

# SEXUALLY TRANSMITTED DISEASES (STDs)

## Patient Information Fact Sheet

### ›What are STDs?

As the name implies, sexually transmitted diseases—or sexually transmitted *infections*, as some experts prefer—develop from organisms that are spread primarily through sexual contact. However, some of these diseases, such as congenital syphilis, can be transmitted nonsexually, from infected needles or from mother to child during pregnancy. The conduit in all cases is either blood, semen, or other bodily fluids.

The most prevalent STDs in the United States are herpes, chlamydia, gonorrhea, and syphilis. A person with any of these conditions is at higher risk for acquiring HIV (human immunodeficiency virus), a type of infection that can cause AIDS (acquired immune deficiency syndrome). Women who have chlamydia or gonorrhea are also susceptible to pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain.

Other STDs include chancroid, HPV (human papillomavirus), and trichomoniasis.

Some recent data on STDs, which have been reported by the Centers for Disease Control and Prevention (CDC), include:

- One in six Americans between the ages of 14–49 is infected with herpes simplex virus type 2 (HSV-2), with rates approaching 50% in black women.
- The total number of chlamydial infections in the US has risen every year since the late 1980s, topping 1.4 million in 2011. This is likely due to better screening methods, more sensitive tests, and more complete reporting.
- Gonorrhea is becoming increasingly resistant to antibiotics, a cause for great concern among groups (young adults and blacks, especially) where the disease is more common.
- Rates of syphilis in 2010 were highest among men 20–24 years old. This represents a major shift since 2006, when rates were highest in men 35–39 years old.

### ›What are the symptoms of STDs?

Signs and symptoms of STDs range from unusual bleeding or discharges to bumps, sores, or swollen lymph nodes. While any of these are cause for concern, they often disappear within a few days or months, even without treatment. However, the organisms that cause STDs continue to reproduce in the body, leading to more serious “secondary” symptoms. For patients with syphilis, for instance, these may include skin rash, fever, muscle aches, joint pain, and changes in vision.

### ›What causes STDs?

An STD is usually spread during sex, when someone who’s infected passes it to someone who isn’t. People who don’t use condoms, have multiple sex partners, or have a history of one or more STDs are at greatest risk. Adolescent girls, too, have a higher risk because constantly changing cells in the immature cervix make it more susceptible to certain sexually transmitted organisms.

Alcohol and recreational drug use have also been implicated in the spread of STDs, because these substances can impair a person’s judgment and cause them to take part in risky behaviors, such as unprotected sex.



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### ›What tests confirm a diagnosis of an STD?

Different tests can confirm the presence of an STD, including blood and urine tests, Pap smears, and direct testing of discharges from active sores. Pregnant women appear to get the bulk of screening for STDs, due to the fact that some diseases can be passed to an unborn child. The first prenatal visit usually includes screenings for HIV, hepatitis B, chlamydia, and syphilis; further tests, for hepatitis C and gonorrhea, are recommended at least once during pregnancy for women at high risk for these infections. Sexually active women who aren't pregnant can test themselves for chlamydia and gonorrhea using an at-home testing kit. Positive results, however, should be verified by re-testing in a doctor's office or public health clinic. Moreover, the patient's current partner, as well as his or her other sexual partners within the past year, should be told about the results so that they can get tested themselves.

### ›How are STDs treated?

Most STDs can be cured with oral antibiotics, often in a single dose. Azithromycin or doxycycline, in particular, is recommended for persons who test positive for chlamydia. Gonorrhea, which often appears at the same time as chlamydia, is treated with either of the same two drugs, another medication, or a combination, depending on the type of infection. However, as mentioned earlier, gonorrhea is becoming increasingly resistant to antibiotics, which limits the ways to cure it. Because of this, the CDC STD treatment guidelines currently recommend a combination therapy of **ceftriaxone** (Rocephin) with either **azithromycin** (Zithromax) or **doxycycline** (Vibramycin) to treat uncomplicated gonococcal infections.

Syphilis also responds to azithromycin or doxycycline, but a shot of penicillin is usually the most effective treatment for someone who had syphilis for less than a year. Someone who had syphilis for greater than a year will need additional doses. This is the best choice for pregnant women, as a drug like **tetracycline** can endanger the fetus.

Two vaccines, a **bivalent human papillomavirus (HPV) vaccine** (Cervarix) and a **quadrivalent HPV vaccine** (Gardasil), are available in the US to protect against types of HPV that can cause genital warts and certain cancers, including cervical cancer. The vaccines are approved for girls and women 9–26 years old, but only Gardasil is recommended for use in males in the same age group. The CDC recommends that, ideally, females receive either one of the vaccines (given in a series of 3 shots) before becoming sexually active.

### ›Further information

Centers for Disease Control and Prevention

<http://www.cdc.gov/std/>

<http://www.cdc.gov/std/gonorrhea/arg/basic.htm>

Mayo Clinic

<http://www.mayoclinic.com/health/sexually-transmitted-diseases-stds/DS01123>

Last reviewed: June 2013