



Kentucky Public Health

Prevent. Promote. Protect.

**Kentucky Harm Reduction and
Syringe Exchange Program (HRSEP)**

Guidelines for Local Health Departments Implementing Needle
Exchange Programs

May 11, 2015

Contents

Introduction	1
Chapter 1. Laying the Groundwork for Program Implementation	3
1.1 Assessing the Community’s Need for HRSEPs.....	3
1.2 Assessing the Community’s Readiness for HRSEPs.....	3
1.3 Building Community Support for HRSEPs.....	4
(a) Assemble the Facts and Intervention Options	4
(b) Assess Stakeholder Knowledge and Attitudes.	5
1.4 An Opportunity for Collaboration	5
1.5 Waste Management for Syringe Disposal.....	5
Chapter 2. Reaching Potential HRSEP Participants	5
2.1 Street Outreach	6
2.2 Emergency Departments.....	7
2.3 Pharmacies and Pharmacists.....	7
Chapter 3. Operating Principles of HRSEPs	7
3.1 Program Registration.....	7
3.2 Syringe Transaction Models	9
(a) Needs Based Negotiation	9
(b) Strict One-for-One Exchange.....	9
(c) One-for-One Plus Exchange	10
(d) Strengths and Limitations of Each Syringe Transaction Model.....	10
3.3 Worker and Volunteer Safety	11
(a) Safe Syringe Disposal.....	11
(b) Prevention of Occupational Blood Borne Pathogen Transmission among HRSEP Staff.	12
3.4 Health and Social Services: Provision and Linkage.....	12
3.5 Strategies to Increase Access to Services.....	13
3.6 Specific Health and Social Services.....	14
(a) Education and Counseling	14
(b) Social Services	14
(c) Medical Care	15

(d) Drug Abuse Treatment	15
(e) Overdose Prevention	15
3.7 Provision or Linkage	16
Chapter 4. Service Delivery Models	16
4.1 Fixed Site.....	17
4.2 Collaboration or Satellite Structure	17
4.3 Mobile/Street Based Programs	18
4.4 Delivery Model	19
4.5 Using Multiple Program Models.....	20
Chapter 5. Monitoring HRSEP Programs	21
5.1 Process Monitoring	21
5. Outcome Monitoring.....	22
5.3 Program Quality Improvement	23
5.4 Building Capacity of HRSEP Staff	23
Chapter 6. Conclusion	24
Appendices	
A: Research and Survey Results Related to HRSEPs	25
B: Sample Monitoring and Evaluation Processes	29
Tables	
1. Types of Information Potentially Collected at HRSEP Intake	8
2. Basic and Advanced Training Topics for HRSEP Staff	24
Acknowledgements	32

INTRODUCTION

In accordance with SB 192 enacted by Kentucky General Assembly in the 2015 Regular Session and signed by Governor Steven L. Beshear as an emergency bill went into effect on March 24, 2015. This bill amended KRS 218A.510 to allow a local health department to operate an outreach program in which individuals can exchange used hypodermic needles and syringes for clean needles and syringes. In Kentucky this program is named the “Harm Reduction and Syringe Exchange Program” (HRSEP). These HRSEP guidelines provide assistance to local health department jurisdictions that wish to operate HRSEPs. For health departments interested in initiating a HRSEP, these guidelines address key issues to be considered before implementation.

SB 192 can be found in its entirety at: <http://www.lrc.ky.gov/record/15RS/SB192.htm>.

Harm Reduction and Syringe Exchange Programs (HRSEPs) are comprehensive programs designed to provide safe disposal of needles for **injection drug users (IDUs)**, testing for blood borne viral infections for those at greater risk of infection due to injection drug use, supply clean needles to lessen the possibility of infection from shared needles, and to help IDUs find treatment and social services with which they may not otherwise be familiar. HRSEPs can also provide resources and education to the family members and friends of IDUs.

HRSEPs 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. IDUs account for approximately 16 percent of new HIV infections in the United States¹ and almost one half (48 percent) of newly reported acute hepatitis C virus (HCV) infections are IDU related. Currently, there are no commercially available vaccines for HIV and HCV.

Scientific evidence indicates one of the most effective strategies for combating HIV infections among IDUs is ensuring access to sterile syringes by IDUs who cannot or will not stop injecting drugs. The Institute of Medicine of the Academy of Sciences has said: “For injection clients who cannot or will not stop injecting drugs, the once-only use of sterile needles and syringes remains the safest, most effective approach for limiting HIV transmission.”

