal, Canada (Jozaghi et al., 2013, Jozaghi et al., 2014).

Safe Injection Facilities have been shown to be effective at reducing harm through improving injection practices and reducing death from overdose (Dolan et al., 2000, Kerr et al., 2005, Kerr et al., 2007, Milloy et al., 2008). Cost-benefit and cost-effectiveness analysis of Vancouver's SIF show significant public health savings after operational costs are deducted (Bayoumi, 2008, Andresen et al., 2009, Pinkerton, 2010). Another cost-benefit and cost-effectiveness study shows that the potential savings in public health funds spent on HIV and HCV justify opening one or more SIFs in Ottawa, Canada (Jozaghi et al., 2014).

As concerns about IDU, particularly among young people continues to rise, public health officials are looking to new interventions. IDU contributes to the spread of disease beyond IDUs, and current interventions are not sufficient to arrest the spread of disease. Although the recent increase in naloxone distribution is promising, it is focused on acute overdose risk rather than reducing the spread of communicable disease or other injection-related harm. The full impact of naloxone programs are still unknown. Given the wide use of SIFs in other developed countries and their associated positive impacts on health, the use of SIFs in the United States is worth consideration.

To understand and measure the level of interest locally and the characteristics of IDUs associated with interest in a SIF, related questions were added to a recurring syringe exchange survey. This analysis examines the characteristics of IDUs who expressed interest in using a SIF, if it were made available to them. The implications of these findings are discussed.

The purpose of this study is to characterize individuals who reported that they would utilize a medically supervised drug use facility. Since there are no known legal operational SIFs in the United States,

research is needed to determine if a SIF would be utilized. Analyzing the population that reports interest in using a SIF ensures a better understanding of the potential impact a SIF would have on public health locally.

## METHODS

### Study Setting

This analysis used data from a survey conducted in King County, WA, known as an early adopter of new practices to address IDU. Organized syringe exchange began in King County in 1989, less than one year after what is widely credited as the first open exchange in the nation, in nearby Tacoma, WA (Lane et al, 1993, Public Health- Seattle & King County, 2014). More recent innovations include take-home naloxone distribution at syringe exchange locations operated by Public Health- Seattle & King County (PHSKC). King County has further increased naloxone access and distribution since the data for this study was collected. In King County, naloxone is currently distributed at all three PHSKC syringe exchanges, a jail, the non-profit Peoples Harm Reduction Alliance, a mobile medical van for the homeless, and directly dispensed through a collaborative practice agreement at two pharmacies.

### Data Collection

The survey was developed and conducted by PHSKC for the purpose of planning and service improvements. It was conducted at all three PHSKC syringe exchange locations over two weeks in July 2013. The survey was administered verbally and no personal identifiers were collected. All individuals exchanging syringes during the study period were asked to participate in the voluntary survey. There were 475 unique participants and 76 who declined the survey. There were a total of 56 questions which included demographics, drug preferences, injection practices, health measures, and insurance status. Upon request, PHSKC provided the data to the University of Washington Alcohol and Drug Abuse Institute's Caleb Banta-Green for the purpose of further analysis. The University of Washington Human Subjects Division determined that Institutional Review Board review was not required for this study as it is a secondary analysis of an anonymous data set with no personal identifiers.

## Data Analysis

The introduction to the SIF question reads:

A medically-supervised drug use facility (also known as a safe injecting room) is a place where people who use drugs can do so safely. A nurse or other health care provider is onsite to provide clean supplies, vein and abscess care, and overdose prevention. There are medically-supervised drug use facilities in some cities in Europe as well as Vancouver, Canada. Vancouver's program is called "Insite."

