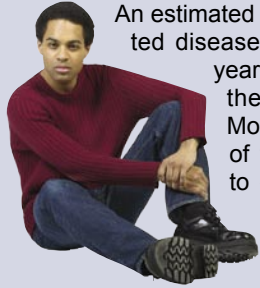


# Sexually Transmitted Diseases (STDs)

## Introduction



An estimated 19 million new sexually transmitted disease (STD) infections happen each year. More than 65 million people in the U.S. have an incurable STD. Most people have little knowledge of these diseases. It is important to educate yourself about them to protect yourself, your friends and your loved ones.

## Chlamydia

Chlamydia is a common sexually transmitted disease (STD) caused by bacteria. It can be spread during vaginal, anal or oral sex and can affect men and women.

More than 929,400 cases were reported in 2004 (the most recent data available), but the true number is thought to be much higher. Almost half of the people infected were 15-24 years old. Many people have no symptoms. Some women might have an abnormal vaginal discharge or a burning when urinating. When the infection spreads, some women may have lower abdominal or back pain, nausea or fever.

The more sex partners a person has, the greater the risk of chlamydia infection. Chlamydia can be treated and cured with antibiotics. If not treated, the infection can cause an infection called pelvic inflammatory disease (PID) in women 10 to 40% of the time. PID can cause permanent damage to the fallopian tubes, uterus and tissues surrounding the ovaries. Women infected with chlamydia may also have higher risk of acquiring HIV infection (HIV causes AIDS) from an infected partner.

## HPV - Human papillomavirus

Genital HPV infection is caused by human papillomavirus (HPV). Most people who become infected will clear it on their own. However, some HPV viruses are "high-risk" types, which may lead to cancer of the cervix, vulva, vagina, anus or penis. About 20 million people are currently infected with HPV with 6.2 million new infections each year. At least 50 percent of sexually active men and women acquire genital HPV infection at some point in their lives.

HPV spreads primarily through genital contact. Most HPV infections have no symptoms. Some people get visible

genital warts which may spread to the mouth through oral sex or have changes in cells of the cervix, vulva, anus or penis that could lead to cancer.

About 10 of the genital HPV types can lead to the development of cervical cancer. The American Cancer Society estimated that in 2005 in the United States, about 10,370 women would develop invasive cervical cancer and about 3,710 women would die from this disease.

A new vaccine which will protect against four types of HPV viruses was approved by the FDA in June, 2006. Because the vaccine does not protect against all types of HPV, it will not prevent all cases of cervical cancer or genital warts. According to the Centers for Disease Control and Prevention (CDC), about 30% of cervical cancers and about 10% of genital warts will not be prevented by the vaccine - nor will it prevent other sexually transmitted infections.

## Syphilis

Syphilis is an STD caused by a type of bacteria. In the U.S., over 33,400 cases of syphilis were reported in 2004 (the most recent data). Infectious syphilis occurs most in women 20 to 24 years of age and in men 35 to 39 years of age.

Syphilis is passed by direct contact with a syphilis sore. Sores occur mainly on the genitals, vagina, anus, in the rectum or on the lips or in the mouth. Syphilis can spread during vaginal, anal or oral sex. Many people infected with syphilis do not have any symptoms for years, but are at risk for later complications if they are not treated.

During the primary stage of syphilis one or more sores (called a chancre) appears. The last (hidden) stage of syphilis has no symptoms. Without treatment, it may damage internal organs, including the brain, nerves, eyes, heart, blood vessels, liver, bones and joints. Penicillin is used for treatment in the early stages (infected less than a year).

## Trichomoniasis

Trichomoniasis (trick-oh-moe-nye-uh-sis) is caused by a microscopic parasite. It is a very common STD found mostly in 16-to-35-year old women. In the U.S., an estimated 7,400,000 new cases affect women and men each year.

Trichomoniasis is spread through sexual activity. Infection is more common in women who have had multiple sexual partners. The parasite is sexually transmitted through penis-to-vagina intercourse or vulva-to-vulva (the genital area outside the vagina) contact with an infected partner.

Many women have symptoms which include a frothy, yellow-green vaginal discharge with a strong odor and irrita-

tion and itching of the female genital area. The prescription drug metronidazole may be prescribed for treatment.

## Genital Herpes

Genital herpes is an STD caused by the herpes simplex viruses type 1 (HSV-1) and type 2 (HSV-2). Most people have few symptoms. Others have one or more blisters on or around the genitals or rectum. At least 45 million people ages 12 and older have had genital herpes infection (1 in 5 adolescents and adults). The Type 1 and Type 2 viruses are released from sores and from unbroken skin between outbreaks. Most people infected with Type 2 are not aware of their infection. In many adults genital herpes can cause painful genital sores that reoccur. In addition, genital herpes can cause potentially fatal infections in babies if the mother has sores at the time of delivery. Worldwide, herpes may play a role in the spread of HIV among men and women who do not have same-sex partners.