Therefore, the public health benefits of HRSEPs 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

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.

HRSEPs reduce HIV incidence among IDUs. Most studies of injection-related HIV and HCV risks have found HRSEPs to be associated with a lower likelihood of syringe sharing or reductions in syringe sharing. Ecological studies have found that locales with HRSEPs tend to have lower HIV seroprevalence among IDUs,^{2,3,4,5} and one study reported that closing a HRSEP resulted in increased prevalence of HIV risk behaviors among IDUs. Other public health benefits of HRSEPs 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 behavioral health services. The evidence for the public health benefits of HRSEPs is strong and consistent over time. See Appendix A for a list of relevant journal articles, survey results and research specifics. HRSEPs have successfully operated in the United States since the late 1980s.

Syringe access saves lives and is cost effective. The CDC has stated a public health goal of 100% coverage, with all injections performed with a sterile syringe, noting that the one-time use of sterile syringes remains the most effective way to limit HIV transmission associated with injection drug use. HRSEPs reduce the spread of infection and address the personal and public health risks of injection drug use in a cost-effective, comprehensive fashion. A sterile syringe costs approximately \$0.97 and the average IDU injects approximately 1,000 times per year. While the lifetime cost of treating someone with HIV can be as high as \$618,000 and the lifetime cost of treating someone with HCV is estimated between \$100,000 and \$300,000.

HRSEPs are comprehensive service programs that include appropriate linkage and referral to substance abuse prevention and treatment services, behavioral health, blood borne pathogen prevention and treatment and other support services. Harm reduction is a set of practical strategies and ideas aimed at reducing the harm to the individual and society associated with drug use. Harm reduction incorporates a spectrum of strategies from safer use to meeting clients “where they are,” addressing conditions of use along with the use itself.

² Des Jarlais DC, Hagan H, Friedman SR, et al. Maintaining low HIV seroprevalence in populations of injecting clients. *JAMA*. 1995;274:1226-1231.

³ 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.

⁴ Vlahov D, Junge B. The role of needle exchange programs in HIV prevention. *Public Health Reports*. June 1998; vol.113(Supp 1):75-80.

⁵ 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 clients. *Addiction*. 2007;102(4):638-646.

CHAPTER 1. LAYING THE GROUNDWORK FOR PROGRAM IMPLEMENTATION

This chapter discusses the various factors that health departments will need to consider as they plan and implement HRSEPs in their jurisdictions, including the importance and necessity of assessing the community's need and readiness for HRSEPs, 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 HRSEP programs should be designed in a manner that will enable local health departments 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. Additionally, local health departments should have 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 identifying if cultural competency goals have been met.

1.1 Assessing the Community's Need for HRSEPs

The first step in considering whether to implement a HRSEP is to determine whether the need exists in the health department jurisdiction. Local health departments and community partners may identify IDUs as a target population by using community needs assessments of key epidemiological factors including HIV and/or HCV prevalence and demographics of risk groups⁶ and select the HRSEP as an appropriate intervention.

After the needs assessment is complete, health departments may work with community planning partners 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 HRSEPs. Health departments may need to educate community partners about IDU-related epidemiological data and the importance of HRSEPs as an intervention to further address the shared goal of reducing the incidence of blood borne pathogens in the community.

1.2 Assessing the Community's Readiness for HRSEPs

Once the health department has determined that a HRSEP is needed to address the HIV/HCV prevention needs of IDUs, the next step is to assess whether the community is "ready for" or receptive to a HRSEP. Kentucky's law requires the development of a HRSEP in

⁶ 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.

any given county to be a local decision. Approval of three separate entities is required. The local health department's Board of Health must agree to operation of a HRSEP. Then, the legislative bodies of both the city and county governments for which the program will be operated must give consent for the operation of the program. Therefore, gaining community approval of a HRSEP is a very important step. Community support is necessary before a HRSEP can be implemented. The following sections outline ways to build community support.

