

# Sexually Transmitted Diseases

## Patient Education Module

**What are they?** Sexually transmitted diseases (STDs) are infections that are spread from person to person through sexual contact, including oral sex, anal sex and the sharing of sex toys. These diseases can be passed through any contact between the genitals of one person and the genitals, anus, mouth or eyes of another person. There are many different STDs, but the most common ones in the United States are herpes simplex virus type II (genital herpes), human papilloma virus, chlamydia, gonorrhea, syphilis, HIV and genital warts. Some infections that can be spread by sex, such as the hepatitis B virus, are not traditionally referred to as STDs because they are spread primarily by other means.

**Symptoms.** Symptoms vary depending on the type of infection, although some people who become infected with an STD may not develop symptoms at all.

Some symptoms of STDs include:

- Painful or painless ulcers on the skin of the genitalia of both sexes and in the vagina in women
- Fever
- Swollen glands
- Abdominal pain
- Discharge from the penis
- Vaginal discharge
- Burning discomfort during urination

Pain during sexual intercourse

**Diagnosis.** If your doctor suspects that you may be infected with an STD, he or she will ask how many sexual partners you have had and if any of them have had an STD.

Then, your doctor will examine you, focusing on your genital area. He or she also will examine your anal area and in women, do a pelvic exam. In addition, your doctor may swab the tip of the penis in men or take a sample of any cervical discharge in women. The specimens are sent to a laboratory for testing. Similar measures may be done with any visible sores.

Your doctor may make a preliminary diagnosis based on the results of your physical examination. For example, painful sores would suggest genital herpes, whereas painless ulcers may indicate syphilis. In this way, you can begin treatment for your infection as soon as possible, even before results of laboratory tests are available. Different tests will be done depending on your symptoms. In the case of genital herpes, if you have an ulcer, it will be swabbed and tested in the lab. Blood tests can also be done to see if you have antibodies (infection-fighting proteins) against the herpes virus, which would indicate that you have been infected at some time in the past.

To test for chlamydia infections, your doctor will send a sample of fluid from the tip of the penis or cervix. Chlamydia can also be diagnosed with a urine test. Gonorrhea requires a direct sample from the tip of the penis or cervix. Syphilis and HIV can be confirmed with a blood test. If you have an ulcer from syphilis, the diagnosis can be confirmed by looking at fluid from the ulcer under a special darkfield microscope to see if the bacteria are present.

If you have one STD, your doctor probably will recommend that you get tested for HIV and other STDs, because the risk factors are similar. Also, you are more likely to get HIV if you are infected with another STD.

**Expected Duration.** How long STDs last depends on the specific type of infection. In some cases, although symptoms may go away without treatment, the patient is still infected and can pass the STD to a partner during unprotected sexual activity. In patients with trichomoniasis, chlamydia, or gonorrhea, treatment with antibiotics can shorten symptoms by weeks or months. In addition, treatment for chlamydia, gonorrhea and syphilis will avoid potential long-term complications. Viral infections, such as genital warts, genital herpes and HIV cannot be cured. However, they can be treated with medications.

**Prevention.** You can help to prevent STDs by:

- Not having sex
- Having sex only with one uninfected person
- Consistently using male latex condoms during sexual activity

Remember, although condoms can help reduce your exposure to STDs, they are not foolproof.

People who are diagnosed with an STD may be contacted by their local health department so that their sex partners can be evaluated and treated. Most physicians urge patients to tell their sex partners if they have an STD so that their partners can seek

medical attention. This is done for two reasons. First, some STDs are fairly silent infections and can be passed unnoticed between sex partners. For example, chlamydia may not cause symptoms in all those infected; however, the scarring effect of the bacteria can lead to infertility, especially in women. Second, STDs are seen as threats to public health. With proper identification and treatment, the rates of infection can be reduced.

If you develop frequent outbreaks of genital ulcers from herpes, you can take a low dose of antiviral medication each day to decrease your risk of developing repeat episodes. This will also decrease the risk of transmitting the infection to your partner. However, you can still pass on the infection, so condoms and safe sexual practices remain the best way to avoid potential herpes infection.

**Treatment.** The treatment of STDs depends on the infection. In the case of gonorrhea and chlamydia, your doctor will give an injection to treat gonorrhea and oral antibiotics to treat chlamydia. Genital herpes is a lifelong infection with no cure. However, the blistering skin sores won't last as long if you treat genital herpes with an oral antiviral medication as soon as symptoms of an attack occur. If you have frequent attacks, you should ask your doctor for a prescription for an antiviral medication, such as acyclovir (Zovirax), famciclovir (Famvir) or valacyclovir (Valtrex) so that you will have it when you need it. Taking antiviral medicine every day may reduce the frequency of attacks by 80 percent in people who have frequent episodes of severe genital herpes.

Syphilis usually is treated with injections of penicillin. Genital warts can be removed by freezing or by applying ointments meant to dissolve the wart.

HIV cannot be cured, but it can be treated with a drug combination called highly active antiretroviral therapy (HAART). HAART medications must be taken every day for the rest of your life. However, this drug combination has turned HIV from a fatal illness into a treatable, chronic disease.

**When To Call A Professional.** Call your doctor immediately if you find a sore in your genital area or if you notice an abnormal discharge from your urethra or vagina. You should also call your doctor if your sex partner has had an STD, even if you have no symptoms.

**Prognosis.** Most STDs respond well to treatment. However, many patients develop repeat episodes of STDs because their sex partners are not treated or because they continue to be exposed to STDs through unprotected sex. To help avoid getting the same disease again, all sex partners also should be treated whenever any patient has an STD.

Genital herpes cannot be cured, because the virus remains dormant in nerves for the rest of a patient's life. However, many people do not notice any problems after the initial infection, and many people don't even notice when they are first infected. In people who do notice herpes flare-ups, about 40 percent of them experience more than 6 flare-ups over a lifetime; whereas less than 10 percent have more than 6 flare-ups a year. In patients with herpes simplex virus type II, antiviral therapy can successfully suppress repeated episodes of genital ulcers, but it will not get rid of the virus.

HIV cannot be cured, but with careful medical attention, monitoring and treatment, most people with HIV live for many years with minimal or no symptoms.