

What is syphilis?

Syphilis is a sexually transmitted disease caused by a bacteria called *Treponema pallidum*.

Who is at risk for syphilis?

Any sexually active person can be infected with syphilis. Syphilis can be transmitted during vaginal, oral and anal sex. Those who have multiple sex partners and unprotected sex are at greatest risk of infection. Syphilis is most often seen in men who have sex with men, but heterosexual individuals can also be infected with syphilis. All pregnant women are recommended to be screened for syphilis at their first prenatal visit. Men who have sex with men and high-risk individuals are recommended to be screened for syphilis at least annually.

What are the symptoms of syphilis?

Syphilis infection is divided into three stages. Symptoms appear at the initial time of infection although they may be unrecognized but can also appear several years later if the infection is not treated. During the primary stage, symptoms may include one or more painless, firm sores (chancres) at the spot where syphilis entered the body (i.e., on the sex organs, anus or in the mouth). The sores last about three to six weeks and then heal without treatment. However, syphilis still remains in the blood. During the secondary stage, about one to two months after the initial sores appear, a rash may develop anywhere on the body and mucous lesions or hair loss may appear. The symptoms of secondary syphilis eventually will resolve with or without treatment, but without treatment, the infection will progress to the latent period of the disease. During the latent period, individuals are infected with syphilis but do not show signs or symptoms of the disease. The tertiary stage of infection occurs 15 to 30 years after initial infection and can damage the brain, heart, nerves, eyes, blood vessels, liver, bones and joints. Congenital syphilis can cause stillbirth, prematurity, neonatal death or a live-born infant can have many symptoms. Infants may also not have symptoms at birth and may develop late manifestations that appear after 2 years of age and involve the central nervous system, bones and joints, teeth, eyes and skin.

How soon do symptoms appear?

Symptoms can appear 10 to 90 days after exposure, but usually appear three weeks after exposure.

How is syphilis spread?

Syphilis is spread through direct contact with a syphilis sore, lesion or rash during vaginal, oral or anal sex. Syphilis also can be passed from an infected mother to her baby during pregnancy or at birth.

When and for how long is a person able to spread the disease?

A person can spread syphilis when sores, lesions or a rash is present during the primary and secondary stages of the infection. Transmission of the infection after the first year is rare.

How is a person diagnosed?

Blood tests are available to diagnose syphilis. Testing specimens from a sore or lesion can also be used to diagnosis syphilis.

What is the treatment?

Syphilis can be treated and cured with antibiotics. The amount of antibiotics needed to treat syphilis is dependent on the stage of syphilis at the time of diagnosis. To ensure a person is cured of syphilis, all of their sex partners also need to be tested and treated for syphilis.

Does past infection make a person immune?

No. A person can be reinfected after treatment.

Should adolescents or others be excluded from school, work or other activities if they have syphilis?

Syphilis is primarily transmitted through sexual contact, so exclusion is usually not necessary. However, if sores occur in areas of the body that are exposed, the infected person should be excluded until 24 hours after treatment has been completed. In addition, the infected person should cover all sores with clothing, a bandage or an appropriate dressing.

What can be done to prevent the spread of syphilis?

The most effective way to reduce the spread of syphilis is to abstain from sexual activity or to be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected. Condoms, when used consistently and correctly, can reduce the risk of syphilis only when the infected areas are covered or protected by the condom. A condom and other protection barriers such as a dental dam should be used for oral, vaginal and anal sex. Limiting the number of sexual partners an individual has also reduces the risk of becoming infected with syphilis. Infected individuals and all of their sexual partners need to be treated immediately at the time of diagnosis to prevent the spread of infection to others.

Additional Information:

Additional information is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180. **This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.**

Resources:

American Academy of Pediatrics. [Section 3, Summaries of Infectious Diseases]. In: Kimberlin DW, Brady MT, Jackson MA, Long SS eds. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2015:[pages 755-768]

Heymann, D.L (ed). 2015. *Control of Communicable Diseases Manual* (20th edition). Washington: American Public Health Associates.

