What is syphilis?

Syphilis is a 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.

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 does syphilis affect a pregnant woman and her baby?

The syphilis bacterium can infect the baby of a woman during her pregnancy. Depending on how long a pregnant woman has been infected, she may have a high risk of having a stillbirth (a baby born dead) or of giving birth to a baby who dies shortly after birth. An infected baby may be born without signs or symptoms of disease. However, if not treated immediately, the baby may develop serious problems within a few weeks. Untreated babies may become developmentally delayed, have seizures, or die.

How common is syphilis?

In the United States, health officials reported over 32,000 cases of syphilis in 2002, including 6,862 cases of primary and secondary (P&S) syphilis. In 2002, half of all P&S syphilis cases were reported from 16 counties and 1 city; and most P&S syphilis cases occurred in persons 20 to 39 years of age. The incidence of infectious syphilis was highest in women 20 to 24 years of age and in men 35 to 39 years of age. Reported cases of congenital syphilis in newborns decreased from 2001 to 2002, with 492 new cases reported in 2001 compared to 412 cases in 2002.

Between 2001 and 2002, the number of reported P & S syphilis cases increased 12.4 percent. Rates in women continued to decrease, and overall, the rate in men was 3.5 times that in women. This, in conjunction with reports of syphilis outbreaks in men who have sex with men (MSM), suggests that rates of syphilis in MSM are increasing.

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. 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 through contact with toilet seats, doorknobs, swimming pools, hot tubs, bathtubs, shared clothing, or eating utensils.

What are the signs and symptoms in adults?

Many people infected with syphilis do not have any symptoms for years, yet remain at risk for late complications if they are not treated. Although transmission appears to occur from persons with sores who are in the primary or secondary stage, many of these sores are unrecognized. Thus, most transmission is from persons who are unaware of their infection.

Primary Stage
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 time between infection with syphilis and the start of the first symptom can range from 10 to 90 days (average 21 days). The chancre is usually firm, round, small, and painless. It appears at the spot where syphilis entered the body. The chancre lasts 3 to 6 weeks, and it heals without treatment. However, if adequate treatment is not administered, the infection progresses to the secondary stage.

Secondary Stage
Skin rash and mucous membrane lesions characterize the secondary stage. This stage typically starts with the development of a rash on one or more areas of the body. The rash usually does not cause itching. Rashes associated with secondary syphilis can appear as the chancre is healing or several weeks after the chancre has healed. The characteristic rash of secondary syphilis may appear as rough, red, or reddish brown spots both on the palms of the hands and the bottoms of the feet. However, rashes with a different appearance may occur on other parts of the body, sometimes resembling rashes caused by other diseases. Sometimes rashes associated with secondary syphilis are so faint that they are not noticed. In addition to rashes, symptoms of secondary syphilis may include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and fatigue. The signs and symptoms of secondary syphilis will resolve with or without treatment, but without treatment, the infection will progress to the latent and late stages of disease.

Late Stage
The latent (hidden) stage of syphilis begins when secondary symptoms disappear. Without treatment, the infected person will continue to have syphilis even though there are no signs or symptoms; infection remains in the body. In the late stages of syphilis, it may subsequently 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. Signs and symptoms of the late stage of syphilis include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness, and dementia. This damage may be serious enough to cause death.

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.

Avoiding alcohol and drug use may also help prevent transmission of syphilis because these activities may lead to risky sexual behavior. It is important that sex partners talk to each other about their HIV status and history of other STDs so that preventive action can be taken.

Genital ulcer diseases, like syphilis, can occur in both male and female genital areas that are covered or protected by a latex condom, as well as in areas that are not covered. Correct and consistent use of latex condoms can reduce the risk of syphilis, as well as genital herpes and chancroid, only when the infected area or site of potential exposure is protected.

Condoms lubricated with spermicides (especially Nonoxynol-9 or N-9) are no more effective than other lubricated condoms in protecting against the transmission of STDs. Based on findings from several research studies, N-9 may itself cause genital lesions, providing a point of entry for HIV and other STDs. In June 2001, the CDC recommended that N-9 not be used as a microbicide or lubricant during anal intercourse. Transmission of a STD, including syphilis cannot be prevented by washing the genitals, urinating, and or douching after sex. Any unusual discharge, sore, or rash, particularly in the groin area, should be a signal to refrain from having sex and to see a doctor immediately.

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 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 developing baby, every pregnant woman should have a blood test for syphilis.

What is the treatment for syphilis?

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. There are no home remedies or over-the-counter drugs that will cure 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 on-going basis if their sexual behaviors put them at risk for STDs.

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 receive treatment if necessary.

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
http://www.cdc.gov/std
Order Publications Online at www.cdc.gov/std/pubs/

STD information and referrals to STD Clinics
CDC-INFO
1-800-CDC-INFO (800-232-4636)
TTY: 1-888-232-6348
In English, en Español

CDC National Prevention Information Network (NPIN)
P.O. Box 6003
Rockville, MD 20849-6003
1-800-458-5231
1-888-282-7681 Fax
1-800-243-7012 TTY
E-mail: info@cdcnpin.org
www.cdcnpin.org

South Central Public Health District
Prevent. Promote. Protect.
Twin Falls 737-5900 Bellevue 788-4335 Jerome 324-8838 Burley 678-8221

What is the link between syphilis and HIV?

Genital sores (chancres) caused by syphilis make it easier to transmit and acquire HIV infection sexually. There is an estimated 2- to 5-fold increased risk of acquiring HIV infection when syphilis is present.

Ulcerative STDs that cause sores, ulcers, or breaks in the skin or mucous membranes, such as syphilis, disrupt barriers that provide protection against infections. The genital ulcers caused by syphilis can bleed easily, and when they come into contact with oral and rectal mucosa during sex, increase the infectiousness of and susceptibility to HIV. Having other STDs is also an important predictor for becoming HIV infected because STDs are a marker for behaviors associated with HIV transmission.

Printable versions of this and other STD fact sheets are available at:
http://www.cdc.gov/std/healthcomm/fact_sheets.htm

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