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## Sexually Transmitted Diseases in the United States

### Key Facts

- The United States has the highest STD rates of any country in the industrialized world.<sup>1</sup>
- There were an estimated 15.3 million new cases of sexually transmitted diseases (STDs) in the U.S. in 1996 - the most recent year for which data are available.<sup>1</sup>
- This 1996 estimate is higher than previous estimates from the 1980s primarily because improved detection techniques have identified asymptomatic (or silent) infections that were undercounted in the past. When previous underestimation is taken into account, the new estimate most likely reflects a slight overall decrease in the number of new STD cases occurring each year.<sup>1</sup>
- Two-thirds of all STDs in 1996 are attributable to two infections - human papillomavirus (HPV) and trichomoniasis (Fig. 1).<sup>1</sup>
- By age 24, at least one in three sexually active people are estimated to have contracted an STD.<sup>1</sup>
- All groups of people are potentially at risk for STDs, but women, teens, and minorities have been disproportionately affected by them.<sup>1</sup>
- STDs are generally divided into those that are bacterial (curable) and those that are viral (incurable, but symptoms often are treatable). Both are often asymptomatic or silent and may be infectious even when symptoms are not present.
- Having an STD increases a person's risk of acquiring HIV.

### Bacterial (Curable) STDs

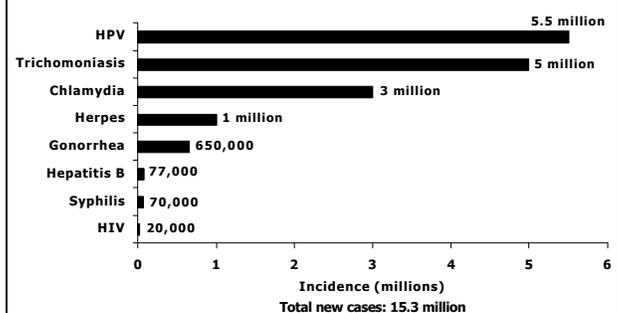
- *Trichomoniasis* or "trich" is the most common bacterial STD, with about 5 million new cases annually.<sup>1</sup> Vaginal infections caused by trich are among the most common conditions found in women receiving reproductive health care.
- *Chlamydia* often exhibits no symptoms, but if left untreated, can lead to pelvic inflammatory disease (PID) and infertility.<sup>1</sup> When detected early, chlamydia is relatively easy to cure.
- *Syphilis* rates are now at their lowest levels in two decades, leading public health authorities to strive for complete syphilis elimination.<sup>1</sup>

### Viral (Incurable) STDs

- *Human Papillomavirus (HPV)* is the fastest growing STD. HPV is a group of over 100 viruses, many of which cause no symptoms. Some types of HPV cause genital warts and some others are strongly linked with cervical and other genital cancers.<sup>2</sup>
- *Herpes* is the second most common viral STD. Herpes can cause outbreaks of sores, but most herpes infections do not cause noticeable symptoms and still can be contagious.<sup>1</sup> While there is no cure for herpes, some of the symptoms can be treated.

Fig. 1

### Estimated Annual New Cases of STDs in the U.S.



Note: Estimates for HIV and Hepatitis B reflect only sexual modes of transmission; estimates are higher when non-sexual transmission is included.  
Source: Kaiser Family Foundation and American Social Health Association, *Sexually Transmitted Diseases in America: How many cases and at what cost?*, December 1998.

- *Hepatitis B (HBV)* can be transmitted sexually or through the blood -- two-thirds of HBV infections are transmitted sexually.<sup>3</sup> Some people with HBV are carriers and can pass the virus without being aware of it, and some will get liver disease or liver cancer. There is no cure for HBV, but there is a vaccine that can prevent it.<sup>1</sup>
- *HIV* infections have stabilized in recent years at approximately 41,000 new cases each year,<sup>4</sup> about half of which are acquired through sexual transmission.<sup>1</sup> The Centers for Disease Control and Prevention estimates that as many as one in three people with HIV do not know they are infected. New drug therapies are allowing people with HIV/AIDS to live longer and healthier lives, but no cure or vaccine exists.

## Consequences of STDs

- Millions of women, men and children are affected by long-term complications of STDs, including a variety of cancers, infertility, ectopic pregnancy and miscarriage, and other chronic diseases.<sup>5</sup>
- People with an active syphilis, genital herpes, or chancroid infection, or who have chlamydia, gonorrhea, or trichomoniasis are 3 to 5 times more likely to contract HIV if exposed than are other people.<sup>6</sup>
- At least 15% of all infertile American women are infertile because of tubal damage caused by pelvic inflammatory disease (PID), resulting from an untreated STD.<sup>6</sup>

## Impact of STDs on Women

- Women are biologically more susceptible than men to becoming infected if exposed to an STD. For example, a woman's risk of contracting gonorrhea from one act of unprotected intercourse may be as high as 90%, while the risk to a man is about 20-30%.<sup>6</sup> The risk of contracting HIV from one act of intercourse has been estimated to be eight times higher from man to woman as it is from woman to man.<sup>7</sup>
- Complications of STDs can be more severe and more frequent among women than men. Once infected, for example, women are more susceptible to reproductive cancers and infertility.<sup>6</sup>
- STDs are less likely to produce symptoms in women, and therefore are less likely to be diagnosed until serious problems develop. Up to 85% of chlamydial infections in women are asymptomatic compared to 40% in men.<sup>6</sup>

