

The 2005 Annual Report of Cowlitz County's Syringe Exchange Program

Background

The Cowlitz County Health Department began operating a syringe exchange program (SEP) in January 2000 after receiving approval by the Cowlitz County Board of Health/Commissioners.* The SEP initially operated out of a mobile van at several different locations before moving into a permanent location within the health department. The SEP has always been operated on a part-time basis about four hours a week. In its first five years of operation, the Cowlitz County Health Department's SEP has had over 24,500 visits and exchanged over 1 million syringes.

Syringe exchange programs exist internationally and are well documented as a cost-effective public health intervention that can prevent and interrupt transmission of disease. The SEP provides a crucial link for clients to much-needed services and to partner with local medical and substance abuse treatment providers to assure prompt referrals and care for this population. SEP's work best when combined with other educational and risk reduction messages and interventions, counseling, and substance abuse treatment options. The initial objectives of the SEP were to:

1. Reduce the rate of transmission of HIV, hepatitis A, B & C, and other bloodborne diseases among IDUs, their sexual partners and offspring by eliminating the sharing of contaminated syringes and needles.
2. Provide information about safer injection practices and other harm reduction education materials, including condoms and other written information to promote safer sexual practices.

In addition to these, the SEP now also strives to:

3. Facilitate entry into substance abuse treatment and mental health services.
4. Provide Hepatitis A, B, and influenza vaccination to high-risk adults and perform HIV counseling and testing.
5. Promote/coordinate access to the health care system.

Evaluation

The evaluation of this program is partially based on the ability to collect accurate self-reported information from the clients, and their trust that their confidentiality will be protected. Each year the data have been refined and improved. However, because of the nature of this program and its relative newness, exact comparability from the inception of the SEP in some areas is not possible. This report presents current reported information and correlation of trends in disease attributable to syringe use as best possible.

* Because injection drug users (IDUs) in the United States tend to use syringes with non-removable needles, the terms "syringe" and "needle" are used interchangeably in this report. Also, the use of the word "he" applies to both genders

Operation of the program

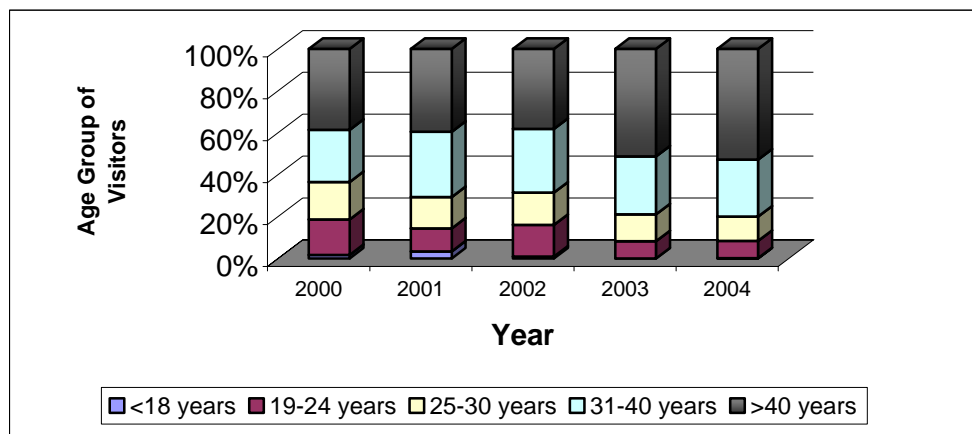
Each client obtaining clean syringes is asked to create his own unique identifier, which is usually a combination of letters and numbers that the client can easily remember. This code links the client's visits over time in the SEP database. At entry into the program the client is asked a series of questions including his age, gender, city of residence, if he is exchanging for others, and his drug(s) of choice. He is also asked which preventive services he has received or has been referred to (such as hepatitis vaccination or HIV testing). After the initial visit, he presents his code and is asked limited questions about drug use, employment and income at each visit.