1.3 Building Community Support for HRSEPs

Providing sterile syringes to IDUs has been shown to reduce sharing of syringes. But like other important public health interventions, in order to successfully implement HRSEPs, there must be an enabling environment consisting of support from key stakeholders such as selected public officials, other government agencies, the general public and consumers. Building community support for HRSEPs is an integral part of successful HRSEP implementation. A careful and systematic process can help build community support for HRSEPs, including assembling the facts and intervention options, assessing stakeholder knowledge and attitudes, and developing an action plan. HRSEPs operate best in a supportive community environment. Staff, volunteers and HRSEP 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 HRSEP site location; (2) educating the community about drug use, HRSEPs, and safe syringe disposal; (3) framing messages about HRSEPs 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 HRSEP planning process so their voices and concerns are heard.⁷ As described below, several steps can be taken to successfully implement HRSEPs.

(a) Assemble the Facts and Intervention Options

Start by assessing the characteristics of the local IDU epidemic and identifying current modes of syringe access. HRSEPs take many forms, and depending on the spatial distribution of IDUs, the accessibility of other health care facilities, and other relevant factors, more than one approach may be worth considering. Having identified potential HRSEP models, health departments will also need to consult with their legal counsel and

⁷ 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.

other stakeholders to discuss the viability of each prospective HRSEP option for the specific jurisdictions.

(b) Assess Stakeholder Knowledge and Attitudes

Identify key stakeholders and assess their knowledge of and attitudes toward HRSEPs. A HRSEP may fail if it is framed negatively or communities resist it. Police, prosecutors, and public defenders are encouraged to be engaged in the HRSEP development from the outset to help ensure the program's success.

1.4 An Opportunity for Collaboration

Local health departments that desire to operate a HRSEP should contact local law enforcement leadership prior to approaching city or county units of government, if possible. Harm reduction should be explained in a three part application to include: reducing harm to the community, reducing harm to addicted persons and officer safety. The array of services offered immediately, as well as those planned for the future, should be fully explained.

The goals of the program should be clearly outlined as well as the expectations of clients. Data concerning the increase and dangers of Viral Hepatitis and HIV often spread by IDUs, the goals and benefits of a HRSEP and the success of existing programs in other states should be discussed. Details such as location, mobile or stationary, and expectations of clients and staff may benefit from law enforcement input.

1.5 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. Collaborating with waste management staff is a good way to discuss how to expand syringe disposal through hazardous waste disposal programs already in place or through stand-alone syringe disposal kiosks. Hospitals or physician offices may provide in-kind support of the HRSEP through an agreement to provide disposal services of used syringes for the HRSEP. Because the primary goal of the HRSEP is to protect IDUs and the public from dirty needles and syringes, a HRSEP must have a waste management plan in effect from its outset.

Chapter 2. REACHING POTENTIAL HRSEP PARTICIPANTS

After the health department has developed collaborative relationships and earned community support, it must next consider how the HRSEP will reach potential participants. There are many options and what works best in one community may not work in another. Street outreach, referrals from emergency department staff or pharmacists may also be effective.

2.1 Street Outreach

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 HRSEP participants, they should introduce themselves and indicate the agency for 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 IDUs while also keeping outreach and service delivery as priorities. Maintaining potential HRSEP participants' confidentiality is of the utmost importance, especially when program staff is talking with people in groups and 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 and also help build support for the program within the community.

Another good resource for conducting street outreach is peers as 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; 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.

2.2 Emergency Departments

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

Emergency departments may consider a screening tool in specific populations to identify at risk populations. For example, the CRAFFT (**C**ar, **R**elax, **A**lone, **F**orget, **F**riends, **T**rouble) screen, which is a short, self-administered behavioral health screening tool developed to

screen adolescents for high risk alcohol and other drug use disorders simultaneously, could be incorporated as routine protocol. Recently, the CRAFFT was recommended for adolescents presenting with trauma. Other screening tools are available and would need to be tailored to reflect the needs and the profile of the community. This screening tool can be found at http://www.ceasar-boston.org/CRAFFT/pdf/CRAFFT_English.pdf

2.3 Pharmacies and Pharmacists

Pharmacies and pharmacists can be a good resource and a strong ally for HRSEP 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 HRSEPs. Pharmacists have daily contact with the public and can be a valuable resource for referring IDUs to the HRSEP directly or through the IDUs' family members with whom the pharmacist may have contact.

CHAPTER 3. OPERATING PRINCIPLES OF HRSEPS

Several elements should be considered in developing local operating principles for HRSEPs. Among these, registration, transaction model, delivery model and worker/volunteer safety are of primary concern.

