

Syphilis

Syphilis was once the cause of destructive epidemics, but now can be effectively controlled with antibiotics.

What is syphilis?

Syphilis is a sexually transmitted disease (STD) caused by the bacteria, *Treponema pallidum*, that can move throughout the body, damaging many body organs over time. Medical experts divide the course of the disease into four stages: primary, secondary, latent and tertiary (late). An infected person who does not get treatment may infect others during the first two stages when lesions (sores) are present. In its late stages, untreated syphilis is not contagious, but it can cause serious heart abnormalities, mental disorders, blindness, other neurological problems and death.

How is syphilis spread?

The bacteria spread from the sores of an infected person to the mucous membranes of the genital area, the mouth or the anus of a sexual partner. It also can pass through broken skin on other parts of the body. The syphilis bacteria are very fragile, and the infection is not spread by contact with objects such as toilet seats or towels. A pregnant woman with syphilis can pass the bacteria to her unborn child, who may be born with serious mental and physical problems as a result of this infection.

The most common way to get syphilis is to have sex with someone who has an active infection-- has a sore or lesion. People at increased risk for syphilis, like those at high risk for other STDs, are those who have had multiple sex partners, have sexual relations with an infected partner, have been infected in the past with another STD and do not use condoms.

What are the symptoms of syphilis?

The first symptom of syphilis is a sore called a chancre, which can appear within 10 days to three months after exposure but generally occurs within three weeks. Because the chancre is ordinarily painless and sometimes occurs inside the body, it may go unnoticed. It is usually found on the part of the body exposed to the bacteria, such as the penis, the vagina or the rectum. A chancre also can develop on the cervix, tongue, lips or other parts of the body. The chancre disappears within a few weeks regardless of whether treatment is obtained.

Secondary syphilis is marked by a skin rash that appears up to 10 weeks after the chancre heals. The rash may cover the whole body or appear only in a few areas, such as on the palms of the hands or soles of the feet. The rash usually heals within several weeks or months. Other symptoms — mild fever, fatigue, headache, sore throat, patchy hair loss and swollen lymph glands throughout the body — also may occur. These symptoms may be very mild and, like the chancre of primary syphilis, will disappear without treatment. The signs of secondary syphilis may come and go over the next one to two years.

The chancre (primary stage) and genital secondary rashes increase the risk of acquiring HIV, the virus that causes AIDS, by providing an accessible point of entry for HIV.

If untreated, syphilis then lapses into a latent stage during which the disease is no longer contagious and no symptoms are present. Many people who are not treated will suffer no further consequences of the disease. However, approximately one-third of those infected go on to develop the complications of late, or tertiary syphilis in which the bacteria damage the heart, eyes, brain, nervous system, bones, joints or almost any other part of the body. This stage can last for years, or even decades. Late syphilis can result in mental illness, blindness, other neurological problems, heart disease and death.

How does syphilis affect a pregnant woman?

It is likely that a pregnant woman with active syphilis who is not treated will pass the infection to her unborn child. Between 40 % and 70% of such pregnancies will result in a syphilitic infant. About 25 percent of these pregnancies result in stillbirth or neonatal death.

Some infants with congenital syphilis may have symptoms at birth, but most develop symptoms between two weeks and three months later. These may include skin sores, rashes, fever, weakened or hoarse crying sounds, swollen liver and spleen, yellowish skin (jaundice), anemia and various deformities. Care must be taken in handling an infant with congenital syphilis because the moist sores are infectious.

The symptoms of syphilis may go undetected in infants. As infected infants become older children and teenagers, they may develop the symptoms of late congenital syphilis, including damage to their bones, teeth, sight, hearing and brain.

How is syphilis diagnosed?

Syphilis has sometimes been called "the great imitator" because its early symptoms are similar to those of many other diseases. People who have more than one sex partner should consult a physician about any suspicious rash or sore in the genital area. Those who have been treated for another STD, such as gonorrhea, should be tested to be sure they have not also acquired syphilis.

There are three ways to diagnose syphilis: a physician's recognition of its signs and symptoms; microscopic identification of syphilis bacteria; and blood tests. Usually, these approaches are used together to detect syphilis and identify the stage of infection.

While blood tests can provide evidence of infection, they may give false negative results (not show signs of infection despite its presence) for up to three months after infection. In addition, blood tests for syphilis can sometimes be positive even though a person is not infected with the disease. Interpretation of blood tests for syphilis can be difficult and repeated tests are sometimes necessary to confirm the diagnosis.

How is syphilis treated?

Syphilis usually is treated with penicillin, given by injection. Other antibiotics can be used for patients allergic to penicillin. It is important that people being treated for syphilis have periodic blood tests to ensure that they have been cured. Persons with syphilis that has invaded the nervous system may need to be retested for up to two years after treatment. In all stages of syphilis, proper treatment will cure the disease but, in late syphilis, damage already done to body organs cannot be reversed.

Having syphilis once does not protect a person from getting it again. Following successful treatment, people can still be susceptible to re-infection.

Can syphilis be prevented?

Not having sex is the best protection against acquiring syphilis and other STDs. Having sex with only one uninfected partner who only has sex with you is also safe.

Testing and treatment early in pregnancy is the best way to prevent syphilis in infants and should be a routine part of prenatal care. All women receiving prenatal care should be tested for syphilis during their first prenatal exam and during their last three months of pregnancy.

How can I reduce my risk of getting syphilis?

The open sores associated with syphilis may be visible and are infectious during the active stages of the disease. Any contact with these contagious sores must be avoided to prevent the spread of the disease. Latex condoms, when always and correctly used, can reduce the risk of syphilis and other STDs but only when the infected areas are covered or protected by the condom. (The open sores may occur in genital areas that can be covered or protected by a condom, but they also may occur in areas that cannot be covered or protected by a condom.)

For more information about STDs, talk to your health care provider or call:

The State of Tennessee HIV/STD Hotline: 1-800-525-2437

(Monday through Friday 8:00 to 4:30 p.m. CST)

OR

The CDC National STD Hotline: 1-800-227-8922

Other Informational Links:

American Social Health Association

<http://www.ashastd.org/>

Centers for Disease Control and Prevention

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

E-Cards, Centers for Disease Control and Prevention

<http://www2c.cdc.gov/ecards/index.asp?category=174>

Get Yourself Tested

<http://www.gytnow.org/>

National Institute of Health Medline

<http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html>

U.S. Department of Health and Human Services

<http://www.womenshealth.gov/faq/sexually-transmitted-infections.cfm>

World Health Organization

http://www.who.int/topics/sexually_transmitted_infections/en/