Syringes are exchanged on a one-for-one basis accompanied by other materials (e.g. written pamphlets, condoms, band aids, cotton balls) as appropriate. Currently, there is no limit to the number of syringes exchanged. Staff operating the SEP are well trained to assess physical and emotional issues and include a nurse, outreach worker, social worker, and other support people.

Summary findings

Clients in the Cowlitz County Health Department's SEP are almost evenly divided between men and women. There is progression towards older clients with more racial and ethnic diversity as the program continues (Figure 1).

Figure 1. Age Distribution of Syringe Exchange Program Clients, 2000-2004



Most SEP clients gave Cowlitz County as their county of residence: (63% Longview; 24% Kelso; 6% another city in Cowlitz County). Notably, however, 7% listed their current residence as outside the county, mostly Columbia County, Oregon. The percentage of clients coming from outside of the county appears to be increasing, from 3% in 2001 to 7% in 2004.

The people using the SEP are economically challenged. During 2004 only 8% reported being regularly employed, 11% were irregularly employed, and over 75% were unemployed. Of clients seen during 2003 and 2004, 60% had no health insurance, 23% had Medicaid coverage, and less than 5% reported having private medical coverage. This information was unavailable for some.

Since the SEP operates on the principle of a one-for-one exchange, it is possible that a person is exchanging syringes for more than himself. At each visit the client is asked this question. About half of SEP clients exchange needles solely for themselves (Figure 2). More than a quarter of clients visiting the SEP during 2004 did so once (27%); 57% came between 2 and 10 times during the year; 15% accessed the program between 11 and 40 times during the year, and three clients (<1%) came to SEP between 53 and 63 times – or a little more than weekly (Figure 2).

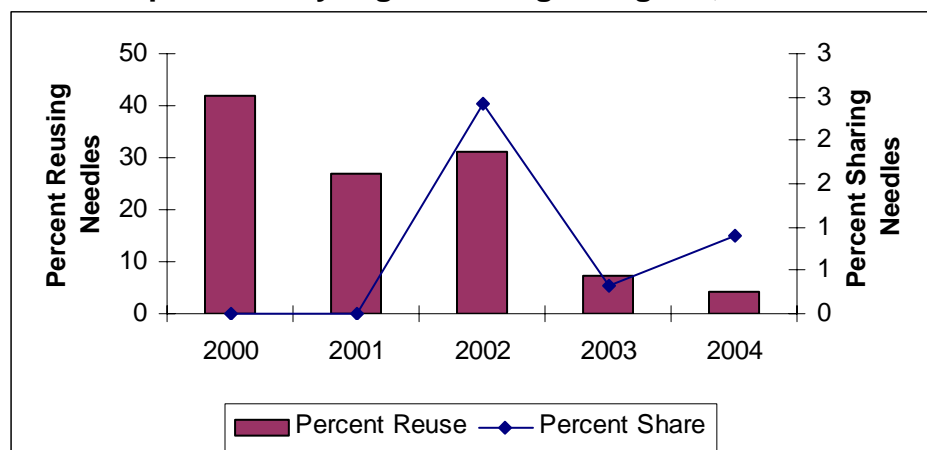
It is a goal of the SEP to have people exchange for themselves. This allows staff to assess risk behaviors and to directly convey personalized prevention and education messages, as well as offer vaccinations, HIV testing, and referral to medical, dental, mental health and substance abuse services. The absolute number of syringes exchanged has increased over time and was 276,718 in 2004 (Figure 2).

