

# STDs Overview and in Homeless Settings

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## HEALING HANDS



Vol. 15, No. 1 | March 2011

## STDs: A Hidden Epidemic

There are over 19 million new cases of sexually transmitted diseases (STDs) in the United States annually.<sup>1</sup> STD—or what is also referred to as sexually transmissible infection (STI)—refers to a variety of clinical syndromes caused by over 25 pathogens that can be acquired and transmitted through sexual contact,<sup>2</sup> including vaginal, oral, and anal sex. Anyone having unprotected sex with a partner who is already infected can contract an STD, and the STD-causing organism—bacteria, virus or parasite—may pass from person to person in blood, semen, vaginal fluids, or via skin-to-skin contact.

Since many STDs cause no symptoms—at least at first—it is possible to contract STDs from people who appear healthy and who may be unaware of being infected. Left untreated, these asymptomatic STDs can cause serious, long-term health consequences—especially for women and infants.<sup>3,4</sup> The health consequences of untreated STDs include:

- **Pelvic inflammatory disease (PID):** An estimated 10–20 percent of women with untreated chlamydia or gonorrhea develop PID, a condition that can cause complications such as chronic pelvic pain (18 percent), ectopic pregnancy (9 percent), and infertility (20 percent)<sup>5</sup>
- **Infertility:** An estimated 24,000 women become infertile annually from untreated STDs<sup>3</sup>
- **Infant mortality and morbidity,** e.g., neonatal HIV, herpes simplex virus, and congenital syphilis<sup>1</sup>
- **HIV transmission:** Studies suggest that the presence of an STD can increase the risk of HIV transmission<sup>3</sup>

Health economists with the CDC (Centers for Disease Control and Prevention) estimate that the direct medical cost to the health care system of STDs and their sequelae is \$16.4 billion annually.<sup>1,6</sup> Along with the human suffering associated with STDs, all Americans share this financial burden through taxes and higher health care costs. While STD is a global phenomenon, rates of curable STDs in this country are the highest in the developed world and are higher than in some developing regions.<sup>4</sup>

### UPDATED TREATMENT GUIDELINES

In December 2010, the CDC issued updated guidelines for treating STDs that contain new information affecting clinical practice. The authoritative guidelines emphasize effective treatment regimens, and cover diagnostic evaluation and prevention and vaccination strategies. They are comprehensive, covering topics beyond the scope of this newsletter, so clinicians should consider downloading the free guidelines from the CDC website.<sup>2</sup>

The CDC and the National Network of STD/HIV Prevention Training Centers are hosting a series of webinars for health professionals on the *2010 STD Treatment Guidelines*, which will be archived and accessible online along with continuing education opportunities, clinical practice references, and teaching tools.<sup>7</sup>

Given the unique challenges of persons experiencing homelessness, keep in mind that the guidelines are just that: guidance, not prescriptive standards. The CDC urges health care providers to consider the clinical circumstances of each patient in the context of local disease prevalence. **Barbara Wismer, MD, MPH**, with the Tom Waddell Health Center in San Francisco, and others interviewed for this issue agree: “Use state and county guidelines, when available, which are more relevant and tailored to the local STD epidemiology and drug resistance patterns.”

“We see a lot of STDs in our homeless patients,” says **Diane E. Judge, APN, CNP**, with Heartland Health Outreach in Chicago, “so the updated guidelines are relevant. They make our job easier by providing recommendations about who needs screening.”

## STD Treatment Guidelines 2010

### COMMON SEXUALLY TRANSMITTED PATHOGENS & THE DISEASES THEY CAUSE

**Chlamydial infections.** *C. trachomatis* infection is the most frequently reported bacterial STD in the United States. Women—especially young and minority women—are most affected: the rate of chlamydia infection among women is about three times the rate among men.<sup>3</sup>

Major medical associations and the CDC recommend that all sexually active women younger than age 26 receive an annual chlamydia screening. In spite of being cost-effective, chlamydia screening is an underutilized form of preventive health care because of its potential for helping to reduce PID rates.<sup>8</sup> Data suggest that chlamydia screening can reduce the incidence of PID by as much as 60 percent. Still, many women at risk are not being tested due to lack of awareness among some clinicians and the limited resources available to support screenings.<sup>5</sup>

**Gonococcal infections.** Gonorrhea, the second most commonly reported bacterial STD, is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix, uterus, and fallopian tubes in women, and in the urethra in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.<sup>9</sup>

The CDC estimates more than 700,000 new gonorrheal infections occur annually in this country. Since the prevalence of gonorrhea varies widely, clinicians should consider local epidemiology when making screening decisions. CDC does not recommend widespread screening, but screening young women—those under age 25 who are at increased risk for infection—is a primary component of gonorrhea control. Clinicians should also screen these high-risk groups:<sup>2</sup>

- Those living in communities with a high disease prevalence
- Those engaging in commercial sex work and drug use
- Women with previous gonorrhea infection, other STDs, new or multiple sex partners, and inconsistent condom use

**Treatment.** Gonorrhea is curable, but often goes untreated because it can be asymptomatic. The ability of *N. gonorrhoeae* to develop resistance to antimicrobial therapies further complicates treatment.

