San Joaquin County
Public Health Services
health grows here

Sexually Transmitted Infection (STI) Provider Guide

Disease Control and Prevention (DCP)
1601 E Hazelton Ave Stockton, CA 95205 | 209-468-3820
Last updated: May 2026

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San Joaquin County
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A DIVISION OF
HEALTH CARE
SERVICES AGENCY

February 2, 2026

Dear Healthcare Provider,

San Joaquin County Public Health Services (SJCPHS) has updated the Sexually Transmitted Infection (STI) Provider Guide, to include more comprehensive materials. We hope that this guide continues to serve as a valuable resource for you.

California continues to have high syphilis rates, ranking 13th in the nation for congenital syphilis, with nearly 5 times more cases now than there were in 2014. In San Joaquin County, we are grateful to see a decline in congenital syphilis cases as of 2023, with case rates falling from 227 per 100,000 in 2022 to 147 per 100,000 in 2023. However, this number is still quite high, and San Joaquin County is ranked 18th in the state for congenital syphilis.

As in the past, we draw your attention to syphilis because the effects on newborns can be devastating, including stillbirth, low birth weight, blindness, hearing loss and birth defects. Of course, timely diagnosis and treatment of *any* STI is crucial to decrease transmission and overall disease morbidity. San Joaquin County is ranked 15th in the state for gonorrhea cases and 10th for chlamydia, and these rankings have remained stable for several years. SJCPHS continues to screen at-risk communities for syphilis and HIV, common co-infections. Our county's HIV rates remain high, with 12.9 new diagnoses per 100,000 in 2023. San Joaquin County is ranked 9th in the state for new HIV diagnoses.

Please be reminded it is the provider's responsibility to report any case or suspected case of a disease of public health importance, including but not limited to syphilis and gonorrhea, to Public Health Services. It should not be assumed that the laboratory performing the test will report a positive result to us. A list of these diseases can be found in this packet and on the California Department of Public Health website https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ReportableDiseases.pdf To report to PHS, please complete the confidential morbidity report, which can be found on the PHS website at http://www.sjcphs.org/disease/documents/cdph110a.pdf. Fax this report to (209) 468-3495. If you have any questions on reporting or any questions about diagnosing or treating any sexually transmitted infection, please call PHS at (209) 468-3845.

Thank you for your continued commitment to address STI's in our community.

Sincerely,

Maggie Park, MD
Health Officer
San Joaquin County Public Health Services

Reporting To Public Health

May 12, 2025

To: All California Health Care Providers and Local Health Officers

Re: HIPAA, Substance Use Disorders, State Law, and Public Health Disclosures

Dear Stakeholders,

There has been some confusion surrounding the effect of the federal Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and other federal and state laws on public health reporting requirements. Therefore, the California Department of Public Health (CDPH) seeks to clarify legally mandated reporting requirements and related allowable disclosures.

HIPAA Privacy Rule

HIPAA allows disclosure of protected health information (PHI) without the written authorization of the individual for public health activities and purposes. (45 Code of Federal Regulations (CFR) § 164.512(b) (2024).) Public health reporting obligations remain under HIPAA. Furthermore, health care providers continue to have a legal obligation to provide information for public health activities including surveillance/reporting, investigations, and interventions. The HIPAA Privacy Rule indicates that State law, including State procedures established under such law, is not preempted or overridden by contrary HIPAA privacy provisions in the area of public health disease or injury reporting and the conduct of public health surveillance, investigation, or intervention. (45 CFR § 160.203 (2013).)

In addition, the 2024 HIPAA Privacy Rule to Support Reproductive Health Care Privacy, which requires some entities requesting PHI to attest that they will not use the information for prohibited purposes (i.e., investigation or liability for the mere act of seeking, obtaining, providing, or facilitating reproductive health care or to identify a person for such a purpose), **exempts** public health from this requirement. (45 CFR § 164.512(b) (2024).) As stated on page 491 of the final rule, “the [U.S.] Department [of Health and Human Services] does not require a public health authority to supply an

attestation to a covered entity to receive PHI of an individual where that disclosure is intended to prevent disease in or promote the health of populations."

CDPH encourages HIPAA covered entities to recognize the *federal exemption for public health* from the attestation requirement and to develop protocols for streamlining responses to PHI requests that originate from public health departments.

Confidentiality of Substance Use Disorder (SUD) Patient Records at 42 CFR Part 2

Unlike HIPAA, regulations for federally assisted Part 2 SUD programs do not allow disclosure of SUD records to public health without patient consent, unless the data are de-identified (Confidentiality of SUD Patient Records, page 1346**)**. SUD programs should consult their legal counsel to find out if they fall into this program category.

Local public health departments may contact Part 2 SUD programs searching for an individual and leave a message, requesting the program to offer the individual the opportunity to sign a consent form allowing disclosure of their PHI to the health department or for the client to call back the health department about an important health matter. According to an HHS fact sheet on Part 2 and health information exchanges (HIEs), a program could also give individuals the opportunity to consent to the Part 2 SUD program sharing data with specific entities (such as public health) via an HIE.

CDPH appreciates the importance of protecting SUD records and encourages Part 2 programs to partner with public health to protect the well-being of our communities. These kinds of partnerships are critical to facilitate timely intervention where delays may close the window for potentially life-saving services. Substance Use Disorder programs represent a unique time for some patients when housing is stable and schedules and location predictable allowing for public health officials to reach, treat or prevent infected or exposed individuals. This section is being included because many treatment facilities have policies against visitors or outside contact that also excludes public health providers. Giving options to an individual to have access to public health by signing a consent form will remove this barrier.

Mandated Reporting Requirements and Allowable Disclosures in California State Law

The following provisions of State law are applicable and are not preempted by HIPAA:

For Health Care Providers

- The California Medical Information Act allows a provider of health care or a health care service plan to disclose medical information:

  > "to a local health department for the purpose of preventing or controlling disease, injury, or disability, including, but not limited to, the reporting of disease, injury, vital events, including, but not limited to, birth or death, and the conduct of public health surveillance, public health investigations, and public health interventions, as authorized or required by state or federal law or regulation." (Cal. Civ. Code § 56.10(c)(18).)

- Health care providers are required to report specified diseases or conditions to the local health officer for the jurisdiction where the patient resides. (Cal. Code Regs., tit. 17, § 2500.) (See CDPH Reportable Diseases and Conditions.)

- State law requires health care providers to provide names-based HIV reporting to the local health officer using a form provided by CDPH. (Cal. Health and Saf. Code § 121022). State law also makes it a misdemeanor for any person to refuse to provide the requested information to aid in the investigation of sexually transmitted infections. (Cal. Health & Saf. Code, § 120600.)