Those surveyed were then asked "if a medically-supervised drug use facility was available in the Seattle area, would you use it?" This is the question of interest for this analysis. Of the survey's 475 unique responders, 55 responded "I don't know" or "maybe" to the question of interest, and therefore were excluded from analyses. All remaining 420 were included in the analyses presented here. Demographic and clinically important variables were selected and compared based on interest in a SIF. Pearson's Chi-Square statistic was used to determine the statistical significance for categorical variables and Fisher's Exact Test was substituted when the number per cell was less than 5. Three logistic regression models were used in a manual, stepwise, conceptually motivated approach. The first model was limited to demographics. The second model added injection practices to the first. The final model incorporated overdose and possession of naloxone questions. Stata 13.1 was used for all data analysis.

## Results Tables

**Table 1a**

Variable	Not Interested in SIF		Interested in SIF		Total		p-value <sup>a</sup>
<b>Interest in SIF</b>	n=55	13%	n=365	87%	n=420*	100%	
<b>Demographics</b>							
<b>Gender</b>							0.136 <sup>b</sup>
Male	33	11%	263	89%	296	71%	
Female	20	17%	100	83%	120	29%	
Transgender	1	33%	2	67%	3	1%	
<b>Age</b>							0.052
<26	8	11%	65	89%	73	17%	
26 - 35	11	8%	121	92%	132	32%	
36 - 45	13	13%	86	87%	99	24%	
>45	23	20%	92	80%	115	27%	
<b>Race</b>							0.566 <sup>c</sup>
White	36	13%	243	87%	279	66%	
Black	4	10%	36	90%	40	10%	
Native	1	5%	20	95%	21	5%	
Multiple/other	13	16%	66	84%	79	19%	
<b>Ethnicity</b>							
Latino	8	18%	37	82%	45	11%	
<b>Housing status</b>							0.007
Stable Housing	33	18%	148	82%	181	43%	
Homeless or Unstable Housing	22	9%	217	91%	239	57%	

<sup>a</sup> Pearson's  $\chi^2$  test except where noted otherwise

<sup>b</sup> Transgender not included in p-value calculation

<sup>c</sup> Fisher's Exact test

\*There were 420 total participants included in this analysis, however data were missing for some questions. Missing responses were <2% of total for each question.

Table 1b

Variable	Not Interested in SIF		Interested in SIF		Total		p-value <sup>a</sup>
<b>Interest in SIF</b>	n=55	13%	n=365	87%	n=420*	100%	
<b>Injection Practices</b>							
<b>Frequency</b>							0.136 <sup>c</sup>
0 per month <sup>d</sup>	7	25%	21	75%	28	7%	
1-3 times per month	3	17%	15	83%	18	4%	
4-9 times per month	5	15%	29	85%	34	8%	
10-29 times per month	8	19%	35	81%	43	10%	
Daily Injection	31	11%	258	89%	289	70%	
<b>Muscled</b>							0.014
No	35	17%	166	83%	201	48%	
Yes	20	9%	196	91%	216	52%	
<b>Femoral</b>							<0.001
No	53	16%	275	84%	328	79%	
Yes	2	2%	87	98%	89	21%	
<b>Shared Syringe with Others</b>							
None	47	15%	272	85%	319	77%	0.194 <sup>c</sup>
One Other Person	6	10%	52	90%	58	14%	
More Than One	2	5%	37	95%	39	9%	
<b>Shared Cookers/Cotton/ Water/Backload</b>							
None	36	16%	187	84%	223	53%	0.067 <sup>c</sup>
One Other Person	12	13%	82	87%	94	22%	
More Than One	7	7%	96	93%	103	25%	

<sup>a</sup> Pearson's  $\chi^2$  test except where noted otherwise

<sup>c</sup> Fisher's Exact test

<sup>d</sup> When asked specifically about injection frequency they indicated 0 or less than once per month, however, indicated they used injection drugs elsewhere in the survey.

\*There were 420 total participants included in this analysis, however data were missing for some questions. Missing responses were <2% of total for each question.