The recommendation for the 250-mg. ceftriaxone dose [Table 1] and the addition of azithromycin or doxycycline—whether or not chlamydia screening has been done and is positive—represents an important change from previous guidelines.

While doxycycline may be given if azithromycin is not an option, this is not optimal for those experiencing homelessness.

Azithromycin may be given in clinic or at an outreach site under direct observation, which ordinarily cannot be done with a seven-day course of twice daily doxycycline. Wismer says, “Single dose, presumptive treatment may be best for our patients since they may have difficulty adhering to long or complex treatment, or may not return or be reachable. Another consideration is that homeless people are at higher risk for photosensitivity skin reactions from doxycycline because it may be difficult or impossible to avoid sun exposure.”

**Syphilis.** A highly infectious disease caused by the bacterium *Treponema pallidum*, syphilis is curable in its early stages. Once on

**Table 1. Recommended regimens for uncomplicated gonococcal infections**

Ceftriaxone in a single injection of 250 mg. or, if not an option: Cefixime 400 mg. orally in a single dose or, if not an option: Single-dose injectable cephalosporin regimens <b>plus</b> Azithromycin 1 g. orally in a single dose or Doxycycline 100 mg. orally twice a day for seven days
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Source: CDC, *Sexually Transmitted Diseases Treatment Guidelines, 2010*, p. 50<sup>2</sup>

the verge of elimination, syphilis reemerged as a public health threat in 2001 and rates have increased steadily since then. The majority of cases (62 percent) in the United States continues to be among men who have sex with men (MSM). This is of particular concern since HIV also heavily affects MSM, and like several other STDs, syphilis can facilitate HIV transmission. Left untreated, syphilis can lead to serious long-term complications, including brain, cardiovascular, and organ damage, and even death. Penicillin given as an injection is the preferred treatment of all stages of syphilis; the dose and length of treatment depends on the disease stage.<sup>5,3</sup>

**HPV.** Human papillomavirus (HPV) is the most common sexually transmitted virus in this country, and the CDC estimates that at least 50 percent of sexually active individuals will have genital HPV at some point in their lives. About 20 million Americans are currently infected, and another 6.2 million become newly infected each year.<sup>8</sup> Most people do not know that they have the virus, which spreads easily by skin-to-skin contact during sexual activity.

While the body's immune system naturally clears about 90 percent of infections within two years without causing symptoms or health problems, certain HPV strains cause genital warts, which can be removed, although lesions may reappear. Other high-risk HPV types can cause cervical and other less common but serious cancers if left untreated.<sup>8</sup> HPV causes virtually all cervical cancers.<sup>10</sup>

Despite high rates of HPV infection, cervical cancer incidence and mortality are on the decline in the United States primarily due to the widespread availability and use of the Pap test—also known as the Pap smear. In addition to detecting treatable early stage cervical cancer, Pap tests detect cervical dysplasia—precancerous changes of cervical cells—allowing for the removal of affected tissue before invasive cancer sets in.<sup>8</sup>

Homeless women have a high prevalence of risk factors for cervical cancer, including HPV infection, multiple sex partners, HIV infection, smoking, sporadic medical care, and less access to

“STDs are public health problems that lack easy solutions because they are rooted in human behavior and fundamental societal problems. Indeed, there are many obstacles to effective prevention efforts. The first hurdle will be to confront the reluctance of American society to openly confront issues surrounding sexuality and STDs.”

— Committee on Prevention & Control of Sexually Transmitted Diseases, Institute of Medicine, 1997, p. 43<sup>4</sup>

preventive care. A disproportionate number of deaths from cervical cancer occurs in impoverished women; low socioeconomic status is associated with higher rates of cervical cancer, lower rates of Pap test screening, and poor follow-up of abnormal Pap smears.<sup>11</sup>

A study reported in the *Journal of Women's Health* found that many homeless women were reluctant to get Pap smears, even when barriers to access and cost are removed. Researchers speculated that the high incidence of previous trauma presents a barrier to homeless women receiving Pap smear screening.<sup>11</sup>

**HIV/AIDS.** Those infected with STDs are at least two to five times more likely than uninfected individuals to acquire HIV (human immunodeficiency virus), the virus that causes AIDS (acquired immune deficiency syndrome).<sup>12</sup> Therefore, the CDC recommends that all individuals seeking STD evaluation and treatment should be routinely screened for HIV infection. Without treatment, virtually all HIV-infected persons will die of AIDS.<sup>2</sup>

The CDC estimates that more than 1.1 million people are living with HIV in the United States, and that one in five (21 percent) individuals is unaware of his or her infection.<sup>13</sup> According to the National Coalition for the Homeless (NCH), HIV/AIDS and homelessness are intricately related:<sup>14</sup>

