

## Access to Sterile Syringes

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**If IDUs who continue to inject use a new sterile syringe for every drug injection, it can substantially reduce their risks of acquiring and transmitting blood-borne viral infections.**

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More than 20 years into the AIDS epidemic, roughly one million Americans (estimated range between 1,039,000 and 1,185,000) are now living with HIV and about 40,000 new infections occur every year. Approximately 1.25 million Americans are chronically infected with hepatitis B; 2.7 million Americans are chronically infected with hepatitis C. **(1,2,3)**

As of 2004, injection drug use accounted for about one-fifth of all HIV infections and most hepatitis C infections in the United States. **(1,3)** Injection drug users (IDUs) become infected and transmit the viruses to others through sharing contaminated syringes and other drug injection equipment and through high-risk sexual behaviors. Women who become infected with HIV through sharing needles or having sex with an infected IDU can also transmit the virus to their babies before or during birth or through breastfeeding.

To effectively reduce the transmission of HIV and other blood-borne infections, programs must consider a comprehensive approach to working with IDUs. Such an approach includes a range of pragmatic strategies that address both drug use and sexual risk behaviors. One of the most important of these strategies is ensuring that IDUs who cannot or will not stop injecting drugs have access to sterile syringes. The U.S. Public Health Service and several institutions and governmental bodies have recommended use of sterile syringes as an important risk reduction strategy. **(4)** In supporting this position, the Institute of Medicine of the National Academy of Sciences has said:

"For injection drug users 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." **(5)**

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### Why Are Sterile Syringes Necessary for Injection Drug Users?

The process of preparing and injecting drugs provides many opportunities for transmitting HIV and viral hepatitis. Before injecting intravenously, an IDU determines whether the needle is in a vein by pulling back on the syringe plunger. If blood enters the syringe, the needle is in a vein and the IDU will inject the drug. After injecting, the IDU rinses the syringe with water. This water is often used to later prepare drugs for injection. If the IDU has HIV or viral hepatitis, his or her blood will contaminate the entire syringe and the preparation equipment with the virus, which can remain viable for several weeks. **(5)**

Transmission can occur directly, when an infected IDU shares a syringe with others, or indirectly, when an infected injector shares injection paraphernalia such as water, cookers, cottons, and spoons, or when he or she jointly prepares and shares drugs with other IDUs. Given the efficiency with which HIV and other blood-borne viruses can be transmitted through injection practices, ensuring that IDUs who continue to inject have access to sterile syringes is a vitally important strategy to prevent disease transmission. Ensuring access to sterile syringes does not increase the number of persons who inject drugs or the number of drug injections. **(5,6,7)** It does reduce the sharing and reuse of syringes. **(8,9)**

### **How Do IDUs Obtain Syringes?**

IDUs get their syringes in several ways: **(10)**

- through illegal or "black market" sources, such as street drug dealers, needle dealers, or shooting galleries or from friends, injection partners, or diabetics—these syringes may not be sterile and may have been used and contaminated with blood; used syringes are sometimes repackaged and sold as new;
- by buying them from pharmacies—this ensures that the syringes are sterile; and
- from syringe exchange programs (SEPs)—this ensures that the syringes are sterile and provides an avenue for safe disposal of used syringes.

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### **Why Is Access to Sterile Syringes a Critical Issue?**

It is estimated that an individual IDU injects about 1,000 times a year. **(11)** This adds up to millions of injections, requiring millions of syringes every year. Most IDUs who continue to inject are currently unable to obtain a sufficient number of sterile syringes to effectively reduce their risks of acquiring and transmitting blood-borne viral infections. **(12)**

### **What Factors Limit IDUs' Access to Sterile Syringes?**

- Most states have legal restrictions on the sale and distribution of sterile syringes **(12)**: 47 states have drug paraphernalia laws and 8 states have syringe prescription laws. These restrictions present significant barriers to the sale of syringes to IDUs by pharmacists, the prescription of sterile syringes to IDUs by physicians, and the operation of SEPs.
- Twenty-three states have pharmacy regulations or practice guidelines that limit the pharmacy sale of sterile syringes to IDUs. For example, pharmacy practice regulations that require purchasers to show identification, sign a register of syringe purchasers, or state the purpose for the purchase, reduce IDUs' ability or willingness to buy syringes. Even in states that have repealed laws and regulations banning the sale of sterile syringes to IDUs, these sales may be hampered by specific pharmacy store policies and the personal reluctance of some pharmacy managers or pharmacists to sell syringes to customers who may be IDUs.
- The fear and negative attitudes about drug use and IDUs felt by the general public, police, policy makers, and community leaders contribute to strong

opposition to initiatives that might increase opportunities for IDUs to obtain sterile syringes.

- IDUs' own attitudes and circumstances also limit access. These include fear of arrest, lack of money to buy sterile syringes, reluctance to self-identify as an IDU by going to a SEP or a physician to obtain a prescription for syringes, or lack of readily available sources of sterile syringes when needed.

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## What Have States and Communities Done to Increase Access to Sterile Syringes?

