Concerning Increases in Congenital Syphilis

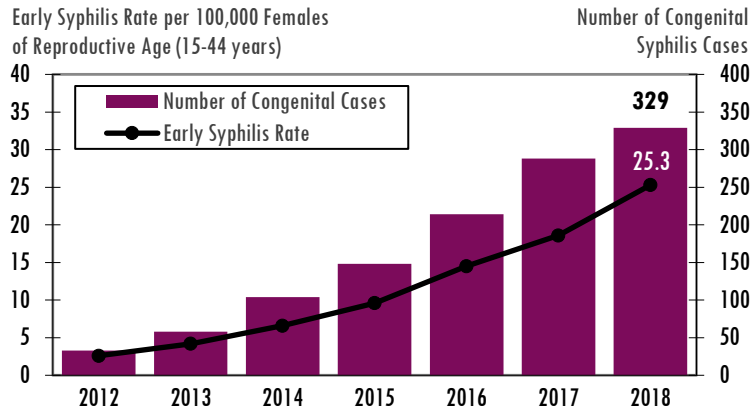
AN UPDATE FOR CALIFORNIA HEALTH CARE PROVIDERS

The Problem: Increasing Congenital Syphilis in California

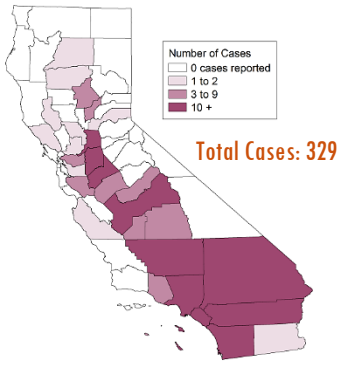
California has experienced a steep increase in syphilis among females and congenital syphilis (CS). From 2012 to 2018, female syphilis cases increased nearly 550% and CS cases increased nearly 900%, from 33 cases in 2012 to 329 cases in 2018. In 2018, most congenital syphilis cases were reported from Central and Southern California; however, an increasing number of counties throughout California are reporting their first CS case in years.[1] Most people who gave birth to infants with CS received prenatal care late in pregnancy or not at all.

This increase in numbers of congenital syphilis cases in California is an important public health problem requiring immediate attention from medical providers caring for pregnant people and people who could become pregnant.

Congenital Syphilis Cases versus Female Early Syphilis Incidence Rate, California, 2012-2018



Congenital Syphilis Number of Cases by County, California, 2018



What Is Congenital Syphilis?

Congenital syphilis occurs when syphilis is transmitted from an infected pregnant person to their fetus during pregnancy. It is a potentially devastating disease that can cause severe illness in babies including premature birth, low birth weight, birth defects, blindness and hearing loss. It can also lead to stillbirth and infant death.[2]

Congenital Syphilis Can Be Prevented!

Congenital syphilis can be prevented with early detection and timely and effective treatment of syphilis in pregnant people and people who could become pregnant. Preconception and interconception care should include screening for HIV and sexually transmitted diseases (STDs), including syphilis, in people at risk, in addition to access to highly effective contraception.

Prenatal Screening: It's the Law!

All pregnant people should receive routine prenatal care, which includes syphilis testing. In California, it is required by law that pregnant people are tested for syphilis at their first prenatal visit.[3]

Syphilis testing should be repeated during the third trimester (28-32 weeks gestational age) and at delivery in people who are at high risk for syphilis or live in areas with high rates of syphilis,[4] particularly among females. Some high-morbidity counties in California are recommending routine third trimester screening for all pregnant people. Routine risk assessment should be conducted throughout pregnancy to assess the risk factors highlighted in the box on page 2; this should inform the need for additional testing.