- People living with HIV/AIDS (PLWHA) are in danger of losing their jobs due to discrimination or as a result of frequent health-related absences; consequently, up to 50 percent of PLWHA are at risk of homelessness
- Many homeless people inject drugs intravenously, and may share or reuse needles, a practice responsible for 13 percent of HIV/AIDS diagnoses
- PLWHA lack the ability to fight off disease, and crowded shelters can expose them to infections such as hepatitis A, pneumonia, tuberculosis, and skin infections
- Adherence to a complex regimen of antiretroviral treatment is difficult for those lacking access to stable housing, clean water, bathrooms, refrigeration, and food
- Most homeless people lack health insurance and cannot pay for medications and services to treat HIV/AIDS

The National AIDS Housing Coalition (NAHC) reports that 3–10 percent of homeless people are HIV-positive, ten times the rate of infection in the general population, and that 40–60 percent of PLWHA experience homelessness or housing instability in their lifetime. Based on recent research findings on HIV and housing, the NAHC recommends making subsidized, affordable housing available to all low-income PLWHA to break the link between homelessness and HIV.<sup>15</sup>

### POPULATIONS AT DISPROPORTIONATE RISK

The three populations at greatest risk for STDs are youth, racial and ethnic minorities, and men who have sex with men.<sup>1</sup> For African Americans and MSM, the high prevalence of STDs within their communities can be a risk factor in itself, since individuals are more likely to encounter an infected partner.<sup>8</sup>

**Table 2. Selected resources & websites**

- 2010 STD Treatment Guidelines | [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010)
- American Social Health Association | [www.ashastd.org](http://www.ashastd.org)
- CDC Division of STD Prevention | [www.cdc.gov/std/dstdp/default.htm](http://www.cdc.gov/std/dstdp/default.htm)
- Expedited Partner Therapy Toolkit | <http://region8ipp.com/epttoolkit/eptindex.htm>
- Guttmacher Institute | [www.guttmacher.org](http://www.guttmacher.org)
- HPV: Human Papillomavirus | [www.nhchc.org/HPV.html](http://www.nhchc.org/HPV.html)
- National Center for HIV/AIDS, Viral Hepatitis, STD & TB Prevention | [www.cdc.gov/nchhstp](http://www.cdc.gov/nchhstp)
- National Network of STD/HIV Prevention Training Centers | [www.nnptc.org](http://www.nnptc.org)
- National Prevention Information Network | [www.cdcpin.org](http://www.cdcpin.org)
- STD Treatment Guidelines Webinars | [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010)
- Treatment & Recommendations for Homeless Patients with Chlamydial or Gonococcal Infections | HCH Clinicians' Network, 2008 | [www.nhchc.org/Publications/STI123108.pdf](http://www.nhchc.org/Publications/STI123108.pdf)
- Treatment & Recommendations for Homeless Patients with HIV/AIDS | [www.nhchc.org/HIVguide2008.pdf](http://www.nhchc.org/HIVguide2008.pdf)

**STDs in youth.** In general, youth are at greater risk for contracting STDs compared to other age groups. Experts estimate that almost half the new cases of STDs each year occur in sexually active young people aged 15–24 years<sup>5,1</sup> and that one in four (26 percent) young women ages 15 to 19 has at least one of the most common STDs.<sup>16</sup>

Adolescence is a time of risk taking, perceived invulnerability, and experimentation with adult activities such as alcohol, drugs, and sex. In normal development, this experimentation takes place in the milieu of adult monitoring, limitations, rules, and consequences that may curb experimentation. Among runaway and homeless teens, however, these moderating factors are missing, and poor sexual health may be the outcome.<sup>17</sup> While no one knows the exact number of homeless teens, researchers estimate a national prevalence of 1.6 million youth experiencing homelessness each year.<sup>18,19</sup>

Homeless youth are likely to be at higher risk for STDs than youth in general for several reasons:<sup>17</sup>

- Extensive histories of abuse and neglect, which may result in risky behaviors including substance abuse and trading sex for food, shelter, money, or drugs
- Spending more time on the street, which exposes youth to drug users, sexual predators, and others who might exploit them and endanger their health
- Sexual practices such as inconsistent condom use and having multiple sexual partners

**GLBTQ youth.** Service providers estimate that gay, lesbian, bisexual, transgender, and questioning (GLBTQ) youth are disproportionately experiencing homelessness. Research shows that 15 to 25 percent of homeless youth self-identify a GLBTQ, which is about twice the rate (i.e., 10 percent) estimated in the

general youth population.<sup>19</sup> A significant minority of GLBTQ youth—one study estimates 25 percent—report being expelled from their homes due to their sexual orientation or gender identity.<sup>20</sup> The harassment, social stigma, and discrimination associated with being GLBTQ contribute negatively to their well-being, as evidenced by high rates of attempted and completed suicide, violence victimization, substance abuse, teen pregnancy, and STD/HIV-associated risky behaviors.<sup>21</sup>