Three types of interventions are now being carried out in the U.S. to increase IDUs' access to sterile syringes:

- Several states and municipalities are engaged in policy efforts to change existing syringe laws and regulations to allow increased pharmacy sales of syringes, remove criminal penalties for possessing syringes, and permit SEP operation. (See the related fact sheet [State and Local Policies Regarding IDUs' Access to Sterile Syringes.](#))
- State and community-sponsored initiatives with pharmacists and physicians to increase syringe prescriptions and sales also are underway to provide education about public health approaches to HIV prevention, including the role of sterile syringes in reducing the transmission of blood-borne pathogens, to address concerns and questions about syringe prescription sales, and disposal, and to encourage changes in policies and practice. (See the related fact sheets, [Pharmacy Sales of Sterile Syringes](#) and [Physician Prescription of Sterile Syringes to Injection Drug Users.](#))
- Many cities and states are pursuing efforts to support syringe exchange programs, which provide IDUs with free sterile syringes and a way to safely dispose of blood-contaminated used syringes. Many SEPs also provide other services, such as links to substance abuse treatment, education and counseling, and health services. (See the related fact sheet [Syringe Exchange Programs.](#))
- In communities throughout the United States, law enforcement officials, medical and pharmacy organizations, public health professionals, policy makers, community-based organizations, and providers have worked together to examine the legal, policy, and social circumstances regarding obtaining sterile syringes for IDUs who continue injecting drugs. Community leaders have educated their states and communities about the facts of injection-related transmission of blood-borne infection and the public health benefits of improving access to sterile syringes as part of a comprehensive public health approach. They also have educated IDUs about substance abuse treatment and the importance of using sterile syringes, addressed concerns about safe syringe disposal, and developed initiatives that improve IDUs' access to this and other vital prevention strategies.

### **Safe Disposal of Used Syringes: An Integral Element of the Access Issue**

Ensuring that IDUs who continue to inject can obtain a sufficient number of sterile syringes is only part of the equation; counseling, health education, and access to

substance abuse treatment are equally important. Safe disposal of used syringes is another important consideration, both to reduce the chances that an IDU will reuse a blood-contaminated syringe and to respond to community and pharmacist fears about the risks of discarded syringes in neighborhoods. (See the related fact sheet [Syringe Disposal](#).)

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## For More Information

Read [A Comprehensive Approach: Preventing Blood-Borne Infections Among Injection Drug Users](#), which provides extensive background information on HIV and viral hepatitis infection in IDUs and on the legal, social, and policy environment. It also describes strategies and principles for addressing these issues.

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## Sources

1. Glynn M, Rhodes P. Estimated HIV prevalence in the United States at the end of 2003. 2005 National HIV Prevention Conference; June 12–15, 2005. Atlanta, GA. Abstract 595.
2. Centers for Disease Control and Prevention (CDC). [Hepatitis B fact sheet](#). Accessed December 22, 2005 from <http://www.cdc.gov/ncidod/diseases/hepatitis/b/fact.htm>.
3. Centers for Disease Control and Prevention (CDC). [Hepatitis C fact sheet](#). Accessed December 22, 2005 from <http://www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm>.
4. Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institute on Drug Abuse and Substance Abuse and Mental Health Services Administration. [HIV prevention bulletin: Medical advice for persons who inject illicit drugs](#). May 9, 1997.
5. Normand J, Vlahov D, Moses LE, eds. [Preventing HIV transmission: the role of sterile needles and bleach](#). Washington (DC): National Academy Press, 1995. Accessed December 23, 2005 from <http://www.nap.edu/books/0309052963/html/>
6. Guydish J, Bucardo, J, Young M, Woods W, Grinstead O, Clark W. Evaluating needle exchange: are there negative effects? *AIDS* 1993;7:871-876.
7. Needle RH, Coyle SL, Normand J, Lambert E, Cesari H. [HIV prevention with drug-using populations - current status and future prospects: introduction and overview](#). *Public Health Reports* 1998;113(Suppl 1):4-18.
8. Gleghorn AA, Wright-De Agüero L, Flynn C. Feasibility of one-time use of sterile syringes: a study of active injection drug users in seven United States metropolitan

areas. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1998; 18(Suppl 1):S30-S36.

9. Heimer R, Khoshnood K, Bigg D, Guydish J, Junge B. Syringe use and reuse: effects of syringe exchange programs in four cities. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1998; 18(Suppl 1):S37-S44.

10. Gleghorn AA, Jones TS, Doherty MC, Celentano DD, Vlahov D. Acquisition and use of needles and syringes by injecting drug users in Baltimore, Maryland. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1995; 10:97-103.

11. Lurie P, Jones TS, Foley J. A sterile syringe for every drug user injection: how many injections take place annually, and how might pharmacists contribute to syringe distribution? *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1998; 18(Suppl 1):S45-S51.

12. Gostin LO, Lazzarini Z, Flaherty K, Jones TS. Prevention of HIV/AIDS and other blood-borne diseases among injection drug users: A national survey on the regulation of syringes and needles. *JAMA* 1997; 277(1):53-62.