State of California—Health and Human Services Agency
California Department of Public Health

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EDMUND G. BROWN JR.
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Dear California Sexually Transmitted Diseases (STD) Controllers,

California has had an increase in syphilis among women over the last two years, and this concerning trend has been accompanied by an increase in congenital syphilis cases. Based on preliminary analysis of surveillance data, from 2012 to 2014 primary and secondary syphilis cases among females more than doubled from 116 to 284, and congenital syphilis cases more than tripled from 29 to 92. To date, these cases have been reported primarily from Central Valley counties and Los Angeles County.

Congenital syphilis can be prevented if the mother is diagnosed and treated appropriately and without delay, and the baby is evaluated and treated per Centers for Disease Control and Prevention (CDC) STD Treatment Guidelines. Prevention of congenital syphilis cases should be an urgent public health matter in all jurisdictions. Review of state surveillance syphilis case data has demonstrated multiple factors that likely contribute to these congenital cases, including gaps in access to prenatal care and syphilis screening, delays in treatment, inadequate treatment, and loss to follow-up, among others. These are opportunities for local interventions to reduce the incidence of congenital syphilis. With relatively low numbers of infectious syphilis cases among women compared to men in California, we should have the capacity to improve the public health response to prevent this devastating neonatal disease complication.

The California Department of Public Health (CDPH) STD Control Branch (STDCB) is recommending several prevention strategies, including changes in disease investigation and partner services protocols, recommendations for local case review, clinical quality improvement efforts, and collaborations.

1) Changes in disease investigation and partner services protocols:

PRIORITIZE FEMALE REACTORS: We have revised the syphilis reactor grid (the instrument used by local health jurisdictions to prioritize follow-up of syphilis laboratory and confidential morbidity reports) to make all women of childbearing age the highest priority for immediate public health follow-up (see Appendix A. California Syphilis Reactor Alert System for Females and Males). There were only minimal changes to age and titer cutoffs used for prioritization (see Appendix B. Comparison of New Alert Categories with Former Categories).

The revised reactor prioritization tool includes a color-based alert value system, in which women of childbearing age and adolescents are the highest priority (red). We encourage local STD programs to treat prenatal reactors and serologies on delivery and neonates as priority public health events. Disease investigators should determine pregnancy status on all women of childbearing age with a reactive syphilis serology. Recommended public health activities and timelines for follow-up prioritization are outlined.

Our state disease intervention staff are available to provide technical assistance with implementation of the revised reactor alert system and congenital syphilis case management. We are planning to provide a webinar training on the use of these new tools. These tools will be available for download and in a laminated version. We will let you know when the webinar is scheduled and the tools are online.

PUBLIC HEALTH DEPARTMENT INTERVIEW OF ALL PREGNANT WOMEN WITH SYPHILIS: We recommend that all pregnant women with syphilis, including late latent syphilis, receive comprehensive case management, including confirmation that they have received appropriate treatment with benzathine penicillin G, interview, and partner services. This is a change from the previous recommendation, which stated that only individuals with early syphilis be interviewed. The rationale for this change is based on the following: 1) most congenital syphilis cases in California are born to mothers with late syphilis, 2) late latent syphilis is still infectious to the fetus, and 3) we need a better understanding of the risk factors associated with these cases. We are updating the congenital syphilis case management protocol and will post it.[1]

INFANT INVESTIGATIONS: Infants born to women who had syphilis during pregnancy require close follow-up by providers and health departments. Reminder systems that ensure proper care for infants have been useful in the past and could be considered as an additional safeguard.

2) Recommendations for local case review:

LOCAL REVIEW OF CASES: Given the public health importance of preventing cases of congenital syphilis, we recommend that local STD program managers and supervisors be made aware of and prioritize syphilis cases among pregnant women, their partners, and heterosexual males. This could serve as an opportunity for capacity building and enhancing disease intervention within local health jurisdictions.

[1] https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CongenitalSyphilis-Surveillence-CaseManagement-Protocol.pdf

STDCB is reviewing congenital syphilis cases quarterly by local health jurisdiction; we can provide these data reports.

SYPHILITIC STILLBIRTHS: There have been several cases of syphilitic stillbirths reported in California in the last couple of years. These cases should be considered sentinel events for public health departments. The CDC STD Treatment Guidelines recommend that any woman who delivers a stillborn infant should be tested for syphilis.

3) Clinical quality improvement efforts:

We need to ensure that prenatal and women's health providers are knowledgeable about screening and treatment recommendations and are engaging with public health. In order to improve the quality of clinical care provided, we would like to make sure you know about several potential opportunities for raising awareness among providers.

PROVIDER TRAINING: In collaboration with the California STD/HIV Prevention Training Center (PTC), we are available to conduct clinical trainings for providers on syphilis. To request a provider training event in your local area, please contact the PTC at captc@ucsf.edu, or at (510) 625-6000. Areas most affected by increases in syphilis in women will be prioritized.

In addition to training health care providers for adults at risk of acquiring syphilis, pediatricians must also be trained to ensure that all babies born to women who had syphilis during pregnancy receive the necessary evaluation and treatment per the CDC STD Treatment Guidelines.

CLINICAL CONSULTATION: Questions about clinical management can be directed to our warm line (510) 620-3400 on Monday through Friday 8am-5pm.