For Local Health Officers

- Local health departments are authorized by Cal. Health and Safety Code § 120175 to conduct infectious disease investigations and interventions, and are given broad authority with which to do so at the local level:

  > "Each health officer knowing or having reason to believe that any case of the diseases made reportable by regulation of the department, or any other contagious, infectious or communicable disease exists, or has recently existed, within the territory under his or her jurisdiction, shall take measures as may be necessary to prevent the spread of the disease or occurrence of additional cases."

- Upon receiving a report of a disease, the local health officer must take whatever steps are deemed necessary for the investigation and control of the disease, condition, or outbreak reported. (Cal. Code Regs., tit. 17, § 2501, subd. (a).)

- Local health officers also have a specific duty to control sexually transmitted infections. Health and Safety Code section 120575 provides:

> "It is the duty of the local health officers to use every available means to ascertain the existence of cases of infectious [sexually transmitted infections] within their respective jurisdictions, to investigate all cases that are not, or probably are not, subject to proper control measures approved by the board, to ascertain so far as possible all sources of infection, and to take all measures reasonably necessary to prevent the transmission of infection."

- Local health officers must prepare individual case and outbreak reports for selected reportable diseases and provide these to the State Department of Public Health. (Cal. Code Regs., tit. 17, § 2502, subd. (b).)

Redisclosures of PHI

- California Health and Safety Code § 121025 lists who may disclose HIV related PHI to whom and for what purposes, including, but not limited to:

> "[F]or the purpose of facilitating appropriate case management or care coordination or delivery of medical care and treatment of persons coinfected with HIV and tuberculosis, syphilis, gonorrhea, chlamydia, hepatitis B, hepatitis C, meningococcal infection, or other reportable diseases under Section 2500 or Section 2505 of Title 17 of the California Code of Regulations, state or local public health agency staff may further disclose the information to other state or local public health agency staff, the HIV-positive person who is the subject of the record, or the HIV-positive person's health care provider." (Cal. Health and Saf. Code § 121025(c)(3)).

CDPH appreciates your cooperation in continuing to protect the health, safety, and privacy of all Californians. If you have questions, we advise you to contact your local attorney as this letter does not constitute legal advice. For questions on public health reporting of communicable diseases, please visit the CDPH Center for Infectious Diseases website or CDPH Contact Us page.

Sincerely,

James Watt, M.D., M.P.H.
Acting Deputy Director
Center for Infectious Diseases
California Department of Public Health

Title 17, California Code of Regulations (CCR) §2500, §2593, §2641.5-2643.20, and §2800-2812 Reportable Diseases and Conditions*

§ 2500. REPORTING TO THE LOCAL HEALTH AUTHORITY.

- **§ 2500(b)** It shall be the duty of every health care provider, knowing of or in attendance on a case or suspected case of any of the diseases or condition listed below, to report to the local health officer for the jurisdiction where the patient resides. Where no health care provider is in attendance, any individual having knowledge of a person who is suspected to be suffering from one of the diseases or conditions listed below may make such a report to the local health officer for the jurisdiction where the patient resides.
- **§ 2500(c)** The administrator of each health facility, clinic, or other setting where more than one health care provider may know of a case, a suspected case or an outbreak of disease within the facility shall establish and be responsible for administrative procedures to assure that reports are made to the local officer.
- **§ 2500(a)(14)** "Health care provider" means a physician and surgeon, a veterinarian, a podiatrist, a nurse practitioner, a physician assistant, a registered nurse, a nurse midwife, a school nurse, an infection control practitioner, a medical examiner, a coroner, or a dentist.

URGENCY REPORTING REQUIREMENTS [17 CCR §2500(h)-(i)]

✆! = Report immediately by telephone (designated by a ♦ in regulations).
† = Report immediately by telephone when two or more cases or suspected cases of foodborne disease from separate households are suspected to have the same source of illness (designated by a ● in regulations).
✆ = Report by telephone within one working day of identification (designated by a + in regulations).
FAX ✆✉ = Report by electronic transmission (including FAX), telephone, or mail within one working day of identification (designated by a + in regulations).
WEEK = All other diseases/conditions should be reported by electronic transmission (including FAX), telephone, or mail within seven calendar days of identification.

REPORTABLE DISEASES AND CONDITIONS §2500(j)

Disease Name	Urgency	Disease Name	Urgency
Anaplasmosis	WEEK	Lyme Disease	WEEK
Anthrax, human or animal	✆!	Malaria	FAX ✆✉
Babesiosis	FAX ✆✉	Measles (Rubeola)	✆!
Botulism (Infant, Foodborne, Wound, Other)	✆!	Melioidosis	✆!
Brucellosis, animal (except infections due to *Brucella canis*)	WEEK	Meningitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic	FAX ✆✉
Brucellosis, human	FAX ✆✉	Middle East Respiratory Syndrome (MERS)	✆!
Campylobacteriosis	FAX ✆✉	Monkeypox or orthopox virus infection	✆!
Candida auris, colonization or infection	FAX ✆✉	Multisystem inflammatory syndrome in children (MIS-C)	FAX ✆✉

Disease Name	Urgency	Disease Name	Urgency
Chancroid	WEEK	Mumps	WEEK
Chickenpox (Varicella)(Outbreaks, hospitalizations and deaths)	FAX ✆✉	*Neisseria meningitidis* (invasive disease)	✆!
Chikungunya Virus Infection	FAX ✆✉	Novel coronavirus Infection	✆!
Cholera	✆!	Novel virus infection with pandemic potential	✆!
Ciguatera Fish Poisoning	✆!	Paralytic Shellfish Poisoning	✆!
Coccidioidomycosis	WEEK	Paratyphoid Fever	FAX ✆✉
Coronavirus Disease 2019 (COVID-19) (hospitalizations only)	FAX ✆✉	Pertussis (Whooping Cough)	FAX ✆✉
Creutzfeldt-Jakob Disease (CJD) and other Transmissible Spongiform Encephalopathies (TSE)	WEEK	Plague, human or animal	✆!
Cronobacter sakazakii infections in infants less than one year of age	FAX ✆✉	Poliovirus Infection	FAX ✆✉
Cryptosporidiosis	FAX ✆✉	Psittacosis	FAX ✆✉
Cyclosporiasis	FAX ✆✉	Q Fever	FAX ✆✉
Cysticercosis or taeniasis	WEEK	Rabies, human or animal	✆!
Dengue Virus Infection	FAX ✆✉	Relapsing Fever	FAX ✆✉
Diphtheria	✆!	Respiratory Syncytial Virus-associated deaths in laboratory-confirmed cases less than five years of age	WEEK
Domoic Acid Poisoning (Amnesic Shellfish Poisoning)	✆!	Rickettsial Diseases (non-Rocky Mountain Spotted Fever), including Typhus and Typhus-like illnesses	WEEK
Ehrlichiosis	WEEK	Rocky Mountain Spotted Fever	WEEK
Encephalitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic	FAX ✆✉	Rubella (German Measles)	WEEK
Escherichia coli: shiga toxin producing (STEC) including *E. coli* O157	FAX ✆✉	Rubella Syndrome, Congenital	WEEK
Flavivirus infection of undetermined species	✆!	Salmonellosis (Other than Typhoid Fever)	FAX ✆✉
Foodborne Disease	†FAX ✆✉	Scombroid Fish Poisoning	✆!
Giardiasis	WEEK	Shiga toxin (detected in feces)	FAX ✆✉
Gonococcal Infections	WEEK	Shigellosis	FAX ✆✉
Haemophilus influenzae, invasive disease, all serotypes (report an incident less than 5 years of age)	FAX ✆✉	Silicosis	WEEK