## HIV/AIDS

HIV (human immunodeficiency virus) is the virus that causes AIDS. This virus may be passed from one person to another through sexual and blood-to-blood contact. In the U.S., the estimated number of AIDS cases through 2004 (the most recent data) is 944,306 with 529,113 deaths.

The most common ways that HIV is transmitted from one person to another is by having sex (anal, vaginal or oral) with an HIV-infected person, by sharing needles or injection equipment with an injection drug user who is infected with HIV, from HIV-infected women to their babies before or during birth or through breast-feeding after birth.

AIDS stands for Acquired Immunodeficiency Syndrome. AIDS is a disease caused by the HIV virus that weakens the immune system. It is a routinely fatal disease.

The only way to know if you are infected is to be tested for HIV. You cannot rely on symptoms, because they are similar to those of many other diseases.

## Gonorrhea

Gonorrhea is a common STD caused by a bacteria. An estimated 700,000 people in the United States are infected each year. Gonorrhea is spread through contact between the penis, vagina, mouth and anus.

Any sexually active person can be infected with gonorrhea. In the U.S., the highest rates are among sexually active teenagers, young adults and African Americans. In men, symptoms include a burning sensation when urinating or a white, yellow or green discharge from the penis. In women, the symptoms are often mild or absent.



Untreated gonorrhea can cause permanent health problems. In women, it can cause pelvic inflammatory disease (PID) with severe abdominal pain, fever and long-lasting pelvic pain. PID can cause infertility or ectopic pregnancy. In men, gonorrhea can cause a painful condition of the testicles that can lead to infertility if untreated. Several antibiotics can cure gonorrhea, although drug resistant strains are developing world-wide.

## Bacterial Vaginosis

Bacterial vaginosis (BV) is the most common vaginal infection in women of childbearing age, with as many as 16 percent of pregnant women having BV in the U.S. The cause of BV is not fully understood. BV is associated with an imbalance in the bacteria that are normally found in a woman's vagina. Not much is known about how women get BV. However, you are more at risk if you have multiple sex partners, douche or use an intrauterine device (IUD). It is not clear what role sexual activity plays in the development of BV. However, women that have never had sexual intercourse are rarely affected.

Women with BV may have an abnormal vaginal discharge with an unpleasant odor. Some women report a strong fish-like odor, especially after intercourse. Discharge, if present, is usually white or gray.

Having BV can increase a woman's chances of getting HIV infection if she is exposed to HIV virus. Having BV and developing PID following surgical procedures seem to be related. BV can make it easier to become infected with other STDs, such as chlamydia and gonorrhea. BV can be treated with medicines prescribed by a health care provider and can be taken by pregnant women.

## Hepatitis B and C

Hepatitis B and C are serious diseases caused by viruses that attack the liver and can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure and death. Hepatitis B infected about 60,000 people in 2004 with 5,000 deaths. Hepatitis C infected estimated at 26,000 in 2004 (the most recent data available).

Hepatitis is spread by contact with the blood of an infected person and can be sexually transmitted. Sharing of needles among drug users also spreads the disease.

Many infected people have no symptoms. Others might have jaundice (yellow skin), fatigue, dark urine, abdominal pain, loss of appetite or nausea. 70% of those infected with Hepatitis C may have chronic liver problems; 15% may develop scarring of the liver; 3% may die. Vaccine is available for hepatitis B, but is only effective if used before infection. There is no vaccine for Hepatitis C.

## How Can STDs be Prevented?

The surest way to avoid infection with any sexually transmitted disease is to practice sexual abstinence (abstain from

any sexual contact) while single. If you marry, select a partner who is not infected with an STD and remain sexually faithful during marriage.

Condoms do not provide complete protection from STDs. Infection can occur in both males and females whether or not a condom is used.

A review by the CDC determined that there is no clinical proof that condoms are effective in reducing the risk of infection from chlamydia, genital herpes, HPV\*, syphilis, chancroid or trichomoniasis. Some protection was found for men against gonorrhea infection, but not for women. Condoms were found to reduce the risk of HIV/AIDS transmission during vaginal sex by 85% when used correctly and consistently (following the directions exactly and using them at every occurrence of sex).<sup>1</sup> Condoms still leave a 15% risk of HIV infection compared to not using a condom at all. HIV is the virus that causes AIDS, a routinely fatal disease.

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01-01-2007



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**STDs**