*Improving the sexual health of homeless youth.* Research indicates that youth who are part of groups educated about safe sexual practices may be less likely to be coerced by others into using drugs, trading sex, or engaging in unsafe sex. A holistic approach to intervention may improve the sexual well-being of youth, and interventions that may lower the risk for STDs include:<sup>17</sup>

- Targeting individuals and their partners
- Holding peer groups in nonjudgmental settings
- Using education in shelters to improve STD awareness
- Distributing free condoms and informative brochures
- Providing access to counselors
- Improving youth self-efficacy
- Teaching sexual negotiation skills
- Increasing access and referrals to street clinics

**STDs in racial & ethnic minorities.** Out of all racial and ethnic health disparities, STDs are among the highest.<sup>1</sup> CDC surveillance data show higher rates of reported STDs among some racial or ethnic minority groups when compared with rates among whites. In the United States, race and ethnicity are risk markers that correlate with other fundamental determinants of health status such as:<sup>5,8</sup>

- Poverty
- Lack of access to health care services
- Health care-seeking behavior
- Substance abuse
- Living in communities with a high prevalence of STD

**Table 3. Summary of STD rates among defined populations, 2009 data**

- African Americans: Chlamydia rates were highest among black men and women, more than eight times higher than that in whites; the rate of gonorrhea among blacks was 20.5 times higher than the rate among whites; and the overall rate of primary and secondary (P&S) syphilis was nine times the rate among whites
- Hispanics/Latinos: STD rates in Hispanics include a chlamydia rate nearly three (2.8) times higher than that of whites; a gonorrhea rate 2.2 times higher among Hispanics than among whites; and compared with whites, the rate of P&S syphilis was 2.1 times higher
- American Indians/Alaska Natives: STD rates included a chlamydia rate 4.3 times that among whites; a gonorrhea rate 4.2 times higher than among whites; and compared with whites, a rate of P&S syphilis 1.1 times higher

Source: CDC, 2010, *Sexually Transmitted Disease Surveillance 2009*, pp. 69–71 & p. 109<sup>5</sup>

In other words, genetic predisposition and risky behaviors only partially explain why some people become sick and others do not.<sup>22</sup> Acknowledging the disparity in STD rates by race or ethnicity can be an initial step in empowering affected communities to organize and focus on this public health problem.<sup>5</sup> Although inconsistency in reporting may distort the extent of these disparities, the disparities are real.<sup>8</sup>

People of color are a minority that is overrepresented among the homeless population:<sup>23, 24, 25</sup>

- 42 percent are African American (compared to 11 percent of the general population)
- 13 percent are Hispanic (compared to 9 percent of the general population)
- 4 percent are Native American (compared to 1 percent of the general population)

*Promoting health equity & addressing racial disparities.* A *health inequity* is a difference in health outcomes that is systematic, avoidable, and unjust; *health equity* means a fair distribution of health determinants, outcomes, and resources among population segments, regardless of social standing. Achieving equity requires special and continuous efforts to improve the health of those who have experienced social or economic disadvantage. It requires focusing not only on eliminating health disparities, but also on the living and working conditions that influence health status. Moreover, it requires persistence to maintain the desired state, after eliminating the disparities.<sup>22</sup>

Recognizing the critical need to reduce the severe racial disparities in STD rates, especially for African Americans,<sup>3</sup> in 2010 the CDC convened an STDs Disparities Stakeholders Group to discuss the issue and make suggestions for CDC consideration so that the agency can strengthen and expand its prevention, diagnostic, and treatment efforts.<sup>26</sup>

**STDs in men who have sex with men.** Subgroups of MSM are at high risk for HIV infection and other STDs. These subgroups include MSM from racial/ethnic minority groups and among those using nonprescription drugs during sex, particularly methamphetamine and volatile nitrites (“poppers”). Since the mid-1990s, increased rates of unsafe sexual behaviors and increased rates of P&S syphilis, gonorrhea, and chlamydial infection have been documented among MSM. These trends may reflect changes in:<sup>2</sup>

- Attitudes about HIV infection that have accompanied advances in HIV therapy
- Changing patterns of substance abuse
- Demographic shifts in MSM population
- Changes in sex partner networks associated with new venues for partner acquisition, e.g., the Internet

*Screening.* These increasing infection rates highlight the need for expanded prevention efforts. In 2009, MSM accounted for 62 percent of all P&S syphilis cases in the United States, which is more cases than men having sex with women or women in all racial and ethnic



groups.<sup>5</sup> The CDC recommends that all sexually active MSM be tested at least annually for syphilis and for both chlamydia and gonorrhea at all anatomic sites of exposure (pharyngeal, urethral, and anal/rectal).<sup>3</sup>

In addition to providing homeless services, Tom Waddell Health Center operates a transgender clinic. “We screen our sexually active transgender MSM clients for STDs—HIV, chlamydia, syphilis, gonorrhea—every six months,” says **Linette Martinez, MD**, “and every three months we screen higher-risk patients who routinely engage in unprotected sex.

