

Syphilis

What is syphilis?

Syphilis is a complex sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. It has often been called “the great imitator” because so many of the signs and symptoms are indistinguishable from those of other diseases.

How is syphilis spread?

Syphilis is passed from person to person through direct contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Transmission of the organism occurs during vaginal, anal, or oral sex. Pregnant women with the disease can pass it to the babies they are carrying. Syphilis cannot be spread by toilet seats, door knobs, swimming pools, hot tubs, bath tubs, shared clothing, or eating utensils.

What are the signs and symptoms in adults?

Primary Stage

The time between infection with syphilis and the start of the first symptom can range from 10 to 90 days (average 21 days). The primary stage of syphilis is usually marked by the appearance of a single sore (called a chancre), but there may be multiple sores. The chancre is usually firm, round, small, and painless. It appears at the spot where syphilis entered the body. The chancre lasts 3-6 weeks, and it will heal on its own. If adequate treatment is not administered, the infection progresses to the secondary stage.

Secondary Stage

The second stage starts when one or more areas of the skin break into a rash that usually does not itch. Rashes can appear as the chancre is fading or can be delayed for weeks. The rash often appears as rough, red or reddish brown spots both on the palms of the hands and on the bottoms of the feet. The rash also may appear on other parts of the body with different characteristics, some of which resemble other diseases. Sometimes the rashes are so faint that they are not noticed. Even without treatment, rashes clear up on their own. In addition to rashes, second-stage symptoms can include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and tiredness. A person can easily pass the disease to sex partners when primary or secondary stage signs or symptoms are present.

Late Syphilis

The latent (hidden) stage of syphilis begins when the secondary symptoms disappear. Without treatment, the infected person still has syphilis even though there are no signs or symptoms. It remains in the body, and it may begin to damage the internal organs, including the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints. This internal damage may show up many years later in the late or tertiary stage of syphilis. Late stage signs and symptoms include not being able to coordinate muscle movements, paralysis, numbness, gradual blindness, and dementia. This damage may be serious enough to cause death.

Can a newborn get syphilis?

Depending on how long a pregnant woman has been infected, she has a good chance of having a miscarriage or of having a stillborn baby or a baby who dies shortly after birth. An infected baby may be born without symptoms, but if not treated immediately, symptoms may develop within a few weeks. These symptoms may include skin ulcers, rashes, fever, weakened or hoarse crying sounds, yellowish skin (jaundice), or swollen liver or spleen. If untreated, these babies may become developmentally delayed, have seizures, or die.

How is syphilis diagnosed?

A health care provider can diagnose syphilis by using dark field microscopy to examine material from infectious sores. If syphilis bacteria are present in the sore, they will show up with a characteristic appearance. A blood test is another way to determine whether someone has syphilis. Shortly after infection occurs, the body produces syphilis antibodies that can be detected by an accurate, safe, and inexpensive blood test. A low level of antibodies will stay in the blood for months or years even after the disease has been successfully treated. Because untreated syphilis in a pregnant woman can infect and possibly kill her unborn baby, every pregnant woman should have a blood test for syphilis.

How common is syphilis?

Syphilis was once responsible for devastating epidemics. The rate of primary and secondary syphilis in the United States declined by 89.2% from 1990 to 2000. The number of cases rose, however, from 5,979 in 2000 to 6,103 in 2001. The U.S. Centers for Disease Control and Prevention reported in November 2002 that this was the first increase since 1990.

What is the link between syphilis and HIV?

While the health problems caused by syphilis in adults and newborns are serious in their own right, it is now known that the genital sores caused by syphilis in adults also make it easier to transmit and acquire HIV (human immunodeficiency virus, the virus that causes AIDS) infection sexually. There is a 2- to 5-fold increased risk of acquiring HIV infection when syphilis is present.

Is there a cure for syphilis?

Yes! A single dose of penicillin, an antibiotic, will cure a person who has had syphilis for less than a year. Larger doses are needed to cure someone who has had it for longer than a year. For people who are allergic to penicillin, other antibiotics are available to treat syphilis. There are no home remedies or over-the-counter drugs that will cure syphilis. Penicillin treatment will kill the syphilis bacterium and prevent further damage, but it will not repair any damage already done. Persons who receive syphilis treatment must abstain from sexual contact with new partners until the syphilis sores are completely healed. Persons with syphilis must notify their sex partners so that they also can be tested, and, if necessary, receive treatment.

Will syphilis recur?

Having had syphilis does not protect a person from getting it again. Antibodies are produced as a person reacts to the disease, and, after treatment, these antibodies may offer partial protection from getting infected again, if exposed right away. Even though there may be a short period of protection, the antibody levels naturally decrease in the blood, and people become susceptible to syphilis infection again if they are sexually exposed to syphilis sores.

How can syphilis be prevented?

The open sores of syphilis may be visible and infectious during the active stages of infection. Any contact with these infectious sores and other infected tissues and body fluids must be avoided to prevent spread of the disease. As with many other STDs, using latex male condoms properly during sexual intercourse may give some protection from the disease. Screening and treatment of infected individuals, or secondary prevention, is one of the few options for preventing the advanced stages of the disease. Testing and treatment early in pregnancy are the best ways to prevent syphilis in infants and should be a routine part of prenatal care.

For specific concerns about syphilis, call the New Hampshire Department of Health and Human Services, Bureau of Infectious Disease Control at 603-271-4496 or 800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at www.cdc.gov or the New Hampshire Department of Health and Human Services website at www.dhhs.nh.gov.