

CURRENTLY, SYPHILIS, ONE OF THE MOST RELEVANT DISEASES, IS THE TRANSMISSION ROUTES, PATHOGENESIS AND PREVENTION

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Annotation: Syphilis is a highly contagious disease that's mostly spread through sexual activity, including oral and anal sex. The infected person often doesn't know that they have the disease and passes it on to their sexual partner. Syphilis was once a major public health threat. It can cause serious long-term problems such as arthritis, brain damage, and blindness. There wasn't an effective treatment until the late 1940s, when the antibiotic penicillin was developed.

According to the CDC, the rate of new cases of syphilis plummeted in the 1990s. In 2000, it reached an all-time low since reporting began in 1941. But the disease has been on the increase ever since. In 2021, the rate of syphilis in the U.S. reached 51.5 cases per 100,000 people, the highest rate since 1990. Syphilis is a bacterial infection usually spread by sexual contact. The disease starts as a painless sore — typically on the genitals, rectum or mouth. Syphilis spreads from person to person via skin or mucous membrane contact with these sores. After the initial infection, the syphilis bacteria can remain inactive in the body for decades before becoming active again. Early syphilis can be cured, sometimes with a single shot (injection) of penicillin.

Keywords: Syphilis, primary syphilis, shangkar, penicillin, latent syphilis.

Without treatment, syphilis can severely damage the heart, brain or other organs, and can be life-threatening. Syphilis can also be passed from mothers to unborn children.

Syphilis develops in stages, and symptoms vary with each stage. But the stages may overlap, and symptoms don't always occur in the same order. You may be infected with syphilis without noticing any symptoms for years.



Primary syphilis

The first sign of syphilis is a small sore, called a chancre (SHANG-kur). The sore appears at the spot where the bacteria entered your body. While most people infected with syphilis develop only one chancre, some people develop several of them.

The chancre usually develops about three weeks after exposure. Many people who have syphilis don't notice the chancre because it's usually painless, and it may be hidden within the vagina or rectum. The chancre will heal on its own within three to six weeks.

Secondary syphilis

Within a few weeks of the original chancre healing, you may experience a rash that begins on your trunk but eventually covers your entire body — even the palms of your hands and the soles of your feet.

This rash is usually not itchy and may be accompanied by wartlike sores in your mouth or genital area. Some people also experience hair loss, muscle aches, a fever, a sore throat and swollen lymph nodes. These signs and symptoms may disappear within a few weeks or repeatedly come and go for as long as a year.

Latent syphilis

If you aren't treated for syphilis, the disease moves from the secondary stage to the hidden (latent) stage, when you have no symptoms. The latent stage can last for years. Signs and symptoms may never return, or the disease may progress to the third (tertiary) stage.

Tertiary syphilis

About 15% to 30% of people infected with syphilis who don't get treatment will develop complications known as tertiary syphilis. In the late stage, the disease may damage the brain, nerves, eyes, heart, blood vessels, liver, bones and joints. These problems may occur many years after the original, untreated infection.

Neurosyphilis

At any stage, syphilis can spread and, among other damage, cause damage to the brain and nervous system and the eye.

Congenital syphilis

Babies born to women who have syphilis can become infected through the placenta or during birth. Most newborns with congenital syphilis have no symptoms, although some experience a rash on the palms of their hands and the soles of their feet.

Later signs and symptoms may include deafness, teeth deformities and saddle nose — where the bridge of the nose collapses.

However, babies born with syphilis can also be born too early, may die in the womb before birth or can die after birth.

When to see a doctor

Call your doctor if you or your child experiences any unusual discharge, sore or rash — particularly if it occurs in the groin area.

Causes, The cause of syphilis is a bacterium called *Treponema pallidum*. The most common way syphilis is spread is through contact with an infected person's sore during sexual activity. The bacteria enter the body through minor cuts or abrasions in the skin or mucous membranes. Syphilis is contagious during its primary and secondary stages, and sometimes in the early latent period.

Less commonly, syphilis may spread through direct contact with an active lesion, such as during kissing. It can also be passed from mothers to their babies during pregnancy or childbirth.

Syphilis can't be spread by using the same toilet, bathtub, clothing or eating utensils, or from doorknobs, swimming pools or hot tubs.

Once cured, syphilis doesn't return on its own. However, you can become reinfected if you have contact with someone's syphilis sore.

Risk factors

You face an increased risk of acquiring syphilis if you:

Engage in unprotected sex

Have sex with multiple partners

Are a man who has sex with men

Are infected with HIV, the virus that causes AIDS

Complications. Without treatment, syphilis can lead to damage throughout your body. Syphilis also increases the risk of HIV infection and can cause problems during pregnancy. Treatment can help prevent future damage but can't repair or reverse damage that's already occurred.

Small bumps or tumors

In the late stage of syphilis, bumps (gummas) can develop on the skin, bones, liver or any other organ. Gummas usually disappear after treatment with antibiotics.

Neurological problems

Syphilis can cause a number of problems with the nervous system, including:

Headache

Stroke

Meningitis

Hearing loss

Visual problems, including blindness

Dementia

Loss of pain and temperature sensations

Sexual dysfunction in men

Bladder incontinence

Cardiovascular problems

These may include bulging and swelling of the aorta — your body's major artery — and of other blood vessels. Syphilis may also damage heart valves.

HIV infection

Adults with sexually transmitted syphilis or other genital ulcers have an estimated two- to fivefold increased risk of contracting HIV. A syphilis sore can bleed easily, providing an easy way for HIV to enter the bloodstream during sexual activity.

Pregnancy and childbirth complications

If you're pregnant, you may pass syphilis to your unborn baby. Congenital syphilis greatly increases the risk of miscarriage, stillbirth or your newborn's death within a few days after birth.

Prevention

There is no vaccine for syphilis. To help prevent the spread of syphilis, follow these suggestions:

Abstain or be monogamous. The only certain way to avoid syphilis is to avoid (abstain from) having sex. The next-best option is to have mutually monogamous sex in which both partners have sex only with each other and neither partner is infected.

Use a latex condom. Condoms can reduce your risk of contracting syphilis, but only if the condom covers the syphilis sores.

Avoid recreational drugs. Misuse of alcohol or other drugs can inhibit your judgment and lead to unsafe sexual practices.

Partner notification and preventive treatment

If tests show that you have syphilis, your sex partners — including current partners and any other partners you've had over the last three months to one year — need to be informed so that they can get tested. If they're infected, they can then be treated.

Official, confidential partner notification can help limit the spread of syphilis. The practice also steers those at risk toward counseling and the right treatment. And since you can contract syphilis more than once, partner notification reduces your risk of getting reinfected.

Screening for pregnant women, People can be infected with syphilis and not know it. In light of the often deadly effects syphilis can have on unborn children, health officials recommend that all pregnant women be screened for the disease.

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