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

SYPHILIS TRANSMISSION
Three means of 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. The stages are:

PRIMARY:

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

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, and late latent) please see CDC Treatment Guidelines at http://www.cdc.gov/STD/treatment/.
LATE LATENT:
- 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):
- Manifestations in the skin and bones (gummas), central nervous system, and cardiovascular system.
- Patient is not infectious in late stage.

DIAGNOSIS
- Dark-field examinations or direct fluorescent antibody tests of chancre tissue are the definitive methods for diagnosing primary and secondary syphilis.

- A presumptive diagnosis is possible with sequential serologic tests (e.g., VDRL, RPR), using the same testing method each time. A fourfold change in titer (e.g., from 1:8 to 1:32) is usually considered to be clinically significant. Confirmatory tests should be performed.

- Examine patient thoroughly and obtain sexual history, as many patients do not notice the signs and symptoms of syphilis because chancre can be hidden in the vagina, rectum, or mouth.

- Contact local health department for information and partner notification. Report presumptive and confirmed cases of syphilis within one working day of the diagnosis.

For more information, visit www.cdc.gov/std/see/ or contact your local health department.