CONGENITAL SYPHILIS

Congenital syphilis occurs when syphilis is untreated during pregnancy and the infection passes to the fetus. Syphilis is curable but causes serious health complications if not treated or inadequately treated.



	MATERNAL	NEONATAL
PREVALENCE	In 2023, there was a 6.8% increase in the rate of syphilis (all stages) among reproductive aged women (15-44 years old) and there 10,121 cases of syphilis during pregnancy.	In 2023, 3,882 congenital syphilis cases were reported (252 stillbirths and 27 neonatal deaths), which is a 3% increase in cases from 2021 and a 740% increase from 2014.
MORBIDITY and MORTALITY	If left untreated, a syphilis infection can lead to long-term complications of the nervous system (neurosyphilis), eyes (ocular syphilis), and ears (otosyphilis). These include strokes, meningitis, vision loss, and hearing loss. Those with tertiary syphilis can experience significant health issues with the heart and other major organs.	Up to 40% of pregnancies with untreated or inadequately treated syphilis may end in miscarriage, stillbirth, or neonatal death.
TRANSMISSION	Transmission occurs via direct contact with syphilitic sores during vaginal, anal, or oral sex. Importantly, transmission can also occur even if sores are not visible.	The highest risk of vertical transmission is during primary, secondary, and early latent syphilis though transmission may occur during any stage of infection.
SCREENING and TESTING	Syphilis screening should be performed 3 times during every pregnancy (first prenatal encounter, 28 weeks gestation, and delivery) and in the event of stillbirth.	Syphilis testing and a thorough examination for evidence of congenital syphilis should be performed in all neonates born following a pregnancy reactive nontreponemal and treponemal test results.
SIGNS AND SYMPTOMS	• Primary syphilis: Develops 10-90 days after exposure. Characterized by a chancre (syphilis ulcer) that appears at the site of infection (e.g., vulva, vagina, cervix, anus, oral cavity), typically painless. Symptoms will go away without treatment. • Secondary syphilis: Occurs 3-6 weeks after primary syphilis. Commonly, a maculopapular rash on hands and feet or torso, flu-like symptoms, lymphadenopathy, and hair loss. Symptoms will go away without treatment. • Latent syphilis: No signs or symptoms. Early latent syphilis occurs within 1 year of infection and late latent syphilis occurs after 1 year of infection. Latent syphilis of unknown duration = timing of infection is unknown. • Tertiary syphilis: Multiorgan damage and failure. Occurs 10-30 years after primary infection. • Neurosyphilis, ocular syphilis, and otosyphilis can occur at any time during the course of syphilis infection.	Most neonates are asymptomatic at birth. • Signs and symptoms of infection can include retinitis, failure to thrive, low grade fever, lymphadenopathy, nonimmune hydrops, rhinitis with mucopurulent discharge (snuffles), hepatosplenomegaly, jaundice, and a skin rash with desquamation particularly of hands and feet. • Consider congenital syphilis in neonates presenting with any rash, fever, or sickness without definitive diagnosis.
DIAGNOSTIC LABS	• Non-treponemal tests (i.e., RPR, VDRL): provide quantitative results in the form of a titer. • Treponemal tests (i.e., TP-PA, EIAs, CIAs, rapid treponemal assays): result as reactive or nonreactive, stays reactive for life in most people regardless of treatment. Diagnosis requires **both** a non-treponemal test and a treponemal test. • Traditional Algorithm: Starts with a non-treponemal test followed by a confirmatory treponemal test. • Reverse Sequence Algorithm: Starts with a treponemal test followed by a confirmatory non-treponemal test (and a second treponemal tests may be performed if the first two tests are discordant) **It may take up to four weeks for a test to convert to reactive after infection.*	Testing should be via a quantitative nontreponemal serologic test (e.g., RPR) on neonatal serum.
TREATMENT	• Follow current CDC STI Treatment Guidelines. • Benzathine penicillin G is the only option for syphilis treatment during pregnancy at any stage of the infection administered IM or IV. • Penicillin allergy: Desensitization and treatment with benzathine penicillin G during pregnancy.	Follow current CDC STI Treatment Guidelines with treatment of congenital syphilis in neonates based on: • Syphilis testing and treatment status during pregnancy • Presence of clinical, laboratory, or radiographic evidence of congenital syphilis in the neonate.

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