Disease Name	Urgency	Disease Name	Urgency
Hantavirus infections	FAX ✆✉	Smallpox (Variola)	✆!
Hemolytic Uremic Syndrome	FAX ✆✉	Syphilis (all stages, including congenital)	FAX ✆✉
Hepatitis A, acute infection	FAX ✆✉	Tetanus	WEEK
Hepatitis B (specify acute, chronic, or perinatal)	WEEK	Trichinosis	FAX ✆✉
Hepatitis C (specify acute, chronic, or perinatal)	WEEK	Tuberculosis	FAX ✆✉
Hepatitis D (Delta) (specify acute case or chronic)	WEEK	Tularemia, animal	WEEK
Hepatitis E, acute infection	WEEK	Tularemia, human	✆!
Human Immunodeficiency Virus (HIV) infection, acute infection	✆	Typhoid Fever, Cases and Carriers	FAX ✆✉
Human Immunodeficiency Virus (HIV) infection, any stage	WEEK	*Vibrio* Infections	FAX ✆✉
Human Immunodeficiency Virus (HIV) infection, progression to stage 3 (AIDS)	WEEK	Viral Hemorrhagic Fevers, human or animal (e.g., Crimean-Congo, Ebola, Lassa, and Marburg viruses)	✆!
Influenza-associated deaths in laboratory- confirmed cases less than 18 years of age	WEEK	West Nile Virus (WNV) Infection	FAX ✆✉
Influenza due to novel strains (humans)	✆!	Yellow Fever	FAX ✆✉
Legionellosis	FAX ✆✉	Yersiniosis	FAX ✆✉
Leprosy (Hansen Disease)	WEEK	Zika Virus Infection	FAX ✆✉
Leptospirosis	WEEK	OCCURENCE of ANY UNUSUAL DISEASE	✆!
Listeriosis	FAX ✆✉	OUTBREAKS of ANY DISEASE (Including diseases not listed in **§2500**). Specify if institutional and/or open community.	✆!

HIV REPORTING BY HEALTH CARE PROVIDERS §2641.5-2643.20

Human Immunodeficiency Virus (HIV) infection at all stages is reportable by traceable mail, person-to-person transfer, or electronically within seven calendar days. For complete HIV-specific reporting requirements, see Title 17, CCR, §2641.5-2643.20 and the California Department of Public Health's HIV Surveillance and Case Reporting Resource page (https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_case_surveillance_resources.aspx)

REPORTABLE NONCOMMUNICABLE DISEASES AND CONDITIONS §2800–2812 and §2593(b)

Disorders Characterized by Lapses of Consciousness (§2800-2812)

Pesticide-related illness or injury (known or suspected cases)**

Cancer, including benign and borderline brain tumors (except (1) basal and squamous skin cancer unless occurring on genitalia, and (2) carcinoma in-situ and CIN III of the Cervix) (§2593)***

LOCALLY REPORTABLE DISEASES (If Applicable):

* The Confidential Morbidity Report (CMR) is designed for health care providers to report those diseases mandated by Title 17, California Code of Regulations (CCR). The CMR form can be found here: Communicable Disease Reporting Forms . Failure to report is a misdemeanor (Health & Safety Code §120295) and is a citable offense under the Medical Board of California Citation and Fine Program (Title 16, CCR, §1364.10 and 1364.11).

** Failure to report is a citable offense and subject to civil penalty ($250) (Health and Safety Code §105200).

*** The Confidential Physician Cancer Reporting Form may also be used. See Physician Reporting Requirements for Cancer Reporting in CA at: www.ccrcal.org.

Revised 03/2026

CONFIDENTIAL MORBIDITY REPORT

PLEASE NOTE: Use this form for reporting all conditions except HIV/AIDS, Tuberculosis, and conditions reportable to DMV.

DISEASE BEING REPORTED

X

Patient Name - Last Name | ***First Name*** | ***MI***

Home Address: Number, Street | ***Apt./Unit No.***

City | ***State*** | ***ZIP Code***

Home Telephone Number | ***Cell Telephone Number*** | ***Work Telephone Number***

Email Address | ***Primary Language*** ☐ English ☐ Spanish ☐ Other: _____

Birth Date *(mm/dd/yyyy)* | ***Age*** | ☐ Years ☐ Months ☐ Days

Current Gender Identity (check one)
☐ Male ☐ Female ☐ Trans male/transman ☐ Trans female/transwoman ☐ Genderqueer or non-binary ☐ Identity not listed *(specify)* _____ ☐ Declined to answer

Sex Assigned at Birth (check one)
☐ Male ☐ Female ☐ Declined to answer

Ethnicity (check one)
☐ Hispanic/Latino ☐ Non-Hispanic/Non-Latino ☐ Unknown

Race (check all that apply)
☐ African-American/Black
☐ American Indian/Alaska Native
☐ Asian *(check all that apply)*
☐ Asian Indian ☐ Cambodian ☐ Chinese ☐ Filipino ☐ Hmong ☐ Japanese ☐ Korean ☐ Laotian ☐ Thai ☐ Vietnamese ☐ Other *(specify)*: _____
☐ Pacific Islander *(check all that apply)*
☐ Native Hawaiian ☐ Guamanian ☐ Samoan ☐ Other *(specify)*: _____
☐ White
☐ Other *(specify)*: _____
☐ Unknown

