ELIMINATING CONGENITAL SYPHILIS IN SAN FRANCISCO

2024 – 2027 STRATEGIC PLAN

San Francisco
Department of Public Health

Report prepared by
Facente Consulting

TABLE OF CONTENTS

This document highlights the strategies that the San Francisco Department of Public Health (SFDPH) will employ between 2024 and 2027 to move toward elimination of congenital syphilis (CS) in San Francisco. This plan includes:

A NOTE ON LANGUAGE

SFDPH is committed to the use of non-stigmatizing and inclusive language. In this document, when discussing groups heavily impacted by syphilis in San Francisco, we will use these terms, which represent preferred language at this point in time, understanding that language evolves and these preferred terms could change in the future:

- *Gay, bi, and other men who have sex with men*
- *Pregnant people or people who can become pregnant**
- *People experiencing homelessness*
- *People who use drugs*

*In some cases, we say "cis women" when syphilis data reflect that specific group. As cis women may or may not be able to become pregnant, and as people who are not cis women may be able to become pregnant, the term "cis women" does not perfectly reflect all people who are vulnerable to experiencing syphilis during pregnancy.

BACKGROUND

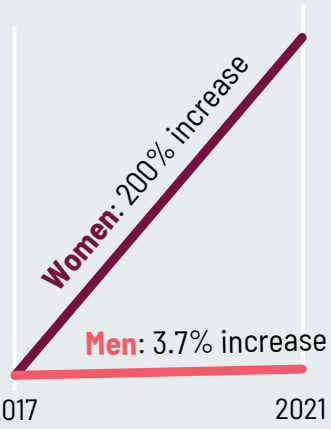
RECENT SYPHILIS TRENDS IN SAN FRANCISCO[A]

Syphilis rates in San Francisco have been on the rise over the past decade, mirroring national trends.[1,2] Rising syphilis rates are likely driven by declining rates of condom use, increased use of methamphetamines leading to higher numbers of sexual partners, and increased use of dating apps leading to higher numbers of sexual partners.[3,4]

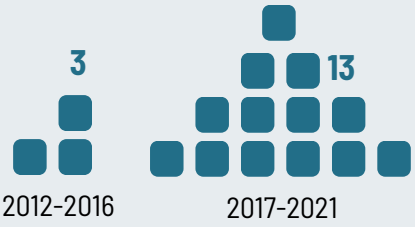
In San Francisco, cis men make up 95% of new early syphilis cases,[1] and about two thirds of new early syphilis cases occur among gay, bi, and other men who have sex with men (MSM).[5] **However, syphilis rates have been increasing most rapidly among cis women**. From 2017–2021, syphilis diagnoses among cis women increased by 200% (59 to 177), compared to a 3.7% increase for cis men (1582 to 1642).[1]

Rising syphilis rates among cis women and infants

In San Francisco, while **cis men** make up most new syphilis cases, syphilis rates have been increasing much more rapidly among **cis women**...



...and **congenital syphilis rates** have increased more than four-fold



Increased syphilis rates among cis women have corresponded to increased congenital syphilis (CS) in San Francisco, **with CS cases increasing 333% in the 2017-2021 period** (13 cases), compared to the prior five-year period (3 cases).[6] In 2020, San Francisco ranked 27th among California's 58 counties in CS incidence rate (62.6 per 100,000 live births).[7] In 2022, 18 San Franciscans were diagnosed with syphilis during pregnancy; of these, 3 cases resulted in CS, 9 cases were successfully averted, 4 cases resulted in therapeutic or spontaneous abortion, and 2 cases had other outcomes. As of December 2023, there were 1162 reported cases of syphilis in San Francisco since January 2023, including 204 cases among cis women and six cases of CS—San Francisco's highest number of CS cases in 30 years.[8]

A. In this section, data are reported for cis men and cis women to reflect terms used in available citywide data. San Francisco reports on syphilis case numbers but not rates among transgender men, transgender women, people who are non-binary, or other gender identities because estimates for their population size are not routinely available. However, San Francisco City Clinic data suggest that 4.5% of syphilis diagnoses were among trans women and 1.8% were among transgender people in 2019. Given that only 1.0% of City Clinic patients were trans females and 0.5% were transgender in 2019, these data suggest that transgender people—especially trans women—are also disproportionately impacted by syphilis.

