SYPHILIS

What is syphilis?

Syphilis is a complex sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. It is often called "the great imitator" because many of its signs and symptoms resemble those of other diseases.

How do people get syphilis?

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 which means that it can also be spread by kissing someone with a sore in their mouth or on their lips. 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.

What are the signs and symptoms of syphilis in adults?

**Primary Stage**
The time between infection with syphilis and the start of the first symptom can range from 10-90 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 also 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.
**Tertiary Stage**
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?**

Yes. Depending on how long a pregnant woman has been infected, she has a good chance of having a stillbirth (syphilitic stillbirth) or of giving birth to a baby who dies shortly after birth. If not treated immediately, an infected baby may be born without symptoms but could develop them within a few weeks. These signs and symptoms can be very serious. Untreated babies may become developmentally delayed, have seizures, or die.

**How is syphilis diagnosed?**

Some health care providers can diagnose syphilis by examining material from a chancre (infectious sore) using a special microscope called a dark-field microscope. If syphilis bacteria are present in the sore, they will show up when observed through the microscope. 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 a blood test. A low level of antibodies will stay in the blood for months or years even after the disease has been successfully treated.

**How is syphilis treated?**

Syphilis is easy to cure in its early stages. A single intramuscular injection of penicillin, an antibiotic, will cure a person who has had syphilis for less than a year. Additional doses are needed to treat someone who has had syphilis for longer than a year. For people who are allergic to penicillin, other antibiotics are available to treat syphilis. Treatment will kill the syphilis bacterium and prevent further damage, but it will not repair damage already done. Because effective treatment is available, it is important that persons be screened for syphilis on an ongoing basis if their sexual behaviors put them at risk for STDs.

**Will syphilis recur?**

Having syphilis once does not protect a person from getting it again. Following successful treatment, people can still be susceptible to re-infection. Only laboratory tests can confirm whether someone has syphilis. Because syphilis sores can be hidden in the vagina, rectum, or mouth, it may not be obvious that a sex partner has syphilis. Talking with a health care provider will help to determine the need to be re-tested for syphilis after treatment has been received.

**How can syphilis be prevented?**

The surest way to avoid transmission of sexually transmitted diseases, including syphilis, is to abstain from sexual contact or to be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected. Correct and consistent use of latex or polyurethane condoms can reduce the risk of syphilis only when the infected area or site of potential exposure (the sore) is protected.

**For more information:** Call the Centers for Disease Control and Prevention at 1-800-232-4636, TTY: 1-888-232-6348 in English and Spanish.