3.1 Program Registration

Any local health department planning to implement a HRSEP will need to decide if it will institute a formal registration process for participants. In many HRSEPs, the formal establishment of a relationship between IDUs and the HRSEP begins with intake or enrollment. It should be noted that HRSEPs 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. In order to accommodate participant needs and encourage enrollment, initial intake procedures should be kept to a minimum. However, HRSEP 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 HRSEP as some may not have ID cards.

By registering participants, the HRSEP can collect statistical data that staff can use to monitor the program. The purpose of program evaluation is to ensure that the program is operating in conformity to its design, reaching its specific target population and achieving anticipated implementation goals. Future monitoring activities can then be linked to the same participant through a unique participant code.

Table 1 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.

Table 1. Types of Information Potentially Collected at HRSEP Intake

Information	Purpose
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 negotiation models
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, to include access to health insurance where applicable.

3.2 Syringe Transaction Models

The goal of HRSEPs 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. HRSEPs typically use one of three types of syringe transaction models: needs based negotiated model, 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 agree 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 public expectations when selecting the type of syringe transaction model to implement.

(a) Needs Based Negotiation

In the needs based negotiation model, the program does not set a limit on the syringes a participant can receive regardless of the number of returned syringes. Although HRSEPs

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, the frequency of injection and the length of time until she/he can next access the HRSEP. Some HRSEPs 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.

(b) Strict One-for-One Exchange

Strict one-for-one exchange programs provide HRSEP 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 HRSEP, 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 HRSEPs that employ strict one-for-one exchange models issue one or more syringes at the outset of client participation when participants enroll in the program to lessen the risk of syringe sharing. For example, the HRSEP might provide 10 sterile syringes the first time someone comes to the HRSEP 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 HRSEP using the one-for-one exchange model can issue a voucher (similar to an "IOU"). For example, someone may return 300 syringes but only wants 10 syringes at that time. The HRSEP can give the participant a voucher for the other 290 syringes that she/he can redeem at another time. Vouchers are also useful when HRSEPs 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. HRSEPs should consider recording the voucher on-site in case participants lose their vouchers, but recording this information would affect anonymity unless HRSEPs use a unique participant code.

(c) 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 a 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 models up to a certain limit. For example, if a participant disposes of eight syringes, she/he receives 16 sterile syringes. A voucher system can also be used with one-for-one plus exchange models.

(d) 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.⁸ 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 a HRSEP. If IDUs are not provided sterile syringes at a HRSEP because they did not have any used syringes to dispose of, they may use unsterile syringes from their associates, which defeats the purpose of HRSEPs.

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 model is better at increasing syringe coverage, 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 HRSEP more often, which may increase opportunities for them to dispose of used syringes and the chances they will use other services, including HIV/HCV testing and drug treatment referrals. Lastly, the needs based negotiated model may require spending more money on syringes, which depends on budgets and funding agencies. HRSEPs should consider working with their local partners to develop the best funding models for their community.

⁸ 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.

3.3 Worker and Volunteer Safety

(a) Safe Syringe Disposal

Local health departments must ensure proper disposal of syringes collected through their HRSEPs. Proper disposal of used syringes is critical to protecting individual health and public safety. Safe disposal procedures help prevent accidental needle stick injuries among staff, law enforcement, volunteers, participants and the public. Infectious diseases can be transmitted during an accidental needle stick; 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 inappropriately discarded, helping to protect the HRSEP from public scrutiny.

Health departments are in an advantageous position as they likely have procedures in place for the disposal of syringes in the daily practice of the regular services provided at the health department. HRSEPs must document policies and procedures governing disposal of syringes and other medical waste and supervise disposal to ensure that staff and volunteers are adhering to the rules as outlined by the local health department's policies and protocol.

The following suggestions may help guide safe disposal procedures:

- Develop or expand partnerships with waste management companies to obtain and dispose of medical waste.
- Do not require that returned syringes be counted by hand. Estimates can be made by observation or by weighing the returned syringe containers to determine the number of syringes disposed of for monitoring purposes.
- If the HRSEP 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.
- Provide individual disposal containers to clients (i.e. syringe and needle collection boxes, laundry detergent bottles, etc.)

(b) Prevention of Occupational Blood Borne Pathogen Transmission among HRSEP Staff

As is the case for other health care workers, HRSEP staff can be at risk for acquiring HIV/HCV from needle stick injuries and cuts during syringe exchange and disposal. To prevent the occupational transmission of blood borne pathogens. HRSEP staff should assume that blood and other bodily fluids from HRSEP participants are potentially infectious, therefore requiring infection control precautions at all times including:

- routine use of barriers (e.g., gloves, goggles, closed-toe and 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 disposal of sharp instruments during and after use.

