

NASTAD: HIV PREVENTION

April 2007

In this issue:

National Alliance of State and Territorial AIDS Directors

Table of Contents

- Back to Basics: Exploring Traditional HIV Prevention Methodologies
- Treating HIV Can Help Prevent Further HIV Transmission
- Treating STDs Can Reduce the Opportunities

for HIV Transmission

- Changing Sexual Behavior Can Reduce HIV Transmission
- Using Condoms Correctly and Consistently Reduces

the Likelihood of HIV Transmission

- Using Clean Needles Reduces the Likelihood of HIV Transmission
- Abstaining from Sex Will Prevent HIV Transmission
- In Closing
- Meeting and Planning Calendar



VISIT NASTAD.ORG -->

Back to Basics: Exploring Traditional HIV Prevention Methodologies

This month's *Bulletin* focuses on the basics of preventing HIV transmission. It is widely understood and accepted that HIV transmission and, more specifically, the behaviors that put one at risk for being infected with HIV, do not happen in isolation from other circumstances. Mental health, substance use/abuse, incarceration, asymmetrical power relations between partners, and domestic abuse are some of the many issues that HIV prevention programs must consider. However, preventing HIV transmission within the complex context of clients' lives always comes down to the fundamental acts that reduce one's primary risk for being infected or infecting others. While the need to address HIV prevention in a holistic way is important, it sometimes diverts our attention from the basic strategies we know to be effective at preventing new infections.

In the end, however, all interventions and activities in our HIV prevention arsenal come down to successfully implementing these very basic approaches: treatment adherence for HIV-positive individuals, treatment of STDs, reducing sexual harm, using clean injecting equipment, using condoms properly and consistently, and abstinence. This *Bulletin* identifies, describes, and briefly explores each of these issues.

As the discourse continues to shift toward identification of individuals already infected with HIV, it is more important than ever to enhance the successful implementation of basic HIV prevention strategies. While these approaches are usually components of comprehensive prevention programs, health departments must set programmatic priorities in response to ever-changing national, state,

and local strategies (prevention du Jour); political and social environments; and with diminishing resources. How many dollars in budget lines across the country have been redirected away from disease investigation services and widespread condom distribution? How many HIV-positive individuals still await quality care and treatment services including antiretroviral therapy? What political and social barriers continue to prevent candid conversations about sex, ready access to clean needles and syringes, and sound abstinence-based comprehensive sexuality education? These approaches, while basic, are necessary to ensure individuals who are currently uninfected stay uninfected long into the future.

Treating HIV Can Help Prevent Further HIV Transmission

Logic naturally guides effective prevention against new HIV infections to the source of the virus, a person already infected. As early as 1995, the Centers for Disease Control and Prevention (CDC) funded individual-level health education and risk reduction activities. For individuals living with HIV, these interventions were coined Prevention Case Management (PCM).¹ HIV PCM is defined as "client-centered prevention activities, which assist HIV seropositive and seronegative persons in adopting risk reduction behaviors."² With the progression of time and science-based interventions, PCM has evolved into Prevention With Positives (PWP), but the basic tenets have remained the same: status disclosure, reduced sexual partners, consistent condom use, and having sex only with HIV-infected partners (serosorting).³

As late as 2000, HIV prevention efforts focusing on persons already infected were considered "secondary," with the "primary" target being individuals with behavioral risk factors or affected demographic characteristics. Since 2001, concentrated efforts at preventing transmission through activities targeting HIV-infected individuals have grown nationally in their reach. Individuals, once informed of their HIV status, are more likely to attempt to avoid transmitting the virus than before their diagnosis was known. However, the same social and emotional constraints faced by all individuals placing themselves at risk of HIV transmission are often compounded for the HIV-positive person. The strain that an HIV diagnosis places on an individual's mental health, substance use, stigmatization, and isolation can all play a part in reducing one's stamina to maintain healthy behaviors and choices and avoid HIV transmission.

Preventing new HIV infections received an astronomical boost through the advent of antiretroviral treatment (ART). In February 1994, it was determined that a three-part medical regimen of zidovudine (AZT) to a pregnant mother during pregnancy, intravenous AZT during labor, and oral AZT to the infant for six weeks demonstrated a 67 percent reduction in perinatal HIV transmission. This breakthrough prevention intervention became the standard of care in the U.S. and the beginning of ART as a prevention intervention.⁵ In 2005, CDC reported that with the appropriate intervention to mothers infected with HIV during pregnancy, labor, or delivery, HIV transmission to their infants had fallen to less than two percent in the U.S.⁶ Perinatal transmission reduction continues to succeed in the U.S. and around the world, and it planted the seed for ART as prevention. As new medications beyond AZT have been developed and new formulations, combinations, and classes continue to emerge, science has increased the life expectancy and quality of life for individuals living with HIV, and it has also provided a measure of prevention for individuals not yet infected.

