

Syringe Services Program (SSP) Development and Implementation Guidelines for State and Local Health Departments

August 2012



Contents

1.	Introduction	1
1.1	Purpose and Use of the Guidelines	2
1.2	Organization of the Guidelines	2
2.	Background	3
2.1	Definition of Syringe Services Programs	3
2.2	Demographics of IDUs in the United States	3
2.3	HIV, HCV, and Overdose among IDUs	3
2.4	Prevention of BloodBorne Viruses through Syringe Services Programs	4
2.5	History of Syringe Services Programs in the United States	5
3.	Laying the Groundwork for Program Implementation	7
3.1	Assessing the Community’s Need for Syringe Services Programs	7
3.2	Assessing the Community’s Readiness for Syringe Services Programs	7
3.2.1	Legalities Surrounding the Operation of Syringe Services Programs	7
3.2.2	Building Community Support for Syringe Services Programs	8
3.3	Working with Law Enforcement	8
3.3.1	An Opportunity for Collaboration	8
3.3.2	Taking Action	9
3.4	Building Community Relationships	10
3.4.1	Neighborhood Groups	10
3.4.2	Reaching Potential Syringe Services Program Participants	11
3.4.3	Emergency Departments	11
3.4.4	Pharmacies and Pharmacy Organizations	11
3.4.5	Waste Management for Syringe Disposal	12
4.	Operating Principles of Syringe Services Programs	13
4.1	Reducing Consequences of Drug Use	13
4.2	Program Registration	13
4.2.1	Syringe Services Program Identification Cards	14
4.3	Syringe Transaction Models	15
4.3.1	Needs-Based/Negotiated Distribution	15
4.3.2	Strict One-for-One Exchange	15
4.3.3	One-for-One Plus Exchange	16
4.3.4	Strengths and Limitations of Each Syringe Transaction Model	16
4.4	Safe Syringe Disposal	17
4.4.1	Prevention of Occupational HIV Transmission among SSP Staff	17
4.5	Health and Social Services: Provision and Linkage	18
4.5.1	Strategies to Increase Access to Services	19
4.5.2	Specific Health and Social Services	19
4.5.3	Provision or Linkage	21

5.	Service Delivery Models	22
5.1	Fixed Site	22
5.1.1	Hospital/Clinic-Based Settings	23
5.1.2	Integrated Syringe Access Services	24
5.1.3	Collaboration or Satellite Structure	24
5.2	Mobile/Street-Based	25
5.3	Secondary or Peer-Delivery Models	26
5.4	Delivery Model	26
5.5	Pharmacy Distribution Model	27
5.5.1	Pharmacy Voucher Program	28
5.6	Rural Settings	28
5.7	Using Multiple Program Models	28
6.	Monitoring Syringe Services Programs	29
6.1	Process Monitoring	29
6.2	Outcome Monitoring	30
6.3	Program Quality Improvement	31
7.	Capacity Building	32
7.1	Assessing and Addressing Capacity Building Needs	32
7.2	Building Capacity of Syringe Services Program Staff	33
7.3	Capacity Building Resources	34
	Glossary	37
	Appendix A: Process Monitoring Indicators	40
	References	43

TABLES

1.	Past-Year Injection Drug Use among Persons Aged 12 or Older, by Selected Demographic Characteristics: 2006 to 2008	4
2.	Syringe Exchange Programs Participating in Beth Israel Survey	5
3.	Types of Information Potentially Collected at Syringe Services Program Intake	15
4.	Basic and Advanced Training Topics for SSP Staff	34

Introduction

Despite significant reduction in the transmission of the human immunodeficiency virus (HIV) and other blood-borne viral infections among injection drug users (IDUs) over the past two decades, injection drug users (IDUs) still account for approximately 16 percent of new HIV infections in the United States,¹ and almost one half (48 percent) of newly reported hepatitis C virus (HCV) infections are IDU related.² To help address this continuing public health problem, the White House Office of National AIDS Policy (ONAP) released the *National HIV/AIDS Strategy (NHAS)*³ in July 2010. An integral step to reaching the NHAS goals to (1) reduce new HIV infections, (2) increase access to care and improve health outcomes for people living with HIV, and (3) reduce HIV-related health disparities is to prevent HIV transmission among substance users through HIV screening programs and other comprehensive HIV prevention services coupled with substance abuse treatment. Similarly, the Department of Health and Human Services (HHS) released *Combating the Silent Epidemic of Viral Hepatitis: Action Plan for the Prevention, Care & Treatment of Viral Hepatitis* in May 2011. Chapter five of the Action Plan is dedicated to reducing viral hepatitis caused by drug use behavior. Congress passed and President Obama signed the Consolidated Appropriations Act 2010, which included language modifying the ban on the use of federal funds for syringe exchange programs (SEPs), for (HHS) programs. These programs are designed to reduce the likelihood of transmission of blood-borne diseases by providing sterile injection equipment to IDUs and reducing the potential of sharing syringes among this population. HHS released “Implementation Guidance for Syringe Services Programs” (SSP) (July 2010) to set forth guiding principles for using federal funds for SSPs. Fundamental to these principles is that SSPs are part of a comprehensive service program that includes, as appropriate, linkage and referral to substance abuse prevention and treatment services, mental health, HIV prevention, HIV care, HIV treatment and other support services. Concurrently, the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) provided interim guidance to grantees for the use of Fiscal Year (FY) 2010 funds for SSPs. Subsequently, the Consolidation Appropriations Act 2012 reinstated the ban on the use of federal funds to syringe exchange programs.

The National Alliance of State and Territorial AIDS Directors (NASTAD) and the Urban Coalition for HIV/AIDS Prevention Services (UCHAPS) have been strong proponents of increased access to sterile syringes for people who use injection drugs as a critical intervention for decreasing HIV transmission among this population. For nearly 20 years many U.S. states and cities have been operating SSPs to prevent disease and protect public safety through increased access to and proper disposal of sterile syringes. They have accomplished this effort through the use of private, local, and state funds and have seen marked reductions in HIV rates among IDUs since the inception of SSPs. In August 2011, NASTAD released a *Statement of Commitment Promoting Injecting Drug User Health* calling for more attention to HIV/AIDS and viral hepatitis health risks and challenges that IDUs continue to face. In May 2012 UCHAPS issued a best practices policy brief “Syringe Access” encouraging the removal of legal and legislative barriers to syringe access. In addition, NASTAD and UCHAPS are strong national advocates for increased and targeted resources and expanded federal investment for disease and overdose prevention, care and treatment programs.

Drawing from a field of SSP expertise that has existed in the U.S. since the late 1980s, these program implementation guidelines have been developed by NASTAD and UCHAPS to further assist state and local health departments to plan and implement SSPs as a part of their prevention portfolios.

1.1 Purpose and Use of the Guidelines

These guidelines provide assistance to state and local health department jurisdictions that wish to support SSPs for IDUs to prevent transmission of HIV and other blood-borne viruses such as HCV and to link IDUs to vital prevention, medical and social services. For health departments currently implementing SSPs, these program implementation guidelines provide information that can be used to enhance or expand services. For health departments interested in initiating an SSP, these guidelines address key issues to be considered before implementing an SSP.

1.2 Organization of the Guidelines

These guidelines are designed to provide an overview of the core components of, and issues related to, implementing and maintaining SSPs.

Section 2 presents background on SSPs, including the epidemiology of HIV, HCV and overdose among IDUs.

Section 3 describes the structural elements that need to be considered before SSP implementation.

Section 4 explains the philosophical underpinnings and operating principles of SSPs.

Section 5 describes a range of existing SSP delivery models.

Section 6 presents suggestions for monitoring SSPs.

Section 7 outlines how to address capacity building needs for SSP implementation and maintenance.

Background

This section provides background information on syringe services programs (SSPs) and injection drug users (IDUs), including the definition of SSPs; the demographic characteristics of IDUs; epidemiology of HIV, HCV and overdose among IDUs; a discussion of how SSPs benefit IDUs; and the history and evolution of SSPs in the U.S.

2.1 Definition of SSPs

SSPs are programs that provide syringe access, disposal and/or exchange to IDUs, while also referring and linking IDUs to HIV and viral hepatitis prevention services, substance abuse treatment, and medical and mental health care. Various types of SSPs provide syringe services to IDUs, including syringe exchange programs (SEPs), pharmacies, physician prescription and health care services.

2.2 Demographics of IDUs in the United States

The national data on demographics of IDUs in the U.S. are scarce. SAMHSA conducts the annual National Household Survey on Drug Use and Health. Combined data from 2006 to 2008 indicate that an annual average of 425,000 persons aged 12 or older (0.17%) used a needle to inject non-prescribed drugs during the past year.⁴ The prevalence of past-year injection drug use was highest among persons aged 18 to 34 (Table 1). Males were more likely than females to have injected drugs in the past year. The prevalence of past-year injection drug use by race/ethnicity varied widely.

2.3 HIV, HCV and Overdose among IDUs

HIV: As of 2009, 26 percent of HIV infections among females and 13 percent among males were attributable to injection drug use in the U.S.⁵ An additional seven percent of cases among males occurred among IDUs who have sex with men (MSM). These figures only partially represent the scope of IDU-associated HIV infections, because injection drug use also contributes to heterosexual HIV transmission, which is responsible for 11 percent of infections among males and 74 percent among females living with HIV.⁵ Among females, over half of HIV infections are acquired either by injecting drugs or having sex with an IDU.⁶ A recent study found that, among non-IDU heterosexuals in a New York community, those individuals with IDU sex partners had two-fold odds of being HIV infected.⁷ Furthermore, data from the CDC-funded National HIV Behavioral Surveillance System (NHBSS) indicate that a third of IDUs shared syringes in the past year.⁸ These findings underscore the need for continued and enhanced efforts to address syringe-related risk among IDUs.

Table 1. Past-Year Injection Drug Use among Persons Aged 12 or Older, by Selected Demographic Characteristics: 2006 to 2008	
Demographic Characteristic	Percentage
Age Group	
12 to 17	0.09
18 to 25	0.28
26 to 34	0.26
35 to 49	0.19
50 or older	0.11
Gender	
Male	0.24
Female	0.11
Race/Ethnicity	
Two or more races	0.35
American Indian/Alaska Native	0.24
White	0.18
Hispanic or Latino	0.18
Black or African American	0.14
Native Hawaiian or Other Pacific Islander	0.02
Asian	0.02

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. *The NSDUH Report: Injection Drug Use and Related Risk Behaviors*. Rockville, MD: SAMHSA; October 29, 2009. Available at: <http://www.oas.samhsa.gov/2k9/139/139IDU.htm>.⁴

HCV: Currently, the majority of the 2.7 to 3.9 million HCV infections among people in the U.S. are attributable to injection drug use.² HCV is much more readily transmitted than HIV through multi-person use of injecting equipment, including drug preparation equipment (cottons, cookers, and rinse water).^{9,10} In the U.S., HCV prevalence among IDUs is generally between 60 percent and 90 percent; length of injecting career is the strongest predictor of being HCV seropositive.^{11,12}

Overdose is the leading cause of death among IDUs¹³ and the second leading cause of accidental death in the U.S.¹⁴ Prevalence of nonfatal overdose among opioid users is up to 60 percent among injection heroin users.¹⁵ Other urban heroin users have lifetime overdose prevalence of 29 percent to 68 percent.^{16,17,18,19}

2.4 Prevention of Blood Borne Viruses through SSPs

Blood borne viruses are those viruses that are transmitted from the blood of one person to the blood of another person. Of particular concern are HIV and HCV. IDUs are at especially high risk for HIV and HCV through sharing injection equipment, particularly syringes, for one or multiple substances such as heroin, cocaine, amphetamines, hormones, and/or steroids. IDUs are also at high risk for HIV and other sexually transmitted infections through unprotected sex.

Therefore, the HIV- and HCV-specific public health benefits of SSPs arise from (1) removing potentially infectious syringes from the community, (2) providing IDUs with sterile syringes and other clean injection equipment, and (3) distributing condoms. Several studies have found that SSPs

reduce HIV incidence among IDUs.^{20,21,22,23} Most studies of injection-related HIV and HCV risk have found SSPs to be associated with a lower likelihood of syringe sharing or reductions in syringe sharing.^{24,25,26,27,28,29,30,31,32,33,34} Ecological studies have found that locales with SSPs tend to have lower HIV seroprevalence among IDUs,^{35,36,37,38} and one study reported that closing an SSP resulted in increased prevalence of HIV risk behaviors among IDUs.³⁹ In addition, the reach of SSPs can extend beyond its primary participants by using social networks of IDUs to deliver and dispose of syringes through secondary or peer exchange models.^{40,41,42} Other public health benefits of SSPs include the linkage of IDUs to critical services and programs and promoting integrative care among drug treatment programs, HIV/AIDS prevention and treatment services, HCV prevention and treatment programs, and social and mental health services. The evidence for the public health benefits of SSPs is strong and consistent over time.

