To: CAHAN San Diego Participants  
Date: January 12, 2021  
From: HIV, STD, and Hepatitis Branch, Public Health Services

Health Advisory: Expanded Syphilis Screening Recommendations for Prevention of Congenital Syphilis

This advisory informs providers about increasing rates of congenital syphilis (CS) and primary and secondary (P&S) syphilis among females of childbearing potential in California and in San Diego County. Expanded recommendations for syphilis screening of persons who are pregnant or could become pregnant are provided.

Key Messages

- In California, congenital syphilis cases increased by over 900% from 2012 to 2018, representing a magnitude of congenital syphilis burden not observed since 1995.
- San Diego County exceeds the high morbidity threshold for congenital syphilis and for primary and secondary syphilis among females of childbearing potential.
- All pregnant patients should be screened for syphilis at least twice during pregnancy, including once during the third trimester (ideally between 28-32 weeks’ gestation). The preferred setting for screening is routine prenatal care, but screening also should be performed during emergency department visits or upon entrance into correctional facilities if prior screening for syphilis during the pregnancy cannot be verified. Detailed screening recommendations are provided below.
- Patients should be screened for syphilis at delivery, except those at low risk who have a documented negative screen in the third trimester.

Situation

In 2018, 329 babies with CS were reported in California, representing a 900% increase from 2012 and a magnitude of CS burden not observed since 1995. This trend mirrors a sharp increase in all stages of syphilis among females, which increased more than 500% during the same period. These increases are attributed to multiple risk factors, which include disparities in access to healthcare, substance use, poverty, and housing instability. In response, the California Department of Public Health (CDPH) issued a Dear Colleague Letter and Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis on December 8, 2020. These guidelines are designed to increase screening for syphilis among persons assigned female at birth who are or could become pregnant to ensure detection, timely treatment, and subsequent prevention of CS.

Reported cases and rates of CS have trended upward in San Diego County in recent years. In 2018, 15 CS cases were reported, with a rate of 35.4 cases per 100,000 live births. While this was lower than the state rate of 68.2 cases per 100,000 live births, San Diego County is considered to have high CS morbidity, defined by CDPH as a rate greater than 8.4 cases per 100,000 live births. Based on
preliminary 2019 surveillance data, there were 21 CS cases in San Diego County (rate of 51.6 cases per 100,000 live births). From 2015-2019, six syphilitic stillbirths were reported in the region, half of which occurred in 2019.

Background

CS is the manifestation of Treponema pallidum in a fetus or infant that is the result of vertical (i.e., transplacental) transmission. Vertical transmission can occur at any gestational age and during all stages of maternal syphilis, including primary, secondary, early latent, and late latent disease. If left untreated, early syphilis in pregnancy results in fetal infection in approximately 80% of cases, more than a third of which lead to fetal or neonatal mortality. Syphilis can result in multiple complications during pregnancy, including intrauterine growth restriction, preterm labor, placental abnormalities, and stillbirth. Potential sequelae of CS among live-born infants include rash and skin lesions, hepatosplenomegaly, thrombocytopenia, central nervous system manifestations, pulmonary infection, skeletal malformations, and facial disfiguration.

CS is preventable through timely diagnosis and treatment of syphilis in pregnancy. Stage-appropriate syphilis treatment with benzathine penicillin G during pregnancy is highly effective in preventing CS, with an overall efficacy of 98.2% inclusive of all stages and gestational ages. The California Health and Safety Code requires providers to screen pregnant patients for syphilis at the first prenatal visit (Sections 120685 and 120690). However, many pregnant women access prenatal care during late pregnancy, or not at all, and therefore do not receive timely screening.

Pregnant women who are vulnerable to syphilis may access care (for pregnancy-related or other reasons) in other clinical settings such as emergency departments (EDs) or interface with correctional facilities. For example, a CDPH review of 123 mothers who delivered infants with CS in two high-morbidity local health jurisdictions in 2017 and 2018 found that 16% (20/123) were seen in an ED during their pregnancies and 80% of these cases lacked any prenatal care. Determination of syphilis status and/or syphilis screening in these settings could identify infections that would otherwise go unidentified and allow for appropriate treatment and other CS-preventive measures prior to delivery.

The Centers for Disease Control and Prevention (CDC) recommends additional serologic screening twice during the third trimester (i.e., once at 28-32 weeks gestation and again at delivery) for women at high risk of infection and in communities and populations in which syphilis prevalence is high. However, there are multiple limitations to risk-based, third trimester screening. Providers often lack the training, willingness, or capacity to perform screening. Further, patient hesitation to disclose highly stigmatized risk factors (e.g., substance use, exchange sex, history of incarceration, homelessness or unstable housing, multiple sexual partners) and fears of legal consequences of such disclosure result in inaccurate risk determination. In 2017, half of prenatal syphilis cases in California were identified among patients without recognized risk factors.

Routine testing early during the third trimester offers the opportunity to detect syphilis in cases of limited or no early prenatal care, syphilis acquisition or seroconversion after an initial negative screen, lapse in first-encounter syphilis screening, and previously inadequately treated syphilis. It also affords adequate time for treatment to prevent CS prior to delivery.
Actions Requested

Based on CDPH recommendations and high CS and female P&S syphilis morbidity in the county, the County of San Diego Health and Human Services Agency recommends the following measures to reduce the burden of female and congenital syphilis in the region:

- Screen all pregnant patients for syphilis at least twice during pregnancy: once at either confirmation of pregnancy or at the first prenatal encounter (ideally during the first trimester) and again during the third trimester (ideally between 28-32 weeks gestation), regardless of whether such testing was performed or offered during the first two trimesters.
- Screen all patients for syphilis at delivery, except those at low risk who have a documented negative screen in the third trimester.
- Confirm the syphilis status of all pregnant patients presenting to an ED prior to discharge, either via documented test results in pregnancy or a syphilis test in the ED.
- Screen all people entering a correctional facility who are or could become pregnant for syphilis at intake, or as close to intake as is feasible.
- Screen all sexually active people who could become pregnant for syphilis at least once in life, regardless of risk factors, with additional screening for those at increased risk.
- Screen all sexually active people who could become pregnant for syphilis at each HIV test.
- Report all syphilis cases to the HIV, STD, and Hepatitis Branch (HSHB) of Public Health Services within one business day of diagnosis by submitting a Confidential Morbidity Report. Click here for more information about sexually transmitted infection case reporting.

Resources for Providers

A complete guide to these recommendations, Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis, was published by the CDPH Sexually Transmitted Disease (STD) Control Branch and includes the evidence in support of these recommendations and considerations for practice implementation. For information about diagnosis and treatment of syphilis in pregnancy and evaluation and management of congenital syphilis, please refer to the 2015 CDC STD Treatment Guidelines.

HSHB can assist providers in the interpretation of reactive (positive) syphilis serologic tests and management of pregnant and congenital syphilis cases. HSHB also can provide technical assistance and help with linkage to syphilis evaluation, testing and treatment. For assistance, please call (619) 692-8501 or (619) 609-3245.

Thank you for your continued participation.

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