## Impact on Teens and Young Adults

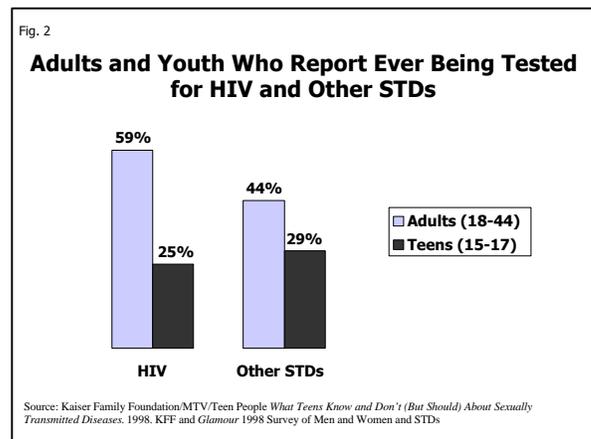
- There is a higher prevalence of STDs among teens than among adults. Two-thirds of cases occur in people ages 15-24, and about a quarter of all new STD cases occur in teens 15-19 years old.<sup>6</sup>
- Teenage girls are also more susceptible than adult women to cervical infections, such as gonorrhea and chlamydia, due to their immature cervix.<sup>6</sup>
- As many as half of all new HIV infections are estimated to be among young people under the age of 25, and as many as one-quarter among youth under the age of 22.<sup>8</sup>

## Direct Medical Costs of STDs

- Direct medical costs annually for STD treatment in the United States is estimated to be at least \$8.4 billion.<sup>1</sup> This does not include nonmedical indirect costs, such as lost wages and productivity (due to illness), out-of-pocket costs, or costs related to transmission to infants.<sup>1</sup>
- HIV incurs half of all direct medical costs related to STDs, at an estimated \$4.5 billion annually.<sup>1</sup>
- HPV incurs the highest direct medical costs of all STDs other than HIV, at a conservative estimate of \$1.6 billion annually, resulting primarily from the treatment of precancerous cervical lesions caused by HPV infection.<sup>1</sup>
- Curable STDs incur nearly \$2 billion a year in direct costs, primarily due to treatment of STDs and their consequences, such as PID (\$1.1 billion), followed by trichomoniasis (\$375 million) and chlamydia (\$375 million).<sup>1</sup>

## Public Knowledge and Personal Concern About STDs

- When asked to name STDs they have heard of, very few Americans can name the most common STD - human papillomavirus or HPV. Two percent named HPV and 11% named genital warts, which are caused by some types of HPV.<sup>9</sup>
- A third of Americans (36%) are not aware that having an STD increases a person's risk of becoming infected with HIV.<sup>10</sup>
- While at least one in three Americans will get an STD in their lifetime, the majority of men (74%) and women (69%) think the rate is one in ten Americans or fewer.<sup>10</sup>
- Perhaps because they dramatically underestimate the size of the STD epidemic, only a handful of men (14%) and women (8%) believe they are *personally* at risk of getting an STD.<sup>10</sup>
- Less than half of adults ages 18-44 (44%) have ever been tested for an STD other than HIV/AIDS (fig. 2).<sup>10</sup>
- Four in ten sexually active women (42%) have never discussed STDs with a health provider.<sup>10</sup>



## References

- <sup>1</sup> American Social Health Association and the Kaiser Family Foundation. *Sexually Transmitted Diseases in America: How Many Cases and at What Cost?* Menlo Park: Kaiser Family Foundation, 1998.
- <sup>2</sup> Walboomers J. et al. "Human Papillomavirus is a Necessary Cause of Invasive Cancer Worldwide." *Journal of Pathology*, 189: 12-19, 1999.
- <sup>3</sup> Sabin K. Surveillance of hepatitis B in the US. CDC, Atlanta, website: [cdc.gov/ncid/diseases/hepatitis](http://cdc.gov/ncid/diseases/hepatitis), June 3, 1998.
- <sup>4</sup> Holmberg SD. The Estimated Prevalence and Incidence of HIV in 96 large metropolitan areas. *American Journal of Public Health* 86 (5); 1996.
- <sup>5</sup> *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*. 1996, Washington, DC. The Institute of Medicine, National Academy Press.
- <sup>6</sup> Donovan P. *Testing Positive: Sexually Transmitted Disease and the Public Health Response*. 1993, New York, NY. The Alan Guttmacher Institute.
- <sup>7</sup> Padian NS, Shiboski SC, Glass SO, et al. Heterosexual transmission of human immunodeficiency virus (HIV) in Northern California: Results from a ten-year study. *American Journal of Epidemiology*. 1997;146:350-57.
- <sup>8</sup> Centers for Disease Control and Prevention. *CDC Facts: Adolescents and HIV/AIDS*, March, 1998.
- <sup>9</sup> Kaiser Family Foundation/Harvard School of Public Health. *Health News Index*, 2/2000.
- <sup>10</sup> Kaiser Family Foundation/Glamour. 1998 Survey of Men and Women on Sexually Transmitted Diseases. Menlo Park, CA: Kaiser Family Foundation.