2.5 History of SSPs in the United States

The history of SSPs in the U.S. is primarily the history of SEPs. The first SEPs in the U.S. began in the late 1980s in Boston, Massachusetts; Tacoma, Washington; and San Francisco, California. With a few exceptions, these SEPs were primarily activist-initiated programs without support from governmental sources.^{43,44,45} The North American Syringe Exchange Network (NASEN) has provided both a national organizational framework for existing SEPs and technical start-up assistance for new programs since the 1980s. Researchers from Beth Israel Medical Center and NASEN have conducted annual surveys of SEPs since the 1990s. Table 2 shows the growth of SEPs in the U.S. from the mid-1990s to 2008.⁴⁵ A period of rapid growth among SEPs occurred during the mid-1990s through the early 2000s; however, since then the growth has been incremental. The 123 SEPs participating in the 2008 survey reported operating in 98 cities in 30 states (including the District of Columbia). A total of 120 SEPs reported budget information for 2008. The reported budgets for these 120 SEPs totaled \$21.3 million, 79 percent of which came from public (nonfederal) funding.

Table 2. Syringe Exchange Programs Participating in Beth Israel Survey

Numbers of ...	1994–95	1996	1997	1998	2000	2002	2004	2005	2006	2007	2008
SEPs known to NASEN	68	101	113	131	154	148	174	166	188	186	184
SEPs participating in survey (%)	60 (88%)	87 (86%)	100 (88%)	110 (84%)	127 (82%)	126 (85%)	109 (63%)	118 (71%)	150 (80%)	131 (70%)	123 (67%)
Cities with SEPs participating	44	69	78	77	98	97	88	90	113	100	98
States with SEPs participating*	21	29	33	33	36	32	32	29	32	31	30
Syringes exchanged (millions)	8.0	13.9	17.5	19.4	22.6	24.9	24.0	22.5	27.6	29.5	29.1
Total of SEP budgets (in millions of dollars)	6.3	7.3	8.4	8.6	12.0	13.0	11.6	14.5	17.4	19.6	21.3
Total of SEP budgets (in millions of dollars, adjusted to 2008 standard)	10.8	11.6	13.0	12.9	16.8	16.6	13.6	16.3	18.8	20.3	21.3
Percentage of total budget from public funding	62	62	67	69	74	67	76	74	79	73	79

Note: NASEN = North American Syringe Exchange Network

*This category includes the District of Columbia and Puerto Rico.

Source: Centers for Disease Control and Prevention. Syringe Exchange Programs—United States, 2008. *MMWR* 2010;59(45):1488-1491.

Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5945a4.htm>.

Four types of SSPs increase syringe access for IDUs in the U.S.: SEPs, pharmacies, physician prescription and health care services. SEPs are community-based programs with a specific mission to increase access to sterile or clean syringes and facilitate disposal of unsterile or used syringes. In many states, pharmacies simply sell needles and syringes without requiring a prescription. Many pharmacies also have some provisions for collecting used syringes, including kiosks and drop boxes.

Participation by pharmacies is voluntary rather than mandatory. Physician prescription of syringes and provision of syringes in health care services are rare.^{46,47,47} Yet these models take advantage of instances in which IDUs may be in contact with health care providers and may be very important in creating trusting relationships between IDUs and health care providers.

Laying the Groundwork for Program Implementation

This section discusses the various factors that health departments will need to consider as they plan and implement syringe services programs (SSPs) in their jurisdictions, including the importance and necessity of assessing the community's need and readiness for SSPs, ways of working with law enforcement and strategies for building strong community relationships. General principles of community inclusion and creating programs and policies that are culturally, and linguistically appropriate and reflect the makeup of the community should be incorporated.

All SSP programs should be designed in a manner that enables funded agencies to effectively serve culturally diverse communities. Specifically, all program components, materials and marketing messages should reflect the history and culture of the target population and be linguistically-appropriate. Further, as is standard procedure, all materials should be reviewed and approved by a content review panel prior to use to ensure community support for the appropriateness of the materials. Additionally, funded agencies should employ a culturally competent workforce, including a diverse management team, have organizational policies that support the delivery of culturally competent services and care and a process for establishing if cultural competency goals have been met.

3.1 Assessing the Community's Need for SSPs

The first step in considering whether to implement an SSP is to determine whether the need exists in the health department jurisdiction. Health departments and/or HIV prevention planning groups (HPPGs) may identify IDUs as a target population by using assessments of key epidemiological factors including HIV and/or HCV prevalence and demographics of risk groups, and select SSP as an appropriate intervention.⁴⁸

After the needs assessment is complete, health departments may work with HPPGs and other partners to (1) identify ways to tailor services based on the specific needs of special risk subgroups of IDUs in the community, (2) select the types of syringe distribution and service delivery models most appropriate given resources and context and (3) identify potential locations for SSPs. Health departments may need to educate HPPGs and other partners about IDU-related epidemiological data and the importance of SSPs as an intervention to further address the shared goal of reducing HIV in the community.

3.2 Assessing Community's Readiness for SSPs

This section of the guidelines discusses the importance of assessing the legalities and community support for implementation of SSPs by the state or local health department.

3.2.1 Legalities Surrounding the Operation of SSPs

Once the health department has determined that a SSP is needed to address the HIV prevention needs of IDUs, the next step is to assess whether the community is "ready" or receptive to an SSP. A starting point is to review the laws and ordinances that currently govern SSPs within the health department jurisdiction. Although some states have explicit laws governing SSPs (e.g., New Mexico

and Hawaii), most do not. States usually have one or more provisions dealing with the delivery and possession of syringes, but these were typically enacted to deal with profit-driven criminal activity. Law enforcement agencies may have their own interpretations of laws governing SSPs, as well as differing priorities. Consequently, laws that appear similar may be enforced differently depending on the locale.

For a health department interested in implementing a new SSP or funding an existing SSP, the challenge is to resolve any confusion about the types of interventions that are legal in a particular community. Resolving this confusion requires a clear vision of the best approach to achieve desired public health outcomes, combined with a willingness to work with health department legal advisors to reconcile any uncertainties. The legal advisors help the health department achieve its goals in a legally responsible manner. For each SSP model (see Section 5), health departments' legal advisors should identify and analyze the laws that govern syringe access.

3.2.2 Building Community Support for SSPs

Providing sterile syringes to IDUs has been shown to reduce sharing of syringes (see Section 2.4). But like other important public health interventions, in order to successfully implement SSPs, there must be an enabling environment consistent of support from key stakeholders such as selected public officials, other government agencies, the general public and consumers. Building community support for SSPs is an integral part of successful SSP implementation. A careful and systematic process can help build community support for SSPs, including assembling the facts and intervention options, assessing stakeholder knowledge and attitudes, and developing an action plan.⁴⁹ As described below, several steps can be taken to successfully implement SSPs.

Assemble the Facts and Intervention Options

Start by assessing the characteristics of the local IDU epidemic and identifying current modes of syringe access. SSPs take many forms, and depending on the spatial distribution of IDUs, the accessibility of pharmacies or other health care facilities, and other relevant factors, more than one approach may be worth considering. Having identified potential SSP models (see Section 5), health departments will also need to consult with legal advisors and other stakeholders to discuss the viability of each prospective SSP option for the specific jurisdictions.

Assess Stakeholder Knowledge and Attitudes

Identify key stakeholders and assess their knowledge of and attitudes toward SSPs. Even a legal SSP may fail if elected public officials do not support it, the media frames it negatively, or communities resist it. Police, prosecutors, and public defenders can be engaged to ensure that SSP staff and participants are not mistakenly treated as lawbreakers. Pharmaceutical industry support is crucial to SSPs that work through pharmacies.

3.3 Working with Law Enforcement

This section of the guidelines discusses the public law under which the use of federal funds for SSPs is authorized, certification requirements, and strategies for collaboration between SSPs, health departments and law enforcement.

3.3.1 An Opportunity for Collaboration

Law enforcement is an essential partner for health departments to achieve beneficial public health outcomes. Law enforcement officials, prosecutors, the judiciary, and correctional officials are all

coping with the societal challenges that can result from public health problems such as HIV, HCV, substance abuse, and mental illness.^{50,51} Efforts to develop more effective, coordinated responses include law enforcement crisis intervention teams, courts that address drug and mental health issues, correctional drug abuse treatment programs and transitional services for people leaving jail and prisons. Health departments can work with other social service agencies to improve the overall system response to these common health threats and link individuals to appropriate services.

There may be concern that law enforcement officials who oppose SSPs will object to any proposed location as a way of preventing an SSP from being implemented. However, law enforcement officials may be willing to generally support implementation of an SSP without providing written approval for a specific location. It is important to negotiate with law enforcement officials and receive their approval because of the effect law enforcement can have on injection behavior and SSP utilization. The language in Public Law 111-117 provides an opportunity to further develop more formal partnerships with law enforcement. Research and experience show that law enforcement will understand, accept, and support SSPs.^{52,53}

Addressing the occupational risks to law enforcement officers is good public health practice, and it demonstrates the benefits of SSPs. Law enforcement officials and other first responders may need education and services to reduce their own occupational health risks and better understand the public health benefits of SSPs. For example, law enforcement officers may experience and worry about needlestick injuries during encounters with IDUs.^{26, 27} SSPs are associated with reduced risk of needlestick injuries to law enforcement officers.²⁸ Law enforcement may also benefit from, and appreciate, access to protective training and equipment from SSPs, as well as to prophylaxis after an injury.

3.3.2 Taking Action

Like other large organizations, law enforcement organizations can be diverse, decentralized and challenged in the uniform implementation of policies. One metropolitan area may have numerous law enforcement agencies, many district legal attorneys and multiple correctional facilities with varying levels of support for SSPs. Support at the organizational top level does not guarantee the same level of support at the street level, and vice versa. In this section, we describe recommended approaches for working with law enforcement organizations.

Importance of Top-Level Support

Claims that SSPs encourage drug abuse and/or crime have been proven unfounded.^{29, 30} Open and unambiguous public support for SSPs among political and social leaders, including the local media, reinforces the need to work with law enforcement officials. Winning support from law enforcement unions and peer organizations such as fire and rescue departments can also help. For example, if the district attorney's office will not prosecute syringe possession or drug residue arrests, law enforcement officials are less likely to make these types of arrests. Addressing related issues, such as access to drug abuse treatment, syringe disposal, and drug overdose, can broaden the base of community support for SSPs. Top-level support within the political and law enforcement leadership may also help ensure that clear messages about the value and legality of SSPs are transmitted to mid-level law enforcement managers and it will provide SSP staff with points of contact regarding issues of law enforcement interference.

Importance of Support from Law Enforcement Officers on the Street

Although street-level law enforcement officers often have considerable experience interacting with and observing IDUs, some law enforcement officers may not be aware of the public health aspects of drug use and infectious diseases, such as HIV. Health departments and SSP staff play a pivotal role in communicating the public health benefits of SSPs, and can provide guidance, as needed, on ways to decrease health risks to law enforcement personnel when interacting with IDUs or handling syringe equipment on the streets. Formal training can be challenging both financially and logistically for SSP operators. Consequently, it is important to build good relationships with police on the street and mid-level commanders, and to consider these activities in SSP budgets.

Open Dialogue between Law Enforcement and SSPs

Building good relationships with law enforcement usually takes time, and the results may vary. Health departments can act as a liaison between SSPs and law enforcement to ensure that communication between these two entities is effective. Most SSPs have a Community Advisory Board or a Board of Trustees. By including law enforcement representatives on these boards, health departments can also help build support and ensure that communication flows both ways.

3.4 Building Community Relationships

SSPs operate best in a supportive community environment. Staff, volunteers, and SSP participants should be involved in community engagement programs. Several strategies have proven effective across a broad range of programs and locations, including: (1) building relationships with community leaders, officials, opinion leaders, law enforcement, public health officials, religious leaders and groups, and businesses most affected by SSP site location; (2) educating the community about drug use, SSPs, and safe syringe disposal; (3) framing messages about SSPs to emphasize the community benefits, including reduced HIV and HCV infection rates, proper syringe disposal and cost-effectiveness; (4) understanding and addressing the concerns of resistant stakeholders in the community; (5) recruiting staff and volunteers who represent the community where the site is located; and (6) involving IDUs in the SSP planning process so their voices and concerns are heard.

This section discusses ways to build relationships with neighborhood groups, potential program participants, pharmacies and pharmacists, and waste management organizations.

3.4.1 Neighborhood Groups

Neighborhood groups can facilitate or impede the location of new SSP sites or maintenance of existing sites. Thus, it is important to partner with the following groups: medical and social service providers, neighborhood and/or homeowners associations, business owners, schools and faith-based groups.

A good way to work with neighborhood groups is to first meet with their boards and ask to participate in or present at larger group meetings. It also can be helpful to become a member of neighborhood groups when possible; however, membership requires that SSP staff members consistently attend and participate in group activities. If appropriate, including both a staff member and an SSP participant in the neighborhood groups may be helpful. IDUs' concerns should be kept in mind when participating in community meetings.

Presentations to community groups ideally convey the community-level benefits of SSPs, such as reduced HIV and HCV infection rates, proper syringe disposal, and cost-effectiveness. Presentations

are opportunities for education and open dialogue, and it is helpful to anticipate concerns within the community and to come prepared with data and answer difficult questions.