Amid rising syphilis and CS rates, San Francisco investigators have led research on the effectiveness of doxy-PEP (doxycycline post-exposure prophylaxis) on reducing sexually transmitted infections (STIs)—among patients already engaged in HIV PrEP (pre-exposure prophylaxis) or living with HIV. Findings demonstrate that among MSM and trans women who were randomized to receive doxy-PEP, the incidence of syphilis dropped nearly 80%, compared to clients who had not started doxy-PEP.[9]

Promising new STI treatment: doxy-PEP

Taking doxycycline 24-72 hours after oral, anal, or vaginal sex ("doxy-PEP") is a new tool in the prevention of STIs and has been shown to reduce syphilis incidence by as much as 80% in San Francisco. While doxycycline should be avoided in pregnancy, doxy-PEP has been highly impactful in reducing syphilis rates among gay, bi, and other MSM, and trans women in San Francisco, which lowers community prevalence. SFDPH guidelines advise that doxy-PEP can be considered for people who can become pregnant on a case-by-case basis.

CONGENITAL SYPHILIS DRIVERS AND DISPARITIES

When considering which San Franciscans are most vulnerable to experiencing syphilis during pregnancy, notable disparities exist. Geographically, certain San Francisco neighborhoods—including the Civic Center/Tenderloin, Mission, and SOMA neighborhoods—tend to host the highest number of syphilis cases among cis women.[6] With respect to race/ethnicity, San Francisco CS cases are too small in number to meaningfully evaluate racial disparities. However, overall, people who are Black/African American, people who are Latino/a/e/x, and people who are Native American are disproportionately impacted by syphilis in San Francisco,[5] and statewide data demonstrate a disproportionately high impact of CS among Black/African American and Latino/a/e/x birthing parents.[7]

Considering other social determinants of health, in 2020, all five birthing parents of newborns with CS in San Francisco had no prenatal care, were experiencing homelessness, and were using methamphetamines and/or opiates.[10] Similarly, in 2022, approximately 1/3 of pregnant San Franciscans with syphilis were experiencing homelessness at the time of diagnosis; many also had experienced methamphetamine or opioid use disorders, a history of child protective services (CPS) involvement in past pregnancies, untreated psychiatric disorders, and no or limited prenatal care.[6]

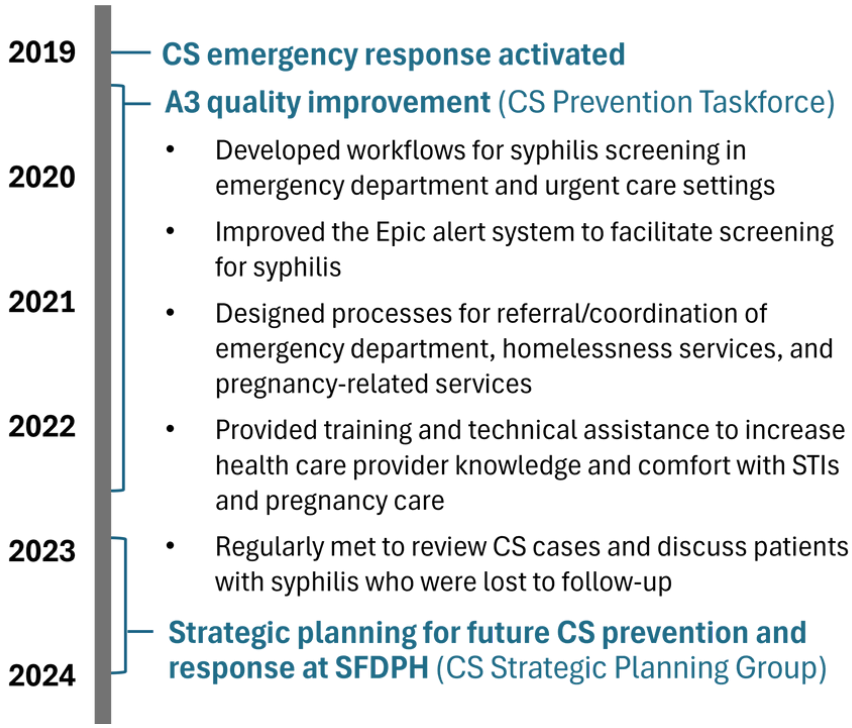
Recently in San Francisco, a notable proportion of birthing parents of infants with CS:

- had no or limited prenatal care
- were experiencing homelessness
- were using methamphetamines and/or opiates
- had a history of child protective services involvement in past pregnancies, and/or
- had untreated psychiatric disorders

The drivers of disparities in congenital syphilis and syphilis among people who are or could become pregnant are complex and interrelated. They include systemic racism, poverty, homelessness, substance use, incarceration, and stigma that reduce access to basic needs and quality healthcare, including prenatal care.[11] These disparities and risk factors underscore the complexity of eliminating CS.

SAN FRANCISCO'S RESPONSE TO CONGENITAL SYPHILIS

In 2019, to address concerning CS trends, SFDPH activated an emergency response that led to development of a CS Prevention Taskforce. The taskforce—made up of multidisciplinary, cross-departmental stakeholders—including partners from City Clinic; Maternal, Child, and Adolescent Health (MCAH); Whole Person Integrated Care (WPIC), primary care, Zuckerberg San Francisco General Hospital emergency department and urgent care center, and Team Lily—oversaw a citywide A3 quality improvement process to increase screening, treatment, and connection to sexual health services, with a focus on people most vulnerable to experiencing syphilis during pregnancy.[12,13,B] In addition, the taskforce met regularly to review CS cases and discuss patients with syphilis who had been lost to follow-up.



Building upon the CS Prevention Taskforce's work, from 2023-2024, members of the taskforce launched a strategic planning process to define priorities for future CS prevention and response, including how to continue to support the groups most vulnerable to experiencing syphilis during pregnancy. Through six meetings over a six month period, the strategic planning group developed the mission, values, and core strategies for 2024-2027, as outlined in this document.

B. During this period, other local initiatives to address syphilis and CS occurred in parallel at Zuckerberg San Francisco General Hospital, including the Internal Medicine house staff incentive project (HIP) and an Emergency Department medical student quality improvement initiative.

MISSION, VALUES, AND STRATEGIES

MISSION

SFDPH seeks to eliminate congenital syphilis in San Francisco.

VALUE STATEMENTS

Accessibility: Our services and programs strive to be trauma-informed, low-barrier, flexible, non-stigmatizing, and informed by a whole-person approach.

Inclusion: Our efforts are inclusive of pregnant persons, their babies, and their partners as we strive to optimize health outcomes for all.

Compassion: We approach this work holistically and with compassion for people impacted by CS, recognizing that complex and often competing priorities impact the lives of all pregnant persons. We also have compassion for ourselves and colleagues in doing this work and support each other.

Respect: All persons deserve respect, and a trustworthy system of care that values each person's dignity.

Integration: We work in collaboration with community partners, DPH, and non-DPH health systems to provide culturally humble, coordinated, and syndemic-informed care.

STRATEGIES

CORE STRATEGY 1

Increase access to low-barrier syphilis testing among (a) populations vulnerable to experiencing syphilis during pregnancy and (b) their partners.

CORE STRATEGY 2

Develop sustainable systems and tools for CS education and capacity building for (a) the workforce and (b) impacted populations.

CORE STRATEGY 3

Improve care coordination of pregnant patients with syphilis or suspected CS.