The evidence of reduced perinatal transmission since 2001 proves that HIV transmission can be avoided with aggressive ART treatment. There has been anecdotal agreement that the amount of virus contained in one's fluids has a direct relationship to the amount of virus one would transmit to an uninfected partner, therefore impacting the likelihood of transmission. As a part of the MMWR *Incorporating HIV Prevention into the Medical Care of Persons Living with HIV*, CDC encouraged medical providers to impress upon patients that an increased viral load level would likely result in increased infectiousness and risk for transmission to partners.⁷ CDC synthesized a variety of studies proving that a high viral load is a major risk factor for HIV transmission. It was also

indirectly suggested that lowering viral load would reduce the risk for HIV transmission, evidenced by what had occurred in mother to child transmissions.⁸ However, since HIV could still be detected in the genital secretions and the tissue of HIV-infected individuals, the likelihood of transmission, even with an undetectable viral load, remained a risk.

In 2005, a Spanish study of sero-discordant couples recruited from 1991-2003 found that HIV prevalence among the negative partner fell from ten-percent to two-percent following the availability of ART. The investigators also noted that no HIV transmission occurred in the study couples when the positive partner was adhering to an ART regimen. The findings concluded that "after the introduction of ART, an important decrease in HIV transmission was observed in the study group" that could not be attributed to any other factors. ART, "as long as it is not accompanied by a relaxation in other prevention measures, could greatly contribute" to reducing HIV transmission.⁹

An additional study conducted among gay men in San Francisco showed a 60 percent decline in HIV infectivity following the introduction of ART regimens for the study participants. Investigators concurred that this decline proves the clinical benefit of ART for HIV infected individuals as well as providing an effective "tool" for prevention. "Use of ART is a potentially important HIV prevention tool, one that is likely to succeed, however, only if accompanied by a continued emphasis on avoidance of exposure."¹⁰

The science of antiretroviral therapy has altered the face of AIDS forever and provided a lifeline to those individuals infected. The science also provides benefits that will reduce further transmissions by lowering viral load and infectivity. However, no investigator or study has determined that ART alone will reduce transmission of HIV. The science of medicine must be combined with the science of behavior to bring about successful reductions in HIV transmission. The efficacy of antiretroviral treatment (ART) as a prevention strategy depends on a physiological response to the treatment as well as a behavioral response to the standard and accepted risk reduction methods.

References:

- 1. HIV Prevention Case Management Guidance. September 1997. National Center for HIV, STD, and TB Prevention. Centers for Disease Control and Prevention. Department of Health and Human Services. Atlanta, Georgia.
- 2. Ibid., p. 1
- 3. Clinical Manual for Management of the HIV-Infected Adult 2006 Edition. AIDS Education Training Center, National Resource Center. July 2006.
- 4. Janssen, R.S., Holtgrave, D.R., Valdiserri, R.O., Shepherd, Melissa, Gayle, H.D., and De Cock, K.
- M. The Serostatus Approach to Fighting the HIV Epidemic: Prevention Strategies for Infected Individuals. *American Journal of Public Health*. July 2001, Vol. 91, No. 7
- 5. Achievements in Public Health: Reduction in Perinatal Transmission of HIV Infection --- United States, 1985-2005. Centers for Disease Control and Prevention, *MMWR*, June 2, 2006/55 (21), page 3.
- 6. Ibid.
- 7. Incorporating HIV Prevention into the Medical Care of Persons Living with HIV. *MMWR Recommendations and Reports*, July 18, 2003 / 52 (RR12).
- 8. Ibid.
- 9. Castilla J et al. Effectiveness of highly active antiretroviral therapy in reducing heterosexual transmission of HIV. *J Acquired Immune Deficiency Syndrome*. 40: 96-101, 2005.
- 10. Porco, TC, Martin, JN, Page-Shafer, KA, Cheng, A, Charlebois, Edwin, Grant, RM, and Osmond, DH. *Decline in HIV Infectivity Following the Introduction of Highly Active Antiretroviral Therapy.* AIDS 2004, 18: 81-88.

Treating STDs Can Reduce the Opportunities for HIV Transmission

In the U.S. each year, CDC estimates that STDs affect over a million individuals, with youth, ages 15-24, representing almost half the cases.¹ While few would argue that this is a significant public health concern, diagnosis and treatment of STDs lags far behind the need. Untreated STDs contribute to the continued spread of disease among sexually active persons, additional complications from disease like ectopic pregnancy and infertility, and, at the same time, an increased risk for HIV transmission.