Infants should not be discharged from the hospital unless the syphilis serologic status of the mother has been determined at least once during pregnancy and, for at-risk people, again at delivery. Any individual who delivers a stillborn infant should be tested for syphilis.[4]

1. California Department of Public Health (CDPH) Sexually Transmitted Diseases Control Branch data page https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx.
2. Centers for Disease Control and Prevention Congenital Syphilis Fact Sheet https://www.cdc.gov/std/syphilis/stdfact-congenital-syphilis.htm.
3. California State Code http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=105.&title=&part=3.&chapter=2.&article.
4. Centers for Disease Control and Prevention 2015 Treatment Guidelines for Syphilis in Pregnancy https://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm.

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People Who Would Benefit from Additional Syphilis Testing in the Third Trimester (28-32 Weeks) and at Delivery Include Those Who:

- Have signs and symptoms of syphilis infection.
- Live in areas with high rates of syphilis, particularly among females.
- Were diagnosed with an STD during pregnancy.
- Receive late or limited prenatal care.
- Did not get tested in the first or second trimester.
- Have partners that may have other partners, or partners with male partners.
- Have history of incarceration.
- Are involved with substance use or exchange sex for money, housing, or other resources.

Common Mistakes

Not reporting syphilis cases to local health departments within 24 hours.

Not strictly adhering to treatment guidelines for pregnant people with syphilis.

Not properly conducting routine risk assessment throughout pregnancy to determine need for additional testing.

Diagnosing Syphilis

Syphilis is diagnosed by reviewing patient history, taking a sexual risk assessment, conducting a physical exam, and obtaining blood tests. Making the diagnosis of syphilis requires interpretation of both treponemal and non-treponemal serology tests results.[5]

Syphilis Treatment

Treatment for a pregnant person is based on the stage of infection. To prevent adverse pregnancy outcomes, physicians should treat patients as soon as possible.[6] Treating a pregnant person infected with syphilis also treats the fetus.[7]

Treatment for Early Syphilis (determined to be less than one year's duration)	**OR**	**Treatment for Late Latent Syphilis or Unknown Duration**
Benzathine penicillin G 2.4 million units by intramuscular injection in a single dose*		Benzathine penicillin G 2.4 million units by intramuscular injection every 7 days for 3 weeks (7.2 million units total)

**Some specialists recommend a second dose of Benzathine penicillin G 2.4 MU IM administered 1 week after initial dose in pregnant people with early syphilis.*

In pregnancy, penicillin is the only recommended therapy. Pregnant people with penicillin allergies should be desensitized and treated with penicillin.[6] There are no alternatives.

For pregnant people, benzathine penicillin doses for treatment of late latent syphilis should be administered at 7-day intervals; if a dose is missed or late, the entire series must be restarted.

Infants born to people who had syphilis during pregnancy require close evaluation and treatment per the CDC STD Treatment Guidelines.[6]

Partner Treatment and the Role of Local Health Departments

Because sex with an untreated partner can cause re-infection, it is especially important to ensure that the partner(s) receive treatment and to inform pregnant people about the risk to their infants if they have sex with an untreated partner. Local health departments are key collaborators in the prevention of congenital syphilis, and can assist with partner treatment.

California law requires that all syphilis infections be reported to the local health department where the patient resides within 24 hours of diagnosis. Guidance on reporting and links to local health departments contact information are available here: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/HowToReportCMRs.pdf

Resources for Health Care Providers

Centers for Disease Control and Prevention, 2015 STD Treatment Guidelines: Syphilis During Pregnancy (https://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm) and Congenital Syphilis (https://www.cdc.gov/std/tg2015/congenital.htm).

For clinical questions, enter your consult online at the STD Clinical Consultation Network (https://www.stdccn.org/).

5. CDPH, Use of Treponemal Immunoassays for Screening and Diagnosis of Syphilis https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/UseofTreponemalImmunoassays_Syphilis.pdf#search=treponemal%20immunoassay.
6. CDC 2015 STD Treatment Guidelines Syphilis During Pregnancy http://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm.
7. De Santis, M., De Luca, C., Mappa, I., Spagnuolo, T., Licameli, A., Straface, G., & Scambia, G. (2012). Syphilis infection during pregnancy: Fetal risks and clinical management. Infectious Diseases in Obstetrics and Gynecology, 2012.

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