3.4.2 Reaching Potential SSP Participants

To reach potential program participants, outreach workers need to have the IDU community's support and trust. Contacting IDUs initially may require time and patience but will help build a good foundation for the outreach effort. When outreach workers first approach potential SSP participants, they should introduce themselves and indicate the agency in which they work. Initially, outreach workers should be sensitive to any cues the potential participant provides to indicate she/he is not interested in talking at that moment. They can simply let people know what services are provided and when they are offered. It is important for outreach workers to develop a comfortable relationship, while also keeping outreach and service delivery as priorities. Maintaining potential SSP participants' confidentiality is of the utmost importance, especially when program staff are talking with people in groups and people's personal information might be overheard. As they build a relationship with participants, outreach workers can discuss safer injection methods and health matters with them in a way that does not seem threatening. Furthermore, culturally competent outreach practices consider the distinct needs of IDU subpopulations (e.g., MSM, women, youth and transgender persons) and also help build support for the program within the community.

Another good resource for conducting street outreach is peers, because they have access to social networks of IDUs. Since they are a part of the IDU community, they may be able to gain peoples' trust faster than non-peer workers. In addition, peers often know the best locations for outreach efforts, can foresee potential challenges to getting IDUs into the program and can help outreach workers assess situations and offer solutions.

When an agency engages in street outreach, it is important to consider the safety of outreach teams, including secondary exchangers (see Section 5.3); culturally appropriate personnel and attire; culturally relevant educational materials and supplies; training and materials for safe syringe disposal; outreach worker training in overdose prevention, recognition and response; and procedures for documentation of outreach activities, including any adverse incidents.

3.4.3 Emergency Departments

For some IDUs seeking health care services for detoxification, wound infections, abscesses and overdose, emergency departments may serve as access points to locate and recruit IDUs for SSPs. Emergency departments can refer IDUs to SSPs for not only sterile syringes, but also for wound care and overdose prevention education, HIV and STD screening, and substance abuse treatment services. SSPs can provide information about the partnering medical facility and refer IDUs for medical care. Other potential partnership strategies may include having a medical practitioner imbedded within a fixed site or mobile-based SSP, and SSP staff accompanying IDUs to emergency departments to better facilitate access to medical care.

3.4.4 Pharmacies and Pharmacy Organizations

Pharmacies and pharmacists can not only provide sterile syringes to IDUs, they can also be a good resource and a strong ally for other SSP modalities. As health care providers who generally work with large and highly diverse populations, pharmacists may be willing to speak directly with their colleagues about SSPs. Professional pharmacy organizations, most of which are registered with their state pharmacy governing body, and pharmacy schools have regular meetings and conferences that can be important venues for presentations on issues related to community health. To reach

pharmacists working at large chains, contacting the pharmacist supervisor at the parent company and offering to work with them on strategies to get information to other pharmacists within the company are often good strategies.^{54,55}

After determining the geographical reach of the SSP, the SSP can easily locate all of the pharmacies through the telephone book or the internet. It is recommended to telephone or approach pharmacists in person and schedule times to come in and talk to them about the SSP.⁵⁶ Successful SSP outreach to pharmacists should include information and handouts about: (1) the local program(s), including the available services, target population demographics, and the location and hours of sites; (2) local laws that might allow them to enhance syringe access independently of the SSP; and (3) general education about common concerns (e.g., “Will SSPs increase discarded syringes?”, “Increase crime?”, “Increase drug use?”, etc.); and (4) the epidemiological evidence for SSP efficacy.^{56,57} It also may be useful to maintain a list of supportive pharmacies and the services they are willing to provide to IDUs, their hours and locations, and all of the necessary information for IDUs to use the services.

3.4.5 Waste Management for Syringe Disposal

As part of building community partnerships, it is useful to engage city, county or state waste management boards and their leadership, meet with them to introduce the program, and outline waste management plans. Working with waste management staff is a good way to discuss how to expand syringe disposal through hazardous waste disposal programs already in place or stand-alone syringe disposal kiosks.

Operating Principles of SSPs

Several elements should be considered in developing local operating principles for syringe services programs (SSPs). This section first describes strategies to reduce the consequences of drug use, the philosophy underpinning SSP operating principles. Also provided in the section is a detailed description of program implementation, registration procedures, three types of syringe transaction models, safe syringe disposal practices, and the types of health and social services that can be offered on-site or through linkages with outside agencies.

4.1 Reducing Drug Use Consequences

Over time, strategies like SSPs reduce the risks and negative effects associated with substance use and addictive behaviors for the individual, the community and society as a whole. While one must take care not to promote drug use, these strategies consider the situations drug users are in by addressing the conditions of drug use. The following principles represent a general understanding of the underpinnings of such interventions:

- Drug use is complex, encompassing a spectrum of behaviors from occasional use to extreme abuse.
- All illegal drug use is harmful. Some forms of drug use are manifested differently than others in terms of the mental and physical health consequences (e.g., overdose, HIV and HCV transmission risks).
- Social inequalities, such as poverty, racism, classism, past trauma, social isolation and sex-based discrimination, influence people's ability to deal with drug use and its consequences effectively. Additionally, environmental factors, like drug availability and non-enforcement, can lead to different outcomes of drug use.
- People in recovery from drug addiction should be involved in the creation and implementation of SSP programs and policies. Services need to be provided in a manner that will help to guide people into services rather than keep them from accessing needed services. Services need to be available to everyone, regardless of gender, race/ethnicity, age, socioeconomic status or sexual orientation.
- Drug users are primarily responsible for reducing the negative outcomes of their drug use. Thus, SSPs strive to get drug users to share information about strategies that might work in their situations and support each other in using those strategies.

4.2 Program Registration

In many SSPs, the formal establishment of a relationship between IDUs and the SSP begins with intake or enrollment. It should be noted that SSPs often do not have established enrollment or program registration procedures. However, the enrollment experience can be important in gaining the participant's trust and setting the tone for future interactions. To accommodate participant needs and encourage enrollment, initial intake procedures should be kept to a minimum. However, SSP staff may need to use a longer intake process for referral to additional services, such as medical care or social services.

Collecting information may decrease participants' anonymity, which may reduce the likelihood that participants will access services. Asking participants to provide government-issued identification

(ID) at enrollment may also deter people from using the SSP, and not everyone has a government-issued identification (ID) cards.

SSP REGISTRATION CAN SERVE THREE POTENTIAL PURPOSES:

1. The registration process can serve as a formal welcome to the SSP and provide an opportunity for educating participants in the range of services offered and assessing participants' needs. However, it is important for the program to take cues from participants in terms of how much to engage them at first, because some people may initially be reluctant to disclose information or stay at the site for any length of time.
2. In some jurisdictions, SSP participants may receive legal protection for possessing needles if they are registered in the SSP. However, SSPs without formal enrollment procedures also can provide legal protection to their participants.
3. By registering participants, the SSP can collect statistical data that staff can use to monitor the program. The purpose of monitoring is to ensure that the program is operating in conformity to its design, reaching its specific target population, and achieving anticipated implementation goals (see Section 6). Future monitoring activities can then be linked to the same participant through a unique participant code.

Table 3 presents the types of information that might be collected at intake/enrollment. This list offers a range of ideas and is not an intake template.

4.2.1 SSP Identification (ID) Cards

In areas where SSP participants receive legal protection for needle possession as a result of being formally enrolled in the SSP, ID cards can be a useful tool. Using ID cards can also facilitate transactions once participants have been enrolled in the program. Similar to other enrollment procedures, the use of ID cards should be instituted only if there is a clear benefit to the participant, such as legal protection. Using ID cards may cause concerns about the lack of anonymity for program participants. If ID cards are used, it is recommended that the program construct unique codes using non-identifiable information the participant can easily recall, such as a combination of mother's maiden name initials and their month and year of birth.

Table 3. Types of Information Potentially Collected at Syringe Services Program Intake

Information	Purpose
First name <i>only</i>	Identifies the individual as a participant, which may protect him/her from law enforcement
Initials	As an alternative to participants' names
Birth year	To describe the service population
ZIP code or area of current residence	To describe the program's reach and identify geographic areas where there are gaps
Sex or gender	To describe the service population
Sexual Orientation	To describe the service population
Race/ethnicity	To describe the service population
Preferred Language	To tailor program services to participants' needs
Injection frequency	To estimate syringe needs for needs-based distribution models (see Section 4.3.1)
Drug preferences	To evaluate program services and tailor them to participants' needs.
Medical Home	To identify access point for medical care for program planning and referrals
Access to Other Services	To identify needed medical, substance abuse, and mental health services for program planning, referrals, and quality improvement
Social Determinants of Health	To identify homelessness, unemployment, and other social factors for program planning and referrals

4.3 Syringe Transaction Models

The goal of SSPs is to provide as close to 100 percent syringe coverage as possible, which means a sterile syringe for every injection of every IDU in a jurisdiction. SSPs typically use one of three types of syringe transaction models: needs-based/negotiated distribution, strict one-for-one exchange and one-for-one plus exchange. Although there is little published research on the comparative efficacy of the three model types, subject matter experts agreed that all three types are in common usage and that each has a set of strengths and limitations. Programs will need to consider available resources and requirements of funders when selecting the type of syringe transaction model to implement. The sections below describe the different types of syringe transaction models followed by a discussion of the strengths and limitations of each.

4.3.1 Needs-Based/Negotiated Distribution

In the needs-based/negotiated syringe distribution model, the program does not set a limit on the syringes a participant can receive regardless of the number of returned syringes. Although SSPs using this model generally encourage participants to return used syringes, participants can still receive sterile syringes even if they do not. The number of syringes distributed is negotiated based on the participant's need, taking into account the number of people the participant is serving, the frequency of injection and the length of time until she/he can next access the SSP. Some SSPs place an upper limit on the number of syringes distributed under this model (e.g., 100 or 500-syringe limit), but they do not place a limit on how often a participant can access services.

4.3.2 Strict One-for-One Exchange

Strict one-for-one exchange programs provide SSP participants with the exact same number of sterile syringes that the participant brings in for disposal. For example, if the participant disposes of 14 used syringes at the SSP, then she/he receives 14 new, sterile syringes in return. With this model, participants cannot get sterile syringes if they do not bring in any used syringes for disposal.

However, some SSPs that employ strict one-for-one exchange models issue one or more “starter kits” when participants enroll in the program to lessen the risk of syringe sharing. They might provide 10 sterile syringes the first time someone comes to the SSP even if the participant has no used syringes for disposal.

In cases where participants do not want to receive as many syringes as they returned during a single transaction, the SSP using one-for-one exchange can issue a voucher (similar to an “IOU”). For example, someone may return 300 syringes but only wants 10 syringes at that time. The SSP can give the participant a voucher for the other 290 syringes that she/he can redeem at another time. Vouchers are also useful when SSPs do not have enough supplies to complete the exchange or when there are limits on the number of syringes a participant can get during a single transaction. SSPs should consider recording the voucher on-site in case participants lose their vouchers, but recording this information would affect anonymity unless SSPs use a unique participant code.

4.3.3 One-for-One Plus Exchange

One-for-one plus exchange programs modify the basic concept of the strict one-for-one exchange programs by providing some predetermined number of extra syringes beyond one for one. For example, these programs often provide 10 extra syringes regardless of the number of disposed syringes brought in, and even if no syringes were returned for disposal they could receive 10 new syringes. Other such programs allow two-for-one exchange schemes up to a certain limit. For example, if a participant disposes of eight syringes, she/he receives 16 sterile syringes. A voucher system, described in Section 4.3.2, can also be used with one-for-one plus exchange models.

4.3.4 Strengths and Limitations of Each Syringe Transaction Model

Prior research has shown that the needs-based/negotiated distribution model is best at achieving the goal of reaching as close to 100 percent coverage as possible, followed by the one-for-one plus exchange model and then the strict one-for-one exchange model.⁴⁴ The main drawback of the strict one-for-one exchange model is that people who have no used syringes to dispose of are unable to receive any sterile syringes. People could have many legitimate reasons for not returning their used syringes. For example, their syringes may have been confiscated by law enforcement, stolen by peers or taken by family members. For reasons of public safety or fear of law enforcement action, IDUs may choose to safely dispose of syringes at the time of injection as opposed to carrying them around until the next time they access an SSP. If IDUs are not provided sterile syringes at an SSP because they did not have any used syringes to dispose of, they may use unsterile syringes from their associates, which defeat the purpose of SSPs.

Another potential drawback of a strict one-for-one exchange model may be a lack of uniformity in its implementation by staff. Staff members may relax the strict one-for-one exchange rule to further encourage safer injection, which can create a scenario in which participants favor certain staff members who appear to be willing to bend the rules. The legitimacy of the program can be called into question by participants and/or the community if there are inconsistencies in applying the rules. Thus, the one-for-one plus exchange model provides staff a built-in alternative to denying syringes without returns.

Although the needs-based/negotiated distribution model is better at increasing syringe coverage to both primary and secondary exchangers, programs may have other reasons for using a one-for-one plus exchange model. In some communities, it is more politically palatable to assure everyone that

the program is exchanging needles as opposed to distributing them. The one-for-one plus exchange model may also be better than the needs-based/negotiated model at encouraging IDUs to access the SSP more often, which may increase opportunities for them to dispose of used syringes and the chances they will use other services, including HIV testing and drug treatment. Lastly, the needs-based/negotiated model may require spending more money on syringes, which depends on budgets and funding agencies.

4.4 Safe Syringe Disposal

All disposal venues, including SSPs, must comply with federal, state and local regulations for disposing of used syringes, which qualify as regulated medical waste (RMW). According to these regulations, health departments must work with SSPs to ensure proper disposal of used syringes. Proper disposal of used syringes is critical to protecting individual health and public safety. Safe disposal procedures help prevent accidental needlestick injuries among staff, volunteers, participants and the public. Infectious diseases can be transmitted during an accidental needlestick; therefore, the experience can be very stressful for the people involved. Furthermore, making disposal resources available to IDUs helps reduce the amount of syringes and other injection equipment found “on the street,” helping to protect the SSP from public scrutiny.