While the variables associated with actual HIV infection are complex, evidence suggests that the presence of STDs, like gonorrhea, herpes simplex virus, chlamydia, syphilis, and trichomoniasis, can facilitate HIV infection. STDs contribute to HIV transmission in two ways. First, STDs can increase an uninfected individual's susceptibility to HIV infection by compromising genital tissue creating ports of entry for the virus and by increasing the concentration of HIV-receptor cells in genital secretions. Second, STDs can increase the infectiousness of individuals living with HIV by increasing the concentration of the virus in genital secretions. Further, evidence suggests that STD treatment reduces HIV susceptibility and infectivity.²

When STDs are not treated, disease continues to be transmitted. Though this seems overly simplistic, it may significantly impact the spread of HIV in high-risk populations. STDs that go untreated represent missed opportunities to prevent new HIV infections.

Still, the ability to respond to staggering rates of STD infection is limited. Anecdotal evidence from state and local health departments indicates that the public health workforce is not sufficient to keep up with need for STD screening, testing, treatment, and partner services. Concurrently, a national survey of U.S. physicians concluded that STD screening levels were far below U.S. guidelines. According to the same study, a majority of individuals with an STD did not receive care from a public STD clinic, but, rather, in other health care settings like emergency departments and private physician's offices.³

Understanding the importance of increasing access and availability to STD treatment, some public health systems have explored alternative methodologies for treating STDs through methods like expedited partner therapy (EPT). CDC defines EPT as "the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the health care provider first examining the partner." As of October 2006, EPT was permissible in 13 states and possible in 28.4

STD treatment remains one of the most important tools in the HIV prevention arsenal. While health departments continue to make advances in their programming, many, if not all, still struggle to keep up with the demand they see. Even so, federal, state, and local funding for STD screening, testing, treatment and partner services programs falls far short of the need. What is the ultimate cost of not treating an STD? If the ultimate cost for some is HIV infection, consider the cumulative lifetime costs for those who were needlessly infected. Perhaps it is time to re-commit to scaling up this basic strategy in our fight to reduce new HIV infections in the U.S.

References:

- 1. http://www.cdc.gov/std/stats/default.htm (and expanded)
- 2. Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sexually Transmitted Infection*, Volume 75, Number 1: Pages 3-17, February 1999.
- 3. Janet S. St. Lawrence, PhD, Daniel E. Montaño, PhD, Danuta Kasprzyk, PhD, William R. Phillips, MD, MPH, Keira Armstrong, MPH and Jami S. Leichliter, PhD. STD Screening, Testing, Case Reporting, and Clinical and Partner Notification Practices: A National Survey of US Physicians. November 2002, Vol 92, No. 11, *American Journal of Public Health* 1784-1788

Changing Sexual Behavior Can Reduce HIV Transmission

Changing sexual behavior can reduce the risk of HIV transmission. When engaging in sexual activity, individuals employ a complex decision making process that guides their willingness to participate in risk behaviors in a given situation. This is dependent on individual knowledge and an understanding and/or perception about risk. For example, an individual may adopt abstinence as a primary harm elimination approach, deciding that sexual activity at any level poses a risk of HIV infection. Other individuals may adopt a more fluid hierarchy of risk reduction strategies that reduces risk but does not eliminate risk all together. Such strategies could include mutual monogamy, reducing the number of sexual partners, mutual masturbation, engaging in oral sex instead of vaginal/anal sex, and using condoms when engaging in vaginal/anal sex. The key is to zero in on sexual risk behavior practices that put individuals at risk for infection and, at the same time, develop alternate sexual practices that reduce the risk of transmission.

Harm reduction is a public health approach that aims to decrease personal harm by adopting strategies that reduce the harm associated with high-risk behaviors. This principle is most notably associated with the field of substance abuse. While harm reduction serves to validate the ideal of abstaining from risk, it recognizes that there are strategies that can reduce risk in the event abstinence is not put into practice.¹ Central to this principle is acknowledging individuals *will* engage in risk-behavior.

Serosorting is grounded in harm reduction and is defined as "the practice of preferentially choosing sex partners or deciding not to use condoms with selected partners based on their disclosed, concordant HIV status." This method has been adopted as a prevention strategy in some communities of Men who have Sex with Men (MSM). Effective serosorting is dependent on multiple assertions individuals make about their partner: their willingness to disclose their actual or perceived HIV status to others, successful negotiation skills to assert what is and is not an acceptable risk factor, and avoiding the use of recreational drugs when engaging in the serosorting process.

