

Intravenous Drug Users & Syringe Exchange Programs: Important Research for Your Community



Center for Interdisciplinary Research on AIDS

Syringe Exchange Programs (SEPs) Are Associated with Lower Risk of HIV/AIDS

According to studies conducted by CIRA scientists, syringe exchange programs (SEPs) lower risk of HIV/AIDS contraction in intravenous drug users. SEPs:

- Promote safer routes of syringe acquisition and discard
- Lower injection risk

One study, conducted with more than 600 participants in Hartford CT, Chicago IL, and Oakland CA, found that clients were two to three times less likely to inject with someone else's used syringe, to share a syringe to dissolve drugs, to share water for dissolving drugs or rinsing syringes, or to reuse previously used syringes.

SEPs Are Associated with Lower Incidence of AIDS

The existence of an SEP in New Haven is directly linked to a decrease to the number and percentage of AIDS cases beginning eight years after the start of the program – the time expected based on the time lag between infection and AIDS.

No parallel decrease was seen in areas with neither SEPs nor legal pharmacy access to clean syringes.

Within five months, the prevalence of potentially infected syringes was decreased by an astounding two-fifths – a level that remained throughout the duration of this study.

As the program gained momentum, the average circulation time of syringes decreased from nearly two weeks to less than three days; this implies that syringes had less chance to be shared, thus lowering the risk of HIV transmission.

SEPs Foster Change in IDU Communities

In examining the effectiveness of SEPs in neighborhoods that implemented such programs versus a neighborhood where legal access to syringes was unavailable, researchers found that injectors living in areas with a syringe exchange site or a pharmacy selling syringes to injectors were:

- Less likely to share and reuse syringes
- To acquire syringes from unsafe sources
- To discard their used syringes improperly than those in neighborhoods without such a program.

Neighborhoods with neither a SEP nor over-the-counter pharmacy sales were more likely to have large Latino populations and be poor.

Researchers also found customers to be effective in assisting the entire IDU community. Customers can recruit the riskiest injector: the non-customer with

whom they are already injecting. Customers can recruit those most at risk – those who, while not customers, actually received syringes from those in the program.

Knowledge of Hepatitis Is Low as Risks of Contraction Are High

Illegal drug injection is a major risk factor for both HIV and hepatitis infections. While SEPs have focused on HIV, hepatitis B and C have been neglected.

SEP customers were consistently less likely than non-customers to engage in a range of risk behaviors, with the notable exception of safely stanching blood post-injection – a behavior that is more likely to transmit hepatitis than HIV. While SEP customers are more knowledgeable than others on the risks of HIV, knowledge of hepatitis is low among all drug injectors, even among those participating in SEPs.

The associations between knowledge and continued risk demonstrate that education is a necessary activity to reduce hepatitis transmissions. Users with knowledge of hepatitis had most likely undergone substance abuse treatment, suffered from hepatitis B vaccination, or participated in injection practices that reduced contact with contaminated blood or water.

SEPs help to disseminate HIV prevention messages; but more must be done to prevent hepatitis transmission.

SEPs Show Large Financial Benefits

SEPs greatly lower the risk of contracting HIV/AIDS. The cost of preventing HIV through an SEP is significantly less than the cost of treating those with HIV and AIDS. During the first three years of SEP implementation in New Haven, the program saved \$1.9 million in net savings. In comparing New Haven to Springfield, MA, it was found that – because of higher incidence of HIV/AIDS – Springfield would lose money because of the lack of an SEP.

These findings come from studies conducted by Robert Heimer, Ph.D. in conjunction with other CIRA scientists including Edward H. Kaplan Ph.D., Kaveh Khoshnood Ph.D., Merrill Singer Ph.D., Laretta E. Grau Ph.D., Scott Clair, Ph.D., and Susan Shaw Ph.D..

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About CIRA

The Center for Interdisciplinary Research on AIDS (CIRA) was established in 1997 and is funded through a grant from the National Institute of Mental Health (NIMH). CIRA focuses on the prevention needs of those most affected by HIV in

Connecticut, including the poor, drug users and their partners, and communities of color. The Center unites three Connecticut research institutes: Yale University in New Haven, The Institute for Community Research (ICR) and the Hispanic Health Council (HHC) – both in Hartford.

The Center brings together scientists from 13 different disciplines with the mission of supporting the conduct of research aimed at the prevention of HIV infection and the reduction of negative consequences of HIV disease in vulnerable and underserved populations. CIRA also supports research on legal, policy and ethical issues in HIV/AIDS.

The Center presently provides infrastructure support to over 60 research and training grants and over 40 affiliated scientists.

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