Table 1c

Variable	Not Interested in SIF		Interested in SIF		Total		p-value <sup>a</sup>
	n	%	n	%	n	%	
<b>Interest in SIF</b>	n=55	13%	n=365	87%	n=420*	100%	
<b>Health Measures and Service Utilization</b>							
<b>Self Overdose</b>							0.05
No	49	15%	283	85%	332	79%	
Yes	6	7%	82	93%	88	21%	
<b>Witnessed</b>							<0.001
No	38	21%	146	79%	184	44%	
Yes	17	7%	219	93%	236	56%	
<b>Abscess</b>							0.64
No	41	16%	223	84%	264	63%	
yes	14	9%	139	91%	153	37%	
<b>Self-Reported Hep C Status</b>							0.274
No/Unknown	38	15%	223	85%	261	62%	
Yes	17	11%	140	89%	157	38%	
<b>Used ER Last 12</b>							0.745
No	30	14%	190	86%	220	53%	
Yes	25	13%	174	87%	199	47%	
<b>Possession of Naloxone in Last 3 Months</b>							0.193
No	45	14%	268	86%	313	75%	
Yes	10	9%	96	91%	106	25%	
<b>Currently Have Naloxone (Subset of those who answered yes above)</b>							0.086
No	7	18%	32	82%	39	33%	
Yes	6	8%	74	93%	80	67%	
<b>Health Insurance</b>							0.366
No	24	11%	188	89%	212	51%	
Yes	29	14%	174	86%	203	49%	
<b>Subset with Insurance</b>							
Medicaid	10	10%	88	90%	98	52%	0.108
Medicare	11	21%	41	79%	52	28%	0.101
Private	7	18%	32	82%	39	21%	0.449

<sup>a</sup> Pearson's  $\chi^2$  test except where noted otherwise.

\*There were 420 total participants included in this analysis, however data were missing for some questions. Missing responses were <2% of total for each question.

## RESULTS

Indicated in table 1, race, gender and age do not have a significant association with interest in using a SIF. Significant factors associated with interest in using a SIF are femoral and muscle injection, homeless or unstable housing status, as well as experiencing or witnessing an overdose. Respondents were asked their preference for a SIF location: the majority preferred the SIF be located at or near their respective survey site.

The first logistic regression model (Table 2), focused on demographics, indicates that homeless people are significantly more likely to report interest in using a SIF after adjusting for other demographic variables. Although not significant, males appear somewhat more likely to report interest in using a SIF than females.

In Model 2, controlling for injection practices, gender became a statistically significant factor in reporting interest in using a SIF. Males are 53 percent more likely to report willingness to use a SIF than females (OR 1.53, 95% CI 1.24-1.93). Individuals over the age of 45 are less likely to express interest in a SIF than the younger than 26 age group. Those who reported muscling (i.e. injecting into the muscle, not a vein) indicate 186 percent more interest in SIF use than those who did not report muscling (OR 2.86 95% CI 1.43-5.73). Similarly, individuals who reported injecting into a femoral vein are 557 percent more likely to report they would use a SIF (OR 6.57 95% CI 1.53-28.23). Sharing of syringes or other injection paraphernalia did not significantly impact likelihood of SIF interest.

In the final model, factors previously shown to impact SIF usage retain similar odds ratios. Males, homeless and younger people are all more likely to report that they would use a SIF. The model also shows that after controlling for other factors, individuals who witness an overdose have 156 percent

more interest in using a SIF than those who have not witnessed an overdose (OR 2.56 95% CI 1.24-5.27).

Individuals who reported they have experienced an overdose did not have greater interest in a SIF.