PROVIDER VISITATION: Implementation of a prenatal provider visitation program should be considered. Surveillance data should be useful in identifying providers who see the majority of cases. We can provide informational materials for providers that can be adapted for local use. Additionally, we can mobilize state staff to assist in areas with high rates of disease.

PROVIDER ALERTS: Local health jurisdictions in affected regions could consider provider alerts that highlight the increase in syphilis cases, the importance of timely and appropriate treatment, and the need for health department involvement. We can assist with the development of these alerts.

SYPHILIS SCREENING IN PREGNANCY: The CDC recommends that screening for syphilis should be performed in all pregnant women during their first prenatal medical visit. This recommendation is endorsed by the US Preventive Services Task Force. In addition, CDC recommends repeat screening early in the third trimester and at delivery for women who are at high risk for syphilis, reside in areas of high syphilis morbidity, or are previously untested. Infants should not be discharged from the hospital after birth without determination of the mother's syphilis serologic status at least once during pregnancy and preferably again at delivery (see http://www.cdc.gov/std/treatment/2010/specialpops.htm). Local health jurisdictions in high morbidity areas should promote routine screening at the first prenatal visit, in the third trimester, and at delivery.

STDCB has patient education brochures about congenital syphilis and the importance of syphilis testing that could be adapted for local use. These materials are available upon request in English and Spanish.

INFANT EVALUATION: Infants born to women who had syphilis during pregnancy require close evaluation and treatment per the CDC STD Treatment Guidelines.

STILLBIRTHS: Any woman who delivers a stillborn infant should be tested for syphilis.

4) Collaborations:

Scarce local resources may be supplemented by partnering with existing internal health department programs and community organizations to improve the care of pregnant women with syphilis and prevent congenital syphilis cases. We encourage you to explore opportunities to collaborate with your local maternal and child health programs, family planning, and perinatal hepatitis and HIV programs, in addition to community drug treatment centers and corrections facilities, to enhance public health follow-up of pregnant women with syphilis. You may also want to pursue collaborations with organizations such as the March of Dimes and ethnic media.

For questions related to disease investigation and partner services protocols, please contact Edwin Lopez: edwin.lopez@cdph.ca.gov or (562) 570-4084.

For surveillance questions or requesting data reports, please contact Denise Gilson at: denise.gilson@cdph.ca.gov or (916) 552-9812.

For clinical questions or general questions related to congenital syphilis prevention efforts in California, please contact Dr. Julie Stoltey at: juliet.stoltey@cdph.ca.gov or (510) 620-3408.

Sincerely yours,

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Chief, STD Control Branch

Cc:
Karen Mark, Office of AIDS
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APPENDIX A. California Syphilis Reactor Alert System for Females and Males

FEMALES										
Age	Biological False Positive	Qual. or + Conf. only	Titer						+ Darkfield
			1:1	1:2	1:4	1:8	1:16	≥1:32	
Prenatal (any age)									
0-44									
45-49									
50-59									
60+									
Unknown									

MALES										
Age	Biological False Positive	Qual. or + Conf. only	Titer						+ Darkfield
			1:1	1:2	1:4	1:8	1:16	≥1:32	
0-19									
20-29									
30-39									
40-49									
50-59									
60+									
Unknown									

Alert Code	Is Syphilis History Report necessary?	Action
	YES	If reactor meets Criteria for Assignment*, create new incident in CalREDIE and assign to investigator within 1 working day.
	YES	If reactor meets Criteria for Assignment*, create new incident in CalREDIE and assign to investigator within 2 working days.
	YES	If reactor meets Criteria for Assignment*, more info required to rule out early syphilis infection. Initiate follow-up with provider. Phone call/query letter within 3 working days.
	NO	Administrative closure, based on age and titer.
	NO	Administrative closure, based on a negative treponemal test.

**Criteria for Assignment:* No records of previous serology found OR ≥ 4-fold (e.g. rapid plasma reagin [RPR] 1:4 to 1:16) increase in titer OR history of negative serological test for syphilis (STS) within year

APPENDIX B. Comparison of New Alert Categories with Former Categories

Syphilis Reactor Triage: Comparison of New Alert Categories with Former Categories					
NEW ALERT	*Former categories*	**Criteria:**			
		Sex	Age	Titer*	Other, if known.
RED	*Priority 1*	Male	0-19	Any	Dark field positive
		Female	0-44** Unknown	Any	Dark field positive or Pregnant
ORANGE	*Priority 1*	Male	20-29 30-39 40-59 Unknown	≥1:4 ≥1:8 ≥1:16 ≥1:8	Pregnant partner
		Female	45-59	≥1:16	
YELLOW	*Priority 2*	Male	20-29 30-39 40-49 50-59 60 + Unknown	≤1:2 1:2,1:4 1:4,1:8 1:8 ≥:1:32 ≤1:4	
		Female	45-49 50-59 60 +	1:4, 1:8 1:8 ≥1:32	
GREEN	*Priority 3*	Male	30-39 40-49 50-59 60 +	1:1 ≤1:2 ≤1:4 ≤1:16	
		Female	45-49 50-59 60 +	≤1:2 ≤1:4 ≤1:16	
BLUE	*Priority 3*	Any	Any	BFP***	

* Non-reactive titers with confirmatory/treponemal positive and qualitative positives are triaged the same as a titer of 1:1.
** Original age cut off for priority 1 females was 39; so priority is being expanded to child bearing age up to 44.
*** BFP = biological false positive; positive titer with a negative confirmatory test.