Sexual Orientation (check one)
☐ Heterosexual or straight ☐ Bisexual ☐ Gay, lesbian, or same gender loving ☐ Orientation not listed *(specify)* _____ ☐ Questioning/Unsure/ Client doesn't know ☐ Declined to answer

Pregnant? ☐ Yes ☐ No ☐ Unknown | ***Est. Delivery Date*** *(mm/dd/yyyy)* | ***Country of Birth***

Occupation or Job Title

Occupational or Exposure Setting (check all that apply): ☐ Food Service ☐ Day Care ☐ Health Care ☐ Correctional Facility ☐ School ☐ Other *(specify)*: _____

Date of Onset *(mm/dd/yyyy)* | ***Date of First Specimen Collection*** *(mm/dd/yyyy)* | ***Date of Diagnosis*** *(mm/dd/yyyy)* | ***Date of Death*** *(mm/dd/yyyy)*

Reporting Health Care Provider | ***Reporting Health Care Facility***

Address: Number, Street | ***Suite/Unit No.***

City | ***State*** | ***ZIP Code***

Telephone Number | ***Fax Number***

Submitted by | ***Date Submitted*** *(mm/dd/yyyy)*

REPORT TO:

San Joaquin County Public Health Services
Attn: Disease Control and Prevention
P.O. Box 2009
Stockton, CA 95201-2009
Phone: (209) 468-3822
Fax: (209) 468-8222
Email: SJCDiseaseReporting@sjcphs.org
Use secure transmission for emailed reports

(Obtain additional forms from your local health department.)

Laboratory Name | ***City*** | ***State*** | ***ZIP Code***

SEXUALLY TRANSMITTED DISEASES (STDs)

Gender of Sex Partners *(check all that apply)*
☐ Male ☐ Female ☐ Unknown ☐ M to F Transgender ☐ F to M Transgender ☐ Other: _____

STD TREATMENT ☐ Treated in office ☐ Given prescription
Drug(s), Dosage, Route | **Treatment Began** *(mm/dd/yyyy)*

☐ ***Untreated***
☐ Will treat
☐ Unable to contact patient
☐ Patient refused treatment
☐ Referred to: _____

If reporting Syphilis, Stage:
☐ Primary (lesion present)
☐ Secondary
☐ Early, non-primary, non-secondary
☐ Unknown Duration or Late
☐ Congenital

Clinical Manifestations?
☐ Neurologic ☐ Otic ☐ Ocular ☐ Late clinical

Syphilis Test Results | **Titer**

☐ RPR	☐ Pos	☐ Neg	_____
☐ VDRL	☐ Pos	☐ Neg	_____
☐ FTA-ABS	☐ Pos	☐ Neg	
☐ TP-PA	☐ Pos	☐ Neg	
☐ EIA/CLIA	☐ Pos	☐ Neg	
☐ CSF-VDRL	☐ Pos	☐ Neg	_____
☐ Other: _____			

If reporting Gonorrhea:
Specimen Source(s) *(check all that apply)*
☐ Cervical ☐ Pharyngeal ☐ Rectal ☐ Urethral ☐ Urine ☐ Vaginal ☐ Other: _____

Symptoms?
☐ Yes ☐ No ☐ Unknown

Partner(s) Treated?
☐ Yes, treated in this clinic
☐ Yes, Meds/Prescription given to patient for their partner(s)
☐ Yes, other: _____
☐ No, instructed patient to refer partner(s) for treatment
☐ No, referred partner(s) to: _____
☐ Unknown

Remarks:

CONFIDENTIAL MORBIDITY REPORT

(continued)

Patient Name - Last Name	***First Name***	***MI***	***Birth Date*** *(mm/dd/yyyy)*

VIRAL HEPATITIS

Diagnosis (check all that apply)

- ☐ Hepatitis A
- ☐ Hepatitis B (acute)
- ☐ Hepatitis B (chronic)
- ☐ Hepatitis B (perinatal)
- ☐ Hepatitis C (acute)
- ☐ Hepatitis C (chronic)
- ☐ Hepatitis C (perinatal)
- ☐ Hepatitis D (acute)
- ☐ Hepatitis D (chronic)
- ☐ Hepatitis E

Is patient symptomatic? ☐ Yes ☐ No ☐ Unknown

Suspected Exposure Type(s)

- ☐ Blood transfusion, dental or medical procedure
- ☐ IV drug use
- ☐ Other needle exposure
- ☐ Sexual contact
- ☐ Household contact
- ☐ Perinatal
- ☐ Child care
- ☐ Other: _____

ALT (SGPT) Result: _____ Upper Limit: _____

AST (SGOT) Result: _____ Upper Limit: _____

Bilirubin result: _____

		Pos	Neg
Hep A	anti-HAV IgM	☐	☐
Hep B	HBsAg	☐	☐
	anti-HBc total	☐	☐
	anti-HBc IgM	☐	☐
	anti-HBs	☐	☐
	HBeAg	☐	☐
	anti-HBe	☐	☐
	HBV DNA: _____		

		Pos	Neg
Hep C	anti-HCV	☐	☐
	RIBA	☐	☐
	HCV RNA (e.g., PCR)	☐	☐
Hep D	anti-HDV	☐	☐
Hep E	anti-HEV	☐	☐

ADULT HIV/AIDS CASE REPORT FORM
(Patients ≥ 13 Years of Age at Time of Diagnosis)

I. Health Department Use Only *(See Appendix 1.0 for Further Details) (Record All Dates as mm/dd/yyyy)* ***Shaded Fields are Required. All Others are Optional.***

Name of Person Completing Form:	Person's Phone Number: ( )	STATENO:	CITYNO:
Date Form Completed: _____/_____/_____	Reporting Health Department - City/County:	Document Source:	
Report Status: ☐ 1- New ☐ 2- Update	Physician's Name:	Physician's Phone Number: ( )	Hospital/Facility Name:
Did this report initiate a new case investigation? ☐ Yes ☐ No ☐ Unknown	Surveillance Method: ☐ Active ☐ Passive ☐ Follow Up ☐ Reabstraction ☐ Unknown	Report Medium: ☐ 1- Field Visit ☐ 2- Mailed ☐ 3- Phone ☐ 4- Electronic Transfer ☐ 5- CD/Disk	

II. Patient Identification

Patient Last Name:	Middle Name:	First Name:		
Alternate Name Type *(e.g. Alias, Married, etc.)*:	Last Name:	Middle Name:	First Name:	
Address Type: ☐ Residential ☐ Bad Address ☐ Correctional Facility ☐ Foster Home ☐ Homeless ☐ Postal ☐ Shelter ☐ Temporary				
Current Street Address:	City:	County:		
State/Country:	ZIP Code:	Phone Number: ( )	Social Security Number:	Other ID Type #1:
Other ID Type #1 Number:	Other ID Type #2:	Other ID Type #2 Number:		