Table 2

Table 2 - Logistic Regression Analysis of Characteristics Associated with Interest in a Safe Injection Facility												
Variable	Model 1			Model 2			Model 3					
	Odds Ratio	95% Confidence Interval	p value	Odds Ratio	95% Confidence Interval	p value	Odds Ratio	95% Confidence Interval	p value			
Female Gender	0.565	0.3-1.07	0.08				0.49	0.24-0.99	0.047			
Age <26	1.0			1.0			1.0					
Age 26-35	1.28	0.48-3.4	0.618	0.92	0.33-2.61	0.882	0.99	0.34-2.89	0.985			
Age 36-45	0.68	0.26-1.79	0.438	0.46	0.16-1.33	0.154	0.51	0.17-1.54	0.232			
Age >45	0.48	0.19-1.19	0.111	0.31	0.11-0.87	0.026	0.36	0.12-1.09	0.07			
Race White*	1.0			1.0			1.0					
Black	1.62	0.52-5.05	0.409	1.52	0.45-5.14	0.499	1.32	0.37-4.69	0.669			
Native American	2.89	0.36-22.88	0.316	2.08	0.25-17.22	0.497	2.26	0.27-19.27	0.455			
Multiple/Other	0.67	0.33-1.37	0.275	0.58	0.27-1.24	0.161	0.55	0.25-1.19	0.131			
No permanent housing	1.85	1.02-3.38	0.044	1.86	0.98-3.53	0.057	1.57	0.81-3.03	0.179			
Daily Injection*				1.0			1.0					
≥ 8 injection per month < daily				0.72	0.33-1.61	0.427	0.78	0.34-1.76	0.546			
< 8 injection days per month				1.32	0.45-3.89	0.612	1.45	0.48-4.41	0.511			
Muscled				2.86	1.43-5.73	0.003	2.52	1.17-5.45	0.019			
Femoral				6.57	1.53-28.23	0.011	5.36	1.23-23.32	0.025			
Shared Syringe				0.93	0.35-2.48	0.889	0.93	0.34-2.53	0.88			
Shared Works				1.6	0.75-3.42	0.226	1.49	0.68-3.27	0.317			
Abscess							1.21	0.53-2.72	0.653			
Had Naloxone in last 3 months							0.63	0.26-1.48	0.285			
Self reported Overdose							1.78	0.58-5.44	0.312			
Witnessed Overdose							2.56	1.24-5.27	0.011			

\*Referent category

## DISCUSSION

This study shows that there is a high level of interest in a SIF among the injection drug users surveyed. Individuals engaged in poor injection practices and those at higher risk of harm express a higher level of interest in accessing a SIF. SIFs offer a unique platform to educate and provide harm reduction services to IDUs, particularly those with the highest risk. Potential benefits are great, however so are barriers.

Research indicates that SIFs are a fiscally responsible public health intervention that improves population health. SIFs also improve access to medical care, particularly for injection-related infections (Small et al., 2008). IDUs are highly stigmatized and face special barriers to access health services. SIFs may also provide other onsite health services, such as wound care, soft-tissue infection treatment, medication management, and case management. Some of these services could be reimbursed by Medicaid and other insurance providers. Half of those surveyed in this sample had insurance. Since this survey was conducted prior to the expansion of Medicaid, the current percentage of those could be higher. There are benefits from having additional billable health services co-located with a SIF, such as, facility and some staffing costs can be shared. Also, a SIF co-located with other health services would have more health professionals on site. These additional staff could become first responders if more assistance in the SIF was acutely necessary.

SIFs should be considered within a broader scope of harm reduction services. Expanded distribution of take-home naloxone could be used in conjunction with a SIF. Abuse deterrents, such as crush resistant opioid pain medications, and expanded access to medication assisted therapy (e.g. buprenorphine, methadone) are an important strategy of prevention and treatment. However, they cannot adequately address health concerns for individuals who are currently using and not attempting to quit. A comprehensive SIF would offer referrals to medication-assisted therapy, addiction counseling, clean

syringes and disposal and expand access to additional medical care. Housing is a major issue for many IDU and co-location of housing services could bring stability to many IDU's lives allowing them to focus on improving their overall health. Housing first models have been shown to have positive health and cost outcomes for chronic public inebriates (Larimer, et al., 2009).

