10 Myths on Congenital Syphilis



Myth: Congenital syphilis was eradicated.

Fact: Congenital syphilis has been on the rise for the past several years, and as of July 29, 2021, 2,022 infants born in 2020 had been identified and reported to the Centers for Disease Control and Prevention (CDC) as cases of congenital syphilis. This number represents 108.1% of all cases reported for 2019 (n=1,870), and prior reporting trends indicate the total number of cases reported through October 2021 (end of the reporting period) may be as high as 2,100.¹

In 2019, Texas was the state with the highest case count (528 cases)* and case rate (132.9 cases per 100,00 live births)* of congenital syphilis. In 2020, the Texas case count increased again, with 561* congenital syphilis cases reported.

Myth: Syphilis is rare in reproductive-aged women.

Fact: In 2019, half of all counties in the U.S. reported syphilis among women of reproductive age – a doubling over the past decade.1 Similarly, in 2020, over half of all Texas counties reported syphilis in women of reproductive age.*

Myth: Most infants with congenital syphilis are identified at birth.

Fact: Congenital syphilis can be diagnosed at up to 2 years of age, but many cases are identified at birth. Therefore, cases are sent to CDC when they are reported to local public health officials and are assigned as morbidity based upon the infant's year of birth. Babies who do not get treatment for congenital syphilis and develop symptoms later on can die from the infection. They also may be developmentally delayed or have seizures. The current and historical congenital syphilis case definitions can be found on CDC's National Notifiable Diseases Surveillance System case definition website.^{2,3}

Myth: We can't improve detection rates in women who don't receive prenatal care.

Fact: Syphilis testing in emergency departments, obstetrics triage units, and primary care offices can expand syphilis treatment to women who don't have access to timely prenatal care. Many women will present to emergency settings over the course of their pregnancy, even if they do not have the ability to receive consistent prenatal care. HIV, syphilis, and other sexually transmitted infection testing is important in these settings so that prompt treatment can occur.

Myth: If a woman tests positive for syphilis with a treponemal-specific test in the reverse sequence algorithm, no further testing is needed.

Fact: In the reverse algorithm, a positive treponemal test should trigger a rapid plasma reagin (RPR) (nontreponemal) test. If the RPR is positive, the woman has evidence of past or present syphilis, and a clinical exam and history are needed to determine whether she needs treatment. If the RPR is negative, the testing is indeterminant, and a second treponemal test should be performed.⁴

Myth: An RPR titer of <1:8 is always diagnostic of serofast syphilis.

Fact: The stage of syphilis, including serofast status, cannot be determined by the level of the RPR titer. Concurrent physical exam and treatment history are needed to confirm the stage. Serofast syphilis exists when a patient has previously appropriately been treated for syphilis with a documented four-fold decline in titers and no evidence of reinfection or clinical symptoms of primary, secondary, or tertiary syphilis or neurosyphilis.



Myth: Most women with syphilis will have symptoms that lead to diagnosis.

Fact: Latent syphilis, either early, late, or unknown duration, is the most common diagnosis, and patients will not have clinical symptoms. Latent syphilis can still lead to congenital syphilis and should be treated with benzathine penicillin G, 2.4 million units intramuscularly. Syphilis in the late latent or unknown duration stages should be treated with three doses of benzathine penicillin G, 2.4 million units intramuscularly.

Myth: There are no sonographic findings with fetal syphilis.

Fact: Antenatal sonographic findings can be seen with fetal syphilis. The most common findings include hepatomegaly and placentomegaly, and also elevated peak systolic velocity in the middle cerebral artery (indicative of fetal anemia), ascites, and hydrops fetalis. Pregnancies with ultrasound abnormalities are at higher risk of compromise during syphilotherapy as well as fetal treatment failure.⁵

Myth: Fetal infection can occur only when the pregnant patient has syphilitic lesions present.

Fact: Syphilis can infect the fetus in all stages of the disease regardless of trimester and can sometimes be detected with ultrasound at >20 weeks. In order to improve early diagnosis of syphilis among people who are pregnant and prevent transmission to the fetus, Texas law requires that testing for syphilis occur at the first prenatal visit, in the third trimester (no sooner than 28 weeks), and again at delivery.

Myth: All CDC-recommended treatments for syphilis can be used for treatment in pregnancy.

Fact: Only benzathine penicillin G is effective to eradicate syphilis from the fetus and fetal compartment. In patients with penicillin allergies, intravenous or oral penicillin desensitization is needed, followed by treatment with penicillin.

*Preliminary data from the Texas Department of State Health Services as of March 2022, subject to change.

^{1.} Centers for Disease Control and Prevention. Congenital Syphilis Preliminary 2020 Data. Atlanta: U.S. Department of Health and Human Services; 2021.

^{2.} CDC. Congenital Syphilis: Preliminary 2020 Data. Accessed Jan. 24, 2022

^{3.} CDC. National Notifiable Diseases Surveillance System. Congenital Syphilis (Treponema pallidum).

^{4.} Workowski KA, Bachmann LH, Chan PA, et al. <u>Sexually Transmitted Infections Treatment Guidelines, 2021</u>. *MMWR Recomm Rep* 2021;70(4):1-187.

^{5.} Rac MW, Revell PA, Eppes CS. <u>Syphilis during pregnancy: a preventable threat to maternal-fetal health</u>. *Am J Obstet Gynecol.* 2017 Apr;216(4):352-363. Epub 2016 Dec 9.