Needle Exchange Facts

Background and History

The Centers for Disease Control and Prevention (CDC) estimates that close to one million individuals are currently living with HIV in the United States. As of June 2000, CDC reported that there have been 753,907 reported actual AIDS cases in the U.S. Twenty-five percent of these cases are attributed to risk factors related to injecting drug use. When mother-to-child HIV transmission, and transmission through sexual contact with an injection drug user are included, 36 percent of all AIDS infections can be related to injecting drug use. The Substance Abuse and Mental Health Services Administration estimates that as many as 2.4 million Americans may be injecting drug users. The link between the epidemics of HIV and substance abuse and subsequent transmission to sexual partners and children cannot be denied.

There is overwhelming evidence that needle exchange programs (NEPs) work: they prevent the transmission of HIV and do not promote substance use. Since 1989, Congress has restricted the use of federal funds for needle exchange programs. Initially, Congress feared that the implementation of needle exchange programs would encourage substance abuse by sending the message that injection drug use is endorsed and promoted through the distribution of clean needles. The same thinking prevails today. While the U.S. Secretary of Health and Human Services (HHS) has the legal authority to determine whether needle exchange programs reduce the transmission of HIV and do not encourage the use of illegal drugs, competing political and philosophical interests have overruled those determinations. As recently as 1998, then Secretary of HHS Donna Shalala certified that based on extensive scientific research, needle exchange programs are an effective component of a comprehensive strategy to reduce HIV transmission and do not encourage the use of illegal drugs. Nonetheless, the ban on federal funding for needle exchange programs has not been lifted.

U.S. Surgeon General David Satcher, the American Medical Association, the American Bar Association, the American Public Health Association, and the National Conference of Mayors all support lifting the federal ban on funding needle exchange programs. Support for needle exchange programs also comes from the U.S. public. Most recently, 71 percent of Americans surveyed in a poll conducted by the Lindesmith Center-Drug Policy Foundation indicated that they support lifting the ban on the use of federal funds for NEPs. Additionally, a poll conducted by the Kaiser Family Foundation found that 66 percent of Americans support needle exchange programs. A poll by the Human Rights Campaign identified that 55 percent of Americans supported the removal of the ban on NEPs. The American public consistently supports these programs as an effective method to reduce HIV transmission.

Needle Exchange Programs Work

Needle exchange programs first began in 1983 in Europe. Recognizing that it would be impossible to completely eradicate drug use, Amsterdam introduced a NEP to reduce the transmission of Hepatitis B and HIV among injection drug users and subsequently to their sexual partners and children. Needle exchange programs are not needle distribution programs. Injecting drug users are required to return a used syringe in order to obtain a new, sterile needle. In more than 80 cities in 38 states in the U.S., NEPs have been created to minimize the risk of HIV infection among injecting drug users. There are currently 113 NEPs in the U.S. In addition to needle exchange, these NEPs often provide drug treatment referrals, methadone clinics, peer education and HIV prevention programs.
Numerous studies in the United States and abroad have determined that needle exchange programs are effective in reducing HIV transmission among substance users. Most notably, in Southern Australia 55 NEPs serving a population of 1.2 million have resulted in no new HIV infections among injecting drug users over the past three years. Rates of HIV infection among injection drug users at a Hawaii NEP declined from five percent in 1989 to one percent in 1996. In Connecticut, there was a reported increase in re-use and sharing of contaminated injection equipment among injecting drug users after a NEP was closed down. The use of clean needles, often obtained through NEPs, reduces the risk of HIV transmission among injecting drug users.

In March of 1997, the National Institutes of Health and the Institute of Medicine demonstrated that needle exchange programs contribute to 80 percent reductions in risk behaviors in injecting drug users and a 30 percent or greater reduction of HIV transmission. NIH also concluded that there is a preponderance of evidence to show that needle exchange programs do not encourage increased substance abuse.

Noted researcher Don C. Des Jarlais has authored numerous scientific reports repeatedly demonstrating that needle exchange programs prevent the transmission of HIV. He has conducted scientific research in Glasgow, Scotland; New Haven, Connecticut; San Francisco, California; and New York City, New York. At each of these cities, Dr. Des Jarlais has repeatedly found that NEPs decrease HIV transmissions among substance abusers. Additionally, Des Jarlais has found that these programs actually encourage injecting drug users to seek treatment if the NEP is associated with a drug treatment and referral center or a methadone clinic.

**Needle Exchange Programs Do Not Encourage Substance Abuse**

Literally hundreds of studies of NEPs have been conducted and summarized in a series of eight federally funded reports over the last ten years—and each of the eight reports has concluded that NEPs can reduce the number of new HIV infections and do not appear to lead to increased drug use among injecting drug users or society as a whole. In a study of a needle exchange program in San Francisco, the results indicated that the program did not encourage increased drug use. Over a five-year period, there was no significant increase in new or young injecting drug users or an increase in drug use by current users. Surprisingly, frequency of injection among the study participants decreased from two injections per day to less than one, and the rate of new drug users decreased from three percent to one percent. A similar study of a needle exchange program in Baltimore indicated NEPs that are closely linked and integrated with drug treatment programs have high levels of retention for substance abuse treatment. The study showed that needle exchange programs assist injecting drug users in abstaining from drug use if the NEP is linked to needed services and drug treatment facilities.

**Needle Exchange Programs Are Cost Effective**

The estimated annual budget for running a needle exchange program is $169,000 per year. Sixty-six percent of an average NEP budget is applied to staffing, rent, and overhead. With an average syringe costing $1.35, there is the potential to serve over 100 clients per day. Considering that as many as 33 Americans are infected with HIV each day due to contaminated syringe equipment, if only two HIV infections are prevented through clean needles, the cost of running a needle exchange program for a year would save money.

Mathematical models predict that NEPs prevent HIV infections among injecting drug users, their partners, and family members at a cost of approximately $9,400 per avoided HIV infection. Considering the lifetime cost of treating a person living with HIV/AIDS is approximately $200,000, this represents a 95.3 percent savings per life. National support for needle exchange could save tens of thousands of lives and billions of dollars.

**Conclusion**

Needle exchange programs save lives. Incorporated as part of a comprehensive HIV prevention strategy, these programs are an effective public health intervention that reduces the transmission of HIV and does not encourage the use of illegal drugs. Needle exchange programs, if linked with other services such as substance abuse treatment, also assist clients in breaking the cycle of substance abuse. Most notably, these programs are an effective and comparatively inexpensive method to prevent new HIV infections among one of the highest at-risk populations.