SSPs must document policies and procedures governing disposal of RMW and supervise disposal to ensure that staff and volunteers are adhering to the rules. It is also important to examine statewide regulations for the proper handling and disposal of RMW. A state-by-state RMW resource locator can be found at <http://www.envcap.org/statetools/rmw/rmwlocator.html>

The following suggestions may help guide safe disposal procedures:

- Examine potential partnerships with waste management companies to obtain and dispose of RMW.
- Reserve funds to hire a private waste management service to collect and dispose of RMW. In many cases, these services include any necessary supplies to properly package RMW for disposal. Hiring a service also helps document proper disposal of used injection supplies.
- Do not require that returned syringes be counted by hand. Estimates can be made by observation or by weighing the returned syringes to determine the number of syringes disposed of for monitoring purposes.
- If the SPP uses a mobile unit, close sharps containers when the vehicle is moving in case the vehicle stops short or there is an accident. Similar strategies should be used when conducting street outreach.

4.4.1 Prevention of Occupational HIV Transmission among SSP Staff

As is the case for other health care workers, SSP staff can be at risk for acquiring HIV from needlestick injuries and cuts during syringe exchange and disposal. To prevent the occupational transmission of HIV, CDC offers these recommendations:⁵⁷

SSP staff should assume that blood and other bodily fluids from SSP participants are potentially infectious, therefore requiring infection control precautions at all times including:

- routine use of barriers (e.g., gloves, goggles, closed-toe and closed-heel shoes) when anticipating contact with blood;

-
- immediate washing of hands and other skin surfaces after contact with blood or body fluids; and
 - careful handling and disposing of sharp instruments during and after use.

Although prevention of occupational HIV transmission is the most important strategy, SSPs should have plans in place for post-exposure management of staff. CDC has issued guidelines for management of health care worker exposure to HIV and recommendations for post-exposure prophylaxis (PEP).⁵⁸ These guidelines provide considerations in determining whether health care workers should receive PEP and in choosing the type of PEP regimen. For most HIV exposures that warrant PEP, a basic four week, two-drug (multiple options) regimen is recommended. For HIV exposures that pose an increased risk of transmission (due to infection status of the source and type of exposure), a three-drug regimen may be recommended. Issues such as delayed exposure reporting, unknown source person, pregnancy in the exposed person, resistance of the source virus to antiviral agents and toxicity of PEP regimens are also discussed in the guidance. Occupational exposures should be considered urgent medical concerns.

SSPs should demonstrate continued due diligence to reduce the risk of occupational HIV transmission by:

- training all staff in infection control procedures and the importance of reporting occupational exposure; and
- promoting and monitoring the availability and use of safety devices to prevent sharps injuries, and developing a post-exposure management plan.

4.5 Health and Social Services: Provision and Linkage

IDUs participating in SSPs may need services to prevent HIV and HCV infection and to address other health and basic human needs. CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) has developed a strategy called Program Collaboration and Service Integration (PCSI) to help health departments, CBOs and other NCHHSTP-funded entities improve health outcomes, efficiency and cost-effectiveness. PCSI is a mechanism for organizing and blending interrelated health issues, activities, and prevention strategies to facilitate a comprehensive delivery of services.⁵⁸ SSPs and state and local health departments can use PCSI to structure health delivery to populations of IDUs and specifically to address the challenges associated with integrating services at an SSP location or through linkage to community service providers.

The key principles of effective PCSI include the following:⁵⁹

Appropriateness: Integration of services must make epidemiologic and programmatic sense and should be contextually appropriate.

Effectiveness: Prevention resources cannot be wasted on ineffective or unproven interventions.

Flexibility: Organizations need the ability to rapidly change and assemble new prevention services to meet changing epidemiology, population demographics, advances in technology, or policy/political imperatives.

Accountability: Prevention partners need the ability to monitor key aspects of their prevention services and gain insight on optimizing operations.

Acceptability: PCSI must lead to improved acceptability to clients, programs, and providers through improved quantity and quality of the integrated services.

With PCSI principles as the foundation, the next sections outline strategies SSPs can undertake to increase access to services, describe the array of services that SSPs can offer and discuss how to decide whether to provide services on-site or through referral agencies.

4.5.1 Strategies to Increase Access to Services

SSPs can enhance their success by employing the following strategies:

- Establish collaborative relationships with referral agencies.
- Make referrals, when possible, to social service agencies that aim to reduce drug use and its consequences.
- Address barriers to accessing services (e.g., financial, transportation, child care, bench warrants).
- Have designated staff call ahead and escort participants to referral sites and advocate for their care.

Health departments can work with community agencies to ensure that SSP participants are able to access services. Specific strategies include the following:

- Develop protocols for referrals to relevant medical, mental health, substance abuse treatment, and social services.
- Identify points of contact within each referral agency that can facilitate SSP participant access to needed services.
- Work with SSPs to train other agencies about SSPs.
- Provide incentives or mandates for collaboration with SSPs, including referrals to SSPs by community agencies.
- Address barriers to care at community programs, including stigmatization of drug users and abstinence as a requirement for receiving services.
- Support flexible community programs that are inclusive of drug users.
- Involve state hepatitis/HIV/sexually transmitted disease (STD) coordinators.

Using a combination of motivational interviewing and financial incentives has shown promise in increasing enrollment of referred participants in drug abuse treatment.⁵⁹

4.5.2 Specific Health and Social Services

Education and Counseling

SSPs play an important role in providing information and counseling to IDUs that allow them to reduce the consequences associated with drug use and to increase their general well-being. SSP staff can benefit from training on providing accurate information and using evidence-based approaches to counseling. Educational materials need to be accurate, up to date and matched to the population served in terms of cultural relevance, language and reading level. Specific areas to be covered can include:

-
- SSP services, location and hours;
 - local health centers and clinics locations and hours;
 - safer injection practices and vein care;
 - safer sex practices;
 - identification and treatment of soft-tissue infections;
 - HIV, HCV, HBV, and STD prevention and treatment associated with unsafe drug injection and sexual practices;
 - drug abuse treatment options;
 - overdose prevention and response; and
 - accidental needlestick response.

Social Services

SSPs can help participants meet basic needs and increase engagement by providing an array of services that are appropriate for the population served and by providing appropriate referrals for services not offered on-site. Potential services can include:

- food and clothing distribution;
- hygiene supplies (e.g., feminine products, soap);
- child care;
- telephone, mail, and computer access;
- vocational assistance;
- legal aid; and
- housing.

Medical Care

IDUs have the same preventive and general medical care needs as the general population. However, they also are at higher risk for specific health problems, such as blood-borne infections and wounds. Medical services can range from screening to comprehensive care, including:

- HIV, HBV, HCV, tuberculosis (TB) and STD screening;
- linkage to and retention in care for IDUs living with HIV and/or HCV;
- primary medical care;
- pregnancy testing and prenatal care;
- vaccinations (hepatitis A/B, influenza, pneumonia);
- TB prophylaxis;
- wound care; and
- evidence-based complementary and alternative medicine (e.g., to reduce drug dependency, massage, acupuncture).

Mental Health Services

IDUs using SSP services have a high prevalence of psychiatric disorders, such as major depression and antisocial personality disorder.⁶⁰ SSP staff may benefit from training on recognizing the signs and symptoms of common psychiatric disorders so that appropriate services can be provided on-site or through a referral agency. SSP mental health services can include:

- screening and referral;
- individual and group therapy;
- psychiatric evaluation and treatment; and
- suicide prevention.

Drug Abuse Treatment

IDUs using SSP services are often characterized by a high severity of drug dependence and the abuse of multiple substances.⁶¹ Although they report high levels of interest in drug abuse treatment, IDUs have relatively low levels of enrollment.^{62, 62} Barriers to accessing drug abuse treatment may be related to lack of finances or transportation, an inadequate number of treatment slots and a lack of dual-diagnosis services.

Locating drug abuse treatment services on-site at SSPs can be an effective solution. Community drug abuse treatment programs that do not have restrictive eligibility criteria enable more SSP participants to use the services. Services available on-site or by referral can include:

- assessment, counseling and referral;
- drug counseling and support groups;
- buprenorphine treatment for opioid dependence (on-site or by referral);
- methadone treatment (payment vouchers and dedicated SSP treatment slots facilitate entry);
- medically assisted detoxification; and
- residential treatment.

Overdose Prevention

Overdose is a major cause of mortality among drug users,⁶³ and SSPs can address overdose prevention and response with both staff and participants. Naloxone is a drug used to counter the effects of opiate overdose. Making naloxone available to trained staff, volunteers, and participants is a recommended evidence-based strategy that reduces opioid overdose fatalities.⁶³ Key overdose prevention strategies include:⁶⁴

- providing comprehensive training on overdose prevention, recognition and response for all SSP staff and volunteers, including rescue breathing and the use of naloxone;
- developing protocols for responding to overdoses on-site;
- educating program participants about overdose prevention and response; and
- making naloxone available to program participants, if resources permit.

4.5.3 Provision or Linkage

Based on multiple factors, including location, financial constraints, availability of community resources and participant preference, SSPs will need to decide to either co-locate services or provide linkages to community resources. Research and SSP experience suggest that co-location of services has advantages in both acceptability and effectiveness for SSP participants⁶⁴ because IDUs have relatively low rates of utilization of community services. Consequently, the SSP may be the participant's only or most trusted point of contact with service agencies. Moreover, providing services on-site increases utilization rates. For SSPs operating in areas with limited community resources, on-site services may be the only option.

Using community linkages to provide services also has advantages, because these collaborations can help organizations broaden their mission, develop more comprehensive strategies, ensure that participants receive high-quality services, minimize duplication of services and make the most of available resources.

Service Delivery Models

Various service delivery models can be used to make syringes available. SSPs may find that the best approach is to use a single model exclusively or to combine models to expand the program's reach. When choosing a service delivery model, SSPs will find the results from the needs assessment process helpful. Model selection should be driven by numerous factors such as available resources and budget, the organizational infrastructure, local political concerns, availability of staff and volunteers, and the local drug subculture and geographic context. Staffing needs may vary depending on service modality as well as participant volume. For solely distributing and disposing of syringes in low volume programs, adequate coverage can be achieved with as few as two people. However, a minimum of four workers would be preferable for high volume programs. Job tasks break down as:

- syringe distribution;
- syringe collection;
- tracking of basic demographics; and
- referral to services.

Staffing needs increase as more services are added to accompany syringe distribution and collection. The following sections briefly outline the inherent strengths and potential limitations of different SSP models, including fixed site, mobile/street based, secondary/peer delivery, delivery and pharmacy provision. Next, we present factors that affect the choice of syringe service modalities in rural settings. The section closes with a discussion of the benefits of blending program models to achieve the highest possible coverage.

5.1 Fixed Site

Fixed-site models include hospital/clinic-based settings, integrated syringe access services, and collaboration or satellite structures. Typically in fixed-site models, the SSP is located in a building or specific location, such as a storefront, office, or other space with street-level access. Fixed sites work best in health jurisdictions where IDUs are clustered in a somewhat centrally located area.

The strengths of fixed-site models include the following:

- It is easier for other social service agencies to refer their clients to the SSP because there is a set location with predictable hours.
- Other services can be integrated with SSP activities, including HIV, HBV, and HCV testing; STD testing; TB screening and prophylaxis; food provision; buprenorphine treatment; abscess and wound care; and overdose prevention.
- Having a permanent site makes it easier to tailor the space to the needs and preferences of the participants.
- Computer-based systems (e.g. electronically tracking inventory of syringes) can more easily be supported in a set indoor location.
- SSP services can be provided in private.
- The location provides shelter from weather and street-based activities.
- On-site storage space may be available to house materials.

The potential limitations of fixed-site models include the following:

- A fixed-site is more costly to maintain because of higher overhead and upkeep.
- Drug users may be reluctant to go to the site because of concerns about stigma.
- It can be challenging to stay abreast of and adapt to changes in the drug scene (e.g., if the SSP's location is no longer close to where IDUs congregate).
- The community may not support the site's location.
- Participants must come to the site, which can be a barrier if IDUs are spread apart geographically and do not have transportation.

5.1.1 Hospital/Clinic-Based Settings

One fixed-site model of syringe access is locating services at a hospital or clinic-based setting. In this model, IDUs who come to hospitals or clinics can obtain syringes from health care providers and dispose of them there.⁶⁵ Distributing syringes from hospitals may be appropriate in health jurisdictions with greater restrictions on other SSP models and is often used in conjunction with other types of models.

The strengths of hospital/clinic-based settings include the following:

- Access to syringes may be greater with this type of model because doctors in hospitals can more easily write prescriptions for syringes.
- On-site procedures exist for disposing of RMW.
- It is easier to conduct overdose prevention, including providing a prescription for naloxone.
- Exchanges can take place more privately.
- It is possible to provide clients with immediate medical care for abscesses and other wounds or health issues.
- HIV and/or HBV and HCV testing exists on-site.
- Concerns about stigma are lessened because visiting hospitals and clinics is not associated specifically with drug users.

