

Syphilis (*Treponema pallidum*)

Disease Fact Sheet Series

What is syphilis?

Syphilis is a sexually transmitted disease (STD) caused by a corkscrew-shaped bacteria called *Treponema pallidum*. The number of Syphilis cases in Wisconsin have been decreasing, yet syphilis prevention remains an important objective because of the serious consequences of untreated or inadequately treated syphilis and its role as a potential risk factor for HIV infection and transmission. Wisconsin is currently involved in the National Plan to Eliminate Syphilis.

Who gets syphilis?

Anyone who is sexually active can get syphilis, but those at greater risk include:

- Persons diagnosed with any STD
- Persons with a sex partner diagnosed with any STD
- Persons with more than one sex partner
- Persons with a new sex partner
- Persons who exchange sex for money or drugs

How is syphilis spread?

Syphilis is spread directly from person to person by direct contact with an infectious lesion. That contact can be genital intercourse, oral intercourse, or anal intercourse. The bacteria pass through intact mucous membranes and abraded skin; they are then carried by the blood stream to every organ in the body. Babies can also get syphilis from their mothers if the mothers are infected during pregnancy.

What are the signs and symptoms of syphilis?

The course of syphilis is divided into three stages, each with different signs and symptoms.

- **Primary syphilis** is the most infectious stage of the disease. The first sign is the chancre, or lesion. It is usually a single, painless ulcer and develops at the original site of infection (skin or mucous membranes) about 3 weeks after inoculation. It is highly infectious and goes away without treatment in 1 to 5 weeks (3 weeks average).
- **Secondary syphilis** symptoms vary greatly in appearance and may or may not be noticeable. Secondary symptoms may last 2 to 6 weeks (4 weeks average) and may recur. Some of the most common signs and symptoms include:
 - General body rash
 - Rash on the palms of the hands and the soles of the feet
 - White (mucous) patches in mouth or genital area (highly infectious)
 - Temporary loss of patches of hair
 - Wet, raised, wart-like growths often in the genital area (highly infectious)
 - Nickel/dime sized lesions (often on face)
 - Malaise (a tired, listless feeling)
- **Latent syphilis** is the stage in which no observable clinical signs or symptoms are present to suggest infection, yet serologic tests for syphilis (STS) are reactive. All cases of syphilis are latent at some time during the course of an untreated infection.

(Over)

How long can a person have this infection?

Syphilis infection can persist for many years even when it is not a symptomatic infection. During this time, damage can occur to many organ systems in the body and the infection may be transmitted to sex partners.

Does past infection with syphilis make a person immune?

No. Reinfection with *Treponema pallidum*, the bacteria that causes syphilis, can occur any time a person is re-exposed.

What is the treatment for syphilis?

Antibiotics such as a single penicillin injection may be prescribed to treat syphilis of less than one year's duration. For infections that have remained untreated for over a year, or for pregnant women with syphilis, one injection weekly for three weeks (total of three shots) may be prescribed.

What would happen if I had syphilis and didn't get treatment?

In untreated syphilis, signs and symptoms range from inapparent to symptoms that indicate severe damage to one or more organ systems in the body including:

- Brain and nervous system
- Heart and circulatory system
- Destructive lesions (gummas) in the skin, bones, brain, or internal organs

Untreated syphilis during pregnancy can lead to miscarriage, stillbirth, and single or multiple organ system manifestations of illness that appear as the child grows. Syphilis can be cured at any stage of infection, but damage that has already occurred cannot be repaired.

How can I avoid exposure to this infection?

If you don't have a mutually monogamous, steady, or lifelong sex partner, using a condom correctly and consistently can help protect you from exposure to syphilis and other sexually transmitted diseases.

What should I do if I think I have this infection?

A blood test for syphilis that gives accurate, quick results is available at your doctor's office, family planning clinics and STD clinics. Early diagnosis and treatment are necessary to avoid the serious complications and spread of this disease. If you test positive, all of your sex partner(s) of up to the past 12 months should be notified, tested and treated for syphilis, even if they have no symptoms. Public health professionals at your local health department can help you with this task. If your sex partners have the infection and they are not treated, you could get the infection again if you have sex again with the same partners.

If I have syphilis, can I have other STDs as well?

It is possible to have more than one STD at a time. Different STDs are spread in the same manner through sexual contact (oral, anal, vaginal and penile). In addition, an infection with syphilis can increase your chances of acquiring HIV infection. It is important to visit your doctor's office or clinic to be examined and tested for STDs as soon as you notice any unusual signs or symptoms or are aware of sexual exposure to someone with an STD.