III. Patient Demographics *(See Appendix 2.0 for Further Details) (Record All Dates as mm/dd/yyyy)*

Sex Assigned at Birth: ☐ Male ☐ Female ☐ Unknown	Country of Birth: ☐ U.S. ☐ Other/U.S. Dependency *(please specify)*: _____			Date of Birth: _____/_____/_____
Alias Date of Birth: _____/_____/_____	Vital Status: ☐ 1- Alive ☐ 2- Dead	Date of Death: _____/_____/_____	State of Death:	Status: ☐ HIV ☐ AIDS
Current Gender Identity: ☐ Male ☐ Female ☐ Transgender: Male-to-Female (MTF) ☐ Transgender: Female-to-Male (FTM) ☐ Unknown ☐ Other Gender Identity *(specify)*: _____				Race: ☐ White ☐ Black/African American ☐ American Indian/Alaskan Native ☐ Asian ☐ Pacific Islander ☐ Chinese ☐ Vietnamese ☐ Hawaiian ☐ Japanese ☐ Asian Indian ☐ Guamanian ☐ Filipino ☐ Laotian ☐ Samoan ☐ Korean ☐ Cambodian ☐ Other *(specify)*: _____
Ethnicity: ☐ Hispanic/Latino ☐ Not Hispanic/Latino ☐ Unknown	Expanded Ethnicity:			
Expanded Race:				

IV. Residence at Diagnosis *(See Appendix 3.0 for Further Details - Add Additional Addresses in Comments and Local/Optional Fields Section) (Required as Appropriate Based on Status)*

Address Type *(check all that apply)*: ☐ Residence at HIV Diagnosis ☐ Residence at AIDS Diagnosis ☐ Check if SAME as Current Address					
Address of Residence at HIV Diagnosis	Street Address:	City:	County:	State/Country:	ZIP Code:
Address of Residence at AIDS Diagnosis	Street Address:	City:	County:	State/Country:	ZIP Code:

V. Facility at Diagnosis *(See Appendix 4.0 for Further Details - Add Additional Facilities in Comments and Local/Optional Fields Section)* STATENO:_____

Diagnosis Type *(check all that apply to facility):* ☐ HIV Diagnosis ☐ AIDS Diagnosis ☐ Check if SAME as Facility Providing Information			
Facility Name:	Phone Number: ( )	Street Address:	City:
County:	State/Country:	ZIP Code:	Provider Name:
Facility Type:	*Inpatient:* ☐ Hospital ☐ Other *(specify):* _____ *Outpatient:* ☐ Private Physician ☐ Adult HIV Clinic ☐ Other *(specify):* _____ *Screening, Diagnostic, Referral Agency:* ☐ CTS ☐ STD Clinic ☐ Other *(specify):* _____ *Other Facility:* ☐ Emergency Room ☐ Laboratory ☐ Corrections ☐ Unknown ☐ Other *(specify):* _____		

VI. Patient History *(See Appendix 5.0 for Further Details - Respond to All Questions)* ☐ **Pediatric Risk** *(Please Enter in Comments and Local/Optional Fields Section)*

After 1977 and before the earliest known diagnosis of HIV infection, this patient had:

Sex with a male: ☐ Yes ☐ No ☐ Unknown Sex with a female: ☐ Yes ☐ No ☐ Unknown Injected non-prescription drugs: ☐ Yes ☐ No ☐ Unknown

HETEROSEXUAL relations with any of the following:	**Has the patient:**
Contact with intravenous/injection drug user (IDU): ☐ Yes ☐ No ☐ Unknown	Received clotting factor for hemophilia/coagulation disorder: ☐ Yes ☐ No ☐ Unknown
Contact with a bisexual male: ☐ Yes ☐ No ☐ Unknown	Received transfusion of blood/blood components *(non-clotting)*: ☐ Yes ☐ No ☐ Unknown
Contact with a person with AIDS or documented HIV infection, risk not specified: ☐ Yes ☐ No ☐ Unknown	Other documented risk: *(if yes, specify):* ☐ Yes ☐ No ☐ Unknown
Contact with transplant recipient with documented HIV: ☐ Yes ☐ No ☐ Unknown	_____
Contact with transfusion recipient with documented HIV: ☐ Yes ☐ No ☐ Unknown	

VII. Laboratory Data *(Record All Dates as mm/dd/yyyy) (See Instructions for Details)*

HIV Antibody Tests (Non-Type Differentiating) [HIV-1 vs. HIV-2]

TEST 1: ☐ HIV-1 EIA ☐ HIV-1/2 EIA ☐ HIV-1/2 Ag/Ab ☐ HIV-1 WB ☐ HIV-1 IFA ☐ HIV-2 EIA ☐ HIV-2 WB
☐ Other *(specify test):* _____

RESULT: ☐ Positive/Reactive ☐ Negative/Nonreactive ☐ Indeterminate **RAPID TEST** *(check if rapid):* ☐ **Collection Date**: _____/_____/_____
Manufacturer: _____

TEST 2: ☐ HIV-1 EIA ☐ HIV-1/2 EIA ☐ HIV-1/2 Ag/Ab ☐ HIV-1 WB ☐ HIV-1 IFA ☐ HIV-2 EIA ☐ HIV-2 WB
☐ Other *(specify test):* _____

RESULT: ☐ Positive/Reactive ☐ Negative/Nonreactive ☐ Indeterminate **RAPID TEST** *(check if rapid):* ☐ **Collection Date**: _____/_____/_____
Manufacturer: _____

TEST 3: ☐ HIV-1 EIA ☐ HIV-1/2 EIA ☐ HIV-1/2 Ag/Ab ☐ HIV-1 WB ☐ HIV-1 IFA ☐ HIV-2 EIA ☐ HIV-2 WB
☐ Other *(specify test):* _____

RESULT: ☐ Positive/Reactive ☐ Negative/Nonreactive ☐ Indeterminate **RAPID TEST** *(check if rapid):* ☐ **Collection Date**: _____/_____/_____
Manufacturer: _____

HIV Antibody Tests (Type Differentiating) [HIV-1 vs. HIV-2]

TEST: ☐ HIV-1/2 Differentiating *(e.g. Multispot)*

RESULT: ☐ HIV-1 ☐ HIV-2 ☐ Both *(undifferentiated)* ☐ Neither *(negative)* **Collection Date**: _____/_____/_____