The potential limitations of hospital/clinic-based settings include the following:

- It requires IDUs to identify themselves as IDUs to their health care providers, which means they lose anonymity.
- Staff and clinicians in particular, may have to overcome preconceived notions about drug use and drug users.
- Many IDUs have had negative experiences in hospitals and clinics (i.e., poor medical treatment, stigmatization), which may lessen their interest in going there.
- Securing resources may be difficult.
- The environment may be too “clinical” and uninviting.
- Staff will likely need regular cultural sensitivity trainings.
- Pre-existing rules and regulations may make it challenging to implement certain services (e.g., Hospitals and clinics may require the confidential collection of identifying information from SSP participants. This expectation would conflict with a SSP that permits anonymous access to services by participants.)

5.1.2 Integrated Syringe Access Services

In the integrated syringe access services model, an organization that is already serving IDUs in a fixed site adds syringe services to its existing set of services, rather than creating a separate SSP. In some cases, syringe services in these settings may be restricted to participants who are enrolled in the parent program, rather than being advertised and made available to all IDUs. Methadone maintenance treatment programs, homeless shelters, case management programs, research or clinical studies, and housing providers are all suitable settings for integrated services.

The strengths of integrated syringe access services include the following:

- This model may be easier to implement from a public relations standpoint because the community will already be accustomed to the organization and its participant base.
- Co-location of services increases IDUs' access to other services.
- The cost of this model can be relatively low if integration of syringe provision occurs within the current organizational framework.
- It is easier to spread the word about services because there is an established participant base.

The potential limitations of integrated syringe access services include the following:

- Program success may be hampered if SSP services are not prioritized by the agency.
- There may be a lack of culturally appropriate materials.
- Program autonomy may be limited because of multiple funding streams.
- Staff will need cross-training.
- If the agency also serves non-IDUs, interactions between IDUs and non-IDUs may pose problems.
- The addition of syringe services may require additional engagement with relevant stakeholders (e.g., waste management for syringe disposal).

5.1.3 Collaboration or Satellite Structure

In the collaboration or satellite structure model, existing SSPs provide syringe services at partner social service agencies in fixed sites in the community (e.g., social services, shelters). It requires that the SSP provide capacity-building training for the partner agency. This approach works best in health jurisdictions where SSPs are supported and there is a need to increase access through multiple modalities. The strengths of collaboration or satellite structures include the following:

- Access to services may be enhanced through additional locations and expanded operating hours.
- The existing participant base of IDUs can help advertise the availability of syringe services with their peers.
- The parent program has experience managing public relations, which may help increase community support for syringe services.

Additional operational and human resource costs may be offset because the parent organization already has the requisite systems and expertise, an established training program and sufficient staff to implement the additional services. It may expand the program's reach by attracting new groups of IDUs.

The potential limitations of collaboration or satellite structures include the following:

- It may be challenging to keep track of inventory if specific systems for doing so are not in place.
- The parent organization and satellite site may have different policies or procedures, which can lead to inconsistencies or discord.

5.2 Mobile/Street Based Programs

Mobile/street-based programs are conducted on foot, by bicycle or by vehicle (e.g., van, bus or recreational vehicle). This method is also referred to as outreach. Many mobile SSPs stop at specified locations and times, whereas others may simply roam unplanned. Although this model is often combined with a fixed-site program, it may also operate independently. This model is well suited to health jurisdictions where IDUs do not congregate in centralized locations or where participants have limited transportation options.

The cost for mobile sites can vary based on the style of outreach implemented and the transportation needs. For example, some mobile sites involve setting up a cart with supplies on a street corner, whereas others use recreational vehicles. Aside from the cost of a vehicle, other costs must be considered, including automobile insurance, parking, maintenance and gasoline. Training should emphasize security and safety. To ensure staff safety, it is also important to collaborate with law enforcement and other community stakeholders about the program.

The strengths of mobile/street-based sites include the following:

- The program may encounter less resistance from the local community because it will not attract congregations of IDUs.
- Mobile sites offer heightened flexibility and the advantage of being closer to a street drug market, increasing accessibility for IDUs who are unable to come to a fixed site.
- The program can adapt to changes in the drug scene or neighborhood and can relocate to places where IDUs congregate.
- The existing participant base of IDUs can help promote the time and place of services to their peers.
- The informal and easily accessible location may help put participants at ease.

The potential limitations of mobile/street-based sites include the following:

- It is less anonymous, because people can see who is using the services in the community.
- Staff need to have a valid driver's license if a motor vehicle is involved.
- Services can be interrupted if the vehicle needs to be repaired.
- It can be harder to provide additional services that require a physical location.
- The work conditions can be stressful for staff because of inclement weather or concerns about safety.
- Supplies need to be stored elsewhere and transported to the sites.
- Participants may be reluctant to come to the SSP in inclement weather.
- It can be costly to maintain because of expenses related to vehicle maintenance and insurance.
- It may be more challenging to obtain law enforcement support (thus, SSP certification) for mobile routes comprised of multiple locations.

5.3 Secondary or Peer-Delivery Models

Secondary or peer-delivery models involve SSPs providing IDUs with syringes to distribute and disposal options to their drug-using networks. Peers often get compensated for providing syringe services in a variety of ways. Often, they are paid a stipend. In other cases, they voluntarily provide the services. Ongoing capacity building is both a necessity and a perk for peers. Secondary access is typically combined with a fixed site, such that peers can come to a fixed site and obtain and dispose of syringe equipment that they then provide to other IDUs in their social networks. However, it is also possible to arrange transfer of equipment through pick-up or delivery. Secondary models require a training program that builds the capacity of IDUs to deliver syringe services to their peers. Secondary and peer-based models need to have established policies, procedures and legal protections for peers. Legal restrictions regarding the distribution of paraphernalia may limit peer-delivery options. Secondary models are best suited for health jurisdictions that are very large geographically and where IDUs tend not to be congregated in dense areas.

The strengths of secondary or peer-delivery models include the following:

- For a low cost, the program can reach many IDUs in geographically distant locations.
- Peers' knowledge of the drug market and local drug scene can extend the program's geographical reach.
- Groups of IDUs who may be less likely to visit an SSP can still get sterile syringes and dispose of used ones safely.
- Peers may feel empowered by conducting a public health service in their community.

The potential limitations of secondary or peer-delivery models include the following:

- When peers collect and transport other participants' used injection equipment, they face safety issues.
- It can be difficult for peer workers to separate out their roles as SSP providers and IDUs in the community.
- If peers are unavailable (e.g., quit using, get arrested, move away), IDUs lose their access to supplies.
- Significant costs are associated with training and supervising secondary exchangers.
- Lack of appropriate oversight could result in misinformation disseminated to IDUs.

5.4 Delivery Model

The delivery model involves the delivery of injection supplies to a prearranged site, such as a house, apartment, hotel, shooting gallery or other prearranged location. Service delivery can take place on a regular schedule or by appointment. It is a direct means of observing the more private aspects of participants' living situations, and services can be developed and tailored to meet those needs. Medical and nutritional services, overdose prevention, directly observed therapy and safer injection education, for example, can all occur in the privacy of a person's home. When syringe delivery staff members are in participants' homes, consideration needs to be given to legal concerns about reportable conditions, such as suspected child abuse. On the one hand, parenting skills can be an educational component of delivery; on the other hand, delicate and fragile relationships can be affected by legal requirements.

It may be best if site managers and landlords of the facilities are informed that unspecified social services are coming to the location. Promotion can occur by outreach workers and through the facility's management, as well as through IDU networks. Delivery is an excellent option in rural jurisdictions, where there are often large geographical areas to cover and privacy is of utmost importance. Delivery may be combined with mobile or fixed sites. Enhanced training for staff and volunteers on safety and confidentiality of participants' needs is necessary.

The strengths of delivery models include the following:

- This form of syringe access is more discreet and consequently reduces negative reactions from the neighboring community, which is rarely aware of the program activity.
- Since participants do not have to transport used injection equipment, it reduces needlestick risk and potential involvement with law enforcement.
- It can be easier to begin a delivery program than other program models due to the reduced need for a physical space.
- Information sharing about injection practices, health, and other issues can occur more privately.
- Participants' safety is enhanced if they do not need to leave their home.
- It increases access to IDUs who may be less likely or unable to attend a fixed site.
- SSP staff have more opportunities to interact with family and peer networks.

The limitations of delivery models include the following:

- It requires the SSP to have and use transportation to provide services.
- It can be challenging to sustain because of staff burnout.
- It can be potentially time consuming, depending on the geographic dispersion of participants.
- It may take time to overcome potential privacy concerns and build a foundation of trust.
- Worker and volunteer safety is a concern.
- It can be expensive to maintain and insure vehicles.

5.5 Pharmacy Distribution Model

Over-the-counter sale of syringes through pharmacies is an important model of syringe access and disposal for IDUs. Pharmacists are knowledgeable and often support community providers. However, they seldom have the time and/or experience to make essential referrals for drug-using SSP participants. Educating pharmacy staff about drug use, SSPs, and the public health benefits of providing syringes, and other related social and medical services is critical. It is also important for pharmacies to consider best disposal practices, including providing sharps containers to drug users just as they do for people with diabetes.

The strengths of pharmacy distribution models include the following:

- Pharmacies often stay open more and later hours than other models.
- Pharmacies often have more locations for IDUs to access than other SSPs.
- Services can be provided in mainstream locations, reducing concerns about stigma and privacy.
- Pharmacies would incur no additional financial cost to add syringe access, particularly if they sell syringes already.
- Participants can take advantage of other services that the pharmacy may offer, such as flu shots.

The potential limitations of pharmacy distribution models include the following:

- Pharmacists and pharmacy staff may not be culturally sensitive to the populations.
- Pharmacies may set a minimum (e.g., 10) or maximum (e.g., 100) number of syringes to distribute per transaction.
- Pharmacies may not want to provide other injection equipment, education, and social and medical service referrals.
- Pharmacies may be unable or unwilling to include syringe disposal services.
- Syringes cost money at pharmacies, which may be a hardship for impoverished IDUs.

5.5.1 Pharmacy Voucher Program

In a pharmacy voucher program, social service agencies work with pharmacies to create a voucher that IDUs can redeem for free syringes at participating pharmacies. This type of program eliminates barriers related to the cost of purchasing syringes at pharmacies. Pharmacy voucher programs are particularly helpful in jurisdictions where other SSPs have not been established and where the law permits the over-the-counter sale of syringes without a prescription. Voucher programs are also beneficial in jurisdictions where drug use occurs in remote locations and IDUs cannot travel to an SSP. SSPs may provide pharmacies with equipment and disposal services in areas where pharmacy vouchers are used. One drawback is that this model involves two steps in providing syringes to IDUs. First, SSPs must find IDUs and provide them with vouchers. Second, IDUs must go to a pharmacy to receive the syringes.

5.6 Rural Settings

Certain service delivery models are more amenable to rural settings, whereas all models are appropriate for most urban settings. As privacy can be a greater concern in rural settings, having fixed sites outside of hospital settings or a pharmacy distribution model may not be feasible. The preferred model may be a combination of delivery and secondary/peer exchange models. It can be very time intensive and expensive for staff to drive to distant locations to provide services because the geographical area may be very large. Staff burnout and budget restraints may be mitigated by combining such driving with secondary models, then each trip ends up reaching many IDUs.

5.7 Using Multiple Program Models

Incorporating multiple models may be the most effective way for programs to expand syringe coverage and reach the greatest number and diversity of IDUs within a given health jurisdiction. Combining models—for example, a fixed site with a mobile van or a mobile unit with peer-based walking delivery—helps increase the likelihood that diverse populations have access to syringes. Also, using multiple program models is more flexible and can direct resources to the most affected areas, allowing programs to respond to changes in patterns among local IDUs. Using a multiple-model approach can require significant resources and demand more effort from staff. This can make them less sustainable. However, multiple program models can be a valuable, comprehensive approach when they are well executed and have sufficient resources.

Monitoring Syringe Services Programs

The effectiveness of SSPs has already been established through scientific evaluations (see Section 2). Therefore, the main goal of monitoring local SSPs is to assess whether a program is operating in conformity to its design, reaching its specific target population and achieving anticipated implementation goals. Health departments are strongly encouraged to require SSPs to continually conduct process monitoring and periodically conduct outcome monitoring.

6.1 Process Monitoring

The overarching goal of process monitoring is to document whether the program is being implemented as intended. The process outcomes to be monitored depend on the type of service delivery model selected and the type and number of additional services provided. In general, it is recommended that programs minimize the data collection burden associated with monitoring so they do not interfere with IDU participation or SSP operations.

Process monitoring serves a number of important and valuable functions for SSPs:

- assesses which services are being used and how often they are used;
- facilitates accounting practices;
- allows SSPs to report back to regulators, funders, and others (such as their communities) about program reach; and
- maintains or increases program support.

We recommend collecting three minimum essential data elements for every syringe transaction occurring at SSPs, without regard to the type of service delivery model:

- number of participant contacts (i.e., duplicated participant counts);
- number of syringes distributed; and
- estimated number of syringes returned for disposal (refer to Section 4.4 for safe syringe disposal strategies).

In addition to these core data elements, additional data can be used to monitor process outcomes, depending on the type of service delivery model and types of services provided. Appendix A lists additional process indicators that programs may wish to monitor, depending on the service delivery model and types of services that are provided in addition to syringe exchange.