Studies have yet to demonstrate the effectiveness of serosorting when compared to other prevention strategies. One study noted the approach may be ineffective due to human error.⁴ Another found, among an HIV-negative cohort, that "condom use was 76 percent effective in preventing new HIV infections [while] serosorting was about 40 percent effective." While this strategy may not be as effective as others, like condom use, it still has a meaningful place in the realm of sexual harm reduction and, ultimately, HIV prevention. Several sources offer recommendations that may help make the strategy more effective including:

- Exploring many options with individuals when developing a risk-reduction plan.
- Encouraging the use of condoms to prevent HIV infection/re-infection and STDs.
- Encouraging individuals to engage in honest dialogue with potential partners about serostatus.
- Working with individuals to develop negotiation strategies that will assist them in asserting their limitations in terms of acceptable risk or unacceptable risk.
- Ensuring clients understand the risk of substance use/abuse when engaging in serosorting activities.
- Serosorting is better than no serosorting.

Over the 25 years of the HIV/AIDS epidemic, we have come to gain a great deal of understanding about the behaviors that place individuals at risk for HIV infection. Understanding that individuals fall all along the continuum of sexuality, HIV prevention efforts must ensure individuals are provided

::

with an arsenal of tools that meet their needs where they are and empower them to reduce any harm they can.

References:

- 1. G. Alan Marlatt. *Harm reduction: Programmatic Strategies for Managing High-Risk Behaviors*. New York, NY: The Guildford Press.
- 2. http://www.aidsmap.com/en/news/506BAAD4-163A-422E-8D5F-B874E401A9C6.asp? type=preview. Retrieved: March 26, 2007.
- 3. Jeffrey T. Parsons, Joseph Severino, Jose Nanin, Joseph C. Punzalan, Kirk von Sternberg, Whitney Missildine, and David Frost. Positive, Negative, Unknown: Assumptions of HIV status among HIV-positive Men Who Have Sex with Men. *AIDS Education and Prevention*. 18(2), 139–149, 2006.
- 4. Jeffrey T. Parsons, Eric W. Schrimshaw, Richard J. Wolitski, Perry N. Halkitis, David W. Purcell, Colleen C. Hoff and Cynthia A. Gomez. Sexual Harm Reduction Practices of HIV-Seropositive Gay and Bisexual Men: Serosorting, Strategic Positioning, and Withdrawal Before Ejaculation. *AIDS* 2005, 19 (suppl 1):S13–S25.
- 5. Golden M. HIV Serosorting Among Men Who Have Sex with Men: Implications for Prevention. Thirteenth Conference on Retroviruses and Opportunistic Infections, Denver, abstract 163, 2006.

Using Condoms Correctly and Consistently Reduces the Likelihood of HIV Transmission

Condom distribution has been an important component of the public health response to HIV/AIDS and STDs for at least as long as the AIDS epidemic has existed. As explained by Joshua Volle, Director of Community HIV Prevention Planning and Programs in the New York City Department of Health and Mental Hygiene, "The entire [condom distribution] strategy is based on the assumption that increased access will lead to increased use." In New York City, distribution has been going on in STD clinics since 1971. Since the mid to late 1980s, condoms have been distributed through a group of community-based organizations and other partners and the distribution has been growing steadily since then.¹

At its core, condom distribution focuses on increasing and easing access for members of the community but also for those who distribute the condoms. As the New York City Department of Health and Mental Hygiene has reinvigorated their condom distribution program, they have made their condoms free and have eased the process of acquiring the condoms by allowing community partners to order condoms through their website. In addition, they have included a link on the website that allows individuals to search distribution sites by zip code. Ultimately, a regular free condom supply is "making it easy for people to get condoms where they work, live, shop and play."²

In scientific studies, condoms have been found to be effective in reducing the transmission of HIV. In a 1999 study, a meta-analysis of the scientific literature on condom effectiveness in reducing heterosexual transmission of HIV was conducted.³ In this study, condoms, when used correctly and consistently, were found to be about 87 percent effective on average in reducing transmission of HIV. At best, condoms are estimated to be approximately 96 percent effective in reducing the transmission of HIV. A National Institutes of Health (NIH) report also cites numerous other studies which demonstrate condom effectiveness in reducing the transmission of gonorrhea, chlamydia, and trichomoniasis.⁴

The NIH report also discusses the Food and Drug Administration's (FDA) assay for condom leakage. The assay consists of a high concentration of a laboratory virus of a size comparable to that of the smallest STD, hepatitis B. Using the assay, FDA has tested different male condoms and was able to demonstrate that condoms are highly effective barriers to virus passage with little chance of

leakage.⁵ Studies employing the assay also found that fluid flow, as opposed to size of the virus, is the most important determinant of viral passage through a hole. In fact, holes much larger than the virus were still able to sufficiently impede fluid flow so that little of the laboratory virus passed through.⁶