Although prevention of occupational blood borne transmission is the most important strategy, HRSEPs should have plans in place for post-exposure management of staff. CDC has issued guidelines for management of health care worker exposure to blood borne pathogens and recommendations for post-exposure prophylaxis (PEP).⁹ The PEP guidelines provide considerations in determining whether health care workers should receive PEP and in choosing the type of PEP regimen. Issues such as delayed exposure reporting, 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.

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

- at least annually training all staff in infection control procedures and the importance of reporting occupational exposure;
- promoting and monitoring the availability and use of safety devices to prevent sharps injuries, and developing a post-exposure management plan; and
- implementation of a PEP policy for HRSEP health care workers

3.4 Health and Social Services: Provision and Linkage

IDUs participating in HRSEPs may need services to prevent HIV and HCV infection and to address other health and basic human needs. The CDC’s National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) programs have developed a strategy called “Program Collaboration and Service Integration (PCSI)” to help health departments 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. HRSEPs can use PCSI to structure health delivery to populations of IDUs and specifically address the challenges associated with integrating services at a HRSEP location or through linkage to community service providers. The CDC’s White Paper on PCSI (2009) can be found at:

[http://www.cdc.gov/nchhstp/ProgramIntegration/docs/207181C_NCHHSTP_PCSI%20White Paper-508c.pdf](http://www.cdc.gov/nchhstp/ProgramIntegration/docs/207181C_NCHHSTP_PCSI%20White%20Paper-508c.pdf).

⁹ 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. MMWR2005;54(RR09):1-17.

3.5 Strategies to Increase Access to Services

HRSEPs 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 provide transportation to referral sites (i.e. assisted referrals).

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

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

Using a combination of motivational interviewing and incentives has shown promise in increasing enrollment of referred participants in drug abuse treatment.¹⁰

3.6 Specific Health and Social Services

HRSEPs 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. HRSEP staff can benefit from training on providing accurate information and using evidence-based approaches to counseling.

¹⁰Kidorf 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.

(a) Education and 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 content areas to be covered can include:

- HRSEP 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, HBV, HCV, 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.

(b) Social Services

HRSEPs can help participants meet basic needs and increase engagement by providing information and referral on an array of services that are appropriate for the population. Potential services include:

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

(c) Medical Care

IDUs have the same preventive and basic 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. HRSEPs serve as a good opportunity for IDUs to meet and build a relationship that will encourage participation in routine services provided by the local health department, such as:

- 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; and
- wound care.

IDUs using HRSEP services have a high prevalence of psychiatric disorders, such as major depression and antisocial personality disorder. HRSEP staff may benefit from training on recognizing the signs and symptoms of common psychiatric disorders and suicide prevention so that appropriate referrals can be made.

(d) Drug Abuse Treatment

The HRSEP may partner with local community treatment providers to combine services in one location. Each community will have different needs and resources. Therefore, consideration should be given to the best way to achieve all the goals of the HRSEP. At a minimum, resources and referrals to treatment services in the community should be provided to HRSEP participants.

(e) Overdose Prevention

KRS 217.186, as amended in SB 192, allows a person or agency to receive a prescription for naloxone and administer it. Overdose is a major cause of mortality among clients and HRSEPs 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 is a recommended evidence-based strategy that reduces opioid overdose fatalities. Key overdose prevention strategies include:

- providing comprehensive training on overdose prevention, recognition and response for all HRSEP 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
- educating the IDUs' family members and friends as well as the community at large how to recognize and respond to overdoses.

3.7 Provision or Linkage

Based on multiple factors, including location, financial constraints, availability of community resources and participant preference, HRSEPs will need to decide whether to co-locate services or provide linkages to community resources. Research and HRSEP experience

suggest that co-location of services has advantages in both acceptability and effectiveness for HRSEP participants¹¹ because IDUs have relatively low rates of utilization of community services. Consequently, the HRSEP may be the participant's only or most trusted point of contact with service agencies. Moreover, partnering with agencies that can provide services on-site increases utilization rates.

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 maximize the utilization of available resources.

CHAPTER 4. SERVICE DELIVERY MODELS

Various service delivery models can be used to make syringes available. HRSEPs 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, HRSEPs 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 include the following:

- syringe distribution;
- syringe collection;
- tracking of basic demographics; and
- referrals 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 HRSEP models, including fixed site, mobile/street based, and delivery.