Most programs use service logs to obtain data on the number of syringes provided per transaction and the estimated number of syringes returned. In these programs, SSP staff writes the site name and the date at the top of the log daily and record transaction data as participants access services. Then staff enters the data into a software program on a daily or weekly basis. Using a handheld electronic device programmed for data input is preferable if the program can afford it because it eliminates the need for entering data from paper forms.

Process monitoring does not require sophisticated statistical methods. Descriptive statistics are usually sufficient to answer process monitoring questions, such as comparing actual program outputs (e.g., number of HIV tests conducted) with target outputs (e.g., projected number of HIV tests conducted).

6.2 Outcome Monitoring

Quantitative assessments should occur periodically with SSP participants for outcome monitoring. Outcome monitoring provides important information for improving program efficiency, quality and effectiveness. In general, outcome monitoring methods should aim to minimize participant burden, not disrupt normal program activities and only collect information that is critical for understanding process outcomes. Utilizing a variety of data types and sources, together with program specific outcome monitoring activities, enhances the assessment of the SSP. For example, data that provide information on HIV incidence rates, HCV incidence rates, crime statistics, incarceration rates and arrest rates may provide system-level indicators for the impact of the program on outcomes related to the overarching goals of the SSP. Quantitative assessments conducted with SSP participants should occur annually or every other year and include between 100 and 200 participants, depending on the size of the program. Choosing participants randomly is preferable but may not be feasible in all locations or for all syringe modalities. Participants may be compensated financially for providing their expertise to the SSP by participating in outcome monitoring surveys.

Outcome monitoring assessments benefit from being conducted by independent observers (e.g., a research partner). Separating personnel involved in data collection from SSP staff reduces biases that may result when participants who interact with SSP staff regularly want to give socially desirable responses. It also protects the confidentiality of participants who will continue to have a relationship with the staff after data collection. Given the personal nature of some of the data collected, it is important that the participants feel comfortable disclosing sensitive information.

Key domains for SSP outcome monitoring include:

- types of services used at the SSP;
- frequency and duration of SSP use, including estimation of numbers of syringes distributed in a given period;
- receptive and distributive syringe sharing;
- disposal practices;
- overdose risk and history;
- access and linkage to drug treatment and medical and social services (e.g., referrals and linkage to medical homes, mental health services and homes and substance abuse treatment facilities);
- participant satisfaction with program elements, such as hours, locations and staff interactions;
- client characteristics (e.g., demographics, injection drug use history, medical history, and substance abuse treatment history);
- drug use preferences (e.g., types of drugs used, including hormones or steroids) and practices (e.g., with whom and how often participants use drugs);
- estimates of number of IDUs reached through secondary exchange; and
- changes in drug use, injection, and treatment as a result of SSP participation.

An individual trained in epidemiological and statistical methods and familiar with the literature on factors associated with HIV, HCV, and overdose risk and SSPs should analyze the data. SSP staff should be involved in interpreting the results.

6.3 Program Quality Improvement

Program quality improvement relies on the systematic collection and use of process monitoring and periodic outcome monitoring to determine if and how well program objectives are being met and to reassess program goals. If goals are not being met, program quality improvement can help SSPs decide if and how to change services to better meet the needs of the target population. Based on program goals, working with a research partner can be an appropriate method for assessing program quality. Quality improvement may include perspectives from community stakeholders, SSP participants, and others with important perspectives regarding the usefulness and effectiveness of the SSP. For instance, programs can use methods such as key informant interviews and focus groups to assess participant satisfaction with program elements, such as hours, locations and staff interactions; learn how SSP participants use program services; or understand how new services might be received. Using unobtrusive approaches, programs can observe SSP transactions systematically to identify opportunities to provide more education, counseling, or other services or simply time them to determine barriers to providing other activities. Similar to participants in outcome monitoring activities, participants in program quality improvement activities may be compensated financially for providing their expert input to the SSP. Many quality improvement ideas can also be discussed through a participant or community advisory board if the SSP has one.

Capacity Building

SSPs have been operating since the mid-1980s in the U.S. Numerous program implementation manuals and guides exist and purveyors of exchange supplies are available for both product development and advice. In addition, many health departments have experience implementing SSPs and can serve as advisors and mentors to health departments looking to begin these programs. Law enforcement officials, as well as publicly elected officials, are also resources for information and assistance with the process for gaining acceptance and approval of SSPs. Several nonprofit organizations, universities, health departments, research institutes and training centers have many years of experience providing training and technical assistance. SSP participants can also provide valuable testimony to the positive impact of SSPs on their lives, in addition to pragmatic and essential input regarding effective program strategies. In general, it is best for peers to train peers. For example, health departments may learn best from other health departments, and law enforcement may learn best from other law enforcement agencies.

7.1 Assessing and Addressing Capacity Building Needs

Before initiating or expanding SSPs, a health department may find it useful to assess its readiness with a jurisdiction (described in Section 3.2). In addition to identifying a specific or mix of SSP models that may be appropriate in a specific jurisdiction, health departments can identify areas of strength, potential deficits and promising strategies to mitigate gaps in organizational and programmatic capacity. It could be useful to discuss the results of the readiness assessment with the HPPG and other partners to facilitate the prioritization process.

Numerous tools exist for assessing readiness (see Section 7.3 for a list of resources). Readiness is typically assessed across a variety of domains including law enforcement and political climate, neighborhood receptivity, resource availability, staff availability and capabilities, infrastructure for staff training and development, leadership support, access to the target population, adequate space in which to implement program services, access to referral networks, availability of supplies, and capacity to conduct program monitoring.

It is likely that health departments and their SSPs will have different capacity building needs based on their stage of development. For example, new SSPs will be concerned with learning about the many ways they can implement services, whereas existing SSPs may be more interested in learning about strategies for program improvement or expansion. Section 7.3 includes a variety of capacity-building resources that can benefit new and existing SSPs alike.

To address identified organizational and programmatic needs, health departments may consider the following strategies to build capacity:

- Peer-to-peer delivery is a particularly effective model for capacity building. It is strongly recommended that programs build in time and resources to learn from others in the field. For example, new programs can learn effective implementation strategies from long-standing programs, such as how to work effectively and competently with the IDU community, law enforcement, pharmacists or the community at large. Existing programs, for instance, can benefit from consulting with their peers about program expansion or ways to address emergent

barriers to implementation. Law enforcement can reach out to their peers in other cities or states. Pharmacists can speak with pharmacists in other areas that have already implemented SSPs. Peer-based capacity building may encompass site visits, conference calls, or other forms of communication.

- CDC funds non-governmental organizations to deliver free capacity-building assistance (CBA) designed to assist health department jurisdictions to implement and sustain science-based and culturally proficient HIV prevention behavioral interventions and HIV prevention strategies, including SSPs. CBA comprises information dissemination, training, technical assistance, technology transfer and facilitation of peer-to-peer mentoring and support. Health departments may request CBA to improve organizational infrastructure and program sustainability, evidence-based interventions and public health strategies, community planning, monitoring and evaluation. For more information on the CBA program, visit <http://www.cdc.gov/hiv/topics/cba/cba.htm>.
- If the health department does not already have an evaluator on staff, consider hiring a local consultant to assist with process and outcome monitoring. For example, a local evaluator can help programs develop a plan for and carry out a rigorous process and outcome monitoring or to brainstorm ways to use existing program data for monitoring purposes. As discussed in Section 6, establishing good monitoring practices should not be overlooked, because they serve many important purposes, some of which may be required for continued funding.

7.2 Building Capacity of SSP Staff

Building capacity of staff increases individual skill level and overall service quality and productivity. In addition to improving service delivery, training staff on the program's philosophy and mission helps ensure that participants feel welcome at the SSP and are comfortable accessing services.

SSPs often have staff or volunteers who can provide training on a regular or ad hoc basis. Other times in-house training is not available on important topics. In such cases, training and technical assistance can be obtained through other mechanisms. A number of organizations and institutions provide training and technical assistance to SSPs (see Section 7.3 for a list of capacity-building resources on a variety of topics). Additionally, staff and volunteers can attend conferences and off-site trainings that can be good opportunities to interact with other providers and gain relevant experience and insight. For training resources, visit <http://www.cdc.gov/hiv/topics/cba/directory.htm>.

It is recommended that all staff and volunteers complete a basic training curriculum that encompasses the core topics shown in Table 4. In addition to the core training program, health departments should prioritize ongoing staff development by offering advanced training on topics such as those shown in Table 4.

Table 4. Basic and Advanced Training Topics for SSP Staff

Basic Training Topics	Advanced Training Topics
<ul style="list-style-type: none"> • Standard operating procedures • Referral to medical, substance abuse treatment, mental health, other service agencies • Cultural sensitivity • Overview of neighborhood concerns • Outreach strategies • Training secondary exchangers • HIV and viral hepatitis transmission and prevention • Overdose prevention • Syringe safety/disposal • Plan for accidental needlesticks • Legal and law enforcement climate 	<ul style="list-style-type: none"> • Polysubstance use • Conflict resolution and de-escalation • Specialized interviewing techniques (e.g., motivational interviewing) • Principles of case management • Abscess and cellulitis treatment and prevention • Domestic violence issues • Co-occurring mental health and substance use disorders

7.3 Capacity-Building Resources

This section includes links to Web-based resources to build the capacity of health departments to plan and implement SSPs. The contents of non-governmental websites do not necessarily represent the views of CDC.

Examples of SSP Policies, Guidelines and Best Practices from States, Cities and CBOs

- District of Columbia Needle Exchange Programs Policies and Procedures Manual (http://dchealth.dc.gov/doh/lib/doh/pdf/dc_nex_policy_procedures.pdf)
- The Chicago Recovery Alliance (<http://www.anypositivechange.org/guideOP.pdf>).
- San Francisco Department of Public Health, Syringe Access and Disposal Program Policies and Guidelines (http://sfhiv.org/documents/SPPPGVersion2.March_1_2011.pdf)
- New York State Department of Health, AIDS Institute, Syringe Exchange Programs Policies and Procedures (http://www.health.state.ny.us/diseases/aids/harm_reduction/needles_syringes/syringe_exchange/docs/policies_and_procedures.pdf)
- Ontario Needle Exchange Programs: Best Practice Recommendations (http://www.health.gov.on.ca/english/providers/pub/aids/reports/ontario_needle_exchange_programs_best_practices_report.pdf)

Evaluation Resources

- Framework for Program Evaluation in Public Health (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm>)
- W.K. Kellogg Foundation Evaluation Handbook (<http://www.wkkf.org/knowledge-center/resources/2010/W-K-Kellogg-Foundation-Evaluation-Handbook.aspx>)
- Evaluation Guidance Handbook: Strategies for Implementing the Evaluation Guidance for CDC-Funded HIV Prevention Programs http://www.cdc.gov/hiv/topics/evaluation/health_depts/guidance/strat-handbook/pdf/guidance.pdf

General Resources

- CDC Capacity Building Assistance Portal for HIV Prevention (<http://www.cdc.gov/hiv/capacitybuilding>)
- Recommended Best Practices for Effective Syringe Exchange Programs in the United States: Results of a Consensus Meeting (http://www.cdph.ca.gov/programs/Documents/US_SEP_rec_final_report.pdf)
- Department of Health and Human Services Implementation Guidance for Syringe Services Programs (<http://www.cdc.gov/hiv/resources/guidelines/PDF/SSP-guidanceacc.pdf>)
- North American Syringe Exchange Network (<http://www.nasen.org/>)

Legal Strategies

- The Project on Harm Reduction in the Health Care System (<http://www.temple.edu/lawschool/phrhcs/phrhcs.htm>)
- The Public Health Law Network (<http://www.publichealthlawnetwork.org/>)
- Syringe Access Law in the United States: A State of the Art Assessment of Law and Policy (<http://www.publichealthlaw.net/Research/PDF/syringe.pdf>)
- State and Local Policies Regarding IDUs' Access to Sterile Syringes (http://www.cdc.gov/IDU/facts/aed_idu_pol.pdf)

Law Enforcement Strategies

- Law Enforcement and Harm Reduction Network (<http://www.leahrn.org/>)
- Policing for Healthy Communities (<http://www.policingforhealth.org/>)
- Syringe Possession Information for California Law Enforcement Officers (<http://www.harmreduction.org/downloads/police%20SEP%20cards.pdf>)
- COPS HR: Coalition of Police Supporting Harm Reduction (<http://www.harmreduction.org/downloads/COPShr.pdf>)
- Do Not Cross: Policing and HIV Risk Faced by People Who Use Drugs (<http://www.harmreduction.org/downloads/PoliceHIVidu.pdf>)
- Needle Exchange Program: Considerations for Criminal Justice (<http://www.harmreduction.org/downloads/NEPcriminaljusticeCIPP.pdf>)
- Attitudes of Police Officers Towards Syringe Access, Occupational Needle-Sticks, and Drug Use: A Qualitative Study of One City Police Department in the United States (<http://www.harmreduction.org/downloads/police%20attitudes.pdf>)
- Law Enforcement and Harm Reduction: Advocacy and Action Manual (<http://www.harmreduction.org/downloads/Police%20Harm%20Reduction%20Concerns.pdf>)
- Law Enforcement and Harm Reduction (<http://www.harmreduction.org/downloads/Law%20enforcement%20and%20harm%20reduction.pdf>)

Overdose Prevention

- Chicago Recovery Alliance:
 - OD Intervention Card—Using Naloxone (<http://www.anypositivechange.org/odcard.pdf>)
 - OD Intervention Poster—Using Naloxone (<http://www.anypositivechange.org/odposter.pdf>)
 - Opiate OD Prevention/Intervention Training—Slideshow (<http://www.anypositivechange.org/odslide.pdf>)
 - Opiate OD Prevention/Intervention Training—Pre/Post Test (<http://www.anypositivechange.org/naltest.pdf>)
 - Injection Partner OD Checklist (<http://www.anypositivechange.org/ODpartnerchecklist.pdf>)

Substance Abuse Treatment and Mental Health Resources

- Substance Abuse and Mental Health Administration (<http://www.samhsa.gov/>)

Glossary

Acquired immune deficiency syndrome (AIDS) is the late stage of HIV infection, when a person's immune system is severely damaged and has difficulty fighting diseases and certain cancers.

