Congenital Syphilis in Texas

What is Congenital Syphilis?

Women diagnosed with syphilis can pass the infection to their children during fetal development or at birth. Syphilis can cause miscarriage, stillbirth, or death shortly after delivery. According to the Centers for Disease Control and Prevention (CDC), up to 40 percent of babies born to women with untreated syphilis may be stillborn or die as a newborn.¹ Some infants with infection can appear healthy at birth, but develop life-altering complications later in life.

Congenital syphilis can present with a spectrum of serious manifestations, but can also occur without symptoms. Congenital syphilis is classified as "early" when the child exhibits symptoms at birth up to their second birthday, and "late" when symptoms start after age two. Early congenital syphilis 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 and/or spleen; inflammation of the mucus membranes of the nose; rash; wart-like lesions on the genitals; and additional symptoms. Older children may develop clinical symptoms of late congenital syphilis, including problems with bone and teeth development, hearing, vision, and the central nervous and cardiovascular systems.²

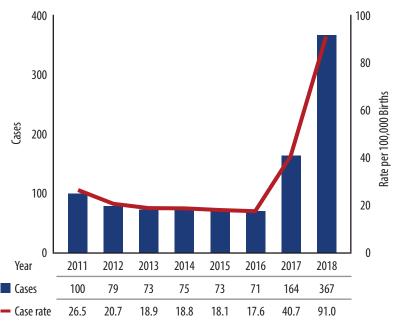
Is Congenital Syphilis a Problem in Texas?

Nationally, the congenital syphilis rate has been rising since 2013. Historically, Texas has reported high numbers of congenital syphilis compared to other states. In 2017, Texas reported the fourth highest rate of congenital syphilis cases in the nation.

In 2018:

- There were 367 cases of congenital syphilis reported to DSHS.
- The rate was 91.0 cases per 100,000 births.
- This represents a 124% increase relative to 2017, when 164 cases were reported at a rate of 40.7 cases per 100,000 live births.
- There were 50 counties that reported congenital syphilis cases.
- The top five reporting jurisdictions for Texas were Harris County (104), Bexar County (61), Dallas County (60), Region 11 (South Texas) (45), and Tarrant County (21).

Figure 1: Texas Congenital Syphilis Cases and Rates by Year of Diagnosis, 2011-2018



Congenital syphilis cases are more likely to occur when pregnant women with syphilis receive late prenatal care or no prenatal care at all. But with timely prenatal care, testing, and treatment, potentially devastating health outcomes for children can be averted.

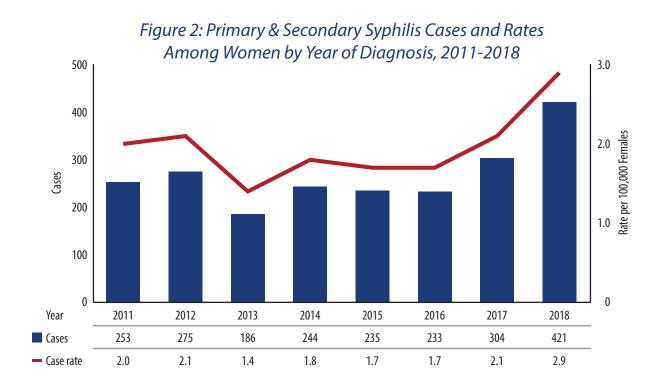
Syphilis Testing and the Law

<u>Texas Health and Safety Code Section 81.090</u> requires all pregnant women in Texas to be tested for syphilis at their **first prenatal visit**, during the **third trimester** of their pregnancy no earlier than 28 weeks gestation, and again at **delivery**. CDC recommends third trimester testing between 28 and 32 weeks gestation. It is important to discuss testing and treatment history with the individual being tested, because persons can still test positive after receiving treatment.

