Congenital Syphilis in Texas

What is Congenital Syphilis?

Congenital syphilis (CS) is syphilis passed from a mother to her baby during pregnancy or at delivery. Transmission occurs when a woman does not receive treatment or only receives partial treatment for her syphilis diagnosis. CS can lead to miscarriage, stillbirth, preterm delivery, birth defects, and even perinatal death. According to the Centers for Disease Control and Prevention (CDC), up to 40 percent of infants born to mothers with untreated syphilis acquired within four years of delivery may be stillborn or die as a newborn. Some infants with CS can show no signs or symptoms at birth but develop life altering complications weeks or years later.

CS can present through a spectrum of severe manifestations. Early CS occurs when the child receives a syphilis diagnosis between birth and their second birthday. Early CS can cause vision or hearing loss; non-viral hepatitis causing jaundice of the skin and eyes; long bone abnormalities; developmental delays; enlargement of the liver, spleen, or both organs (hepatosplenomegaly); severe inflammation of the mucus membranes of the nose (snuffles); rash; anemia; pneumonia; and other symptoms. Late CS starts when symptoms manifest after age two. Older children may develop clinical manifestations of late CS, including problems with bone and tooth development, hearing and vision loss, and issues with the central nervous and cardiovascular systems.³ However, timely prenatal care, testing, and treatment, can potentially prevent devastating health outcomes for children.

Is CS a Problem in Texas?

Nationally, CS case rates have risen annually since 2013. Historically, Texas has reported high rates of CS compared to other states. CS increased approximately 148 percent from 2018 to 2022.

In 2022*:

- Texas reported 922 cases of CS.
- Approximately 1 in 435 Texas infants had a CS diagnosis.
- This represents a nearly 34 percent increase relative to 2021, when 689 cases were reported at a case rate of 181.2 cases per 100,000 live births.
- 109 counties reported at least one CS case.
- Harris County, Dallas County, Bexar County, Tarrant County, and Public Health Region 11 reported over 62 percent of CS cases in Texas.

by Year of Diagnosis, 2013-2022 250 1,000 Case Rate per 100,000 Live Births 200 750 **Number of Cases** 150 500 100 250 Year 2014 2015 2016 2017 2018 2019 2020* 2021* 2022*† Cases 74 71 70 166 372 530 565 689 Case rate 18.9 17.6 17.4 41.7 92.2 137.2 150.8

Figure 1: Texas Congenital Syphilis Cases and Rates

Syphilis Testing and the Law

According to <u>Texas Health and Safety Code</u> §81.090, healthcare providers must test pregnant women for syphilis three times throughout their pregnancy. The testing should take place during the **first prenatal visit**, again during the **third trimester** (no earlier than 28 weeks of gestation), **and** at the time of **delivery**.

The CDC recommends testing pregnant women for syphilis between 28 and 32 weeks of gestation. Additionally, healthcare providers should test women who experience stillbirths at or after 20 weeks of gestation.



When advising clients about syphilis testing, it is important to discuss their previous testing and treatment history. Most people will continue to test positive after treatment, so it is crucial to confirm and document appropriate treatment for anyone with a reactive syphilis serology, particularly if they are pregnant. Local or regional health authorities can help confirm testing and treatment history, the reported syphilis stage, and if the client needs additional treatment.

Syphilis in Texas Women

Women diagnosed with primary or secondary syphilis (symptomatic syphilis) during pregnancy who do not start treatment at least 30 days prior to delivery are more likely to deliver infants with clinical manifestations of CS.

In 2022, Texas reported 1,131 cases of primary and secondary syphilis among women of childbearing age at a rate of 18.0 per 100,000 females. This represents a 14 percent increase relative to 2021, when Texas reported 911 cases at a rate of 14.8 cases per 100,000 females (Figure 2). Increased rates of syphilis in women have been associated with increased rates of CS, regardless of pregnancy status.⁴

Treatment for Syphilis

Syphilis should be treated as early as possible, especially if the patient is a pregnant woman, to prevent serious health issues for

Figure 2: Primary and Secondary Syphilis Cases and Case Rates Among Women of Childbearing Age in Texas by Diagnosis Year, 2013-2022



the infant. Long-acting Benzathine penicillin G therapy is the only CDC approved regimen to treat syphilis during pregnancy to prevent syphilis transmission to the infant.⁴ This therapy is highly effective in preventing CS, with a success rate of up to 98 percent.⁵ Women who are allergic to penicillin should see a specialist for desensitization to penicillin.⁶

Women diagnosed with late syphilis of unknown duration require three doses of benzathine penicillin G given one week apart. Treatment must be restarted if doses are missed or given more than nine days apart.⁷ Failure to complete appropriate syphilis treatment at least 30 days prior to delivery results in a reported CS case.⁸

To reduce barriers, physicians should treat their own patients instead of referring them to other providers. <u>Local and regional health authorities</u> can also answer questions about syphilis and other STD treatments. Since syphilis can pass between partners, it is also important to discuss the possibility of reinfection with syphilis if sex continues with an untreated partner.

Per the <u>CDC treatment guidelines for congenital syphilis</u>, infants born to women with a positive syphilis serology should have a non-treponemal serology test performed. Additional evaluations and treatment considerations for infants should be made following CDC guidelines. The Department of State Health Services (DSHS) developed a physician-approved <u>CS Infant evaluation and treatment flowchart</u> (PDF), which follows CDC guidelines.



Local and Regional Health Departments



2021 CDC Treatment Guidelines

Reporting Syphilis

<u>Texas Administrative Code, Title 25, Part 1, Chapter 97, Subchapter F,</u> requires physicians and clinics to report positive syphilis labs to DSHS. If a patient presents with symptoms of primary or secondary syphilis, reporting guidelines mandate reporting within 24 hours to the local health authority for public health follow-up. For additional information about reporting, please see the <u>DSHS disease reporting website</u> or consult with the local or regional health department.

CS Infant

CS Infant Evaluation and Treatment Flow Chart

Resources

- CDC STD Treatment guidelines for syphilis: cdc.gov/std/treatment-guidelines/syphilis.htm
- Special considerations for pregnant women with syphilis: <u>cdc.gov/std/treatment-guidelines/syphilis-pregnancy.htm</u>
- Congenital syphilis treatment guidelines: cdc.gov/std/treatment-guidelines/congenital-syphilis.htm
- Epidemiological profile: <u>dshs.texas.gov/hivstd/syphilis/congenitalsyphilis/datasurveillance</u>

The slight variations between the numbers reported in the CDC National Report and those reported in the Texas STD Surveillance Report are due to ongoing data collection, quality assurance efforts, and the reporting of CS cases born in previous years. For the purposes of this fact sheet, DSHS used birth year data.

*DSHS based 2020, 2021, and 2022 CS case rates on provisional 2020, 2021, and 2022 birth data.

†2022 data are provisional.

References

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Fast Facts

Syphilis is curable.

CS is preventable.

Offer syphilis testing to your patients.

The law requires syphilis testing for pregnant women.

Local reporting authorities dshs.texas.gov/hivstd/ reporting/regions/

DSHS HIV/STD Section

737-255-4300 dshs.texas.gov/hivstd/

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