

Women, Unprotected Anal Sex and HIV Risk

Unprotected anal sex can put both partners at high risk for HIV, especially “receiving” partners. This is true not only for men who have sex with men, but also for women. In addition, people having unprotected anal sex are at risk for rectal gonorrhea, chlamydia, and anal warts and anal cancer from human papillomavirus (HPV) infection. In contrast to tissue in the vagina and mouth, anal tissue is very fragile, making receptive anal sex much riskier for transmitting HIV and other sexually transmitted infections (STIs).

A recent study found that 30% of women 15 to 44 years of age have had anal sex at some point in their lives.¹ Studies have also shown that women who have unprotected anal sex with an HIV-infected man

even one time are about 30 times more likely to get HIV than if they had unprotected vaginal sex once.²⁻⁴

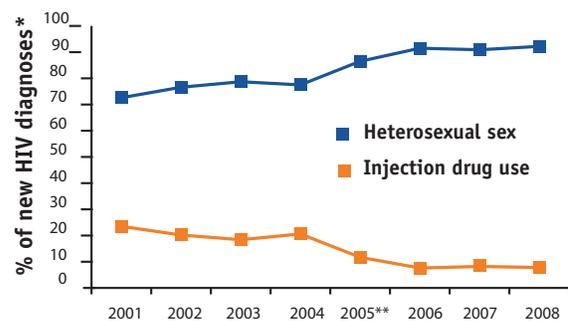
In New York City, 943 women were newly diagnosed with HIV infection in 2008. Women infected with HIV through heterosexual intercourse represent a large and increasing percentage of all women newly diagnosed with HIV. It is unclear whether women are aware of the risks of unprotected anal sex.

This report examines the prevalence of heterosexual anal sex in the past year among women 18 to 64 years of age in New York City, condom use during anal sex and whether women having unprotected anal sex are getting tested for HIV and other STIs. Recommendations for reducing the risks of unprotected anal sex are on page four.

The main way women get HIV is through heterosexual intercourse

- In 2008, more than nine in ten women (ages 13 years and older) with known risk who were newly diagnosed with HIV acquired the infection through sex, reflecting a 7% increase since 2006.
- It is unknown how many women were infected through unprotected anal sex. However, since unprotected anal sex is far more likely to transmit HIV than unprotected vaginal sex, it is probably the source of many infections.

Relative contribution of sexual transmission to new HIV diagnoses among New York City women, 2001-2008



* Among women whose transmission risk is known.

** Risk assessment procedures as well as the definition of heterosexual risk for women in NYC were changed in 2005, thus proportions pre-2006 are not directly comparable to proportions in later years.

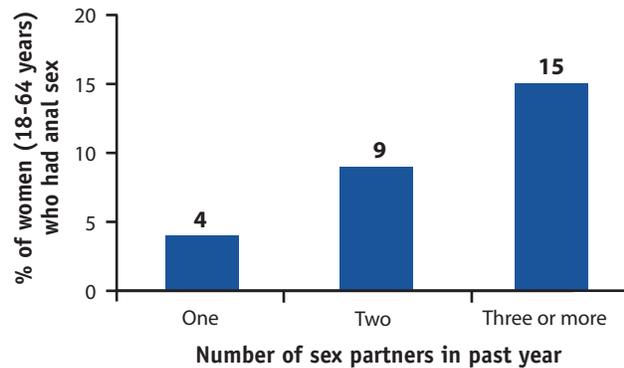
Source: HIV Epidemiology and Field Services Program, NYC DOHMH, 2001-2008.

This report is based on data from the New York City Community Health Survey (CHS) conducted by the Bureau of Epidemiology Services, NYC Department of Health and Mental Hygiene (DOHMH). Approximately 10,000 adults ages 18 years and older are interviewed about their health by telephone each year. Women were asked about their sexual practices, including if they had anal sex in the past 12 months. Estimates presented here are from CHS 2007 and are age-adjusted to the year 2000 Standard Population, unless otherwise specified. For full survey details, visit nyc.gov/health/survey. The data on HIV diagnoses among NYC women from 2001 to 2008 are taken from the HIV Epidemiology and Field Services Program in the Bureau of HIV/AIDS Prevention and Control, NYC DOHMH.

