

Sexually Transmitted Diseases in the U.S.

Each year, there are approximately fifteen million new cases of sexually transmitted diseases (STDs) in the U.S., and this country has the highest rate of STD infection in the industrialized world.¹ By age 24, at least one out of every four Americans is believed to have contracted an STD, and an estimated 65 million Americans are now living with an incurable STD.²

Research suggests that women are biologically more susceptible to STD exposure than men.³ While STDs, including HIV, affect every age group, people under 25 account for roughly two-thirds of all new STD infections: 42 percent occur among those aged 20-24 and 25 percent occur among 15-to-19-year-olds.^{1,2} CDC data also show higher reported rates of STDs among some racial and ethnic minority groups, compared with rates among whites – possibly reflecting overall health disparities as well as greater use of public health clinics by minority populations.⁴

STDs are generally divided into two categories: bacterial (which can be cured with antibiotics) and incurable viral infections, whose symptoms are often treatable. Many STDs are asymptomatic – often leaving people unaware that they are infected. Women are less likely to experience symptoms,³ but the complications of STDs are also greater and more frequent among women than men.⁵ Left undiagnosed and untreated, STDs can lead to long-term complications including infertility, ectopic pregnancy, miscarriage, reproductive cancers, and other chronic diseases.^{2,3} STD infection can also increase a person's risk for contracting and transmitting HIV.^{5,6} STDs take a significant financial toll as well: One 1994 estimate suggests that direct and indirect costs total about \$10 billion each year; if HIV is included, the costs jump to almost \$17 billion annually.^{2,3}

Public Attitudes and Provider Practices

- More than 9 in 10 women (92%) aged 18-49 agree that people often feel more embarrassed about having an STD than about other health issues.⁷
- Fewer than half (44%) of adult women under 50 report being personally concerned about STDs.⁷

- Only half of adult women have discussed HIV testing with their partner, and only two in five have discussed getting tested for other STDs.⁷
- Half of adult women under 50 say they have not talked to their health care provider about STDs, including HIV/AIDS.⁷
- Just over half of ob/gyns and family practice physicians (54% and 57%, respectively) talk about STDs with all or most of their routine gyn patients; only 43% of ob/gyns and 53% of family practice physicians say they routinely discuss HIV/AIDS.⁸

Knowledge and Awareness

- Almost all women (99%) aged 18-49 are aware that STDs are spread through sexual intercourse.⁷
- About one in three adult women (35%) do not know that some infections can be transmitted without having intercourse, and nearly one in 6 (15%) do not realize STDs can be spread even when symptoms are not present.⁷
- Three in five (60%) women are unaware that women are biologically more susceptible than men to STDs.⁷
- Nearly half (48%) of adult women do not know that having an STD increases a person's risk of HIV.⁷

STD Statistics in the U.S.

Even though STDs are relatively common and affect all population groups, a number of factors limit the ability of researchers to accurately calculate the rate and actual number of infections. The CDC collects much data based on state reporting requirements, which do not track all STDs. And, the degree and manner in which states track reportable STDs may vary. In addition, given the asymptomatic nature of some STDs, infected individuals may not seek testing and treatment – and thus may not be counted in government estimates.²

Bacterial (Curable) STDS

Bacterial Vaginosis

- Bacterial vaginosis (BV) is the most common vaginal infection in women of childbearing age.⁹
- While overall rates of BV infection are not known, as many as 16% of pregnant women have BV, and infection rates vary by race and ethnicity – from 6% in Asians and 9% in whites to 16% in Hispanics and 23% in African Americans.¹⁰
- BV is sometimes accompanied by discharge, odor, pain, itching, or burning.⁹
- The bacteria that causes BV can sometimes infect the uterus and fallopian tubes, leading to pelvic inflammatory disease (PID) – which can cause infertility or increased risk for ectopic pregnancy, a life-threatening condition in which a fertilized egg grows outside the uterus. Pregnant women with BV are more likely to have babies who are born early or with low birth weight.¹⁰