“Examples of cases where people don’t use condoms include couples where both partners are HIV-positive; sex workers going without condoms in order to earn more; transgender people who compete with biological women for relationships and forgo condoms to gain advantage; or those in abusive relationships engaging in unprotected sex to gain partner approval.” According to the NCH, the sexual orientation of homeless persons is not often measured.<sup>23</sup>

### SEX WORKERS & SURVIVAL SEX

Poverty, addiction, lack of education, and abuse are common causes leading both men and women into the sex trade and homelessness. Most women and youth who enter prostitution are survivors of sexual abuse, and many use drugs or alcohol in order to cope with past or current sexual violence in their lives.<sup>27</sup> Survival sex—exchanging sex for drugs, food, clothing, shelter or money—is high among GLB homeless youth, and a strong predictor of HIV risk in this population.<sup>28</sup> Studies of homeless youth suggest somewhere between 15–30 percent have engaged in commercial sex\* or exchanged sex for basic needs.<sup>29</sup>

**Deborah Borne, MD, MSW**, with Tom Waddell Health Center, advises: “Don’t assume that your client isn’t doing commercial sex work to survive; prostitution is a huge reality. Don’t be judgmental; remember that substance abuse is a terrible disease and that poverty sucks. People will do what they need to do to get food, and it’s not just our clients doing sex work.”

\* The commercial sex industry involves business and commerce that support pornography, stripping, phone sex, exotic dancing, mail-order brides, transactional sex, and prostitution<sup>29</sup>

**Table 4. The Five Ps: Partners, Prevention of Pregnancy, Protection from STDs, Practices & Past History of STDs**

#### 1. Partners

- “Do you have sex with men, women, or both?”
- “In the past two months, how many partners have you had sex with?”
- “In the past 12 months, how many partners have you had sex with?”
- “Is it possible that any of your sex partners in the past 12 months had sex with someone else while they were still in a sexual relationship with you?”

#### 2. Prevention of pregnancy

- “What are you doing to prevent pregnancy?”

#### 3. Protection from STDs

- “What do you do to protect yourself from STDs and HIV?”

#### 4. Practices

- “To understand your risks for STDs, I need to understand the kind of sex you have had recently.”
- “Have you had vaginal sex, meaning ‘penis in vagina sex?’” If yes, “Do you use condoms: never, sometimes, or always?”
- “Have you had anal sex, meaning ‘penis in rectum/anus sex?’” If yes, “Do you use condoms: never, sometimes, or always?”
- “Have you had oral sex, meaning ‘mouth on penis/vagina?’”

#### For condom answers:

- If “never”: “Why don’t you use condoms?”
- If “sometimes”: “In what situations (or with whom) do you not use condoms?”

#### 5. Past history of STDs

- “Have you ever had an STD?”
- “Have any of your partners had an STD?”

#### Additional questions to identify HIV and viral hepatitis risk include:

- “Have you or any of your partners ever injected drugs?”
- “Have any of your partners exchanged money or drugs for sex?”
- “Is there anything else about your sexual practices that I need to know about to ensure you good health care?”

Source: Adapted from CDC, *Sexually Transmitted Diseases Treatment Guidelines, 2010*, p. 3<sup>2</sup> and California Chlamydia Action Coalition, 2001, pp. 1–3<sup>30</sup>

### KNOWING IS HALF THE BATTLE . . .

Since the 1990s, Case Manager Health Specialist **Breonna M. McCree** has run peer support groups for Walden House in San Francisco, which serves people affected by substance abuse and mental illness. “Peer support is invaluable; you know where your clients are because you’ve been there,” McCree says. “I know what helped me, and hopefully, what will help them. Everything that I say to my clients, I say to *myself* to keep *myself* on track.

“In this economy, where money is tight, those with the least are hit hardest,” she says. “To cope with feeling overwhelmed, they often turn to prostitution or to using or selling drugs. These risky behaviors expose them to STDs, abuse, and sometimes death—playing Russian roulette with their lives to have enough money to pay for a hotel room.

“It seems the system is designed to keep people on the street,” McCree says. “It’s easier to get drugs than to get addiction treatment. People get discouraged trying to get into treatment; they give up and return to old, comfortable behavior patterns. I tell my clients that we know danger well and are comfortable with it; we know gloom, doom, and destruction. We run toward danger instead of things that will improve our lives and make us successful.

"I try to motivate my clients toward something positive and encourage them to try something different. Sometimes that first step is the hardest, and then they're off and running! I'm reminded of the GI Joe cartoons from the '80s that ended with a PSA message, giving kids advice about life and how to stay safe. The PSA would end with the phrase, *Now you know, and knowing is half the battle.*"

### THE CLINICIAN'S ROLE

Clinicians working with homeless people play a critical role in preventing and treating STDs since they have a unique opportunity to provide education and counseling. Primary prevention of STDs begins with changing the sexual behaviors that place persons at risk for infection.<sup>2</sup> CDC guidelines recommend that clinicians routinely take clients' sexual history as part of the clinical interview, using skills characterized by respect, compassion, and a nonjudgmental attitude. Wismer adds: "It's important to ask about intimate partner violence and exchanging sex for money and drugs to assess risk and explore prevention strategies."