Figure 2. Annual Program Statistics, Cowlitz County Health Department Syringe Exchange Program, 2000-2004

Year	2000	2001	2002	2003	2004
Number of individuals served per year				577	548
Average number of visits per person per year				5.4	5.7
% that exchange for themselves only	47%	44%	47%	43%	56%
Total number of syringes exchanged per year	81,528	224,607	288,368	227,360	276,718
Average no. needles exchanged per visitor	106	185	136	82	89

Two behaviors – reusing syringes and/or sharing them with others – are associated with greatly increased risks of transmitting bloodborne pathogens. There has been a significant decrease in needle reuse (Figure 3), which is likely due to availability of clean needles and persistent prevention messages. This in itself is a successful public health measure for Cowlitz County.

Figure 3. Client Risk Behaviors, Sharing and Reusing Needles, Cowlitz County Health Department Syringe Exchange Program, 2000–2004

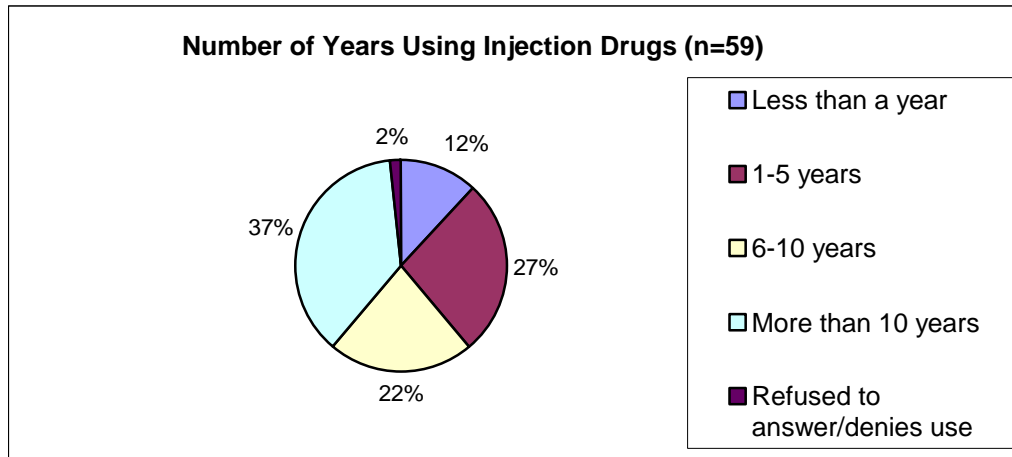


In June of 2005 SEP clients were surveyed about how they obtained clean needles *before* coming to SEP; 55% of clients surveyed cleaned and reused their own or someone else’s needles and 19% of clients reported that they would share needles with someone else. Clients were also asked about how they would currently get clean

needles if they had none after leaving jail or a treatment center - 36% responded that they would obtain needles from a friend and 31% would return to SEP for clean needles. Finally, clients were asked if they had any other way to obtain clean needles and 39% stated "No".

The same survey collected information on how long clients have been using injection drugs; 86% reported using injection drugs for a year or longer. Of those, 37% of reported using for 10 years or longer (Figure 4).

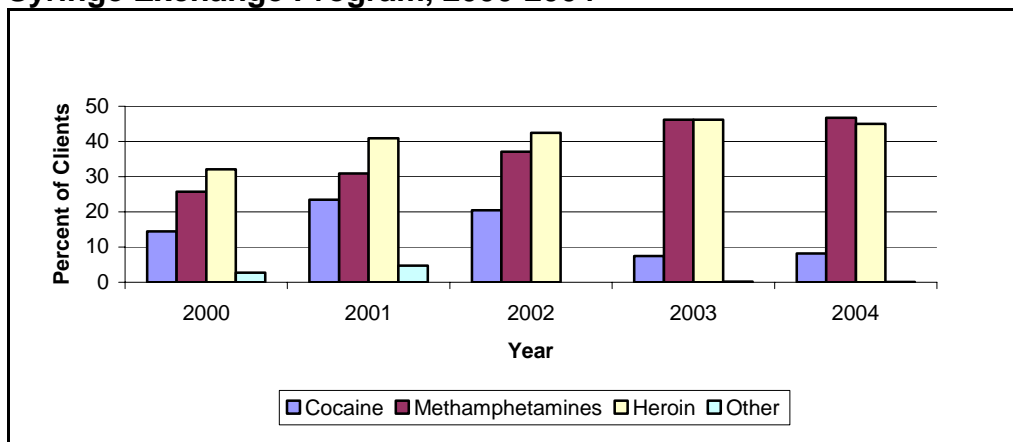
Figure 4. History of injection drug use, Cowlitz County Health Department Syringe Exchange Program, 2005.