Chlamydia

- Chlamydia is the most frequently reported infectious disease in the U.S. Although an estimated 3 million cases occur annually, only 783,242 cases were reported in 2001.²
- CDC data based on states that collect age-specific information indicate that teenage girls have the highest infection rates: 15- to 19-year-old girls represent 46% of all reported infections, with women ages 20 to 24 accounting for another 33%.¹¹
- Approximately 75 percent of infected women and 50 percent of infected men have no symptoms. When present, signs of infection for women include vaginal discharge and a burning sensation during urination. For men, signs of infection include discharge from the penis, pain or burning during urination, and pain or swelling of the testicles.¹⁰
- Left untreated, chlamydia can lead to pelvic inflammatory disease. Other pregnancy complications from chlamydia include neonatal conjunctivitis and pneumonia.¹¹

Gonorrhea

- Each year, approximately 650,000 people in the U.S. are infected with gonorrhea.¹⁰
- Roughly 75 percent of all reported gonorrhea is found in people aged 15 to 29, with highest infection rates usually found in 15-to-19-year-old

women and 20-to-24-year-old men. In 1999, 77 percent of all reported gonorrhea cases occurred among African Americans.¹²

- When initially infected, most men have some signs or symptoms, such as a burning sensation when urinating or a yellowish white discharge. In women, early symptoms are often mild, and many experience none at all.¹⁰
- Untreated gonorrhea can lead to pelvic inflammatory disease (PID), and a pregnant woman can also pass gonorrhea to her baby during delivery – which can cause blindness, joint infection, or a life-threatening blood infection. While gonorrhea is sexually transmitted, it can be spread to other parts of the body, such as the eyes.¹²

Syphilis

- The CDC estimates that there are 70,000 new cases of syphilis annually, although health officials reported only 35,600 cases in 1999.⁹ Although the reported rate of syphilis in 2000 was at its lowest point since 1941, 2001 figures showed an increase of just over 2 percent.¹³
- Syphilis occurs primarily among those aged 20 to 39, with the reported rate for men 1.5 times greater than that for women. In 1999, the incidence was highest in men aged 30 to 39 and women aged 20 to 29.²
- Signs of infection – normally a single painless genital sore – first appear between 10-90 days, with an average span of 21 days. Although sores disappear without treatment, new symptoms appear several weeks to six months after infection. These might include: a rash; genital lesions; sores on the mouth, throat, and cervix; a patchy loss of hair; or a general sense of ill health – making symptoms often indistinguishable from those of other disease. These symptoms, too, will also disappear on their own.¹⁰
- While symptoms disappear, untreated syphilis remains in the body. The infection, which progresses in stages, can damage internal organs, including the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints. Pregnant women can also pass the disease on to their fetus.¹⁰

Trichomoniasis

- Trichomoniasis is the most common curable STD in young, sexually active women in the U.S. An estimated 5 million new cases occur each year in women and men; calculations on the overall number of infections are not available.¹⁴

- Many women experience symptoms such as vaginal discharge or odor, or pain during sex or while urinating, which usually appear within 5 to 28 days of infection; most men remain asymptomatic.¹⁰
- Trichomoniasis, an upset of the balance of bacteria that is normally found in the vagina, is rarely dangerous; but in pregnant women, it may cause premature rupture of the membranes and pre-term delivery.¹⁴
- Most people with herpes have no symptoms, but the infection can stay in the body indefinitely. When signs do occur, they typically appear as genital blisters or sores. Outbreaks can recur after weeks or months, but are almost always less severe and shorter than the first episode. HSV-2 can cause potentially fatal infections in infants if a pregnant woman has an active infection during delivery.¹⁶
- There is no cure for herpes, but taking antiviral medications can prevent and/or shorten outbreaks.¹⁶

Viral STDs

Human Papillomavirus (HPV)