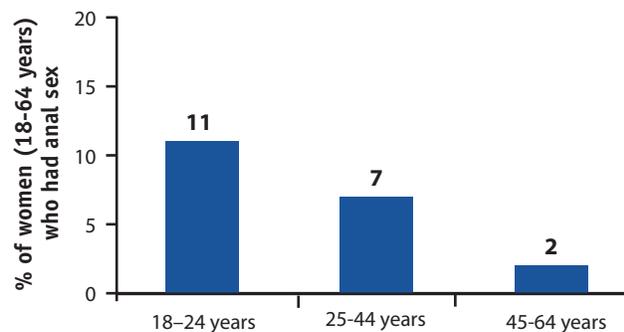
Women with multiple sexual partners and younger women are more likely to have anal sex

- In New York City, about 105,000 (5.6%) women 18 to 64 years of age reported having anal sex with men in the past year.
- Anal sex was more common among women with more sex partners in the past year. Fifteen percent (15%) of women with three or more sex partners had anal sex in the past year, compared with 4% of those with one sex partner.
- Among women who had sex in the past year, women 18 to 24 years of age were almost six times as likely to have had anal sex than women 45 to 64 years of age (11% vs. 2%).
- Reports of anal sex in the past year are similar among sexually active New York City women of different race/ethnicity, with Asian women reporting 8%, white women 7%, Hispanic women 6% and black women 4%.

Anal sex in the past year by number of sex partners among New York City women



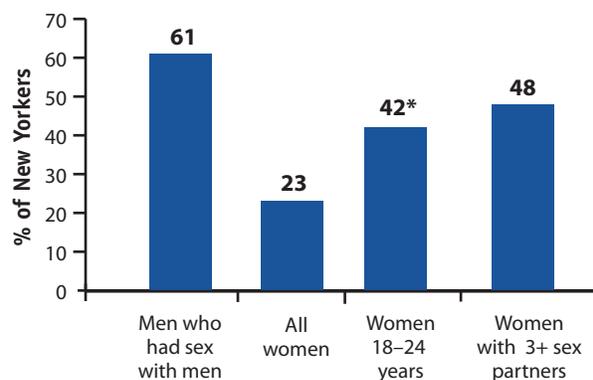
Anal sex by age among New York City women who were sexually active in the past year



Women are less likely than men who have sex with men to use a condom during anal sex

- Although both sexes are at similar risk of getting HIV through unprotected anal sex, women were less likely to report always using a condom during anal sex. Less than one quarter of NYC women always used condoms during anal sex in the past year, compared with more than half of men who had anal sex with men (23% vs. 61%).
- Less than half of women in any group defined by age, race, ethnicity or number of sex partners reported always using a condom during anal sex.

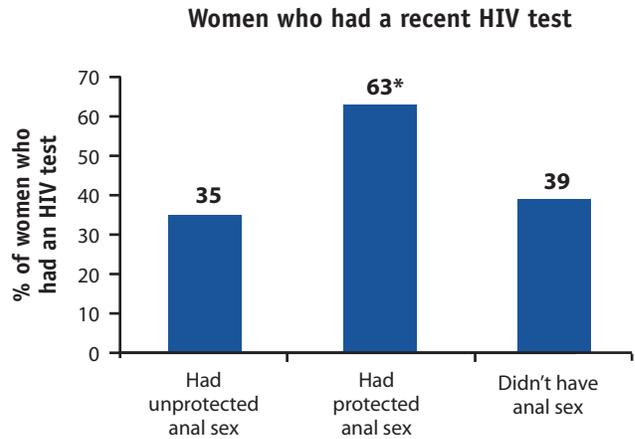
New Yorkers who reported always using condoms during anal sex in the past year



*Due to small numbers, estimate should be interpreted with caution.

