

News Scan

NIDA ADDICTION RESEARCH NEWS

RESEARCH NEWS

Studies Shed New Light on HIV Risk-Taking Behavior Among Intravenous Drug Users

Drug use is now the major risk factor identified in new cases of AIDS in the United States, and a growing number of cases are being reported among the partners of intravenous drug users. In addition, the majority of HIV-infected newborns have mothers who were infected through their own drug use or through sexual activity with a drug user.

The urgency of the problem comes from statistics such as these: One study of street-recruited intravenous drug users and crack cocaine smokers found that among the intravenous drug users, HIV seroprevalence was 12.7 percent, and among crack smokers, HIV seroprevalence was 7.5 percent.

NIDA's top priorities in dealing with this issue are to understand the behaviors that put drug users at risk for contracting HIV and other infectious diseases; expand outreach to educate populations at risk about the relationship between drug use, AIDS, and other infectious diseases; and fund research on drug use behaviors that lead to the transmission of HIV and other infectious diseases.

HIV Infections Among At-Risk Populations in America's 96 Largest Cities			
Risk Group	Estimated Number in Risk Group	Estimated Percent HIV Positive	Estimated New HIV Infections Each Year Per 100 Group Members
Injecting Drug Users	1.5 million	14.0	1.5
Men Who Have Sex With Men	1.7 million	18.3	0.7
At-Risk Heterosexuals*	2.1 million	2.3	0.5
* Men and women who are at risk because they have sex with injecting drug users and/or bisexual or gay men. Estimates were compiled in 1996.			

One of the most important areas of research involves understanding the behaviors that drug users engage in that put them at risk for contracting life-threatening diseases.

Source: NIDA: *The Sixth Triennial Report to Congress*

Understanding the Behavior that Forges the Link Between Drug Use and HIV

Three studies supported by NIDA addressing the relationship between AIDS and drug use are featured in the March 2001 issue of *AIDS and Behavior*. One study concludes that risk behavior of drug users is inversely related to the level of seroprevalence in the community in which they live. A second study reports on a successful short-term intervention to reduce high-risk behavior by injection drug users, and a third presents survey results from current drug users about the street methods they use in an attempt to protect themselves from HIV infection or other sexually transmitted diseases.

"These studies share several common themes and cast some important light on how we can halt the spread of HIV/AIDS among drug-using populations," says NIDA Director Dr. Alan I. Leshner. "One of the unsettling observations emerging from these studies is that high-risk behaviors, such as sharing syringes and having unprotected sex, are higher in communities in which HIV infection rates are low. Drug users who live in a community with high seroprevalence are more likely to have seen firsthand the devastating effects of HIV/AIDS, and they clearly tend to be more responsive to risk-reduction interventions."

More detailed information about these three studies follows.

Study Finds Drug Users in Communities with Low HIV Rates More Likely to Engage in High-Risk Behaviors

Researchers from the National Development and Research Institutes, Inc., in New York, report on information collected from a multisite HIV prevention program funded by NIDA. Data from interviews with more than 12,000 intravenous drug users (IDUs) from 22 communities were analyzed. Each community site was characterized according to seroprevalence. Ten sites were classified as low (5 percent or less), 8 sites as moderate (6-19 percent), and 4 as high (20 percent or more).

The purpose of the study was to compare HIV-related risk behaviors among IDUs in communities with various seroprevalence rates. The researchers found that drug users living in low seroprevalence communities were more likely to engage in risky injection and sex-related risk behaviors than those living in communities with higher rates of HIV infection.

IDUs living in sites with lower seroprevalence rates had the highest rates of having sex with another IDU during the past 30 days, and reported the highest level (85 percent) of unprotected sexual acts.

There were significantly higher rates (about 2.5 times higher) of injection in high seroprevalence communities than in the low or moderate communities, yet more drug users (52 percent) in low seroprevalence communities reported using syringes belonging to other people compared to the other sites.

- **WHAT IT MEANS:** These findings, says lead investigator Dr. Sherry Deren, highlight the importance of employing prevention methods in all communities, not just those with the highest rates of HIV infection.

The study appears in the March 2001 issue of *AIDS and Behavior*.