Some may point to the NIH document as proof that condoms are not effective barriers to transmission of some STDs. However, it is more appropriate to say the research is inconclusive. Due to small sample sizes in many studies it has been difficult to obtain findings of statistical significance. In other studies, the population being studied (e.g., commercial sex workers) made it difficult to generalize findings beyond that population. In addition, studies generally rely on participants' recollection of condom use, which can also be inaccurate.⁷

While many condom effectiveness studies have been done, none have employed the preferred scientific study design because of ethical concerns. Ideally, a scientific study would randomly assign study participants to one of two groups, with one group told to use condoms every time they engage in sexual activity and the other group receiving no such instruction. At the end of the study, rates of HIV and other STDs for the two groups would be compared. Based largely on the common sense understanding that condoms prevent the transmission of HIV and STDs, no such study can be ethically conducted. Primarily, ethical considerations prevent researchers from withholding lifesaving information, like condoms and their correct and consistent use, from study participants.

In today's HIV prevention world, the "use a condom" message has become tiresome. Clearly, there is condom fatigue but this may also be a sign of a prevention success: people have heard—and heard again—that they should use a condom to prevent HIV. They may not use them but they know they should. As Volle observed, "we have moved the message away from 'Use a condom or get an STD' to making condoms a natural part of people's lives and making them sexy and hip, done through the branding of the package." 11

In the New York City campaign, the Department of Health and Mental Hygiene branding of condoms, creating a new and unique packaging, has increased the condom distribution and has peaked the interest of the distributors, media, and the community. In the first month of the campaign, about five million condoms had been distributed.

"We have tons and tons of people who are calling in and trying to access more condoms. Outside of the traditional clinics and health department sites we now have more non-traditional sites like local universities, churches, block associations, criminal justice, housing, and sex party promoters, for example, that are signing on to distribute the free NYC Condom. We have a renewed interest in condoms, which have once again taken center stage in the discussion around HIV prevention." 12

Despite the evidence that supports the hypothesis that condoms prevent HIV transmission it is difficult to say how effective condom distribution campaigns have been in reaching the populations most at risk and in need of condoms. In the New York City case, Volle explains, "We have never been able to say, with any certainty, how effective our condom distribution programs have been in the past because there was no way to identify the condoms that were being distributed through our program." The branding actually facilitates measuring and monitoring the reach of the campaign. Now that the free condoms have a unique look, it is easier for interviewees to state specifically that they had "seen it, taken it, and used it, or not." 14

References:

1. Volle S.J. March 22, 2007. Director of Community HIV Prevention Planning and Programs, NYC Department of Health and Mental Hygiene, Bureau of HIV/AIDS. Personal communication.

- 2. Ibid.
- 3. Davis, K.R., et al. November/December 1999. The Effectiveness of Condoms in Reducing Heterosexual Transmission of HIV. *Family Planning Perspectives*. 31(6): 272-79.
- 4. See, for example: Isbey, S.F., et al. October, 1997. Charactorisation of Neisseria Gonorrheoeae in Semen During Urethral Infection in Men. *Genitourin Medicine*. 73(5): 378-82; Lycke, E., et al. January-March 1980. The Risk of Transmission of Genital Chlamydia Trachomatis Infection is Less than that of Genital Neisseria Gonorrhoeae Infection. *Sexually Transmitted Dieases*. 7(1): 6-10.; and Rosenberg, M.J., et al. 1992. Barrier Contraceptives and Sexually Transmitted Diseases in Women: A Comparison of Female-Dependent Methods and Condoms. *American Journal of Public Health*. 82(5): 669-74.
- 5. Lytle, C.D., et al. March, 1997. An In Vitro Evaluation of Condoms as Barriers to a Small Virus. *Sexually Transmitted Diseases.* 24(3): 161-64.
- 6. Lytle, C.D., et al. 1997. A Sensitive Method for Evaluating Condoms as Virus Barriers. *Journal of AOAC International*. 80(2): 319-24.
- 7. Ibid.
- 8. The National Institutes of Health cites 180 such studies.
- 9. Steiner, M.J., et al. 2003. Invited Commentary: Condom Effectiveness- Will Prostate-Specific Antigen Shed New Light on this Perplexing Problem? *American Journal of Epidemiology*. 157(4): 298-300.
- 10. Cates, W. October, 2001. The NIH Condom Report: The Glass in 90% Full. *Family Planning Perspectives*. 33(5): 231-33.
- 11. Op cit.
- 12. Op cit.
- 13. Op cit.
- 14. Ibid.