Women who had unprotected anal sex are no more likely than other women to get tested for HIV

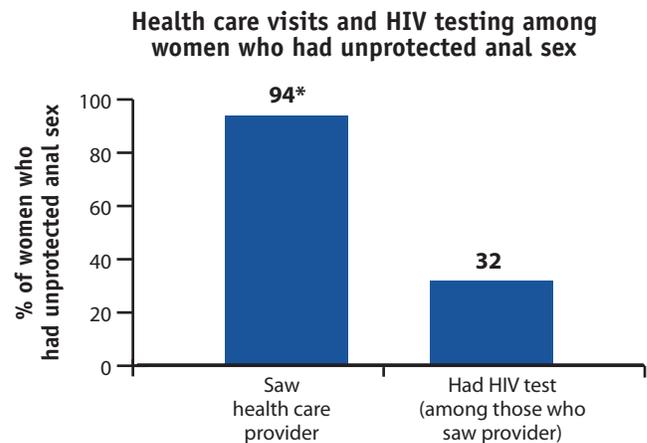
- Despite the high risk of unprotected anal sex, women who had unprotected anal sex in the past year were less likely than those who always used a condom during anal sex to have a recent HIV test (35% vs. 63%*).
- HIV testing was similar between women who had unprotected anal sex and those who did not have anal sex in the past year (35% and 39%, respectively).
- Similarly, women who reported having unprotected anal sex were less likely to have their health care provider recommend an HIV test than those who used a condom during anal sex (11% vs. 47%).



**Due to small numbers, estimate should be interpreted with caution.*

There are many missed opportunities for HIV testing among women who have had unprotected anal sex

- Even though most women who had unprotected anal sex saw a health care provider in the past year (94%*), only 32% of these women also had a recent HIV test.
- Among women who had anal sex without a condom in the past year, nine in ten women (91%*) were screened for cervical cancer in the past three years, an ideal opportunity to discuss sexual practices and provide HIV testing.



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Recommendations

Health care providers should know their patients' sexual practices in order to provide appropriate clinical recommendations, testing and treatment.

- Ask all patients about anal, vaginal and oral sex and condom use with each form of sex as part of standard HIV and other STI risk assessments.
- Examine and test patients who have had unprotected anal sex since their last visit for HIV, gonorrhea and chlamydia. Take anorectal and vaginal samples for gonorrhea and chlamydia testing.
- Urge all patients who engage in anal sex to use condoms. Although nothing provides 100% protection except not having sex, condoms greatly reduce the risk of HIV and other STIs.

Gynecologists should inquire about sexual behavior and provide risk-appropriate counseling and testing for HIV and other STIs during routine visits.

All New Yorkers should be aware of the health risks of unprotected anal sex, including HIV, rectal gonorrhea, and chlamydia as well as anal warts and anal cancer from HPV infection.

- Persons engaging in anal sex should always use a condom.
- Women who have had unprotected anal sex should get tested for HIV and other STIs at least once a year.

Call 311 for more information or visit:
 Free NYC condoms: nyc.gov/condoms
 Free and confidential STD clinics: nyc.gov/html/doh/html/std/std2.shtml
 Free and confidential HIV testing: hivtest.org

References

1. Prevalence and correlates of heterosexual anal and oral sex in adolescents and adults in the U.S. *J Infect Dis.* 2007;196:1852-1859.
2. Heterosexual transmission of human immunodeficiency virus: variability of infectivity throughout the course of infection. *Am J Epidemiol.* 1998;148:88-96.
3. Rethinking the heterosexual infectivity of HIV-1: a systematic review and meta-analysis. *Lancet Infect Dis.* 2008;8:553-563.
4. Reducing the risk of sexual HIV transmission: quantifying the per-act risk for HIV on the basis of choice of partner, sex act, and condom use. *Sex Transm Dis.* 2002;29:38-43.



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