VII. Laboratory Data *(continued)* *(Record All Dates as mm/dd/yyyy)* **STATENO:**_____

HIV Detection Tests (Qualitative)

TEST 1: ☐ HIV-1 RNA/DNA NAAT *(Qual)* ☐ HIV-1 P24 Antigen ☐ HIV-1 Culture ☐ HIV-2 RNA/DNA NAAT *(Qual)* ☐ HIV-2 Culture

RESULT: ☐ Positive/Reactive ☐ Negative/Nonreactive ☐ Indeterminate **Collection Date**: _____/_____/_____

TEST 2: ☐ HIV-1 RNA/DNA NAAT *(Qual)* ☐ HIV-1 P24 Antigen ☐ HIV-1 Culture ☐ HIV-2 RNA/DNA NAAT *(Qual)* ☐ HIV-2 Culture

RESULT: ☐ Positive/Reactive ☐ Negative/Nonreactive ☐ Indeterminate **Collection Date**: _____/_____/_____

HIV Detection Tests (Quantitative Viral Load) ***Note: Include earliest test after diagnosis***

TEST 1: ☐ HIV-1 RNA/DNA NAAT *(Quantitative Viral Load)* ☐ RT-PCR ☐ bDNA ☐ Other *(specify test):* _____

RESULT: ☐ Detectable ☐ Undetectable **Copies/mL**: _____ **Log**: _____ **Collection Date**: _____/_____/_____

TEST 2: ☐ HIV-1 RNA/DNA NAAT *(Quantitative Viral Load)* ☐ RT-PCR ☐ bDNA ☐ Other *(specify test):* _____

RESULT: ☐ Detectable ☐ Undetectable **Copies/mL**: _____ **Log**: _____ **Collection Date**: _____/_____/_____

Immunologic Tests (CD4 Count and Percentage)

CD4 at or closest to current diagnosis status: **CD4 count:**_____ cells/µL **CD4 percentage:**_____% **Collection Date**: _____/_____/_____

First CD4 result <200 cells/µL or <14%: **CD4 count:**_____ cells/µL **CD4 percentage:**_____% **Collection Date**: _____/_____/_____

Other CD4 result <200 cells/µL or <14%: **CD4 count:**_____ cells/µL **CD4 percentage:**_____% **Collection Date**: _____/_____/_____

Documentation of Tests *(Complete only if none of the following was positive: HIV-1 Western blot, IFA, culture, p24 Ag test, viral load, or qualitative NAAT [RNA or DNA])*

Did documented laboratory test results meet approved HIV diagnostic algorithm? ☐ Yes ☐ No ☐ Unknown

If yes, provide date *(specimen collection date if known)* of earliest positive test for this algorithm: _____/_____/_____

If HIV laboratory tests were not documented, is HIV diagnosis documented by a physician? ☐ Yes ☐ No ☐ Unknown

If yes, provide date of documentation by physician: _____/_____/_____

VIII. Clinical *(Check Boxes Where Applicable) (Record All Dates as mm/dd/yyyy)*

	✓	Date		✓	Date
Candidiasis, esophageal			Kaposi's sarcoma		
Cryptococcosis, extrapulmonary			Pneumocystis carinii pneumonia		
Cytomegalovirus disease (other than in liver, spleen or nodes)			Wasting syndrome due to HIV		
Herpes simplex: chronic ulcer(s) (>1 mo. duration), bronchitis, pneumonitis or esophagitis			Other *(specify):*		

IX. Treatment/Services Referrals *(Record All Dates as mm/dd/yyyy)*

Has This Patient Been Informed of His/Her HIV Infection? ☐ Yes ☐ No ☐ Unknown

Patient's Medical Treatment is Primarily Reimbursed by:

☐ 1- Medicaid ☐ 2- Private Insurance/HMO ☐ 3- No Coverage ☐ 4- Other Public Funding ☐ 9- Unknown

For Female Patient:

Is This Patient Currently Pregnant? ☐ Yes ☐ No ☐ Unknown

Has This Patient Delivered Live-Born Infants? ☐ Yes ☐ No ☐ Unknown

IX. Treatment/Services Referrals *(continued)* *(Record All Dates as mm/dd/yyyy)*

STATENO:_____

For Children of Patient: *(Record Most Recent Birth Below; Record Additional or Multiple Births in Comments and Local/Optional Fields Section)*		
Child's Name:	Child's Soundex:	Child's Date of Birth: _____/_____/_____
Child's Coded ID:	Child's STATENO:	
Hospital of Birth: *(If Child Was Born at Home, Enter "Home Birth" for Hospital Name)*		
Hospital Name:		Phone Number: ( )
Street Address:	City:	
County:	State/Country:	ZIP Code:

X. HIV Testing and Antiretroviral Use History (TTH) *(Record All Dates as mm/dd/yyyy) (Required Sections for New Case Report Only)*

Main Source of Testing and Treatment History Information *(select one):* ☐ Patient Interview ☐ Medical Record Review ☐ Provider Report ☐ NHM&E/PEMS ☐ Other *(specify):* _____			Date Patient Reported Information: _____/_____/_____
Ever Had a Positive HIV Test? ☐ Yes ☐ No ☐ Refused ☐ Don't Know/Unknown	Date of First Positive HIV Test: _____/_____/_____	Ever Had a Negative HIV Test? ☐ Yes ☐ No ☐ Refused ☐ Don't Know/Unknown	Date of Last Negative HIV Test: (*If date is from a lab test with test type, enter in Laboratory Data Section.)* _____/_____/_____
Number of Negative HIV Tests Within 24 Months Before First Positive Test *(#)*: _____ ☐ Refused ☐ Don't Know/Unknown			
Ever Taken Any Antiretrovirals (ARVs)? ☐ Yes ☐ No ☐ Refused ☐ Don't Know/Unknown	If Yes, What ARV Medications? _____		
Date ARVs First Taken: _____/_____/_____	Date ARVs Last Taken *(mm/dd/yyyy):* _____/_____/_____		

XI. Duplicate Review

Status *(check one)*: ☐ Same As ☐ Different Than ☐ Pending	State Name:	STATENO:

XII. Comments and Local/Optional Fields

LOCAL HEALTH DEPARTMENTS:

SUBMIT COMPLETED FORM TO THE OFFICE OF AIDS PER YOUR CONTRACT'S SCOPE OF WORK, EXHIBIT A, PART D, OBJECTIVE 2.

PROVIDERS:

SUBMIT COMPLETED FORM MARKED "CONFIDENTIAL" TO THE HIV/AIDS SURVEILLANCE PROGRAM AT YOUR LOCAL HEALTH DEPARTMENT.