90-Minute Counseling Session Reduces High-Risk Behaviors: Needle Use Behavior More Resistant to Change Than Risky Sexual Practices

A research team led by Dr. Mark Williams of the Center for Health Promotion Research and Development at the University of Texas-Houston School of Public Health and the Comprehensive Drug Research Center, Department of Epidemiology and Public Health, at the University of Miami School of Medicine, evaluated an educational HIV risk-reduction intervention implemented in 18 sites in the U.S. and Puerto Rico. More than 7,700 not-in-treatment drug users were targeted. The brief intervention (less than an hour and a half) reduced the incidence of risky behaviors such as sharing needles, using needles previously used by others, or participating in unprotected sexual activity. Sexual risks were reduced to a greater extent than were risks associated with needle use.

- **WHAT IT MEANS:** Brief, educational interventions might be effective in reducing sexual risk behaviors. Needle risk, on the other hand, appears more resistant to change, especially among high frequency cocaine injectors. HIV prevention strategies may be more effective if drug users are matched to an intervention appropriate to their level of needle risk.

The study appears in the March 2001 issue of *AIDS and Behavior*.

Methods Based on Street “Myths” Not Effective Protection Against HIV

A research team led by Dr. Lisa Metsch from the Comprehensive Drug Research Center at the University of Miami School of Medicine gathered information from current drug users about the practices they used to protect themselves from sexually transmitted diseases, including HIV. Members of the team interviewed 92 active users of crack and injection drugs to ascertain their level of awareness about HIV infection through sexual contact and to determine if and how they try to avoid infection.

The investigators found that these individuals were aware of their personal risk of contracting HIV/AIDS through sexual contact and that they used a variety of methods to try to protect themselves. “Unfortunately,” Dr. Metsch says, “the actions taken are neither reliable nor sanctioned by health care professionals.”

Many of the drug users used their personal assessment of a prospective partner’s cleanliness as an indication of HIV status. An individual judged as being “clean and decent” was perceived to be a safe sexual partner. Some respondents, both men and women, reported using street-bought antibiotics for prophylactic protection against HIV infection and other sexually transmitted diseases. This practice, say the investigators, not only offers a false sense of security, but also may contribute to the development of resistant strains of bacteria.

The investigators concluded that even though compliance with effective methods of preventing HIV infection such as abstinence or condom use is low among this drug-using population, these individuals are aware of the risks and are motivated to protect themselves. “The challenge,” Dr. Metsch says, “is to channel this motivation and these self-protective activities into behaviors that are effective in preventing disease transmission.”

- **WHAT IT MEANS:** Street myths about how to protect oneself from HIV infection remain among drug users and must be explicitly and directly targeted in health education messages with this population.

The study appears in the March 2001 issue of *AIDS and Behavior*.

UPCOMING EVENTS

- July 19-20, 2001: **MDMA (Ecstasy) Research: Advances, Challenges, and Future Directions**, William H. Natcher Conference Center, NIH Campus, Bethesda, MD.
- August 8-10, 2001: **2nd National Conference on Drug Abuse Prevention Research: A Progress Update**, Omni Shoreham Hotel, Washington, DC
- September 24-26, 2001: **Bridging the Power of Science and Culture to Improve Drug Abuse Research in Minority Communities**, Wyndham Franklin Plaza Hotel, Philadelphia, PA.

Watch upcoming issues of *NewsScan* for more information on these events, or call NIDA at 301-443-6245.

For more information about any item in this *NewsScan*:

- Reporters, call Michelle Muth at 301-443-6245 in the NIDA Press Office.
- Congressional staffers, call Mary Mayhew or Keith Van Wagner, NIDA Congressional Affairs Office, at 301-443-6071.

The National Institute on Drug Abuse is a component of the National Institutes of Health, U.S. Department of Health and Human Services. NIDA supports more than 85 percent of the world’s research on the health aspects of drug abuse and addiction. The Institute carries out a large variety of programs to ensure the rapid dissemination of research information and its implementation in policy and practice. Fact sheets on the health effects of drugs of abuse and other topics can be ordered free of charge in English and Spanish by calling *NIDA Infofax* at 1-888-NIH-NIDA (644-6432) or 1-888-TTY-NIDA (889-6432) for the deaf. These fact sheets and further information on NIDA research and other activities can be found on the NIDA home page at <http://www.drugabuse.gov>.