CORE STRATEGY 4

Optimize the use of data to support syphilis prevention and response efforts among populations vulnerable to experiencing syphilis during pregnancy.

Each strategy and its steps are detailed on the following pages.

CORE STRATEGY 1

Increase access to low-barrier syphilis testing among (a) populations vulnerable to experiencing syphilis during pregnancy and (b) their partners.

1.1 Assess best testing strategies for high impact non-clinical settings (e.g., Health Access Points (HAPs), shelters, navigation centers, syringe service programs), including the appropriateness of lab-based versus rapid testing in various settings frequented by people vulnerable to CS.

1.2 Assess barriers and facilitators to increased syphilis testing in non-clinical settings frequented by people vulnerable to experiencing syphilis during pregnancy.

1.3 Update protocols for HIV/STI testing services in various non-clinical settings that serve patients vulnerable to experiencing syphilis during pregnancy, including Street Medicine, Shelter Health, Jail Health, and various behavioral health settings.

1.4 Strengthen the syphilis testing support system by utilizing resources for patients, such as access to phones and incentives.

1.5 Prioritize the certification of health workers to run rapid syphilis tests. (This step also supports core strategy 2).

1.6 Develop a sustainable infrastructure to support rapid syphilis screening in non-clinical settings, with clearly defined responsibilities of various SFDPH departments and funded community partners.

1.7 Pilot strategies and programs to test and treat partners of people vulnerable to experiencing syphilis during pregnancy (e.g., paired testing).

1.8 Integrate continuous quality improvement efforts within testing services to ensure that the strategies are still meeting the needs of the community.

CORE STRATEGY 2

Develop sustainable systems and tools for CS education and capacity building for (a) the workforce and (b) impacted populations.

2.1 Develop capacity to engage the partners of people vulnerable to CS in testing and treatment efforts. (This step also supports core strategy 1.7).

- Year 1: Research and inventory best practices on partner engagement for syphilis testing among people experiencing homelessness.
- Years 2-3: Develop protocols and implement testing for partners of people vulnerable to experiencing syphilis during pregnancy.

2.2 Prioritize targeted clinical capacity building for nurses and health workers in HAPs, syringe service programs (SSPs), navigation centers, and shelters to screen for syphilis.

2.3 Develop or utilize existing online trainings for clinical providers in high impact settings (e.g., HAPs, SSPs, navigation centers and shelters) to provide rapid syphilis testing.

2.4 Create train the trainer models for rapid syphilis testing in various settings frequented by people vulnerable to CS.

2.5 Develop and disseminate a best practice guide for offering and prescribing doxy-PEP to cis women using shared decision making.

2.6 Develop capacity of non-clinical staff to provide syphilis and CS education and resources in settings frequented by people vulnerable to experiencing syphilis during pregnancy.

2.7 Regularly engage community members who may be vulnerable to experiencing syphilis during pregnancy and those who work with people vulnerable to experiencing syphilis during pregnancy to explore acceptability of prevention, testing, and linkage strategies.

- Year 1: Explore mechanisms for obtaining community feedback.
- Years 2-3: Implement a process of iterative community engagement around CS prevention, testing, and linkage strategies.

2.8 Implement internal SFDPH training via SFDPH's learning management system (LMS) to ensure that updated information and knowledge about the impact of CS are available to new and existing staff.

CORE STRATEGY 3

Improve care coordination of pregnant patients with syphilis or infants with suspected CS.

3.1 Revise standard work for referral process in the event of a suspected or confirmed CS case.

3.2 Create a standardized process for documentation of a suspected or confirmed syphilis case during pregnancy.

3.3 Utilize Epic and e-consult tools to enhance inter-team communication and patient tracking.

3.4 Integrate syphilis education, testing, and linkage into funded partners' scopes of work, including Health Access Points and substance use treatment settings. (This step also supports core strategies 1 and 2).