Local Health Department HIV/AIDS contact list is available at: www.cdph.ca.gov/programs/AIDS/pages/tOAHIVRptgSP.aspx

STI Screening Recommendations

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

TOMÁS J. ARAGÓN, M.D., Dr.P.H.
Director and State Public Health Officer

GAVIN NEWSOM
Governor

March 28, 2022

Dear Colleague,

Emergency departments (EDs) are uniquely positioned to identify people with syphilis, HIV, and hepatitis C who otherwise might remain undiagnosed. Among those who experience barriers accessing routine primary care, EDs often serve as the sole point of contact with the healthcare system. EDs act as a safety net for these individuals and offer an important opportunity to identify and treat these patients, as well as bridge the gap with public health, while providing immediate and essential medical care for people who are at highest risk for sexually transmitted diseases (STD), HIV, and hepatitis C.[1, 2]

Syphilis and hepatitis C are curable, and HIV treatment can achieve viral suppression and undetectable viral loads, which eliminates sexual transmission of HIV.[3] Identification and treatment of these infections decreases statewide morbidity and mortality. Therefore, **California Department of Public Health (CDPH) recommends that EDs consider implementing routine opt-out testing for syphilis, HIV, and hepatitis C.**

Opt-out testing – in which a patient is notified that testing will be performed unless the patient declines (e.g., if blood testing is being done as part of the planned workup) – is recommended by the U.S. Centers for Disease Control and Prevention (CDC) as best clinical care, regardless of reported risk behaviors. **Implementation of opt-out STD, HIV, and hepatitis C testing is supported by California state law and health department recommendations.**[2, 4]

Identification and immediate treatment through the ED may have the added benefit of furthering health equity for those disproportionately affected by these infections.[5] Routinized opt-out ED syphilis, HIV, and hepatitis C screening is an effective strategy to identify infections, begin immediate treatment, link to care, prevent transmission, and enable health equity.

If you have questions, please contact stdcb@cdph.ca.gov. Thank you for your work to improve the health and wellness of California's residents.

Sincerely,

Kathleen Jacobson, MD
Chief, STD Control Branch
California Department of Public Health

Marisa Ramos, PhD
Division Chief,Office of AIDS
California Department of Public Health

Additional Resources:

CDPH Screening for Syphilis in Emergency Departments – Resource Guide:
https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Screening-for-Syphilis-in-Emergency-Departments-Resource-Guide.pdf

CDPH HIV Testing in Hospital Emergency Departments: Findings and Recommendations:
https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/AB_2439_Report.ADA.pdf

CDC Hepatitis C Screening Resources for Health Care Providers:
https://www.cdc.gov/knowmorehepatitis/hcp/index.htm

References:

1. U.S. Department of Health and Human Services. *Trends in the Utilization of Emergency Department Services, 2009-2018.* Available at: https://aspe.hhs.gov/sites/default/files/migrated_legacy_files//199046/ED-report-to-Congress.pdf
2. California Department of Public Health. *HIV Testing in Hospital Emergency Departments: Findings and Recommendations Assembly Bill No. 2439.* Available at: https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/AB_2439_Report.ADA.pdf
3. Centers for Disease Control and Prevention. *HIV Treatment as Prevention. Available at:* https://www.cdc.gov/hiv/risk/art/index.html
4. California Department of Public Health. *Summary of Laws and Regulations Related to Sexually Transmitted Disease (STD) Prevention and Control in California.* Available at: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Summary_of_STD_Laws.pdf
5. Centers for Disease Control and Prevention. *HIV Prevention Progress Report, 2019.* Available at: https://www.cdc.gov/hiv/pdf/policies/progressreports/cdc-hiv-preventionprogressreport.pdf

CALIFORNIA SEXUALLY TRANSMITTED INFECTIONS (STI) SCREENING RECOMMENDATIONS

Content reflects the 2021 CDC STI Guidelines and recommendations from U.S. Preventive Services Task Force, Infectious Disease Society of America, and California Department of Public Health (CDPH) Sexually Transmitted Diseases Control Branch (STDCB). In populations where no recommendations exist, screen based on risk factors and local STI prevalence (e.g., where someone lives or receives medical care). Local health departments can help with confidential notification of sex partners of patients with STIs/HIV. For STI clinical consults, use the online STD Clinical Consultation Network (www.stdccn.org) or contact CDPH STDCB at stdcb@cdph.ca.gov or 510-620-3400. An ADA-compliant version of this document is here: https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/California-STI-Screening-Recommendations.aspx.

