

The STD/HIV Link

According to the Centers for Disease Control and Prevention (CDC), testing for and treating sexually transmitted diseases (STDs) can help stop the spread of Human Immunodeficiency Virus (HIV).

The presence of other STDs increases the likelihood of HIV transmission and acquisition. Individuals infected with STDs are at least two to five times more likely than the uninfected to acquire HIV if they are exposed through sex. Also, if a person with HIV is co-infected with another STD they are more likely to transmit the virus through sex (Wasserheit JN. 1992. Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. *Sexually Transmitted Diseases* 9:61-77).

Increased susceptibility: STDs appear to increase HIV susceptibility by two mechanisms. Genital ulcers (e.g., syphilis, herpes, or chancroid) can cause breaks in the genital tract lining or skin, creating a portal of entry for HIV. Additionally, inflammation resulting from genital ulcers or non-ulcerative STDs (e.g., chlamydia, gonorrhea, and trichomoniasis) increases the concentration of cells in genital secretions that can serve as targets for HIV (e.g., CD4+ cells).

Increased infectiousness: Studies show that HIV-positive individuals who are co-infected with other STDs are likely to shed HIV in their genital secretions. Studies have shown that men with both gonorrhea and HIV are more than twice as likely to have HIV in their genital secretions than those with only HIV. Moreover, the median concentration of HIV in semen is as much as 10 times higher in men with both gonorrhea and HIV than those with only HIV. Higher concentrations of HIV in semen or genital fluids increase the likelihood that the virus will be transmitted to a sex partner. (*Adapted from:* <http://www.cdc.gov/std/hiv/STDFact-STD-HIV.htm>)

Recent Vermont STD data is of concern given this STD/HIV relationship

- 11 cases of infectious syphilis were identified in the first eleven months of 2011. (This compares with fewer than five cases of infectious syphilis in 2010.)
- 47 cases of gonorrhea and 1,385 cases of chlamydia were reported to date in 2011.
- Since 2006, greater than 40% of the cases of gonorrhea in males have been among men who have sex with men (MSM). (Over half of Vermont HIV/AIDS cases are among MSM.)
- In 2010, five of the individuals diagnosed with gonorrhea were also HIV positive.

Health care providers are encouraged to:

Offer patients between the ages of 13-64 HIV testing, at least once, as a routine part of medical care. Annual HIV testing is recommended for patients at high risk of infection. Offer testing for HIV, syphilis and hepatitis if patients:

- Test positive for gonorrhea or chlamydia
- Have had more than one sexual partner since their last test
- Use intravenous (IV) drugs
- Are a man who has sex with men¹

STD testing should include both rectal and pharyngeal testing based on sexual history, particularly for MSM.²

The *Infectious Disease Bulletin* can be viewed at: <http://healthvermont.gov/pubs/IDB/index.aspx>
For questions & comments, please contact Patsy Kelso at (802) 863-7240

¹ <http://www.mayoclinic.com/health/std-testing/ID00047>

² <http://www.ncsddc.org/who-we-are/press-releases/world-aids-day-underscores-need-think-broadly-about-hiv-prevention>