There are multiple barriers to implementation of a SIF. A SIF could face significant political opposition as well as neighborhood opposition from potential sites. Vancouver's SIF faced steep opposition prior to opening, although after the SIF began operation it gained widespread popular support (Ogborne et al., 2008). An additional barrier is that IDUs would likely not be willing to travel very far to use a SIF, limiting SIF users to a small geographic region (Kral, et al., 2010). In this survey a majority of responders indicated they wanted the SIF to be located near the site in which they were surveyed (data not shown). This speaks to the need to have multiple SIFs, or possibly a mobile unit given that IDUs are located throughout the county.

No laws explicitly forbid SIFs. However, federal law (Crack House Statue 21 USCA §856, 2006) expressly prohibits the maintenance of a premises for illegal drug use (Beletsky et al., 2008). The intent of this law was not to prohibit local governments from implementing public health programs and could be interpreted not to include public health interventions that are proven effective (Beletsky et al., 2008). It is unclear if SIFs are prohibited under state laws. State legislators have the power to authorize a SIF via legislation, but not have done so. In many states, including Washington State, a SIF could be authorized by the governor via executive order. Alternately, a health officer could initiate implementation of a SIF similarly to how syringe exchanges began by local determination of the health officer or board of health. When syringe exchanges were challenged Washington State's Supreme Court ruled unanimously that syringe exchanges did not violate state drug laws, stating in the ruling "the broad power given local health boards and officers under the Constitution authorized them to institute needle-exchange

programs” ( Spokane County Health District Vs. Brocket, 1992). If a state or county sanctioned SIF were created, the federal government response may resemble responses to medical marijuana and physician-assisted suicide – that is, allow implementation by the state. Ultimately, the legality of a SIF remains undefined until implemented and challenged in court.

To address these barriers, advocates for the creation of a SIF may consider using a mobile unit, such as a converted RV. A mobile unit could avoid some of the neighbor opposition to a permanent site. Another advantage to the mobile unit is the ability to serve multiple geographic regions. A mobile SIF could be used as a training model to teach safer injection practices in an applied setting. IDUs may not be able to access the SIF on a daily basis but could learn safer injection practices to employ when the SIF is not available. Mobile SIFs currently operate in both Barcelona and Berlin (Dietze et al., 2012).

This study suggests that individuals who have witnessed an overdose would be among those who are most likely to use a SIF, if it were available. This could be due to fatigue and stress from the perception of being a caretaker for other IDUs (Wagner et al., 2014). Witnessing an overdose could be a significant source of stress that drives individuals to access a SIF. Since witnessing an overdose is associated with personal overdose, a SIF would likely be accessed by those with elevated personal risk (Coffin et al., 2007; Ochoa et al., 2005).

A qualitative study of Vancouver’s SIF found that females who were currently using Vancouver’s SIF expressed that it was particularly important for females to access a SIF, due to their greater risk of violence and gender norms related to injection practices (Fairbairn, et al., 2008). This suggests that a SIF’s harm reduction potential may extend beyond injection-related health to include domestic violence, sexual assault and gender issues.

Reducing harm to young people is also of particular interest to public health advocates. This study shows that age is related to interest in using a SIF, with younger groups expressing more interest. Influencing young people to reduce poor injection practices and prevent and reverse overdoses has more potential to reduce Years of Life Lost (YLL) and Disability Adjusted Life Years (DALY) than targeting older adults. Reducing spread of disease and improving injection safety in younger people has a greater impact on long-term population health than similar changes in older people.

As evidenced in this analysis, IDUs with elevated risk of harm are more likely to report interest in using a SIF than other IDUs. SIFs operated world-wide have been proven effective at improving health and appear to be a fiscally responsible public health approach. Furthermore, IDUs are amenable to this intervention. The body of research supporting SIFs is strong. A pilot study is the next logical step to further explore the impacts of a SIF operated in the U.S.

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