3.5 Identify and address communication gaps between CS response teams, including WPIC, Emergency Departments, Labor and Delivery, Kaiser, UCSF, and CPMC.

3.6 Deliver ongoing training, education, and support around CS prevention and response with non-SFDPH Emergency Departments and birthing hospitals.

CORE STRATEGY 4

Optimize the use of data to support syphilis prevention and response efforts among populations vulnerable to experiencing syphilis during pregnancy.

- **4.1** Obtain feedback from stakeholders on current routinely disseminated syphilis data reports.
- **4.2** Determine what additional data would be useful to guide or evaluate CS prevention and response efforts.
- **4.3** Utilize the syphilis taskforce to identify opportunities to strengthen Epic report functionality.
- **4.4** Evaluate and optimize the use of Epic reports for panel management of pregnant patients at risk for syphilis in the San Francisco Health Network.
- **4.5** Refine systems for monitoring and evaluating new initiatives to improve syphilis screening.
- **4.6** Maintain practice of reviewing clinical data to determine characteristics of people with syphilis during pregnancy who are successfully connected to syphilis treatment versus those who are not.
- **4.7** Implement a process to utilize data to create and support CS champions at various testing sites and clinics.
- **4.8** Share data through provider meetings, SFDPH staff meetings, and “lunch and learn” presentations, among other opportunities.
- **4.9** Develop an Epic-based panel management process for tracking pregnant people who are lost to follow up.

REFERENCES

1. San Francisco City Clinic (2022, October 3). "Sexually Transmitted Infections Data and Statistics." Retrieved August 7, 2023, from https://www.sfcityclinic.org/providers/epidemiology-and-statistics.

2. Centers for Disease Control and Prevention (2023, May 16, 2023). "National Overview of STDs, 2021." Retrieved October 19, 2023, from https://www.cdc.gov/std/statistics/2021/overview.htm#Syphilis.

3. Chen, Y. H., et al. (2019). "Increases in Pre-exposure Prophylaxis Use and Decreases in Condom Use: Behavioral Patterns Among HIV-Negative San Francisco Men Who have Sex with Men, 2004-2017." AIDS Behav 23(7): 1841-1845.

4. Nguyen, T. Q., et al. (2018). "Historical and Current Trends in the Epidemiology of Early Syphilis in San Francisco, 1955 to 2016." Sex Transm Dis 45(9S Suppl 1): S55-s62.

5. San Francisco Department of Public Health (2022). San Francisco Sexually Transmitted Disease Annual Summary, 2019. San Francisco, CA, City and County of San Francisco.

6. Decker, A. (2023). Congenital Syphilis Update. San Francisco, San Francisco Department of Public Health.

7. California Department of Public Health (CDPH) (2022). Congenital Syphilis Surveillance Tables. 2020-STD-Data-Syphilis-Congenital-Tables.xlsx. Sacramento, CDPH.

8. Decker, A. (2024). Personal Communication (e-mail), June 6, 2024.

9. Mascolini, M. (2024). Doxycycline PEP Study Extension: High uptake and significant decline in STIs after clinical implementation. Conference on Retroviruses and Opportunistic Infections (CROI). Denver, Colorado.

10. Decker, O. (2021). Improvements in Congenital Syphilis Response. A3Syphilis_011162021.pptx. San Francisco, San Francisco Department of Public Health.

11. California Department of Public Health (CDPH) (2021). Emerging Practices for Responding to the Congenital Syphilis Crisis in California: Findings from 2021 Strategy Sessions. Sacramento, CDPH.

12. Healey, J. and J. Olsen (2022). Evaluation Plan for A3 Quality Improvement Congenital Syphilis (A3 QI CS) Efforts. San Francisco, San Francisco Department of Public Health.

13. San Francisco Department of Public Health (SFDPH) and San Francisco City Clinic (2021). STI Clinical Update Webinar: San Francisco Department of Public Health, San Francisco City Clinic. San Francisco, California Prevention Training Center.