Buprenorphine is used to treat opioid dependence (addiction to opioid drugs, including heroin and narcotic painkillers). Buprenorphine is in a class of medications called opioid partial agonist-antagonists. Buprenorphine alone and in combination with naloxone can prevent withdrawal symptoms when someone stops taking opioid drugs by producing similar effects to these drugs.

Capacity building refers to one or more activities that contribute to an increase in the quality, quantity and efficiency of program services and the infrastructure and organizational systems that support these program services. In the case of HIV prevention capacity building, the activities are associated with the core competencies of an organization that contribute to its ability to develop and implement an effective HIV prevention intervention and to sustain the infrastructure and resource base necessary to support and maintain the intervention.

Cooker is a spoon or bottle cap used to liquefy drugs so they can be injected.

Drug paraphernalia laws, under the Federal Drug Paraphernalia Statute, Controlled Substances Act, make it illegal to possess, sell, transport, import or export drug paraphernalia as defined. The law gives specific guidance on determining what constitutes drug paraphernalia. Many states also have enacted their own laws prohibiting drug paraphernalia.

Evaluation is a systematic method for collecting, analyzing and using information to answer questions about projects, policies and programs, particularly about their effectiveness and efficiency.

Hepatitis C virus (HCV) causes a liver disease that is the most common IDU-associated infection in the United States. HCV infection sometimes results in an acute illness but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer. It is transmitted by contact with the blood of an infected person, primarily through sharing contaminated needles to inject drugs.

HIV prevention community planning is a collaborative process by which health departments work in partnership with the community to implement a community planning group to develop a comprehensive HIV prevention plan that includes prioritized target populations and a set of prevention activities/interventions for each target population.

Human immunodeficiency virus (HIV) is the virus that can lead to acquired immune deficiency syndrome, or AIDS. There are two types of HIV: HIV-1 and HIV-2. In the U.S., unless otherwise noted, the term "HIV" primarily refers to HIV-1. Both types of HIV damage a person's body by destroying specific blood cells, called CD4+ T cells, which are crucial to helping the body fight diseases.

Injection drug user (IDU) is a person who injects illicit drugs, hormones, steroids, or silicone.

Kiosks or drop boxes are places for safely disposing of used syringes. They are usually placed in publicly accessible locations. Syringes can be placed in the kiosk or drop box but cannot be retrieved, reducing reuse of contaminated syringes and risk of accidental needlesticks.

Methadone is a drug used to prevent withdrawal symptoms in patients who were addicted to opioid drugs and are enrolled in treatment programs in order to stop taking or continue not taking the drugs.

Monitoring is routine documentation of characteristics of the people served, the services provided and the resources used to provide those services.

Motivational interviewing is a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence.

Naloxone is a drug used to counter the effects of opioid overdose, for example, a heroin or morphine overdose. Naloxone is used specifically to counteract life-threatening depression of the central nervous system and respiratory system.

Needs-based/negotiated distribution is a program practice that places no limits on the number of syringes an SSP participant may receive, regardless of the number of used syringes returned. While encouraged, participants do not need to return any used syringes in order to receive new, sterile syringes.

One-for-one plus exchange is a program practice that modifies one-for-one exchange by providing an SSP participant with a predetermined number of extra syringes beyond the number of sterile syringes brought in for disposal.

Program Collaboration and Service Integration (PCSI) is a mechanism of organizing and blending interrelated health issues, separate activities, and services in order to maximize public health impact through new and established linkages between programs to facilitate the delivery of services.

Regulated medical waste (RMW), also known as “biohazardous” waste or “infectious medical” waste, is the portion of the waste stream generated by health care facilities that may be contaminated by blood, body fluids, or other potentially infectious materials that may pose a significant risk of transmitting infection and endangering human health.

Secondary exchange is a type of syringe exchange program model whereby participants exchange with their peers after being supplied by the SSP.

Sharps are items with corners, edges, or projections capable of cutting or piercing the skin, such as syringes with needles.

Social networks are social structures made up of individuals (or organizations) called “nodes” that are connected by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, sexual relationships, or relationships of beliefs, knowledge or prestige.

Strict one-for-one exchange is a program practice whereby an SSP participant is only provided with the same number of sterile syringes as were brought in for disposal.

Subject matter experts (SME) are individuals who have expertise in the area of syringe services programs, whether from a programmatic, governmental, research or evaluation, participant, or administrator perspective.

Syringe exchange programs (SEPs) provide free sterile syringes in exchange for used syringes to reduce transmission of blood-borne pathogens among IDUs.

Syringe prescription laws require a prescription for the legal purchase or possession of a syringe by most or all buyers. Most prescription laws have been repealed or amended to allow purchase of a specified number of syringes without a prescription.

Syringe services programs (SSPs) provide a way for IDUs to safely dispose of used syringes and to obtain new, sterile syringes. SSPs also provide a range of related prevention and care services that are vital to helping IDUs reduce their risk of acquiring and transmitting blood-borne viruses, as well as maintain and improve their overall health. SSPs include syringe access, disposal, and needle exchange programs, as well as referral and linkage to HIV and viral hepatitis prevention services, drug abuse treatment and medical and mental health care.

Sample Monitoring And Evaluation Processes

SYRINGE SERVICES PROGRAM PROCESS MONITORING INDICATORS

Health departments implementing syringe services programs (SSPs) may wish to incorporate the SYRINGE SERVICES PROGRAM PROCESS MONITORING INDICATORS

Health departments implementing syringe services programs (SSPs) may wish to incorporate the following process and program monitoring indicators.

Minimum required process monitoring indicators for all SSP models:

- Number of clients/participants
- Number of syringes distributed
- Number of syringes returned/disposed of

Recommended list of process monitoring indicators for each SSP model:

- Fixed Site (e.g., hospital/clinic based settings, integrated syringe access services, collaboration or satellite structure)
 - Number of hours open per week for syringe exchange
 - Number of HIV tests provided
 - Number HIV positive
 - Number of HCV antibody tests provided
 - Number of tests positive for HCV antibodies
 - Number of referrals for HCV antibody testing
 - Number of referrals for HIV testing
 - Number of referrals for substance abuse treatment
 - Number of each type of service directly provided or referral provided
 - Client demographics: age, gender, race/ethnicity
- Mobile/Street Based
 - Number of hours open per week for syringe exchange
 - Number of HIV tests provided
 - Number HIV positive
 - Number of referrals for HIV testing
 - Number of HCV antibody tests provided
 - Number of tests positive for HCV antibodies
 - Number of referrals for HCV antibody testing
 - Number of referrals for substance abuse treatment
 - Number of each type of service directly provided or referral provided
 - Client demographics: age, gender, race/ethnicity
- Secondary or Peer Delivery
 - Number of peers distributed to
 - Number of peer distributors
- Delivery Model
- Number of delivery sites
- Number of persons served per delivery site

-
- Number of referrals for HIV testing
 - Number of referrals for HCV antibody testing
 - Number of referrals for substance abuse treatment
 - Pharmacy Distribution
 - Number of hours open per week for syringe exchange
 - Number of referrals for HIV testing and/or HIV tests provided
 - Number of referrals for HCV antibody testing and/or HCV antibody tests provided
 - Number of referrals for substance abuse treatment
 - Number of each type of service directly provided or referral provided
 - Number of vouchers redeemed (if pharmacy distribution program is combined with a voucher program)
 - Multiple Programs
 - Number of hours open per week for syringe exchange
 - Number of HIV tests provided
 - Number HIV positive
 - Number of referrals for HIV testing
 - Number of HCV antibody tests provided
 - Number of tests positive for HCV antibodies
 - Number of referrals for HCV antibody testing
 - Number of referrals for substance abuse treatment
 - Number of each type of service directly provided or referrals provided
 - Client demographics: age, gender, race/ethnicity

Other process monitoring indicators:

- Number of participants
 - Number of new clients
 - Client demographics:
 - Age
 - Gender
 - Race/ethnicity
 - ZIP code of residence
 - Behavioral characteristics
 - Number of syringes distributed
 - Number of syringes collected/disposed of
 - Number of syringes each participant is exchanging for
 - Number of visits per client per month
 - Number of hours open for syringe exchange per week
 - Number of peers distributed to
 - Number of peer distributors
 - Number of delivery sites
 - Number of persons served per delivery site
 - Number of vouchers redeemed (if pharmacy distribution program is combined with a voucher program)
 - Number of each type of service directly provided or referral provided
 - Number of referrals made to HIV services
 - Number of HIV tests provided
 - Number HIV positive
-

-
- Number of HCV antibody tests provided
 - Number of tests positive for HCV antibodies
 - Number of referrals for HCV antibody testing
 - Number of referrals for substance abuse treatment
 - Number of condoms distributed
 - Number of flu vaccines provided
 - Number of hepatitis A vaccination doses
 - Number of hepatitis B vaccination doses
 - Number of negative events
 - Number of community-based syringe-disposal kiosks

References

- 1 Hall HI, Song R, Rhodes P, Prejean J, An Q, Lee LM, Karon J, Brookmeyer R, Kaplan EH, McKenna MT, Janssen, RS for the HIV Incidence Surveillance Group. Estimation of HIV incidence in the United States. *JAMA*. 2008;300(5):520-529.
- 2 Centers for Disease Control and Prevention. Surveillance for Acute Viral Hepatitis – United States, 2007. *MMWR Surveillance Summary* 2009;58(ss3):1-27. Available at <http://www.cdc.gov/mmwr/PDF/ss/ss5803.pdf>. Accessed April 22, 2011.
- 3 White House Office of National AIDS Policy. *National HIV/AIDS Strategy*. July 2010. Available at <http://www.whitehouse.gov/files/documents/nhas-implementation.pdf>. Accessed March 1, 2011.
- 4 Substance Abuse and Mental Health Services Administration (SAMHSA). *The NSDUH Report: Injection Drug Use and Related Risk Behaviors*. October 2009. Available at: <http://www.oas.samhsa.gov/2k9/139/139IDU.htm>.
- 5 Centers for Disease Control and Prevention. HIV Surveillance Report, 2010; vol. 22. Published March, 2012. Available at:<http://www.cdc.gov/hiv/topics/surveillance/resources/reports>. Accessed June 28, 2012
- 6 Centers for Disease Control and Prevention. Drug-Associated HIV Transmission Continues in the United States. Available at: <http://www.cdc.gov/hiv/resources/factsheets/idu.htm>. Accessed June 28, 2012.
- 7 Jenness SM, Neaigus A, Hagan H, Murrill CS, Wendel T. Heterosexual HIV and sexual partnerships between injection drug users and non-injection drug users. *AIDS Patient Care STDs*. 2010;24(3):175-181.
- 8 Centers for Disease Control and Prevention. HIV-associated behaviors among injecting drug-users-20 cities, U.S. 2009. *MMWR* 2012;61(08):133-138. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6108a1.htm>. Accessed June 28, 2012
- 9 Needle RH, Coyle S, Cesari H, Trotter R, Clatts M, Koester S, Price L, McLellan E, Finlinson A, Bluthenthal RN, Pierce T, Johnson J, Jones TS, Williams M. HIV risk behaviors associated with the injection process: multiperson use of drug injection equipment and paraphernalia in injection drug user networks. *Subst Use Misuse*. 1998;33(12):2403-2423.
- 10 Thiede H, Hagan H, Campbell JV, Strathdee SA, Bailey SL, Hudson SM, Kapadia F, Garfein RS. Prevalence and correlates of indirect sharing practices among young adult injection drug users in five U.S. cities. *Drug and Alcohol Depend*. November 2007;91(Suppl 1):S39-47.
- 11 Hagan H, Des Jarlais DC, Stern R, Lelutiu-Weinberger C, Scheinmann R, Strauss S, Flom PL. HCV synthesis project: preliminary analyses of HCV prevalence in relation to age and duration of injection. *Int J Drug Policy*. 2007;18(5):341-351.
- 12 Lorvick J, Kral AH, Seal K, Gee L, Edlin BR. Prevalence and duration of hepatitis C among injection drug users in San Francisco, Calif. *Am J Public Health*. 2001;91:46-47.
- 13 Bargagli AM, Sperati A, Davoli M, Forastiere F, Perucci CA. Mortality among problem drug users in Rome: an 18-year follow-up study, 1980-97. *Addiction*. 2001;96(10):1455-1463.
- 14 Kung HC, Hoyert DL, Xu J, Murphy SL. Deaths: final data for 2005. *Natl Vital Stat Rep*. 2008;56(10):1-120.
- 15 Milloy MJ, Kerr T, Mathias R, Zhang R, Montaner JS, Tyndall M, Wood E. Non-fatal overdose among a cohort of active injection drug users recruited from a supervised injection facility. *Am J Drug Alcohol Abuse*. 2008;34(4):499-509.
- 16 Sherman SG, Cheng Y, Kral AH. Prevalence and correlates of opiate overdose among young injection drug users in a large U.S. city. *Drug and Alcohol Depend*. 2007;88(2-3):182-187.
- 17 Seal KH, Kral AH, Gee L, Moore LD, Bluthenthal RN, Lorvick J, Edlin BR. Predictors and prevention of nonfatal overdose among street-recruited injection heroin users in the San Francisco Bay Area, 1998-1999. *Am J Public Health*. 2001;91(11):1842-1846.
- 18 Pollini RA, McCall L, Mehta SH, Vlahov D, Strathdee SA. Non-fatal overdose and subsequent drug treatment among injection drug users. *Drug and Alcohol Depend*. 2006;83(2):104-110.
- 19 Darke S, Zador D. Fatal heroin "overdose": a review. *Addiction*. 1996;91(12):1765-1772.
- 20 Palmateer N, Kimber J, Hickman M, Hutchinson S, Rhodes T, Goldberg D. Evidence for the effectiveness of sterile injecting equipment provision in preventing hepatitis C and human immunodeficiency virus transmission among injecting drug users: a review of reviews. *Addiction*. 2010;105(5):844-859.
- 21 Beletsky L, Grau LE, White E, Heimer SBR. The roles of law, client race, and program visibility in shaping police interference with the operation of US syringe exchange programs. *Addiction*. In press.