Syphilis in Women

Women with untreated or inadequately treated primary and secondary syphilis (symptomatic syphilis) during pregnancy are more likely to result in clinical congenital syphilis cases. Women with untreated or inadequately treated non-primary, non-secondary syphilis (early and unknown duration or late syphilis that occurs within one or more years after infection) still have a 23 percent chance of an adverse pregnancy outcome.³

In 2018, Texas reported 421 primary and secondary syphilis among women at a rate of 2.9 per 100,000 females. This represents a 38% increase relative to 2017, when 304 cases were reported at a rate of 2.1 cases per 100,000 females (Figure 2). Increased rates of syphilis in women has been associated with increased rates of congenital syphilis regardless of pregnancy status.⁴



Treatment for Syphilis

Pregnant women diagnosed with syphilis should seek treatment as early as possible to prevent serious health problems for their children. Long-acting penicillin therapy must be used to treat syphilis during pregnancy to prevent passing the infection to the baby.⁵ This therapy is extremely effective in preventing mother-to-child transmission, with a success rate of up to 98 percent.⁶ Pregnant women who are allergic to penicillin should see a specialist for desensitization to penicillin.⁷

Women diagnosed with unknown duration or late syphilis require three treatments of penicillin given one week apart; failure to complete this therapy appropriately will result in a reported congenital syphilis case. Additionally, the penicillin treatment regimen appropriate for the mother's stage of syphilis must be initiated at least 30 days prior to delivery to prevent a congenital syphilis case.

Whenever possible, physicians should treat their own patients instead of referring them to other providers to avoid losing patients to follow-up. Local health departments can also answer questions about treatment. Since syphilis can be passed between partners, it is also important to discuss the possibility of reinfection with syphilis if they have sex with an untreated partner. For infants with probable congenital syphilis or syphilis exposure, please refer to the treatment guidelines.

Reporting Syphilis

In Texas, syphilis is a reportable condition and all positive syphilis labs are required to be reported to DSHS in accordance with <u>Texas Administrative Code, Title 25, Part 1, Chapter 97, Subchapter F</u>. 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</u> <u>disease reporting website</u> or consult with the local or regional health department.

* There are slight variations between the numbers reported in the CDC National Report and those reported in the Texas STD Surveillance Report. This is due to the use of different report dates contained within the data.

References

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- 3 Arnold, S., Ford-Jones, E. (2000). Congenital syphilis: A guide to diagnosis and management. Paediatrics & Child Health, 5(8), 463-469. [Online]. Available: <u>www.ncbi.nlm.nih.gov/pmc/articles/PMC2819963/</u> [Accessed August 28, 2019].
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- 6 Bowen, V., Su, J., Torrone, E., Kidd, S., & Weinstock, H. (2015). Increase in Incidence of Congenital Syphilis — United States, 2012–2014. MMWR. Morbidity and Mortality Weekly Report,64(44), 1241-1245.doi:10.15585/ mmwr.mm6444a3. [Online]. Available: <u>www.cdc.gov/mmwr/preview/</u> <u>mmwrhtml/mm6444a3.htm</u> [Accessed August 28, 2019]
- 7 Centers for Disease Control and Prevention, "2015 Sexually Transmitted Diseases Treatment Guidelines," June 2015. [Online]. Available: <u>www.cdc.</u> <u>gov/std/tg2015/</u> [Accessed August 28, 2019].

FAST FACTS Congenital Syphilis

Syphilis is curable.

Congenital syphilis is preventable.

Offer syphilis testing to your patients. Syphilis testing is legally required for pregnant women.

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

CDC STD Treatment guidelines for syphilis www.cdc.gov/std/tg2015/syphilis.htm

Special considerations for pregnant women with syphilis www.cdc.gov/std/tg2015/syphilispregnancy.htm

Congenital Syphilis treatment guidelines www.cdc.gov/std/tg2015/congenital.htm

DSHS TB/HIV/STD Section

(512) 533-3000 www.dshs.texas.gov/hivstd

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