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Care for the Homeless Health Educator Wendy Ledesma providing information at a community health fair.

Key interviewing techniques include using open-ended questions, understandable language, and normalizing language. The Five Ps approach to obtaining a sexual history [Table 4] can be an effective template.

In addition to taking a sexual history, clinicians should encourage STD risk-reduction and educate the client about specific actions that can reduce the risk for STD transmission, for example:<sup>2</sup>

- Abstinence
- Condom use
- Limiting the number of sex partners
- Modifying sexual practices
- Pre-exposure vaccination

Interactive counseling approaches and motivational interviewing techniques are effective in STD/HIV prevention. For information on these and other behavioral interventions, visit <http://effectiveinterventions.org>.<sup>2</sup>

### PUTTING EVIDENCE INTO PRACTICE: PARTNER MANAGEMENT

Judge says, "The updated guidelines address partner management, which is a range of activities designed to help prevent reinfection and limit further STD transmission." One activity on the continuum is partner notification, where clinicians or public health authorities learn about the partners of infected patients and help to arrange for partner evaluation and treatment. The CDC recommends encouraging patients with STDs to notify their sex partners and urge them to seek medical evaluation and treatment.<sup>2</sup> "Another strategy," Judge continues, "is to ask patients to bring their partners with them when they return to the clinic for further treatment."

The CDC evaluated available evidence concerning expedited partner therapy (EPT) for gonorrhea and chlamydial infections and concluded that it is a useful option to facilitate partner management, particularly in treating male partners of women with chlamydial infection or gonorrhea.<sup>2,31</sup>

"When patients diagnosed with chlamydia or gonorrhea explain that it's doubtful that their partners will seek treatment, clinicians can offer *patient-delivered partner therapy*, a form of EPT," says Judge. "In this case, the clinician provides the sex partners of infected persons medications [or prescriptions] for the patient to take to his or her partner without the provider first examining the partner. This hasn't always been standard practice, and the legal status of EPT varies by state, so check the CDC website<sup>32</sup> for information on the status of EPT in your state." Currently, eight states prohibit EPT.

Along with the medication or prescription, clinicians should send treatment instructions, appropriate warnings about taking medications, and a statement advising that partners seek personal medical evaluation—especially women who have symptoms of STDs or PID.<sup>2</sup> Clinicians in states where EPT is legal may refer to the web-based *Expedited Partner Therapy Toolkit* provided by the Region VIII Infertility Prevention Project<sup>33</sup> and the CDC's *Legal/Policy Toolkit for Adoption and Implementation of EPT*.<sup>34</sup>

"Often our clients have multiple partners whom they cannot—or don't want to—locate, or they may be having survival sex, or it may be a case of rape," Judge says. "Even if they have one regular partner, women particularly may fear telling partners that they have an STI because it might result in physical or emotional abuse. Our public health department only traces syphilis-positive results, so usually we are unable to treat contacts of gonorrhea- or chlamydia-positive clients."

## SEXUAL HEALTH: PRACTICE PEARLS

**Engage & teach using creative games & incentives:** Use fun, interactive game formats and group sessions to teach clients about safer sex, contraception, sexuality, STDs and HIV/AIDS. Examples of our workshops are *The Dr. Truth Show*, which gives participants a chance to ask a “sex expert” confidential questions related to sex; *Who Wants to be a Female Condom Expert?* modeled on the TV game show *Who Wants to be a Millionaire?*; the *Sexual Drawing Game* based on *Pictionary*, where participants draw or use Play-Doh to teach each other about safer sex; and the *Sexual Health Game*, based on the popular game show *Jeopardy!* where participants learn about HIV/AIDS, STIs, safer sex, and other sexual health facts.

Announce the event about a week in advance, and invite clinicians such as case managers and nurse practitioners to refer clients who may benefit. Host the group in a location that will attract walk-ins during the event. Have refreshments, and raffle prizes so everyone who attends has a chance to win. Vet the curriculum to be sure that the information is correct. Keep sessions to 60–90 minutes to maintain the group’s attention. Following the game, include discussion to reinforce your essential three or four take-away points.

Advantages of this approach include engaging clients who otherwise may be hard to reach; empowering clients and validating what they know; providing opportunities to correct misinformation while diffusing tension over “right” and “wrong” answers; and promoting use of your services such as annual exams, vaccinations, or testing. Our groups are

well attended, have a reputation for being fun and educational, and clients give good feedback and help spread the word to others.

— *Lizanne Fontaine, Director of Health Services, & Lesley Moody, Health Education Supervisor, Care for the Homeless, New York City*

**Practice trauma-informed care:** Treat every client with dignity and respect. Assume that all have experienced trauma, assume that all have experienced sexual trauma, and assume that it’s hard for everyone—including your staff—to talk about sex. Give everyone—especially teens—autonomy to make decisions and to be in control of their health care. Create a safe environment for the clients and staff.