The Cowlitz County Health Department has been surveying local substance abuse treatment centers since 2002 to determine how aware intravenous drug users are of the SEP. Of nearly 800 surveys collected from 2002-2005, 55% of respondents were aware of the SEP. The survey included any person being seen for substance abuse and not solely intravenous users. Of those aware of the SEP, over a quarter had utilized services at the SEP. People were asked who referred them to treatment - asking them to mark all that apply: 41% indicated a self-referral to treatment; 27% said a friend or family member; 10% indicated the legal system (court, judge, or lawyer); 8% indicated SEP; 7% Department of Social and Health Services; and the remaining 8% another agency or provider in the community.

The drugs of choice are depicted in Figure 5 - with methamphetamines surpassing heroin in 2004 for the first time.

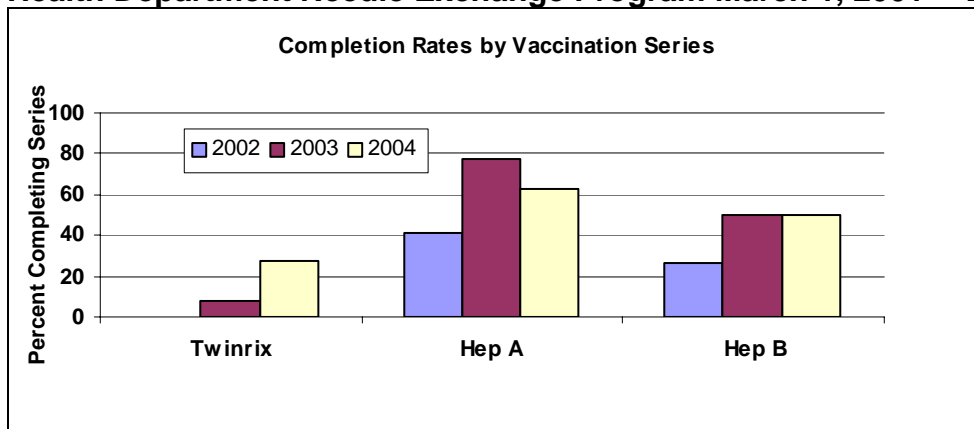
Figure 5. Drug Preferences of Clients of the Cowlitz County Health Department Syringe Exchange Program, 2000-2004



Vaccination Status

Since 2001, over 188 doses of hepatitis A vaccine have been given at the SEP; 128 doses of hepatitis B vaccinations were given; and 304 doses of the combined hepatitis A and B vaccine (TwinRix) administered (Figure 6).

Figure 6. Visitors Completing Hepatitis Immunization Series, Cowlitz County Health Department Needle Exchange Program March 1, 2001* - December 31, 2004