- Genital HPV is considered to be the most common STD in the U.S. Approximately twenty million people are currently infected with HPV, and about 5.5 million new infections occur each year. Fifty to 75 percent of sexually active men and women acquire genital HPV infection at some point in their lives.¹⁰
- The human papillomavirus (HPV) is a group of more than 100 viruses, more than 30 of which are sexually transmitted and can infect the genital area.¹⁵
- Most HPV infections appear to be temporary, likely cleared by the person's immune system, and have no noticeable symptoms. Some HPV types cause visible genital warts, while several other types cause virtually all cases of cervical cancer. These "high-risk" HPV types may also be linked to cancer of the anus and penis.¹⁵
- Although there is no cure for HPV, treatments are available for genital warts and research is underway on a vaccine for high-risk HPV types.¹⁰
- Regular Pap smears can identify pre-cancerous cells in the cervix – caused by high-risk HPV types – before they develop into cancer. A DNA test can identify HPV infection, including which HPV type is present. When detected early, cervical cancer has an extremely high survival rate.¹⁵

Genital Herpes

- Nationwide, 45 million people ages 12 and older – or one out of five of the total adolescent and adult population – are infected with herpes simplex virus type 2 (HSV-2), with approximately one million new infections annually.²
- HSV-2 usually infects the genitals, but can be spread to the mouth. A second herpes virus, HSV-1, causes cold sores and fever blisters but can also be spread to the genitals.¹⁰

Hepatitis B

- According to the CDC, there are 1.25 million people in the U.S. with chronic Hepatitis B. Each year, there are approximately 77,000 new cases, two-thirds of which are sexually transmitted.²
- A viral infection that attacks the liver, Hepatitis B can lead to chronic infection, scarring of the liver, liver cancer, or death.¹⁰
- Symptoms are similar to the flu and can include loss of appetite, fatigue, nausea and vomiting, abdominal pain, and jaundice (a yellowing of the skin and eyes).¹⁰
- There is no cure for Hepatitis B, but there is a vaccine against infection.¹⁰

HIV/AIDS

- Roughly 40,000 new HIV infections occur in the U.S. annually, and there are an estimated 850,000-950,000 persons living with HIV in this country today. Up to one-third of HIV-positive individuals are thought to be unaware of their infection.¹⁷
- The CDC estimates that almost one-third of new HIV infections (30 percent) occur among women. In addition, the proportion of all AIDS cases reported among adult and adolescent women has more than tripled, from 7% in 1985 to 26% in 2001.¹⁸ Most women are infected with HIV through heterosexual contact.¹⁸ Among women, the epidemic has had an increasingly disproportionate impact on women of color.
- By race/ethnicity, it is estimated that more than half of new HIV infections occur among African-Americans (54%), compared with 26 percent of new infections among whites, and 19 percent of new infections among Hispanics. The majority of new infections (42%) occur among men who have sex with men, 33 percent occur among those who are thought to contract HIV through heterosexual contact, and 25% occur among injection drug use.¹⁹

- HIV can be in the body for months or years before it causes noticeable symptoms or progresses to AIDS, yet it can still be spread to a partner. The only way to confirm an HIV diagnosis is to get tested.¹⁰
- Currently, the average time between HIV infection and the appearance of signs that could lead to an AIDS diagnosis is about 10 years.²⁰ This time varies greatly and can depend on many factors. There are medical treatments that can slow down the rate at which HIV weakens the immune system and there are other treatments that can prevent or cure some of the illnesses associated with AIDS but there is currently no cure. As with other diseases, early detection offers more options for treatment and preventive health care.¹⁰

Protecting Against HIV and other STDs²¹

Public health officials agree that the best advice for people who are sexually active is to limit the number of sexual partners, to not go back and forth between partners, to avoid sexual contact and seek medical evaluation if they suspect infection, and to use latex condoms correctly every time they have sex.

Condoms cannot offer universal protection from all STDs, but they can reduce the risk of infection. When used consistently and correctly, latex condoms have been found to be highly effective at preventing HIV transmission. They can also reduce the risk of gonorrhea, chlamydia, and trichomoniasis. For genital herpes, syphilis, and HPV, the risk of transmission is reduced only when the condom covers the infected areas.

