Diagnosis of a Sexually Transmitted Bacterial Infection Is Linked to Very High Risk of SUBSEQUENT HIV ACQUISITION

FINDINGS FROM TWO RECENT STUDIES OF HIV-NEGATIVE MEN IN NEW YORK CITY (NYC) SUPPORT THIS LINK:

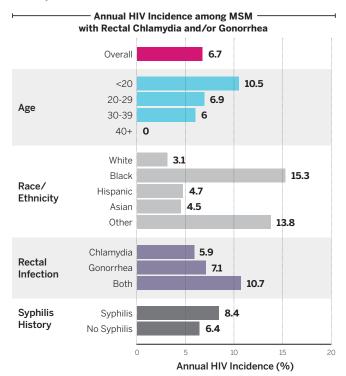
STUDY 1:

Men who have sex with men (MSM) diagnosed with rectal chlamydia and/or gonorrhea are almost three times more likely to get HIV within a year than MSM without a rectal infection.

Among MSM who were diagnosed with, and treated for, RECTAL CHLAMYDIA and/or GONORRHEA at New York City Health Department Sexual Health clinics* (2008-2010) and matched to the NYC HIV surveillance registry:

- One in 15 were diagnosed with HIV within a year (annual HIV incidence: 6.7 percent)
- •The risk of HIV diagnosis was higher for certain subgroups, including young MSM (<20 years), Black MSM and MSM diagnosed with both rectal chlamydia and gonorrhea versus a single infection

*Formerly called STD clinics



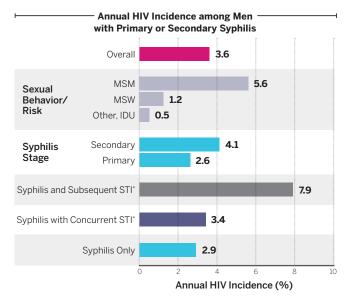
Source: Pathela P., et al. HIV incidence among men with and without sexually transmitted rectal infections: estimates from matching against an HIV case registry. Clinical Infectious Diseases (2013): 57(8) 1203-9.

STUDY 2:

One in 20 MSM with a primary or secondary syphilis diagnosis were diagnosed with HIV within a year.

Among all men with a **PRIMARY** or **SECONDARY SYPHILIS** diagnosis reported in NYC (2000-2010) and matched to the NYC HIV surveillance registry:

- One in 20 MSM were diagnosed with HIV within a year (annual HIV incidence: 5.6 percent)
- Higher HIV risk was observed among men with secondary syphilis versus primary syphilis
- Higher HIV risk was observed among men who repeatedly acquired other sexually transmitted bacterial infections after either a primary or secondary syphilis diagnosis



MSM=men who have sex with men

MSW=men who have sex with women

IDU=injection drug users

STI=sexually transmitted infection

Source: Pathela P., et al. The high risk of an HIV diagnosis following a diagnosis of syphilis: a population-level analysis of New York City men. *Clinical Infectious Diseases* 61.2 (2015): 281-287.

^{*}Includes diagnoses of chlamydia, gonorrhea or lymphogranuloma venereum

HIV-negative men diagnosed with rectal chlamydia, rectal gonorrhea or an early stage of syphilis are likely to continue engaging in sexual behaviors that increase their chances of later being infected with HIV. Health care providers can take these steps to help patients protect themselves against HIV and other sexually transmitted infections (STIs):

Discuss Sexual History

Take a comprehensive sexual history that includes gender of sexual partners and anatomic sites of sexual exposure during the past year.

Screen for STIs

- Examine sites of sexual exposure (e.g., anorectum).
- Use nucleic acid amplification tests (NAAT) for chlamydia and gonorrhea screening (e.g., anal, oropharyngeal, genitourinary).
- Inspect skin surfaces, including palms of hands and soles of feet.
- Test patients who have ulcers with serologic syphilis tests (nontreponemal and treponemal tests).

Screen for HIV

- Offer testing every three to six months to patients who were diagnosed with an STI, have condomless anal intercourse or have multiple sexual partners.
- Use the most sensitive test available.
- Test for acute HIV infections (plasma HIV RNA assays).

Recommend PrEP and PEP

- Establish referral networks or sites that provide PrEP and PEP care.
- Discuss pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) with HIV-negative men who have an STI and ongoing HIV risk.
- Prescribe PrEP and PEP according to clinical guidelines, or refer patients to sites that prescribe.

Counsel Patients on Sexual Health

- Use any clinical encounter as an opportunity to discuss safe sex practices.
- Explain increased risk of HIV to patients diagnosed with an STI (e.g., "One out of every 20 men who has sex with men who is diagnosed with syphilis will be diagnosed with HIV within a year").
- Discuss strategies for using condoms to prevent STIs, including HIV.

Stay Current

- Know the signs and symptoms of chlamydia, gonorrhea and syphilis.
- Know the latest treatments for STIs.
- Be familiar with local STI and HIV trends.