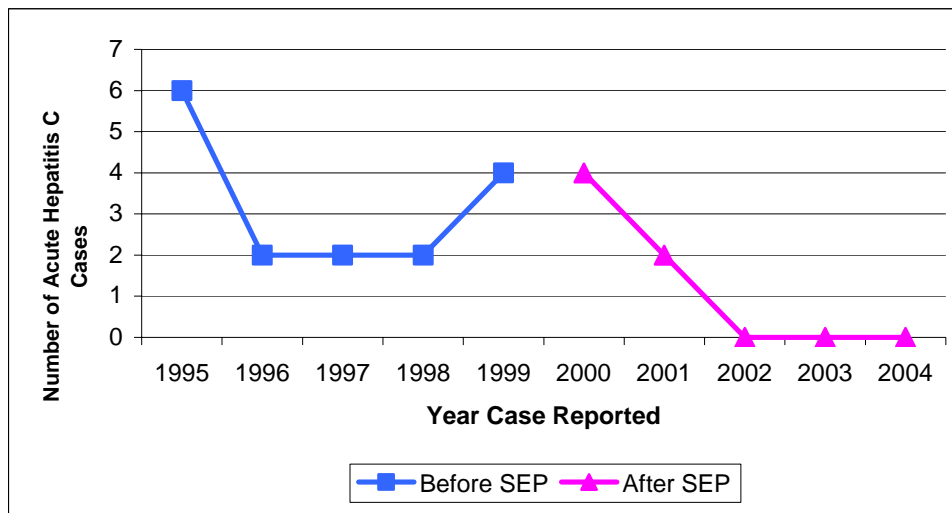
Disease Outcomes

It is difficult to assess precisely what programs, personal risk reduction strategies, or interventions influence disease rates in a community. In reality, it is probably multi-faceted and influenced by many active partners including agencies, providers, and individuals themselves. When cases of disease are reported their individual risk factors for exposure are assessed, including whether a person has used or shared needles. To the degree it can be captured, the SEP contributes to the lowering of rates of Hepatitis A, B, C, and HIV.

Hepatitis A

The Hepatitis A virus (HAV) is not transmitted through blood-to-blood contact, but it is more common in persons using illicit drugs. Hepatitis A has been a significant cause of illness in the past and the CCHD has aggressively targeted at-risk adults for vaccination (Figure 7).

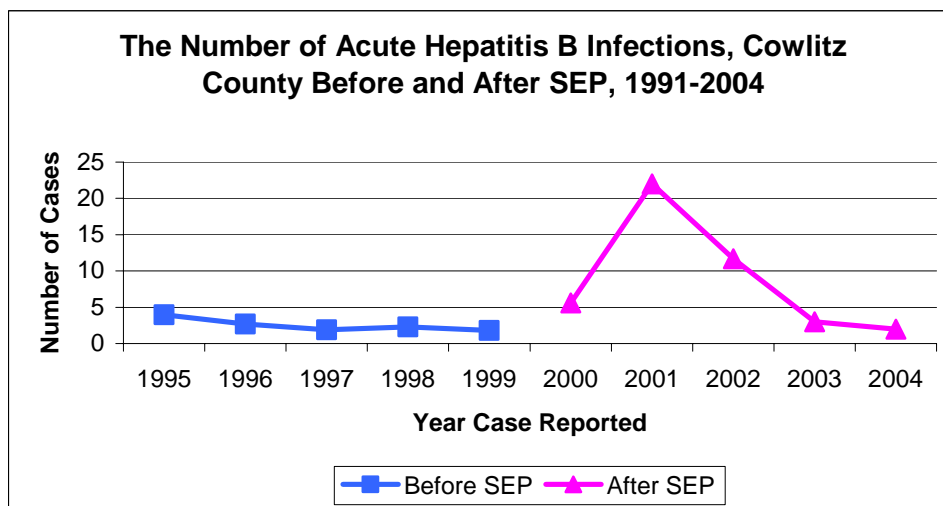
Figure 7. Number of Hepatitis A Infections Reported in Cowlitz County Before and After the Start of SEP (2000), 1995-2004



Hepatitis B

Hepatitis B viral (HBV) infection can cause symptoms similar to HAV. Most adults fight off infection with HBV and have no long-term health problems. But in 5% of cases, it becomes chronic (lasting more than six months), and can then cause cirrhosis, liver cancer, and liver failure, resulting in 6,000 deaths per year nationally. HBV and hepatitis C (HCV) infections are also acquired relatively rapidly among IDUs.