11 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.

4.1 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 HRSEP is located in a building or specific location, such as the local health department building, 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 HRSEP because there is a set location with predictable hours.
- Other services can be integrated with HRSEP activities, including HIV, HBV, and HCV testing; STD testing; TB screening and prophylaxis; food provision; clinical 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.
- HRSEP services can be provided in a private setting.
- 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 may be more costly to maintain because of higher overhead and upkeep.
- Clients 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 HRSEP'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 they do not have transportation.

4.2 Collaboration or Satellite Structure

In the collaboration or satellite structure model, existing HRSEPs provide syringe services at partner social service agencies in fixed sites in the community (e.g., homeless shelters). It requires that the HRSEP provide capacity-building training for the partner agency. This approach works best in health jurisdictions where HRSEPs 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.

4.3 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 an outreach program. Many mobile HRSEPs stop at specified locations and times. 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. Note that jurisdictional approval for all areas of operation and stops for a mobile unit is required.

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 IDU clients.
- 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 needs 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 HRSEP in inclement weather.
- It can be costly to maintain because of expenses related to vehicle maintenance and insurance.
- Groups of IDUs who may be less likely to visit a HRSEP can still get sterile syringes and dispose of used ones safely.
- Peers may feel empowered by conducting a public health service in their community.

4.4 Delivery Models

The delivery model involves the delivery of injection supplies to a prearranged site, such as a house, apartment, hotel, 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. It is important for the HRSEP to deliver only in its jurisdiction as approved by its Board of Health and county and city officials for that specific delivery site.

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 needle stick 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.
- HRSEP staff has more opportunities to interact with family and peer networks.

The limitations of delivery models include the following:

- It requires the HRSEP 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.

4.5 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 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.

Chapter 5. MONITORING HRSEP PROGRAMS

The main goal of monitoring local HRSEPs 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 HRSEPs to continually conduct process monitoring and periodically conduct outcome monitoring.

5.1 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 IDUs participation or HRSEP operations.

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

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

Three minimum essential data elements are recommended for every syringe transaction occurring at HRSEPs, 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 3.3 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 B 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, HRSEP 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).

5.2 Outcome Monitoring

Quantitative assessments should occur periodically with HRSEP 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 HRSEP. For example, data that provide information on HIV/ 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 HRSEP. Quantitative assessments conducted with HRSEP participants should occur, at a minimum annually or every other year and include a representative sample of participants. Choosing participants randomly is preferable but may not be feasible in all locations or for all syringe modalities. Participants may be incentivized for providing their expertise to the HRSEP by participating in outcome monitoring surveys. Key domains for HRSEP outcome monitoring include:

- types of services used at the HRSEP;
- frequency and duration of HRSEP 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, behavioral 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 outreach; and
- changes in drug use, injection and treatment as a result of HRSEP participation.

An individual trained in epidemiological and statistical methods and familiar with the literature on factors associated with HIV, HCV, and overdose risk and HRSEPs should analyze the data. HRSEP staff should be involved in interpreting the results. See appendix B for process monitoring indicators.

5.3 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 HRSEPs 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, HRSEP participants, and others with important perspectives regarding the usefulness and effectiveness of the HRSEP. 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 HRSEP participants use program services; or understand how new services might be received.

Using unobtrusive approaches, programs can observe HRSEP transactions systematically to identify opportunities to provide more education, counseling, or other services or simply time them to determine barriers to providing other activities. Many quality improvement ideas can also be discussed through a participant or community advisory board if the HRSEP has one.

5.4 Building Capacity of HRSEP 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 HRSEP and are comfortable accessing services.

HRSEPs may 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 HRSEPs. 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. It is recommended that all staff and volunteers complete a basic training curriculum that encompasses the core topics shown in Table 2. 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 2.

Table 2. Basic and Advanced Training Topics for HRSEP Staff

Basic Training Topics	Advanced Training Topics
<ul style="list-style-type: none">• Standard operating procedures	<ul style="list-style-type: none">• Polysubstance use

-
- Referral to medical, substance abuse treatment, behavioral health, other service agencies
 - Cultural sensitivity
 - Overview of neighborhood concerns
 - Outreach strategies
 - HIV and viral hepatitis transmission and prevention
 - Overdose prevention
 - Syringe safety/disposal
 - Plan for accidental needle sticks
 - Legal and law enforcement climate
 - 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 behavioral health and substance use disorders
-

Chapter 6. CONCLUSION

HRSEPs have proven to be an effective model for combating blood borne pathogens and helping IDUs find much needed treatment and services. As the community works to implement the program that is best suited to its needs, this guidance offers viable the options. The Kentucky Department for Public Health within the Cabinet for Health and Family Services is also available to answer any questions or address any concerns.