People are sexual beings; just because someone is homeless doesn’t mean that they don’t have sex. When taking a sexual history, let the client know that you ask these questions of everyone. Words can be empowering; use client-centered words. Use the same words that your client does. When asking, *Have you had oral sex, meaning ‘mouth on penis/vagina’?* say ‘I want to use the words that you use; how do you say it?’

— *Deborah Borne, MD, MSW, Tom Waddell Health Center*

**Encourage follow-up:** Make it clear that you care about the patient and want them to return for follow-up. Patients need rescreening three months following treatment to be sure that they haven’t been reinfected. Stress that you need to be able to find them to give them test results.

— *Diane E. Judge, APN, CNP, Heartland Health Outreach*

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## Healing Hands

*Healing Hands* is published by the National Health Care for the Homeless Council | [www.nhchc.org](http://www.nhchc.org)

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# IN FOCUS

A Quarterly Research Review of the National HCH Council

December 2012

## HIV/AIDS among Persons Experiencing Homelessness: Risk Factors, Predictors of Testing, and Promising Testing Strategies

The October issue of *In Focus* provides a synthesis of recent literature on HIV/AIDS among persons experiencing homelessness in the United States. Special attention is given to literature on HIV risk behaviors, predictors of HIV testing utilization, and promising HIV testing strategies for both youth and adult populations experiencing homelessness.

### **Prevalence of HIV/AIDS in Homeless Population**

In 2009, an estimated 784,701 individuals were living with a diagnosis of HIV infection in the United States.<sup>[1]</sup> According to a 2010 study, HIV infection was more prevalent in urban poverty areas<sup>1</sup> in the U.S. (2.1%) than in the general population (<1%); in these urban poverty areas, homeless status was significantly associated with and a predictor of HIV prevalence.<sup>[2]</sup> Persons experiencing homelessness are disproportionately infected with HIV/AIDS at a rate 3-9 times higher than the stably housed population.<sup>[3-5]</sup> Among youth experiencing homelessness, HIV prevalence is estimated to be between 2-11%.<sup>[6]</sup>

### **High-Risk Behaviors among Persons Experiencing Homelessness**

HIV risk behavior is prevalent among the homeless population. Individuals experiencing homelessness are more likely than other subpopulations to engage in behaviors associated with HIV risk, including risky sexual practices, injection drug use and needle sharing, and trading sexual acts for money, drugs, or a place to stay.<sup>[5]</sup>

An emerging topic within HIV/AIDS literature is that of high-risk behaviors and HIV prevalence among homeless youth. The country's estimated two million runaway and homeless youth (RHY) are disproportionately affected by HIV and other sexually transmitted infections in comparison to stably housed youth.<sup>[6, 7]</sup> Unstably housed youth are at 2-10 times greater risk of HIV infection than stably housed adolescents in the U.S.<sup>[6]</sup> This elevated rate of HIV infection could be the result of the small networks of social support that exist among RHY, in which high-risk behaviors are normalized, including unprotected sexual intercourse and injection drug use.<sup>[8]</sup> A study of homeless youth found that the longer adolescents had been homeless, the less motivated they were to reduce HIV risk behaviors.<sup>[9]</sup>

Unstably housed youth are at **2 to 10X** Greater Risk of HIV infection

Online social networking—used by over 96% of youth experiencing homelessness—can play a significant facilitative and preventative role in high-risk behavior, depending on how it is used.<sup>[6]</sup> For example, online social networking

<sup>1</sup> Urban poverty area defined as a census tract where  $\geq 20\%$  of residents had household incomes below the U.S. Poverty level in one of 23 cities included in the study.

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by youth who are homeless has shown to be a tool for identifying sexual partners and establishing exchanges of sex for food, drugs, or places to stay, while it has also been used to discuss safe sex practices and build knowledge about HIV/STI prevention behaviors.<sup>[6, 10]</sup>

## Factors Associated with Utilization of HIV Testing

According to Wenzel et al. (2012): “HIV testing is an effective tool for reducing HIV transmission and for combating poor HIV/AIDS health outcomes that disproportionately affect homeless persons” (p. 270).<sup>[4]</sup> If routine HIV testing became widespread, it could extend survival rates by 1.5 years for the average HIV-infected individual who seeks care.<sup>[11]</sup> However, HIV testing has yet to become a widespread practice, as more than one-fifth of HIV positive persons in the United States are unaware they are infected.<sup>[1]</sup>

**1 in 5**  
People infected with HIV  
in U.S. is unaware  
he or she is infected

Testing rates among youth experiencing homelessness are higher than youth in the general population.<sup>[6, 7]</sup> In a study of sexually active youth experiencing homelessness in Los Angeles, 85% had ever been tested, while 47% had been tested in the past three months.<sup>[7]</sup> The factors significantly associated with increased likelihood of testing included youth who self-identified as gay or had been to a drop-in center in the past month; factors marginally associated included youth who were of older age, Hispanic ethnicity, had more depressive symptoms, injected drugs in the past six months, and had two or more casual or need-based sexual partners in the past three months. Sexual risk behavior had no associations with testing likelihood.