Figure 8. The Number of Acute Hepatitis B Infections, Cowlitz County Before and After the Start of SEP (2000), 1990-2004



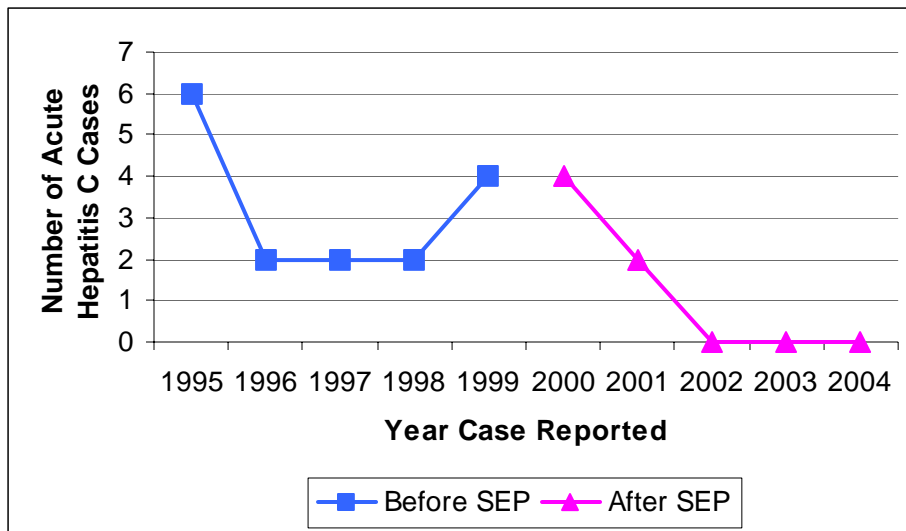
Hepatitis C

In Cowlitz County no new acute hepatitis C cases have been reported since 2001. Our incidence of acute infections with hepatitis B has typically remained at about 5 cases per 100,000 population. During 2001 and 2002 there was an outbreak reported among IDUs and residents with other risk factors for infection, because the SEP clients are anonymous, it is unclear whether any of the cases had attended SEP. A review of cases reported 2000-2004 indicates a decrease in the number of cases reporting

injection drug use. Between 50%-70% of IDUs become infected with HCV within 5 years of beginning injection drug use; it is usually the first bloodborne virus they acquire, and many have several different infections.¹

The Centers for Disease Control and Prevention (CDC) notes that, “Individuals who injected drugs, even if they did so on only one occasion many years ago, are at highest risk for HCV infection. HCV infection is rapidly acquired following the initiation of injection drug use and occurs from the sharing of needles, syringes, or other equipment associated with drug use. Of persons injecting drugs for at least 5 years, 60 percent to 80 percent are infected with HCV compared to about 30 percent infected with HIV. The high rate of HCV infection among injection drug users is also reflected in the high rates (15 percent to 40 percent) of HCV infection found among incarcerated persons. More than 80 percent of the nation’s estimated 1.7 million current injecting drug users have been incarcerated.”² The rate of acute HCV infection in Cowlitz County has decreased to zero over the last few years.

Figure 9. Number of Acute Hepatitis C Infections Reported in Cowlitz County Before and After the Start of SEP (2000), 1995-2004



