

ALERT: South Dakota is experiencing our biggest syphilis outbreak since 1970

Syphilis: Physician's Guide

Syphilis is a systemic, sexually transmitted disease (STD) caused by the *Treponema pallidum* bacterium.

SYPHILIS TRANSMISSION:

- Person to person via vaginal, anal, or oral sex through direct contact with a syphilis chancre.
- Person to person during foreplay, even when there is no penetrative sex (much less common).
- Pregnant mother with syphilis to fetus.

SIGNS and SYMPTOMS

If left untreated, syphilis progresses in stages.

PRIMARY SYPHILIS:

- One or more chancres (usually firm, round, small, and painless) appear at the site of infection (most often the genital area) 10 to 90 days after infection.
- The chancres heal on their own in 3-6 weeks.
- Patient is highly infectious in the primary stage.

It is very important for people who test positive for HIV and other STDs to get tested for syphilis, since transmission of HIV is enhanced by syphilis and other STDs.

SECONDARY SYPHILIS:

- Rashes occur as the chancre(s) fades or a few weeks after the chancre heals.
- Rashes typically appear on the palms of the hands the soles of the feet, or on the face, but also may appear on other areas of the body.
- Sometimes wart-like "growths" may appear in the genital area.
- Rashes and syphilitic warts tend to clear up on their own within 2-6 weeks but may take as long as 12 weeks.
- Patient is highly infectious in the secondary stage.

EARLY LATENT SYPHILIS:

- Patient is seroreactive within one year of onset of infection, but has no symptoms.
- Patient is potentially infectious.

LATE LATENT SYPHILIS:

- Patient is seroreactive more than 1 year after onset of infection, but has no symptoms.
- Patient is not infectious in late latent stage.

LATE (TERTIARY) SYPHILIS:

- Manifestations in the skin and bones (gummas), central nervous system, and cardiovascular system.
- Patient is not infectious in late stage.

DIAGNOSIS

- Syphilis diagnoses are made using two types of blood tests: 1. nontreponemal tests (VDRL and RPR) and 2. treponemal tests (FTA-ABS, TP-PA, various EIAs, and chemiluminescence immunoassays).
- The definitive diagnostic method is by darkfield microscopy, which is rarely used any more.
- Examine patient thoroughly and obtain sexual history, as many patients do not notice the signs and symptoms of syphilis because chancres can be hidden in the vagina, rectum, or mouth.
- Contact the health department for information and help with partner notification. Report all presumptive and confirmed cases of syphilis within 3 days of diagnosis (Secure web at sd.gov/diseasereport or call 800-592-1861).

TREATMENT www.cdc.gov/std/treatment/

- **Primary, Secondary, or Latent <1 year.** 2.4 million units IM of Benzathine Penicillin G in a single dose
- **Latent >1 year, latent of unknown duration, late cardiovascular, gumma.** 2.4 million units IM of Benzathine Penicillin G in 3 doses at 1 week intervals (7.2 million units total)
- **Pregnant women.** Treatment during pregnancy should be the penicillin regimen appropriate for the stage of syphilis (See CDC Treatment Guidelines)
- **Neurosyphilis.** 3 to 4 million units IV of Aqueous Crystalline Penicillin G every 4 hours for 10-14 days (18-24 million units/day)
- **Penicillin allergies.** See CDC Treatment Guidelines

Note: For treatment information on congenital syphilis and syphilis in children (early, primary, secondary, latent [both <1 year and >1 year or of unknown duration], late latent and HIV co-infection) please see CDC Treatment Guidelines.

Full diagnosis and treatment guidelines, educational, visual and epidemiologic resources at www.cdc.gov/std/syphilis or call the South Dakota Department of Health 800-529-1861.