APPENDIX A

RESEARCH AND SURVEY RESULTS RELATED TO HRSEPs

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.

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>.

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

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 17, 2010.

Jenness SM, Neaigus A, Hagan H, Murrill CS, Wendel T. Heterosexual HIV and sexual partnerships between injection clients and non-injection clients. *AIDS Patient Care STDs*. 2010;24(3):175-181.

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

Needle RH, Coyle S, Cesari H, Trotter R, Clatts M, Koester S, Price L, McLellan E, Finlison 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 client networks. *Subst Use Misuse*. 1998;33(12):2403-2423.

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 clients in five U.S. cities. *Drug and Alcohol Depend*. November 2007;91(Suppl 1):S39-47.

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.

Lorvick J, Kral AH, Seal K, Gee L, Edlin BR. Prevalence and duration of hepatitis C among injection clients in San Francisco, Calif. *Am J Public Health*. 2001;91:46-47.

Bargagli AM, Sperati A, Davoli M, Forastiere F, Perucci CA. Mortality among problem clients in Rome: an 18-year follow-up study, 1980-97. *Addiction*. 2001;96(10):1455-1463.

Kung HC, Hoyert DL, Xu J, Murphy SL. Deaths: final data for 2005. *Natl Vital Stat Rep*. 2008;56(10):1-120.

- Milloy MJ, Kerr T, Mathias R, Zhang R, Montaner JS, Tyndall M, Wood E. Non-fatal overdose among a cohort of active injection clients recruited from a supervised injection facility. *Am J Drug Alcohol Abuse*. 2008;34(4):499-509.
- Sherman SG, Cheng Y, Kral AH. Prevalence and correlates of opiate overdose among young injection clients in a large U.S. city. *Drug and Alcohol Depend*. 2007;88(2-3):182-187.
- 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.
- Pollini RA, McCall L, Mehta SH, Vlahov D, Strathdee SA. Non-fatal overdose and subsequent drug treatment among injection clients. *Drug and Alcohol Depend*. 2006;83(2):104-110.
- Darke S, Zador D. Fatal heroin “overdose”: a review. *Addiction*. 1996;91(12):1765-1772.
- 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 clients: a review of reviews. *Addiction*. 2010;105(5):844-859.
- 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.
- 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.
- Burris S, Blankenship KM, Donoghoe M, Sherman S, Vernick JS, Case P, Lazzarini Z, Koester S. Addressing the “risk environment” for injection clients: the mysterious case of the missing cop. *Milbank Q*. 2004;82(1):125-156.
- Bluthenthal RN, Kral AH, Lorvick 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.
- 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.
- Dillon B, Allwright S. Prison officers’ concerns about blood borne viral infections. *The Howard Journal of Criminal Justice*. 2005;44(1):29-40.
- 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.
- 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-clients and police officers—Connecticut, 1992–1993. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1995;10(1):82-89.

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.

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.

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.

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.

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 clients with needed services through pharmacies: an evaluation of a pilot intervention in New York City. *AIDS Educ Prev*. June 2010;22(3):238-251.

Hurley SF, Jolley DJ, Kaldor JM. Effectiveness of needle-exchange programmes for prevention of HIV infection. *Lancet*. 1997;349:1797-1800.

Des Jarlais DC, Hagan H, Friedman SR, et al. Maintaining low HIV seroprevalence in populations of injecting clients. *JAMA*. 1995;274:1226-1231.

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.

Vlahov D, Junge B. The role of needle exchange programs in HIV prevention. *Public Health Reports*. June 1998; vol.113(Supp 1):75-80.

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 clients. *Addiction*. 2007;102(4):638-646.

Des Jarlais DC, McKnight C, Goldblatt C, Purchase D. Doing harm reduction better: syringe exchange in the United States. *Addiction*. 2009;104:1441-6144.

De P, Cox J, Boivin JF, Platt RW, Jolly AM. Social network-related risk factors for bloodborne virus infections among injection clients receiving syringes through secondary exchange. *J Urban Health*. 2008 Jan;85(1):77-89.

