HEALTH ADVISORY:
Continued Increase in Syphilis Cases

TO:    All Sonoma County Health Care Providers
FROM:  Karen Holbrook MD MPH, Deputy Health Officer
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CC:    PLEASE SHARE WITH ALL MEDICAL STAFF

SITUATION
There continues to be an increase in early syphilis cases in Sonoma County, including known transmission within heterosexual networks resulting in cases among women of childbearing age. Rising numbers among women increase the potential for congenital syphilis which can cause devastating outcomes for newborns including stillbirth or infant death. Case clusters in vulnerable populations such as individuals who are homeless, including those residing at encampments, and persons with substance use disorders in Sonoma County is a public health concern. Early syphilis cases continue to increase among men who have sex with men (MSM) as well as those co-infected with HIV.

Early Syphilis Cases by Year of Report and Gender
Sonoma County, 2006-2017

BACKGROUND:
Reported cases of early syphilis have increased dramatically since 2011 throughout California and Sonoma County. Between 2016 and 2017, the number of new cases reported in Sonoma County nearly doubled from 63 to 116 cases. Of the 116 cases reported in 2017, 15 were women. While syphilis has historically been transmitted among men who have sex with men and continues to increase in this population, there has been an increase in heterosexual transmission throughout California that has led to a concerning rise in congenital syphilis cases among newborns. Sonoma County has had two cases of congenital syphilis reported in the past five years – 1 each in 2014 and 2015.
ACTIONS REQUESTED:

- **Counsel** high-risk individuals and all women of child-bearing age about the risks of syphilis and other STDs in Sonoma County. Syphilis has not historically been common among Sonoma County women and many may have little knowledge of the signs, symptoms, and risks associated with infection. Some may be unaware that an untreated syphilis infection, even if asymptomatic, can result in poor pregnancy outcomes and other health issues months and years later.

- **Consider** syphilis in all pregnant women. Due to the increase in syphilis in Sonoma County, particularly among females, routine assessments of high-risk sexual activity may not be sufficient to identify true risk for syphilis infection.

- **Test**
  
  1. **All pregnant women** for syphilis and consider additional testing in the third trimester and at delivery for women at high-risk\(^1\) for syphilis. Testing for syphilis at the first prenatal visit, and at the beginning of the third trimester\(^2\) improves the chances of diagnosing and treating pregnant women with syphilis prior to delivery. Because syphilis may be acquired at any time during pregnancy, high-risk mothers should also be screened at time of delivery. Infants should not be discharged from the hospital until the result of syphilis serologic testing of the mother at the time of delivery is available.

  \(^1\)In Sonoma County, women at high-risk for syphilis include women who are unstably housed or homeless, women with substance use disorders, and women who are identified as contacts to known syphilis cases.

  \(^2\)Third trimester syphilis testing is recommended at the same time as the Tdap vaccine. Linking these two prevention activities may help implementation.

  2. **All sexually active gay, bisexual and other men who have sex with men (MSM)** at least once per year for syphilis and other STDs. MSM who have multiple or anonymous partners should be screened more frequently (e.g. 3 to 6 month intervals).

- **Treat** syphilis as soon as the infection is identified. Treatment with a penicillin regimen (benzathine penicillin G [Bicilin LA] 2.4 mu IM) is the preferred drug for treating all persons in all stages of syphilis. Penicillin is the only therapy proven to be effective in pregnancy. Treatment at least 30 days before delivery is 98% effective at preventing congenital syphilis.

- **Prevent** reinfection by treating all sex partners. Alternately, you may refer partners to Sonoma County Disease Control at (707) 565-4566 for assistance in obtaining care and treatment.

- **Report** all syphilis cases to the Sonoma County Disease Control within one day of identification. Completed Confidential Morbidity Reports (CMR) can be transmitted electronically through CalREDIE or faxed to the STD Program at (707) 565-4565.

Disease Control Investigators are available to assist with partner notification and tracking during business hours and may be available to do an in person interview while your patient is in the clinic. Please call (707) 565-4566 to request this service.

CLINICAL:

Syphilis is a systemic disease caused by *Treponema pallidum*. The disease has been divided into stages based on clinical findings to help guide treatment and follow-up.

**Primary:** A painless sore (chancre) appears at the site of transmission and may not be noticed due to location. The sore lasts 3-6 weeks and heals regardless of treatment.

**Secondary:** After initial chancre, typically 4-10 weeks later, more general systemic symptoms occur such as fever, general lymphadenopathy, muscle aches and fatigue. Commonly skin rashes or mucous membrane lesions may occur. The most typical rash is non-pruritic with rough, red or reddish-brown spots on the palms of hands or bottoms of feet. The rash may vary and may also be faint and not noticeable. The rash will also heal regardless of treatment.

**Latent:** The syphilis infection remains in the body without causing visible symptoms. This stage can last for years. Untreated, syphilis can go on to cause other serious syndromes affecting the brain, nervous system, eyes, heart, liver, bones and joints.
Tertiary: Late stage disease can occur decades after infection. It is associated with severe medical problems including cardiovascular, liver and bone disease and can be fatal.

Neurosyphilis: At any state of syphilis, CNS involvement can occur and merits special treatment.

Congenital syphilis can occur when a woman infected with syphilis transmits the infection to the baby during pregnancy and/or delivery. Congenital syphilis can cause a range of poor outcomes in the pregnancy including miscarriage, stillbirth, and prematurity. Babies born with congenital syphilis can also have serious health impacts including birth defects, bone abnormalities, blindness and hearing loss. An infected baby may not initially show signs or symptoms of the disease but if untreated, may develop serious problems within a few weeks.

TREATMENT AND PREVENTION:
Treatment with a penicillin regimen (benzathine penicillin G [Bicilin LA] 2.4 mu IM) is the preferred drug for treating all persons in all stages of syphilis. Late latent syphilis requires additional doses. Penicillin is the only therapy proven to be effective in pregnancy. Pregnant women should be treated with a penicillin regimen appropriate for the stage of infections (see RESOURCES below). Pregnant women with a history of allergy to penicillin should be desensitized and treated with penicillin. Treatment at least 30 days before delivery is 98% effective at preventing congenital syphilis.

Persons exposed sexually to a patient who has syphilis in any stage should be evaluated for signs and symptoms, tested, and then treated if infected. All patients who test positive for syphilis, including pregnant women, should also be tested for HIV if not already known to be HIV-infected.

RESOURCES:

CDPH Syphilis Clinical Guidelines
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Syphilis-ClinicalGuidelines.aspx

CDPH Provider Update on Congenital Syphilis

CDC STI treatment guidelines