Using Clean Needles Reduces the Likelihood of HIV Transmission

Use a sterile needle and syringe each and every time you inject. Do not share needles with your drug using partners. Use new and clean cookers, cotton, and water. These are science-based HIV and hepatitis C (HCV) prevention messages which health departments and community-based organizations have been promoting among injection drug users (IDUs) for years. In and of itself, a drug using person using their own clean needle and works prevents the transmission of HIV and probably hepatitis B (HBV) and HCV.

HBV and HCV infections are acquired relatively rapidly among IDUs. Within five years of beginning injection drug use, 50-70 percent of IDUs become infected with HBV. Between 50 and 80 percent of IDUs become infected with HCV within five years of beginning injection drug use; it is usually the first blood-borne virus they acquire. The effectiveness of syringe exchange in preventing the transmission of HBV and HCV is not as well documented as it is in the prevention of HIV transmission. With such high prevalence rates among IDUs and evidence that HBV and HCV are more infectious than HIV, it is imperative that more research on the effectiveness of syringe exchange programs in preventing transmission of viral hepatitis be funded and conducted.

Fortunately, the *use a new, clean needle* prevention message is not a tough sell to IDUs; when needles and works are accessible, IDUs are motivated to use them to protect their health. Unfortunately, the ongoing ban of the use of federal, and in many jurisdictions, state funds to support needle exchange programs impedes effective HIV and viral hepatitis prevention efforts for IDUs and their sexual and needle sharing partners.

Moreover, when part of comprehensive prevention strategy, participation in needle exchange programs goes beyond preventing the transmission of blood-borne pathogens and can play an important role in improving the quality of individual's life. In many instances, the needle exchange

::

program mobile van or drop-in center often serves at the first point of contact for an IDU to an array of health and social services such as HIV/HCV counseling and testing and referrals to drug treatment. While there has been much evidence to support that needle exchange programs do not increase drug use or crime, ^{2,3} some studies have shown that participating in a needle exchange program serves to help individuals reduce their injection drug use as well as being less likely to share syringes. ⁴ Additionally, over the past decade many harm-reduction-based programs have led efforts to extend their life-saving services to include critical information and tools to address abscess/wound care and overdose prevention.

Alessandra Ross, the Injection Drug Use Policy and Program Coordinator with the California Department of Health Services Office of AIDS, says "needle exchange programs tend to be small, flexible and responsive. They are constantly re-inventing themselves to meet new conditions: last summer, when a rash of overdoses occurred in the Midwest and East Coast that were traced to fentanyl-laced heroin, needle exchanges were at the forefront of the effort to alert the public to the danger." In this regard, needle exchange programs are uniquely situated to play key public health functions.

For example, for years, needle exchange programs have dispensed 70 percent alcohol wipes for their clients. Forensic pathologist Carla Toms notes "the small area they are designed to cover may not fit the needs of injection drug users, who may not succeed in accessing a vein on their first attempt. Multiple attempts require multiple preps and injections may not comply with this regimen beyond the first or first few attempts resulting in injections into unprepped skin." Therefore, Toms has recommended to the staff at Clean Needles Now in Los Angeles that the use of an alcohol-based hand sanitizer offers a flexible alternative for prepping an injection site and helps to reduce the incidence of soft tissue infections, including Methicillin-Resistant Staphylococcus Aureus (MRSA).

The Food and Drug Administration recommends a concentration of 60 to 95 percent ethanol or isopropanol for alcohol-based hand sanitizers which have been demonstrated to decrease bacterial counts by an average of 90 percent. These are effective against gram-positive and gram-negative bacteria, tuberculosis, fungi, and some viruses including herpes simplex virus, human immunodeficiency virus, influenza virus, respiratory syncytial virus, hepatitis B virus, and probably hepatitis C virus.⁵ Products such as Purell (62 percent), Triad (70 percent) and Germ-X (62 percent) meet this criterion. Programs like Clean Needles Now have begun making hand sanitizers available to their participants. If distributed, clients should be advised to prep a large area of skin (i.e., an entire limb), use enough of the sanitizer that the area still feels wet after 10-15 seconds and, when possible, select an area that is not visibly dirty. Additionally, clients should be advised that alcohol is flammable and therefore alcohol-wet skin should not be exposed directly to flame.

Using a sterile needle remains the safest, most effective approach to limiting the transmission of HIV in injection drug-using populations; the denial of access to sterile needles is the denial of access to a life-saving medical intervention.⁶ The agenda for comprehensive HIV prevention programming for IDUs must include access to sterile needles and further research on their effectiveness regarding limiting HCV transmission.

