

# Syphilis in Women and Congenital Syphilis

## An Update for Healthcare Providers in Los Angeles County (LAC)

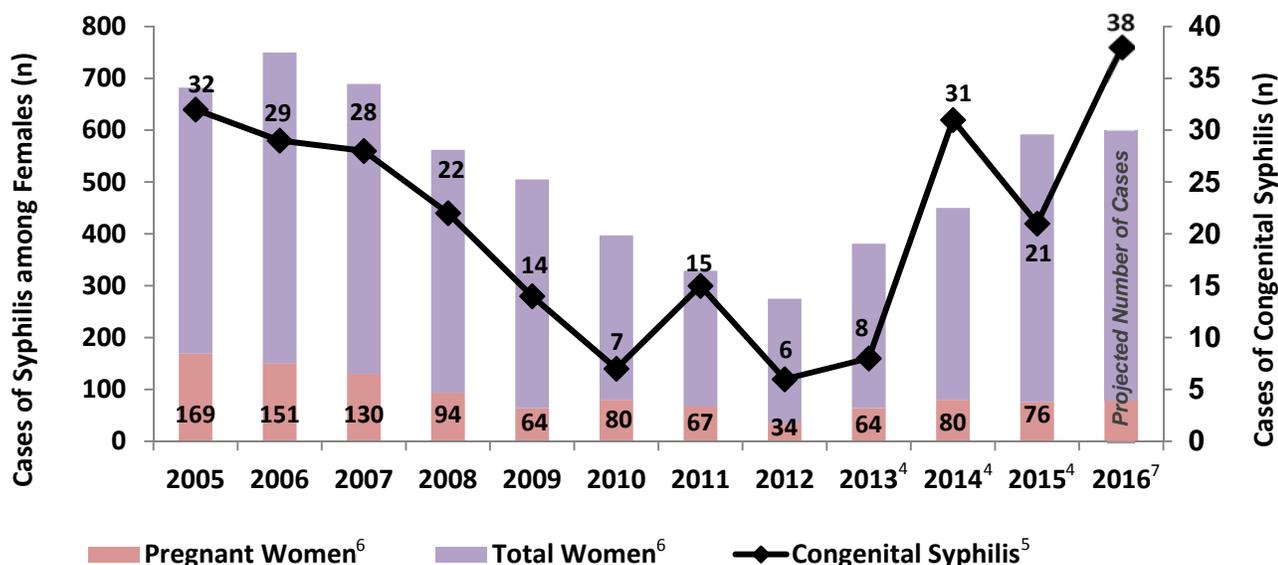
In recent years, LAC has seen an increase in the number of syphilis cases among women. This parallels a steady increase in syphilis cases in men during the same time period. Similar increases have been seen across the U.S. and in other parts of California.<sup>1,2</sup> Health care providers play a critical role in addressing the syphilis epidemic by identifying and treating infected patients, and helping to ensure that sexual partners also receive treatment.



### Congenital Syphilis on the Rise

Increases in female syphilis cases have led to a dramatic increase of congenital syphilis in LAC (Figure 1). Congenital syphilis is a preventable condition that results from untreated syphilis during pregnancy, with potentially severe consequences for infected infants. Congenital syphilis can lead to stillbirth, neonatal death, birth defects involving the nervous system or bones, blindness or deafness, skin lesions and scarring, and other manifestations. Fetal infection can occur during any trimester of pregnancy, and during any stage of syphilis, though transmission to the fetus is most likely in primary, secondary, and early latent syphilis cases. Preventing adverse pregnancy outcomes requires early screening and, if positive, immediate treatment, at least 30 days before delivery. Treating a pregnant woman for syphilis also treats her fetus. Benzathine G penicillin is the *only* appropriate treatment for syphilis during pregnancy.

**Figure 1. Number of Female Syphilis Cases and Probable Congenital Syphilis Cases, LAC 2005-2016<sup>3</sup>**



<sup>1</sup> Centers for Disease Control and Prevention. 2013 Sexually Transmitted Diseases Surveillance: Syphilis. Available from: <http://www.cdc.gov/std/stats13/syphilis.htm>

<sup>2</sup> California Department of Public Health STD Control Branch. Congenital syphilis information for STD Controllers. Available from: [http://www.cdph.ca.gov/programs/std/Documents/Bauer\\_CA\\_STD\\_Controllers\\_Letter\\_Congenital%20Syphilis\\_04\\_01\\_15.pdf](http://www.cdph.ca.gov/programs/std/Documents/Bauer_CA_STD_Controllers_Letter_Congenital%20Syphilis_04_01_15.pdf)

<sup>3</sup> Data are from STD Casewatch as of 08/05/2016 and exclude cases in Long Beach and Pasadena.