-
- 22 Bluthenthal RN, Kral AH, Erringer EA, Edlin BR. Drug paraphernalia laws and injection-related infectious disease risk among drug injectors. *J Drug Issues*. 1999;29(1):1-16.
 - 23 Burris S, Blankenship KM, Donoghoe M, Sherman S, Vernick JS, Case P, Lazzarini Z, Koester S. Addressing the “risk environment” for injection drug users: the mysterious case of the missing cop. *Milbank Q*. 2004;82(1):125-156.
 - 24 Bluthenthal RN, Kral AH, Lorrwick J, Watters JK. Impact of law enforcement on syringe exchange programs: a look at Oakland and San Francisco. *Med Anthropol*. December 1997;18(1):61-83.
 - 25 Davis CS, Burris S, Kraut-Becher J, Lynch KG, Metzger D. Effects of an intensive street-level police intervention on syringe exchange program use in Philadelphia, PA. *Am J Public Health*. 2005;95(2):233-236.
 - 26 Dillon B, Allwright S. Prison officers’ concerns about blood borne viral infections. *The Howard Journal of Criminal Justice*. 2005;44(1):29-40.
 - 27 Beletsky L, Macalino G, Burris S. Attitudes of police officers towards syringe access, occupational needle-sticks, and drug use: a qualitative study of one city police department in the United States. *Int J Drug Policy*. 2005;16(4):267-274.
 - 28 Groseclose SL, Weinstein B, Jones TS, Valleroy LA, Fehrs LJ, Kassler WJ. Impact of increased legal access to needles and syringes on practices of injecting-drug users and police officers—Connecticut, 1992–1993. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1995;10(1):82-89.
 - 29 Marx MA, Crape B, Brookmeyer RS, Junge B, Latkin C, Vlahov D, Strathdee SA. Trends in crime and the introduction of a needle exchange program. *Am J Public Health*. 2000;90(12):1933-1936.
 - 30 Galea S, Ahern J, Fuller C, Freudenberg N, Vlahov D. Needle exchange programs and experience of violence in an inner city neighborhood. *J Acquir Immune Defic Syndr*. 2001;28(3):282-288.
 - 31 Holtzman D, Barry V, Ouellet LJ, Des Jarlais DC, Vlahov D, Golub ET, Hudson SM, Garfein RS. The influence of needle exchange programs on injection risk behaviors and infection with hepatitis C virus among young injection users in select cities in the United States, 1994-2004. *Preventive Medicine*. 2009;49:68-73.
 - 32 Cooper EN, Dodson C, Stopka TJ, Riley ED, Garfein RS, Bluthenthal RN. Pharmacy participation in non-prescription syringe sales in Los Angeles and San Francisco counties, 2007. *J Urban Health*. 2010;87(4):543-552.
 - 33 Rudolph AE, Standish K, Amesty S, Crawford ND, Stern RJ, Badillo WE, Boyer A, Brown D, Ranger N, Orduna JMG, Lasenburg L, Lippek S, Fuller CM. A community-based approach to linking injection drug users with needed services through pharmacies: an evaluation of a pilot intervention in New York City. *AIDS Educ Prev*. June 2010;22(3):238-251.
 - 34 Hurley SF, Jolley DJ, Kaldor JM. Effectiveness of needle-exchange programmes for prevention of HIV infection. *Lancet*. 1997;349:1797-1800.
 - 35 Des Jarlais DC, Hagan H, Friedman SR, et al. Maintaining low HIV seroprevalence in populations of injecting drug users. *JAMA*. 1995;274:1226-1231.
 - 36 Heimer R, Kaplan EJ, Khoshnood K, et al. Needle exchange decreases the prevalence of HIV-1 proviral DNA in returned syringes in New Haven, Connecticut. *Am J Med*. 1993;95:214-220.
 - 37 Vlahov D, Junge B. The role of needle exchange programs in HIV prevention. *Public Health Reports*. June 1998; vol.113(Supp 1):75-80.
 - 38 Bluthenthal RN, Ridgeway G, Schell T, Anderson R, Flynn NM, Kral AH. Examination of the association between syringe exchange program (SEP) dispensation policy and SEP client-level syringe coverage among injection drug users. *Addiction*. 2007;102(4):638-646.
 - 39 Des Jarlais DC, McKnight C, Goldblatt C, Purchase D. Doing harm reduction better: syringe exchange in the United States. *Addiction*. 2009;104:1441-6144.
 - 40 De P, Cox J, Boivin JF, Platt RW, Jolly AM. Social network-related risk factors for bloodborne virus infections among injection drug users receiving syringes through secondary exchange. *J Urban Health*. 2008 Jan;85(1):77-89.
 - 41 Lorrwick J, Bluthenthal RN, Scott A, Gilbert ML, Riehman KS, Anderson RL, Flynn NM, Kral AH. Secondary syringe exchange among users of 23 California syringe exchange programs. *Subst Use Misuse*. 2006;41(6-7):865-882.
 - 42 Bluthenthal RN. Syringe exchange as a social movement: A case study of harm reduction in Oakland, California. *Subst Use Misuse*. 1998;33(5):1147-1171.
 - 43 Lurie P, Reingold AL, Bowser B, Chen D, Foley J, Guydish J, Kahn JG, Lane S, Sorensen J. *The Public Health Impact of Needle Exchange Programs in the United States and Abroad*. Vols 1 & 2. San Francisco: University of California; 1993.
 - 44 Kochems LM, Paone D, Des Jarlais DC, Ness I, Clark J, Friedman SR. The transition from underground to legal syringe exchange: the New York City experience. *AIDS Educ Prev*. December 1996;8(6):471-489.
-

-
- 45 Centers for Disease Control and Prevention. Syringe Exchange Programs—United States, 2008. *MMWR Morb Mortal Wkly Rep*. November 19 2010;59(45):1488-1491. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5945a1484.htm>.
 - 46 Rich JD, Hogan JW, Wolf F, DeLong A, Zaller ND, Mehrotra M, Reinert S. Lower syringe sharing and re-use after syringe legalization in Rhode Island. *Drug and Alcohol Depend*. 2007;89(2-3):292-297.
 - 47 Rich JD, Macalino GE, McKenzie M, Taylor LE, Burris S. Syringe prescription to prevent HIV infection in Rhode Island: a case study. *Am J Public Health*. 2001;91(5):699-700.
 - 48 Centers for Disease Control and Prevention. HIV Prevention Community Planning Guide. Available at:<http://www.cdc.gov/hiv/topics/cba/resources/guidelines/hiv-cp/pdf/hiv-cp.pdf>.
 - 49 Downing M, Riess TH, Vernon K, Mulia N, Hollinquest M, McKnight C, Des Jarlais DC, Edlin BR. What's community got to do with it? Implementation models of syringe exchange programs. *AIDS Educ Prev*. February 2005;17(1):68-78.
 - 50 Kessler RC, Nelson CB, McGonagle KA, Edlund MJ, Frank RG, Leaf PJ. The epidemiology of co-occurring addictive and mental disorders: implications for prevention and service utilization. *Am J Orthopsychiatry*. 1996;66(1):17-31.
 - 51 Teplin LA. Keeping the peace: police discretion and mentally ill persons. *National Institute of Justice Journal*. July 2000:9-15.
 - 52 DeBeck K, Wood E, Zhang R, Tyndall M, Montaner J, Kerr T. Police and public health partnerships: evidence from the evaluation of Vancouver's supervised injection facility. *Subst Abuse Treat Prev Pol*. 2008;3(1):11.
 - 53 Robles RR, Colon HM, Matos TD, Finlinson HA, Munoz A, Marrero CA, Garcia M, Reyes JC. Syringe and needle exchange as HIV/AIDS prevention for injection drug users in Puerto Rico. *Health Policy*. 1998;45(3):209-220.
 - 54 Rose VJ, Backes G, Martinez A, McFarland W. Non-prescription syringe sales in California: a qualitative examination of practices among 12 local health jurisdictions. *J Urban Health*. 2010;87(4):561-575.
 - 55 Cooper EN, Dodson C, Stopka TJ, Riley ED, Garfein RS, Bluthenthal RN. Pharmacy participation in non-prescription syringe sales in Los Angeles and San Francisco counties, 2007. *J Urban Health*. 2010;87(4):543-552.
 - 56 Rudolph AE, Standish K, Amesty S, Crawford ND, Stern RJ, Badillo WE, Boyer A, Brown D, Ranger N, Orduna JMG, Lasenburg L, Lippeck S, Fuller CM. A community-based approach to linking injection drug users with needle services through pharmacies: an evaluation of a pilot intervention in New York City. *AIDS Educ Prev*. June 2010;22(3):238-251.
 - 57 Centers for Disease Control and Prevention. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis. *MMWR*2005;54(RR09):1-17.
 - 58 Centers for Disease Control and Prevention. Program Collaboration and Service Integration: Enhancing the Prevention and Control of HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis in the United States. *National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) White Paper*. Available at: http://www.cdc.gov/nchhstp/ProgramIntegration/docs/207181-C_NCHHSTP_PCSI%20WhitePaper-508c.pdf. Accessed July 2, 2012.
 - 59 Kidorf M, Disney ER, King VL, Neufeld K, Peirce J, Kolodner K, Brooner RK. Improving substance abuse treatment enrollment in community syringe exchangers. *Addiction*. 2009;104:786-795.
 - 60 Kidorf M, Disney ER, King VL, Neufeld K, Beilenson PL, Brooner RK. Prevalence of psychiatric and substance use disorders in opioid abusers in a community syringe exchange program. *Drug and Alcohol Depend*. 2004;74(2):115-122.
 - 61 Kidorf M, Disney E, King V, Kolodner K, Beilenson P, Brooner RK. Challenges in motivating treatment enrollment in community syringe exchange participants. *J Urban Health*. 2005;82(3):456-467.
 - 62 Riley ED, Safaeian M, Strathdee SA, Brooner RK, Beilenson P, Vlahov D. Drug user treatment referrals and entry among participants of a needle exchange program. *Subst Use Misuse*. 2002;37(14):1869-1886.
 - 63 Sporer K, Kral AH. Prescription naloxone: a novel approach to heroin overdoseprevention. *Ann Emerg Med*. 172-177. Available at: http://www.osuem.com/journal_club/articles/nnEmergMed2007Sporer_all.pdf
 - 64 Heinzerling KG, Kral AH, Flynn NM, Anderson RL, Scott A, Gilbert ML, Asch SM, Bluthenthal RN. Unmet need for recommended preventive health services among clients of California syringe exchange programs: implications for quality improvement. *Drug and Alcohol Depend*. February 1 2006;81(2):167-178.
 - 65 Masson CL, Sorensen JL, Perlman DC, M.S. S, Delucchi KL, Chen T, Sporer K, Des Jarlais D, Hall SM. Hospital versus community-based syringe exchange: a randomized controlled trial. *AIDS Educ Prev*. 2007;19(2):97-110.
-

Acknowledgements

NASTAD and UCHAPS gratefully acknowledges and thanks Natalie Cramer, NASTAD, Director Prevention, NASTAD and Marsha Martin, UCHAPS, Director for their roles in the development of the guidelines. They also thank Lorraine Denis-Cooper, Associate Prevention, Chris Taylor, NASTAD, Associate Director, Viral Hepatitis, Murray Penner, NASTAD, Deputy Executive Director and Julie Scofield, NASTAD Executive Director for their guidance and editorial support.

August 2012

Julie M. Scofield
NASTAD Executive Director

Marsha Martin
UCHAPS Director

Randy Mayer (Iowa), NASTAD Chair

Kyle Baker (Los Angeles), UCHAPS Governmental Co-chair

Peter McLoyd (Chicago), UCHAPS Community Co-chair

