

Screening for Syphilis in Emergency Departments | Resource Guide

SETTING THE STAGE

Over the last several years, California (CA) has experienced a steep increase in syphilis and congenital syphilis (CS) cases. Syphilis has increased in all regions of the state which is a major public health concern.¹

“Up to 40% of babies born to women with untreated syphilis may be stillborn, or die from the infection as a newborn”³

Persons with syphilis may have mild symptoms or no symptoms and can be unaware of their infection, so syphilis screening is essential.² Left untreated, syphilis can cause chancre, condyloma lata, rash, lymphadenopathy, patchy alopecia, neurosyphilis, meningitis, ocular syphilis, and aortitis.² CS can cause spontaneous miscarriage, stillbirth, low birth weight, premature birth, and death shortly after birth.³ For babies born with CS, it can cause bone deformations, brain and nerve problems, and other serious health consequences.³

In response to the rising rates of syphilis and CS in CA, the CA Department of Public Health Sexually Transmitted Diseases (STD) Control Branch issued expanded syphilis screening recommendations which includes a recommendation for Emergency Department (ED) providers in high CS morbidity areas to confirm the syphilis status of all pregnant patients prior to discharge to ensure timely detection, treatment, and subsequent CS prevention.⁴ STD care, including for syphilis, is considered an essential health service and is, therefore, covered by insurance.⁵

BENEFITS OF SCREENING FOR SYPHILIS IN EDs

Screening for syphilis in EDs has been shown to detect unidentified and untreated infections. Several evaluation studies on various screening models have been published by EDs across the country. Additionally, we interviewed four CA EDs that have implemented expanded, opt-out screening programs. These initiatives found that ED screening programs can:

Published Literature

Result in increased diagnoses of syphilis^{6,7,8} as well as other, asymptomatic STIs⁹

Potentially avert cases of CS^{8,10}

Reach a population that otherwise may be missed through traditional screening recommendations^{6,9}

CA Emergency Departments

Increase access to testing, especially during the era of COVID

Reduce healthcare costs due to increased + earlier treatment of STDs

Reduce transmission due to early detection + treatment

Increase screening + treatment of individuals who have had undiagnosed syphilis for decades

LESSONS LEARNED FROM OTHER EDs

Emergency Departments (EDs) in California that have implemented routine, opt-out* syphilis screening programs have noted several keys to successful implementation of this initiative:

Garnering buy-in from staff:

- **Have a champion** within both the public health department + the ED to generate excitement + buy-in
- Have **conversations with other EDs** that are already implementing syphilis screening
- **Include anyone impacted by the protocol** (e.g., lab, finance, ED providers, administration, etc.) from the outset + get their buy-in
- **Educate staff** (e.g., lectures/in-services, virtual learning opportunities, reminder emails, in-person training) on new screening protocols including opt-out screening, linkage to care, automated ordering, etc.

Identifying protocols + workflows:

- **Consider adding syphilis screening at the same time as other opt-out screening** (e.g., HIV, HCV) to streamline implementation
- If possible, **automate the test ordering process** (e.g., EMR best practice alert) to limit impact to existing workflows + to reduce opportunities for human error
- **Identify opportunities to reduce lab turnaround time** (e.g., tests that can be run in-house, etc.) so that initial results can be obtained + the patient can be treated prior to discharge
- Discuss protocols for providing **empiric treatment in the ED** if concerns about patient loss to follow up are a screening barrier

Considering who will follow-up on positives + linkage to care:

- Prior to roll-out, **determine standard follow-up procedures for patients who test positive** including **identification of who at the hospital + the health department** will ensure seamless linkage to care
- When possible, **expand linkage to care services** during the times of the day when you see the most patients (e.g., outside of business hours, etc.)

**Note: while these EDs implemented routine, opt-out screening many of these strategies could also be applied to other expanded screening models*

References

- ¹ [Concerning Increases in Congenital Syphilis: An Update for California Health Care Providers.](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Congenital-Syphilis-Provider-Update.pdf)
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Congenital-Syphilis-Provider-Update.pdf>
- ² [Sexually Transmitted Diseases \(STDs\) Reach Epidemic Levels in California.](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STDs_Reach_Epidemic_Levels_Infographic_2018.pdf)
https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STDs_Reach_Epidemic_Levels_Infographic_2018.pdf
- ³ [Congenital Syphilis – CDC Fact Sheet](#); Centers for Disease Control and Prevention. January 2017.
- ⁴ [Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis.](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Expanded-Syphilis-Screening-Recommendations.pdf)
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Expanded-Syphilis-Screening-Recommendations.pdf>
- ⁵ [Sexually Transmitted Disease Preventive Services Coverage](#); Centers for Disease Control and Prevention. August 2020.
- ⁶ Stanford KA, Hazra A, Schneider J. Routine Opt-out Syphilis Screening in the Emergency Department: A Public Health Imperative. *Academic Emergency Medicine*. 2020;27(5):437-438. doi:10.1111/acem.13897
- ⁷ Chechi T, Sage AC, Tran N, Waldman S, May LS. 433. Implementation of an Emergency Department Syphilis Screening Program. *Open Forum Infect Dis*. 2019;6(Supplement_2):S216-S216. doi:10.1093/ofid/ofz360.506
- ⁸ Stanford K, Ridgway J, Schneider J. P740 Improving syphilis diagnosis and treatment in an urban population through routine emergency department screening. *Sex Transm Infect*. 2019;95(Suppl 1):A319-A320. doi:10.1136/sextrans-2019-sti.800
- ⁹ Stanford KA, Hazra A, Friedman E, Devlin S, Winkler N, Ridgway JP, Schneider J. Opt-out, routine emergency department syphilis screening as a novel intervention in at-risk populations. *Sex Transm Dis*. 2020 Oct 1. doi: 10.1097/OLQ.0000000000001311. Epub ahead of print. PMID: 33009277.
- ¹⁰ Larios Venegas A, Melbourne HM, Castillo IA, et al. Enhancing the Routine Screening Infrastructure to Address a Syphilis Epidemic in Miami-Dade County. *Sexually Transmitted Diseases*. 2020;47(5S):S61. doi:10.1097/OLQ.0000000000001133