References

¹ American Social Health Association (ASHA) and the Kaiser Family Foundation. Sexually Transmitted Diseases in America: How Many Cases and at What Cost? Menlo Park: Henry J Kaiser Family Foundation, December 1998.

² Centers for Disease Control and Prevention (CDC). Tracking the Hidden Epidemic: Trends in STDs in the United States, 2000. http://www.cdc.gov/nchstp/dstd/Stats_Trends/Trends2000.pdf and CDC, Sexually Transmitted Disease Surveillance, 2001, September 2002. <http://www.cdc.gov/std/stats/2001PDF/Survtext2001.pdf>

³ Institute of Medicine, The Hidden Epidemic: Confronting Sexually Transmitted Diseases, Washington DC: National Academy Press, 1996.

⁴ CDC, STDs in Racial and Ethnic Minorities, 2002. <http://www.cdc.gov/std/stats/2001PDF/SFMinorities2001.pdf>.

⁵ Wasserheit JN. 1992. Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. Sexually Transmitted Diseases 9:61-77.

⁶ Fleming DT, Wasserheit JN. 1999. From epidemiological synergy to public health policy and practice: The contribution of other sexually transmitted diseases to sexual transmission of HIV infection. Sexually Transmitted Infections 75:3-17.

⁷ Kaiser Family Foundation and *SELF* magazine, A More Sexually Aware You: What You Don't Know About Your Sexual Health, June 2003.

⁸ Kaiser Family Foundation, National Survey of Women's Health Care Providers, Menlo Park: 2000

⁹ CDC, STD Facts on Bacterial Vaginosis, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/FactsBV.htm (September 2000)

¹⁰ ASHA, Facts and Answers About STDs, <http://www.ashastd.org/stdfaqs/index.html>

¹¹ CDC, STD Facts on Chlamydia, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/chlamydia_facts.htm (April 2001)

¹² CDC, STD Facts on Gonorrhea, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/FactsGonorrhea.htm (May 2001)

¹³ CDC, STD Facts on Syphilis, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/Syphilis_Facts.htm (May 2001) and <http://www.cdc.gov/od/oc/media/pressrel/r021101b.htm> (Nov 2002)

¹⁴ CDC, STD Facts on Trichomoniasis, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/FactsTrichomoniasis.htm (September 2000)

¹⁵ CDC, STD Facts on HPV, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/FactsHPV.htm (May 2001)

¹⁶ CDC, STD Facts on Genital Herpes, http://www.cdc.gov/nchstp/dstd/Fact_Sheets/facts_Genital_Herpes.htm (June 2001)

¹⁷ CDC, Advancing HIV Prevention: New Strategies for a Changing Epidemic—United States, 2003, MMWR, April 18, 2003 and Fleming, P., et.al., HIV prevalence in the United States, 2000, 9th Conference on Retroviruses and Opportunistic Infections, Abstract # 11, Oral Abstract Session 5, February 2002.

¹⁸ CDC, HIV/AIDS Surveillance Report, Vol. 13, No. 2. And HIV/AIDS Among U.S. Women: Minority and Young Women at Continuing Risk, <http://www.cdc.gov/hiv/pubs/facts/women.htm> and CDC, HIV/AIDS Update: A Glance at the HIV/AIDS Epidemic, 2002.

¹⁹ CDC, HIV/AIDS Update: A Glance at the HIV/AIDS Epidemic, 2002.

²⁰ CDC HIV/AIDS Frequently Asked Questions URL: <http://www.cdc.gov/hiv/pubs/faq/faq4.htm>

²¹ CDC, Latex Condoms and Sexually Transmitted Diseases—Prevention Messages, Atlanta: CDC, 2001, p. 2

Additional copies of this publication (#3345) are available on the Kaiser Family Foundation's website at www.kff.org.