<sup>4</sup> 2013-2016 data are provisional due to reporting delay.

<sup>5</sup> Congenital Syphilis includes syphilitic stillbirths.

<sup>6</sup> Syphilis among females includes all cases staged as primary, secondary, early latent, late latent and late.

<sup>7</sup> 2016 data are provisional and projection only as of 8/5/16 a total of 20 Congenital Syphilis Cases have been reported.

## When should pregnant women be screened for syphilis?

California Law requires that all pregnant women must be screened at their first prenatal visit.<sup>7</sup> **Pregnant women at higher risk for syphilis should be re-screened during the third trimester (28-32 weeks estimated gestational age) and at delivery.** No newborn should leave the hospital without provider review of maternal serologic status during pregnancy, and preferably, review of maternal status at delivery. Any woman who delivers a stillborn (fetal demise after 20 weeks gestation) should also be evaluated for syphilis.

## Which women are considered at higher risk for syphilis during pregnancy?

- Women with Late or Sporadic pre-natal care
- Women with history of substance abuse/serious mental illness
- African American and Latina women
- Women whose sex partner may have other partners
- Women who exchange sex for money, shelter, drugs, or other things of value

Some recent congenital syphilis cases in LAC have occurred in women who tested negative for syphilis early in pregnancy but were infected prior to delivery. Other women who tested positive for syphilis were treated and re-infected, others not treated properly, or not treated at all. Enhanced screening and timely treatment are essential to eradicate congenital syphilis in LAC.

Since more than half of all pregnancies in LAC are unplanned,<sup>8</sup> prevention, detection, and treatment of syphilis in women of reproductive age is important to eliminate congenital syphilis. Women should be tested if they report new or multiple sexual partners, or a partner who has male partners. Women who plan to get pregnant or who are not using effective birth control, especially if they're in the listed higher risk categories, should be tested.

## What lab testing and reporting is done for syphilis?

Syphilis is usually diagnosed through a careful review of patient history along with serologic testing. Two types of blood tests are used to diagnose syphilis—non-treponemal and treponemal tests. Both types of tests must be used to confirm a diagnosis. When ordering RPR, please also order a reflex treponemal test.

Test	Function	Examples
<b>Non-treponemal</b>	<ul style="list-style-type: none"> <li>• Target non-specific antibodies that bind to lipoidal antigens released from cells damaged by syphilis or by other conditions</li> <li>• Quantitative results that usually decrease with successful treatment</li> </ul>	<ul style="list-style-type: none"> <li>• VDRL and RPR</li> </ul>
<b>Treponemal</b>	<ul style="list-style-type: none"> <li>• Identify antibodies to <i>T. pallidum</i>, the bacteria that cause syphilis</li> <li>• Results typically remain positive throughout a patient's lifetime</li> </ul>	<ul style="list-style-type: none"> <li>• TP-PA, FTA-ABS, EIA, and CIA assays</li> </ul>

By law, all cases of syphilis must be reported to the Department of Public Health within one working day. For more information, see: <http://publichealth.lacounty.gov/dhsp/ReportCase/STD-CMR8-2014.pdf>

**The LAC Department of Public Health Division of HIV and STD Programs helps interpret syphilis test results and provides guidance on appropriate and timely treatment. Call the nursing consultation line at 213-744-3106.**

## Where can providers go for more information?

You can find more information on the following websites:

- <http://publichealth.lacounty.gov/dhsp/InfoForProviders.htm#Syphilis>
- <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Syphilis.aspx>
- <http://www.cdph.ca.gov/programs/std/Pages/default.aspx>
- <http://www.cdc.gov/std/syphilis/default.htm>
- <http://www.cdc.gov/std/syphilis/syphilis-webinar-slides.pdf> (reverse screening sequence)

<sup>7</sup> California Health and Safety Code 120675-120715

<sup>8</sup> Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. Healthy Women, Healthy Children: Preconception Health in LA County. LA Health; March 2010.