COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

PROVIDER HEALTH ADVISORY

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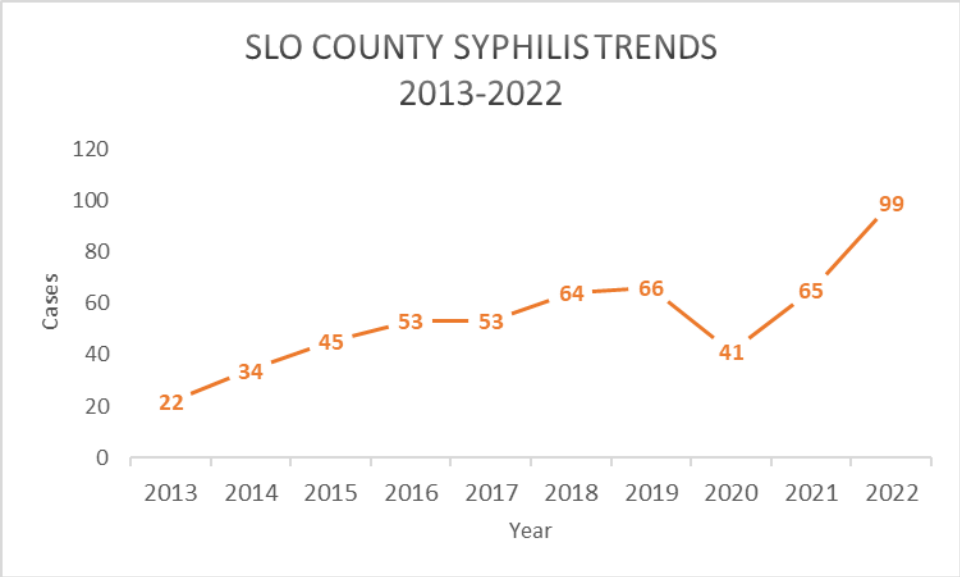
Syphilis Update: Data Trends, Testing, & Medication Shortage

The state of California continues to see significant increases in syphilis, including syphilis in pregnant persons and congenital syphilis in infants. Syphilis has also been increasing in SLO County (see detail below), save a decrease in 2020 likely due to lack of testing.

In this context, we encourage providers to test all pregnant people and patients in higher-risk groups (men who have sex with men, people with HIV infection, people whose partner(s) have tested positive for syphilis) as well as patients for whom there is clinical suspicion.



Testing reminders

- When a patient presents with STI symptoms and/or is requesting an STI check, include testing for HIV, syphilis and hepatitis C. The California Department of Public Health (CDPH) recommends that emergency departments consider implementing routine opt-out testing for syphilis, HIV, and hepatitis C.
- Providers are required to report syphilis in all stages, including congenital syphilis, within one working day of identification.

- A screening/non-treponemal test (RPR or VDRL) should **always** be ordered with reflex to titer and a confirmatory/treponemal test (TPPA, FTA-Abs, or MHA-TP) unless the patient has a documented history of syphilis.
- When using the Reverse Testing Algorithm, a reactive EIA requires BOTH a quantitative RPR/VDRL and a TPPA to be interpreted accurately. See Reverse Testing Algorithm FAQ's from the San Francisco Department of Public Health.
- ALL reactive RPR/VDRL tests should be followed up with a titer (quantitative RPR/VDRL) even in the case of a non-reactive EIA.
- The charts below are used to interpret syphilis testing results for the two syphilis testing algorithms. It is important to note that both algorithms require a treponemal test result to be interpreted accurately.

Traditional Algorithm

RPR/VDRL quant.	TPPA,FTA-Abs or MHA-TP	Interpretation	Recommended Action
Non-reactive	Non-reactive	Not a case	N/A
Reactive (with titers)	Non-reactive	BFP [1] /Not a case	Repeat tests[2]
Non-reactive	Reactive	Previously treated, late and untreated, OR early primary case	Repeat tests[2]; Case investigation[3]
Reactive (with titers)	Reactive	Case	Case investigation[3]

Reverse Sequence Algorithm

EIA	RPR/VDRL quant.	TPPA	Interpretation	Recommended Action
Non-reactive	-	-	Not a case	N/A
Reactive	Non-reactive	Non-reactive	BFP[1] /Not a case	Repeat tests[2]
Reactive	Non-reactive	Reactive	Case	Case investigation[3]
Reactive	Reactive (with titers)	Reactive	Case	Case investigation[3]

Notes: [1]Biological False Positive; [2]Repeat tests 2-3 weeks after initial test to observe rise in RPR titer or EIA/TPPA seroconversion; [3]Case investigation done by a Communicable Disease Investigator (CDI) for surveillance and disease control purposes.

- For pregnant people, please review the recommended prenatal screening and treatment recommendations from the CDPH.

Medication shortage

The Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) have announced and listed **long-acting penicillin G benzathine injectable suspension products (Bicillin® L-A)** on their respective drug shortage webpages, estimating a recovery timeframe in Q4 2023.

Benzathine penicillin G is the recommended, first-line treatment for syphilis, and the only recommended treatment for pregnant people.

Prompt and timely treatment of syphilis in pregnancy is nearly 100% effective at preventing devastating outcomes of congenital syphilis. Up to 40% of infants born to pregnant people with untreated syphilis will be stillborn or suffer early infant death or will face long-term morbidity including blindness, deafness, and bone damage.

Among non-pregnant adults:

- **Doxycycline 100 mg PO BID x 14 days is an acceptable alternative for those with primary, secondary, or early latent syphilis.**
- **Doxycycline 100 mg PO BID x 28 days is an acceptable alternative for those with late latent syphilis or syphilis of unknown duration.**

Use of other intramuscular formulations of penicillin, including Bicillin® C-R, are **not** acceptable alternatives for the treatment of syphilis.

Given the current Bicillin® L-A drug shortage, the California Department of Public Health (CDPH) STD Control Branch (STDCB) recommends the following:

1. **Prioritize Bicillin® L-A for pregnant people with syphilis infection (or exposure) as well as for infants exposed to syphilis in utero.**
2. **Prioritize Bicillin® L-A for patients with contraindications to doxycycline** (e.g., anaphylaxis, hemolytic anemia, Stevens Johnson syndrome).
3. **Conserve Bicillin® L-A by using alternative drugs** for the treatment of infectious diseases (e.g., streptococcal pharyngitis) where oral medications or other effective antimicrobials are available.
4. If you are experiencing a Bicillin® L-A shortage and/or having trouble obtaining the medication, please contact the County of San Luis Obispo Public Health Department at 805-781-5500.
5. Health care providers can monitor the Bicillin® L-A drug shortages on the FDA Drug Shortages webpage. For clinical questions related to the treatment of syphilis during the Bicillin® L-A shortage, providers may also contact the STD Clinical Consultation Network or the CDPH STDCB at (510) 620-3400 or stdcb@cdph.ca.gov.