

## **SYPHILIS: Notes About the Disease**

Syphilis is caused by a spirochete, *Treponema pallidum*. This sexually transmitted condition is diagnosed in stages: primary, secondary, early latent, late latent and latent of unknown duration. Syphilis will progress from one stage to the other without treatment. The infected person is symptomatic and most infectious in primary and secondary stage syphilis. Early latent stage syphilis is asymptomatic but the individual may continue to be infectious to sex partner(s). Syphilis tends to be more prevalent among an older age group than the age group affected by gonorrhea and chlamydia.

Syphilis has been called “the great imitator” because signs and symptoms mimic other diseases. Primary syphilis presents as one or more painless chancres and will resolve without treatment after three to six weeks. The secondary stage will manifest as rashes over different areas of the body and may appear as the chancre of primary syphilis is healing or several weeks after the chancre has healed. As is the case with primary syphilis, the signs and symptoms of secondary syphilis will resolve without treatment. If untreated, the early latent stage of syphilis follows but no signs and symptoms are present at this stage. Late latent stage syphilis is diagnosed based on history suggesting no symptoms, exposure or treatment of patient or partner within the last 12 months. A mother can be infectious to her unborn fetus in the late latent stage of syphilis.

Diagnosis is made via non-treponemal (e. g. RPR, TRUST) and treponemal (e. g. TPPA, CAPTIA) serology testing. A Darkfield microscopic test of serous fluid from a chancre or mucocutaneous lesions identifies the actual treponemes if present and is definitive for diagnosis of primary syphilis or secondary syphilis respectively. A positive non-treponemal serology test must be confirmed with a treponemal serology test in order to diagnose syphilis. Symptom history is used to determine the stage of syphilis and thus, the appropriate treatment.

Measures to control transmission include referral of all sex partners based on stage of syphilis and exposure history. Sex partners must be examined, tested and prophylactically treated at time of service. Use of latex condoms with sexual encounters is also effective in controlling transmission of this infection.