Predictors of HIV testing vary for adults. A study of heterosexually active homeless men explored the individual and structural predictors of HIV testing.<sup>[4]</sup> The study found that structural factors related to service access and use—including recent access to medical or dental services or past U.S. military service—were significantly associated with a greater likelihood of past-year HIV testing. Conversely, individual factors—including demographic factors and HIV risk behavior—were not associated with a greater likelihood of past-year HIV testing. As Wenzel et al. (2012) state, these findings are supported by past research, which identifies access to medical services as a predictor of utilizing HIV testing.<sup>[12]</sup>

A study of women in shelters and low-income housing units, however, found both individual and structural factors to be associated with testing likelihood.<sup>[13]</sup> HIV testing was more likely among women who: lived in a shelter, were younger, lived with a child, had a regular source of medical care, had drug or alcohol dependence within the past year, experienced sexual violence, and were at low risk for mental health problems.

## Promising Practices in HIV Testing

The increased likelihood of HIV testing utilization among unstably housed men who had recent access to medical or dental services and unstably housed women who had a regular source of medical care presents an opportunity to improve testing rates across the board. In the aforementioned study of women in shelters and low-income housing units, the most common location for testing was a clinic or physician’s office.<sup>[13]</sup> Implementing routine and universal testing at medical and dental appointments regardless of individual factors such as demographic characteristics or HIV risk behavior has proven more effective

**Recent access to  
medical services =  
greater likelihood of  
HIV testing utilization**



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than targeted, risk-based testing practices that rely on individual factors, which Wenzel et al. found to be ineffective predictors of testing.<sup>[4, 14]</sup> This is consistent with the Centers for Disease Control's (CDC) revised testing recommendations, which endorse "routine voluntary HIV screening as a normal part of medical practice, similar to screening for other treatable conditions."<sup>[14]</sup>

Health Center Program grantees, including Health Care for the Homeless (HCH) projects, can provide integral HIV testing locations for unstably housed consumers due to their roles as primary care medical homes for the country's most vulnerable populations, regardless of insurance status or ability to pay.<sup>[15]</sup> Incorporating universal HIV testing into the primary care setting could increase the prevalence of HIV testing utilization among persons experiencing homelessness, potentially leading to "...earlier HIV diagnosis, improved linkage to care, and reduced transmission of HIV infection."<sup>[16]</sup> This primary care testing approach is reiterated in the National HIV/AIDS Strategy released in 2010, which states that all health care settings should be utilized for HIV testing.<sup>[17]</sup>

The dental care setting—found at some HCH projects—is also gaining attention for its suitability for rapid HIV testing.<sup>[18]</sup> Rapid HIV testing is a quick and cost-effective method for HIV screening that can be conducted by non-laboratorians in a variety of settings, although reactive-positive results must be followed up with traditional testing.<sup>[19]</sup> Even though exploration of HIV testing practices in the dental setting remains limited, dental clinics offer a promising venue for HIV rapid testing using oral fluid. Dentists already offer screening tests that are not focused on oral health, including tests for high blood pressure and elevated glucose, so incorporating routine HIV testing could become a standard component of dental exams.<sup>[18]</sup>

**40%**  
of unstably housed youth  
received HIV testing in  
non-clinical setting

Rapid HIV testing is also being implemented in outreach and community settings—including mobile medical units, homeless shelters, public parks, needle exchange programs, bathhouses, community events, bars, social service organizations, and drug treatment facilities—to reach minority groups and others at high risk for HIV infection.<sup>[19]</sup> In a study of rapid HIV testing in non-clinical settings, which included over 24,000 participants, 98% of those tested by participating community-based organizations indicated that they believed the non-clinical venues were appropriate settings for testing.<sup>[19]</sup>

Testing in non-clinical venues, especially bathhouses and community special events, successfully reached those who had not been previously tested.

Non-clinical testing venues—including outreach settings and community-based organizations—may also be more effective in reaching unstably housed youth than conventional medical settings.<sup>[20]</sup> In particular, unstably housed youth have shown a preference for drop-in centers over other service sites, and the use of drop-in centers was significantly associated with testing among this population.<sup>[7]</sup> In a study of youth experiencing homelessness in New York City, 40% of participants had received rapid and conventional testing in non-clinical venues.<sup>[20]</sup> Considering that the majority of adolescents in a community sample were willing to take a free rapid HIV test when offered, routine rapid testing in drop-in centers and other non-clinical settings could be an effective way to increase testing rates among youth.<sup>[21]</sup>

## Discussion

Given the prevalence of HIV infection and high-risk behavior among persons experiencing homelessness, particularly unstably housed youth, a better understanding of HIV testing utilization predictors and innovative testing practices is essential. The educational potential of online social networking could be utilized as a



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prevention strategy for RHY, whom are generally well-connected to online social media. Additionally, the use of promising rapid HIV testing strategies, including in primary care, dental, and non-clinical settings, can reach individuals who have never been tested, such as minorities, youth, and those with high-risk behaviors.

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