Lorvick 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.

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.

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.

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.

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>.

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.

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.

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>.

APPENDIX B

SAMPLE MONITORING AND EVALUATION PROCESSES

HRSEP Process Monitoring Indicators

Health departments implementing HRSEPs may wish to incorporate the following process and program monitoring indicators.

Minimum required process monitoring indicators for all HRSEP models:

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

Recommended list of process monitoring indicators for each HRSEP 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 tests provided
 - Number of tests positive for HCV
 - Number of referrals for HCV testing
 - Number of referrals for HIV testing
 - Number of referrals for substance abuse treatment and other clinical services such as STD testing and 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 tests provided
 - Number of tests positive for HCV
 - Number of referrals for HCV testing
 - Number of referrals for substance abuse treatment and other clinical services such as STD testing and treatment

- Number of each type of service directly provided or referral provided
- Client demographics: age, gender, race/ethnicity
- Delivery Model
 - Number of delivery sites
 - Number of persons served per delivery site
 - Number of referrals for HIV testing
 - Number of referrals for HCV testing
 - Number of referrals for substance abuse treatment
- 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 tests provided
 - Number of tests positive for HCV
 - Number of referrals for HCV testing
 - Number of referrals for substance abuse treatment and other clinical services such as STD testing and 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
- Number of syringes each participant is exchanging
- Number of visits per client per month

- Number of hours open for syringe exchange per week
- Number of delivery sites
- Number of persons served per delivery site
- 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 tests provided
- Number of tests positive for HCV Number of referrals for HCV testing
- Number of referrals for substance abuse treatment and other clinical services such as STD testing and treatment
- Number of condoms distributed
- Number of flu vaccines provided
- Number of hepatitis A vaccination doses
- Number of hepatitis B vaccination doses
- Number of adverse events
- Number of community-based syringe-disposal kiosks

Kentucky Harm Reduction and Syringe Exchange Program (HRSEP) Committee Members

The Kentucky Department for Public Health would like to acknowledge and thank the following HRSEP committee members for their many contributions in the development of the HRSEP protocol:

- Allen Brenzel, MD, Chief Medical Officer, Department for Behavioral Health, Developmental and Intellectual Disabilities
- Van Ingram, Executive Director of the Kentucky Office of Drug Control Policy, Justice and Public Safety Cabinet
- Sarah Moyer, MD, MPH, Interim Director and Chief Medical Director, Louisville Metro Public Health and Wellness
- Veronnie Faye Jones, MD, PhD, MSPH, University of Louisville
- Jennifer Havens, PhD, MPH, University of Kentucky
- Rice C. Leach, MD, Director, Lexington Fayette County Health Department
- Lynne Saddler, MD, MPH, Director, Northern Kentucky District Independent Health Department
- Stephanie Vogel, M.Ed., MCHES, Northern Kentucky District Independent Health Department
- Roseanne Nields, St. Elizabeth's Hospital
- Ashel Kruetzcamp, MSN, RN, SANE, St. Elizabeth's Hospital
- Wayne Crabtree, M.Div., CADC, Louisville Metro Public Health and Wellness
- Scott Lockard, MSW, CSW, Director, Clark County Health Department and President, Kentucky Health Departments Association, Inc.

The Department for Public Health would also like to recognize national harm reduction partners who supported this initiative with their technical assistance and expertise:

- The National Alliance of State and Territorial AIDS Directors (NASTAD)
- The Urban Coalition for HIV/AIDS Prevention Services (UCHAPS)
- Jon Zibbell, PhD, Division of Viral Hepatitis, Prevention Branch, Centers for Disease Control and Prevention
- Judith Feinberg, MD, Professor of Medicine, University of Cincinnati
- Daniel Raymond, Policy Director, Harm Reduction Coalition, New York
- Dan Bigg, Director, Harm Reduction Coalition Chicago
- Chris Taylor, Director, Viral Hepatitis, NASTAD

Thank you for advancing our state of wellness!

- Stephanie Mayfield, MD, FCAP, Commissioner, Department for Public Health
- Kraig Humbaugh, MD, MPH, Senior Deputy Commissioner, Department for Public Health
- Allyson Taylor, JD, Chief of Staff, Department for Public Health
- Joy Hoskins, RN, BSN, Chief Nursing Officer, Department for Public Health