References:

- 1. http://www.cdc.gov/IDU/hepatitis/hepc_and_hiv_co.pdf
- 2. D. Vlahov et al., Reductions in high-risk drug use behaviors among participants in the Baltimore needle exchange program. *J. Acquir. Immune. Defic. Syndr. Hum. Retrovirol.* 16 (5) 400-406 (1997)
- 3. M.A. Marx, B. Crape, R.S. Brookmeyer, B. Junge, C. Latkin, D. Vlahov, and S. Strathdee, Trends in crime and introduction of a needle exchange program. *Am. J. Public Health* 90 1933-1936 (2000).
- 4. R.N. Blumenthat, A.H. Kral, L. Gee, E.A. Erringer, B.R. Edlin, The effect of syringe exchange use on high-risk injection drug users: a cohort study. *AIDS* 14 (5), 605-611 (2000).
- 5. Reynolds SA et al. Emerging Infectious Diseases, v12 (3), March, 2006

6. Elders, J, Forward to Health Emergency 2003: The Spread of Drug-Related AIDS and Hepatitis C among African Americans and Latinos.

Abstaining from Sex Will Prevent HIV Transmission

Continuous abstinence from vaginal and anal intercourse is the only 100-percent effective method to prevent the transmission of HIV/AIDS. Promoting abstinence as a method to prevent new HIV/AIDS infections has long been debated due to the social, political, and religious ideologies which surround this prevention strategy. All women and men are abstinent at some time in their lives. Furthermore, practicing abstinence does not mean a person is sexless. Women and men abstain from sex for many reasons — even after they've been sexually active. These reasons change throughout life and can include: awaiting readiness for a sexual relationship; waiting to find the "right" partner; to support personal, moral, or religious beliefs and values; and to prevent pregnancy and sexually transmitted infection.

The concept of abstinence as a prevention strategy is most often debated when examined through the lens of gender and age.

Gender issues³ affect abstinence in numerous ways. In many cultures, gender norms for females include submissiveness, deference to male authority, dependence, virginity until marriage, and faithfulness during marriage. Norms for men, in contrast, are built around power and control, independence, not showing emotions, risk-taking, using violence to resolve conflict, early sexual activity, and having multiple sexual partners. Many young women and men cannot choose abstinence for themselves, either because they are already married or may be coerced into sex in exchange for money or food. The power dynamics of many heterosexual relationships can prevent women a choice in whether they will practice abstinence.⁴

Studies focused on age of risk behavior debut reveal the critical reality that the earlier young people begin to participate in unhealthy risk behavior, the greater their overall and long-term risk.⁵ Retrospective reports of early sexual debut have been correlated with a greater number of sexual partners, lower levels of condom use, a greater chance of unintended pregnancy, and a higher risk of self-reported STDs, as well as with other risk behaviors, including weapon-carrying and drug use.⁶ Abstinence as a strategy to delay sexual debut, particularly among early adolescents, can result in more positive health outcomes for adolescents as they transition into adulthood.

The benefits of delayed sexual debut among adolescents are acknowledged by both camps of the abstinence debate. However, the fact remains that abstinence is not a reality for most adolescents. Studies have shown that more than two-thirds of young people will have had sex by the time they graduate.⁷ Additionally, in spite of recent decreases, there are still nearly 900,000 teen pregnancies in the U.S. each year.⁸ These figures demonstrate the need for increased comprehensive sexuality education. Many agencies (including NASTAD) have issued statements in support of abstinence-based, comprehensive sexuality education.⁹

The politicization of abstinence, both domestically and globally, and the overemphasis on the "A" in the ABC approach, despite the limited evidence supporting the effectiveness and medical accuracy of abstinence-only education, has in many ways led to the misapplication of abstinence as a prevention strategy. The bottom line is that abstinence is the only current 100-percent effective way to prevent new HIV infections. When this strategy is presented as a personal choice—along with methods to protect oneself *after* the choice has been made to become sexually active—abstinence remains the most reliable and cost-efficient method to prevent the spread of HIV/AIDS.

References:

1. Planned Parenthood. Continuous Abstinence. http://www.plannedparenthood.org/birth-control-

::

pregnancy/birth-control/continuous-abstinence.htm. Retrieved: March 22, 2007.