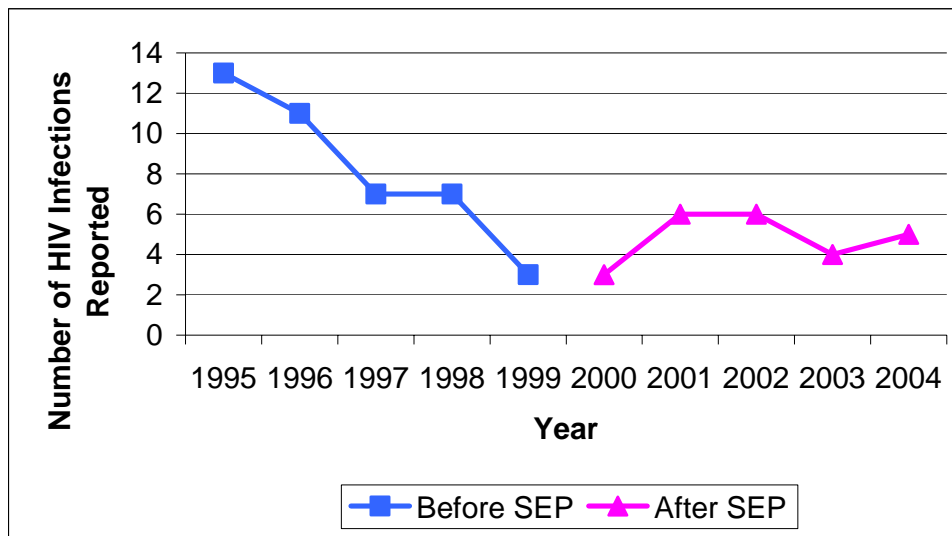
HIV/AIDS

The proportional distribution of HIV/AIDS cases by transmission category in the United States has shifted since the beginning of the epidemic. In 1985, male-to-male sexual contact accounted for 65% of all AIDS cases in the U.S.; in 2003, this transmission category accounted for 42% of all AIDS cases. The proportion of AIDS cases attributed to injection drug use increased during 1985–1994 and then slightly decreased, accounting for 22% of all cases in the U.S. during 2003. Figure 10 illustrates the number of new HIV infections reported in Cowlitz County each year.

¹ Centers for Disease Control and Prevention. “Viral Hepatitis and Injection Drug Users” September 2002. CDC. http://www.cdc.gov/idu/hepatitis/viral_hep_drug_use.pdf

² National Hepatitis C Prevention Strategy: A Comprehensive Strategy for the Prevention and Control of Hepatitis C Virus Infection and its Consequences, The Division of Viral Hepatitis, National Center for Infectious Diseases Centers for Disease Control and Prevention, Summer 2001. <http://www.cdc.gov/ncidod/diseases/hepatitis/c/plan/strategy.pdf>

Figure 10. Number of HIV Infections Reported in Cowlitz County Before and After the Start of SEP (2000), 1995-2004



Conclusion

In summary, the number of visits to the Cowlitz County SEP increased by more than three-fold from between 2000 and 2004, and the number of syringes exchanged increased from about 81,000, in 2000 to nearly 277,000 in 2004. Based on a county population of 95,000 residents, in 2000 an average of less than 1 syringe per resident was exchanged. By 2004, that rate was 3 per resident. While the numbers have increased, there was a significant decrease in the rate of needle reuse. This, and the SEP's emphasis on hepatitis vaccination, routine HIV testing, and prevention and education has led to greatly increased immunization rates and decreased disease rates among this high-risk population. There is strong evidence that the SEP is contributing to the reduction of HIV, Hepatitis A and C in our community. And while there has been an overall increase in the incidence of hepatitis B, it is decreasing among IDUs.

At this time neither vaccine nor cure exists for HIV or hepatitis C. We will continue to rely on prevention efforts to slow the spread of disease for years to come. For IDUs currently not in treatment, exchanging clean needles for used is the preferred method for preventing bloodborne pathogen transmission.

Recommendations

- Consider program changes such as direct exchange for individuals only.
- Continue to enhance data collection to better track usage and completion of services.
- Encourage and support comprehensive policies and initiatives by the Board of Health/Commissioners to reduce drug presence and use, including the evaluation of drug treatment program's capacity.
- Support community-based discussions on strategies to enhance voluntary entry of clients into substance abuse treatment programs.
- Continue efforts to promote testing for hepatitis B, C, and HIV among SEP clients, prevention messages, and opportunities to reach those most at risk
- Evaluate costs of the SEP and look for any efficiencies/savings