- 2. ibid
- 3. http://www.fhi.org/en/Youth/YouthNet/ProgramsAreas/gender/index.htm
- 4. Family Health International. Abstinence for Youth. http://www.fhi.org/en/Youth/YouthNet/ ProgramsAreas/abstinence.htm. Retrieved: March 20, 2007.
- 5. Institute for Youth Development. IYD Youth Facts. Age of Risk Behavior Debut: Trends and Implications. http://www.youthdevelopment.org/download/debut.pdf. Retrieved: March 21,2007.
- 6. L. O'Donnell, C. O'Donnell, A. Stueve. Early Sexual Initiation and Subsequent Sex-Related Risks Among Urban Minority Youth: The Reach for Health Study. *Family Planning Perspectives* Volume 33, Number 6, November/December 2001. http://www.guttmacher.org/pubs/journals/3326801.html. Retrieved: March 20, 2007
- 7. SIECUS. Advocates for youth and SIECUS Applaud the Introduction of the Responsible Education About Life (REAL) Act. *Press Release*. March 22, 2007. http://www.siecus.org/media/press/ press0139.html. Retrieved: March 22, 2007
- 8. SIECUS. Advocates for youth and SIECUS Applaud the Introduction of the Responsible Education About Life (REAL) Act. *Press Release*. March 22, 2007. http://www.siecus.org/media/press/press0139.html. Retrieved: March 22, 2007
- 9. NASTAD. Comprehensive Sexuality Education: Effective HIV Prevention for Youth. April 2006.

In Closing

To be sure, the approaches discussed above are effective, to differing degrees, at preventing HIV transmission. Much of the past and recent literature seems only to confirm this assertion. What does that tell us about the state of HIV prevention? How is it that we have so much scientific evidence on which to base a scaling-up of these effective back-to-basics strategies, but we continue to hear the argument from opponents that prevention programs don't work? What barriers must be addressed to re-invigorate a concerted commitment of resources to these strategies? How can we challenge ourselves to overcome the fatigue that is often associated with these simple methods? How can we challenge ourselves to resist the temptation of focusing on more exciting, and often more expensive, interventions that may, ultimately, have much less impact?

We must begin a strategic and thoughtful conversation about enhancing and perpetuating these science-based strategies in HIV prevention programs across the country. In combination, we must heighten our acknowledgement, adoption, and support for promising strategies like microbicides, vaccines, pre- and post-exposure prophylaxis, and even circumcision, as evidence continues to demonstrate their effectiveness. These promising strategies will be the focus of next month's *Bulletin*.

Meeting and Planning Calendar

Capacity Building Opportunities

For a searchable database of CDC-supported capacity building trainings and events, visit the Capacity Building Branch's Group Events Management System site.

April 5-7, 2007

"HIV/STD Prevention in Rural Communities: Sharing Successful Strategies V," the Rural Center for AIDS/STD Prevention national conference, Indiana University, Bloomington, IN. A call for papers will be issued in fall 2006. For more information, visit RCAP's website.

May 19, 2007

National Asian and Pacific Islanders HIV/AIDS Awareness Day. For more information, visit the event

website.

::

May 20-23, 2007

HIV Prevention Leadership Summit (HPLS), New Orleans, LA. For more information, visit the conference website.

May 24-27, 2007

HIV/AIDS 2007: The Social Work Response, Albuquerque, NM. Organized by the Boston College Graduate School of Social Work. For more information, visit the conference website.

June 27, 2007

National HIV Testing Day. Sponsored by NAPWA. For more information, visit NAPWA's website.

October 15, 2007

National Latino AIDS Awareness Day. For more information, visit the event website.

November 7-10, 2007

United States Conference on AIDS (USCA), Palm Springs, CA. For more information, visit the <u>conference website</u>.

December 1, 2007 World AIDS Day.

December 2-5, 2007

2007 National HIV Prevention Conference, Atlanta, GA. Sponsored by CDC and other governmental and non-governmental partners. For more information, visit the <u>conference website</u>.

NASTAD's production of the *Bulletin* is made possible through funding provided by CDC's Division of HIV/AIDS Prevention (DHAP) in the National Center for HIV, STD, and TB Prevention.

If you have an idea or program relative to any of these topics that you would like to include in the *Bulletin*, please contact <u>Dave Kern</u> or <u>Lynne Greabell</u> (202) 434-8090. The *NASTAD HIV Prevention Bulletin* is written and edited by NASTAD staff and participants of community planning and prevention efforts around the country.

LET US KNOW WHAT YOU THINK! NASTAD welcomes feedback to issues presented in our newsletter. Submit your commentary to: NASTAD@NASTAD.org.

Visit our <u>Webpage</u>! Electronic versions of the *Bulletin* are posted along with other information on both NASTAD's prevention and care projects.

444 North Capitol Street, NW • Suite 339

Washington D.C. 20001 • nastad@nastad.org

Click here to unsubscribe

444 N. Capitol Street, NW, Washington, DC 20001