Population	Infection	Screening Recommendation	Comments
Non-pregnant cisgender women[1,2]	Chlamydia & Gonorrhea[4,5]	▪ Sexually active, <25 years: annually ▪ Sexually active, 25 years: if at increased risk[5]	Consider screening more frequently if at increased risk[5] Rescreen for reinfection approximately 3 months after treatment
	Syphilis[6]	▪ At least once, repeat if at increased risk ▪ Co-test when screening for HIV	Increased risk includes history of incarceration or transactional sex work, geography, race/ethnicity, methamphetamine use
	HIV	<65 years: at least once (opt-out), annually if at risk	Test if seeking evaluation and treatment for STIs
	Hepatitis C[7]	18 years: at least once, repeat if at risk	Except in settings where the prevalence of HCV infection is <0.1%
Pregnant persons[1,2,3]	Chlamydia & Gonorrhea[4,5]	▪ At first prenatal visit ▪ <25 years or at increased risk: retest at 3rd trimester[5]	Conduct test of cure 4 weeks after treatment for chlamydia Rescreen for reinfection 3 months after treatment
	Syphilis[6]	▪ First prenatal visit ▪ 3rd trimester (ideally 28-32 weeks' gestation)[8] ▪ Delivery unless low risk & negative 3rd trimester test	Increased risk includes limited prenatal care, unstable housing, meth use, incarceration (within past year), new STI diagnosis in pregnancy and lives in area with high congenital syphilis rates[3]
	HIV	▪ At first prenatal visit (opt-out) ▪ At 3rd trimester if at increased risk[9]	Rapid testing should be performed at delivery if not previously screened during pregnancy
	Hepatitis B[7]	▪ First prenatal visit of each pregnancy ▪ At delivery if no prior screening or if at increased risk	Test for Hepatitis B surface antigen (HBsAg). Increased risk includes injection drug use, new STI in pregnancy or HBsAg+ partner.[3]
	Hepatitis C[7]	At first prenatal visit	Except in settings where the prevalence of HCV infection is <0.1%
Cisgender men who have sex with cisgender women	Chlamydia & Gonorrhea	If at high risk	Consider routine chlamydia screening in high prevalence settings (adolescent clinics, correctional facilities, STI/sexual health clinic)
	Syphilis	Screen asymptomatic adults at increased risk	Increase risk includes history of incarceration or commercial sex work, geography, race/ethnicity, and age <29 years
	HIV	<65 years: at least once (opt-out), annually if at risk	Test if seeking evaluation and treatment for STIs
	Hepatitis C[7]	18 years: at least once, repeat if at risk	Except in settings where the prevalence of HCV infection is <0.1%
Men who have sex with men (MSM) or with transgender women	Chlamydia & Gonorrhea	Annually at sites of sexual exposure (urethral [urine], rectum, pharynx) regardless of condom use; every 3-6 months if at increased risk	Increased risk includes patients on HIV PrEP (screen every 3-4 months) or living with HIV, if patient or sex partners has multiple partners, sex in conjunction with drug use
	Syphilis	Any age: annually, every 3-6 months if at increased risk	Screen every 3-4 months if on HIV PrEP
	HIV	Annually if patient/partner(s) have had >1 sex partner since last HIV test; every 3-6 months if at increased risk	Screen every 2 months (if on injectable HIV PrEP) or 3 months (if on oral HIV PrEP)
	Hepatitis B[7]	At least once	Test for HBsAg, HBV core antibody, and HBV surface antibody
	Hepatitis C[7]	18 years: at least once, repeat if at risk	Except in settings where the prevalence of HCV infection is <0.1%
Transgender and gender diverse persons[2]	Chlamydia & Gonorrhea	Adapt screening recommendations based on anatomy	Consider screening for pharyngeal and rectal infections based on sexual behaviors and exposure, regardless of reproductive anatomy
	Syphilis	Consider at least annually, repeat if at increased risk	
	HIV	<65 years: at least once (opt-out), annually if at risk	
	Hepatitis C[7]	18 years: at least once, repeat if at risk	Except in settings where the prevalence of HCV infection is <0.1%
Persons with HIV[10,11]	Chlamydia, Gonorrhea, & Syphilis	At first HIV evaluation, and at least annually thereafter; more frequently based on risk	Chlamydia & gonorrhea infection should include all sites of sexual exposure (pharynx, rectum, urethral [urine], and vagina) regardless of sex
	Trichomonas	If receptive vaginal sex, at first HIV evaluation, then at least annually	Retest approximately 3 months after treatment
	Hepatitis B[7]	At least once	Test for HBsAg, HBV core antibody, and HBV surface antibody
	Hepatitis C[7]	▪ Serologic testing at initial evaluation ▪ Annual HCV testing in MSM with HIV infection	

[1] Consider trichomonas screening in high-prevalence settings (e.g., STI clinics and correctional facilities) and for asymptomatic cisgender women at high risk for infection (e.g., those with multiple sex partners, transactional sex, drug misuse, or a history of STI or incarceration). The use of highly sensitive and specific tests (e.g., a nucleic acid amplification test (NAAT)) is recommended for detecting *Trichomonas vaginalis*.

[2] Human papillomavirus (HPV) testing is recommended as part of cervical cancer screening for persons with a cervix. See www.asccp.org for further guidance.

[3] Detailed STI/HIV Screening recommendation in pregnancy at https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/California-STI-HIV-Screening-Recommendations-in-Pregnancy.aspx

[4] A vaginal swab (self-collected) NAAT is the optimal urogenital specimen type for women. Consider rectal chlamydia (CT) and pharyngeal and rectal gonorrhea (GC) screening for women based on reported sexual history, through shared decision-making between the patient and the provider.

[5] CT or GC risk factors include prior CT or GC infection, particularly in past 24 months; more than one sex partner in the past year; suspicion that a recent partner may have had concurrent partners; new sex partner in past 3 months; illicit drug use; transactional sex in the past year, and local factors (e.g., community prevalence of infection). CDPH data has shown that CT and GC rates among Black/African American females are 1.5 and 3 times higher than statewide rates among all females, respectively, which are likely due to social determinants of health and living in communities with high STI prevalence. Providers should consider screening Black/African American women up to age 30.

[6] CDPH 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

[7] AB 89 requires primary care facilities in California to offer hepatitis B and hepatitis C testing based on the latest screening recommendations from the U.S. Preventive Services Task Force

[8] 28 weeks gestation recommended by the Centers for Disease Control and Prevention 2021 STI Treatment Guidelines.

[9] High risk (for HIV infection in pregnancy) include persons who use drugs, have STIs during pregnancy, have multiple sex partners during pregnancy, have a new sex partner during pregnancy, live in areas with high HIV prevalence, or have partners with HIV

[10] Primary Care Guidelines for Persons with Human Immunodeficiency Virus: 2020 Update by the HIV Medicine Association of the Infectious Disease Society of America. Clinical Infectious Diseases. 6 November 2020; https://doi.org/10.1093/cid/ciaa1391.

[11] Guidance on Anal HPV screening for persons with HIV at https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-opportunistic-infections/human-0?view=full

Screening Guidelines for Sexually Transmitted Infections (STIs), Viral Hepatitis, and Tuberculosis (TB) in California Correctional/Detention Facilities

These guidelines summarize U.S. Centers for Disease Control and Prevention (CDC) recommended routine/opt-out screenings and actions for chlamydia, gonorrhea, human immunodeficiency virus (HIV), hepatitis C virus (HCV), hepatitis B virus (HBV), syphilis, trichomonas, and tuberculosis (TB) in correctional/detention facilities. Supplemental recommendations from the California Department of Public Health (CDPH) and American College of Obstetricians and Gynecologists (ACOG) are provided, when applicable.

Recommended screening at intake, during incarceration, and additional testing for pregnant persons[1]

Disease/ Condition	Recommended Routine/Opt-Ou Screening at Intake*	Additional Screening During Incarceration/Detention	Additional Testing for Pregnant Persons
Chlamydia/ Gonorrhea	All females [2] ≤35 years of age and all males <30 years of age	▪ At least every 3-6 months for individuals on HIV pre-exposure prophylaxis (PrEP) [3] ▪ Persons reporting/presenting with genitourinary, oropharyngeal, anorectal symptoms or rash ▪ Persons potentially exposed to an STI or HIV [4]	All pregnant persons <24 years of age; pregnant persons ≥25 years of age at increased risk [5] **CDPH [6]/ACOG [7]:** all pregnan persons regardless of age
HCV	All persons. Test for HCV antibody (anti-HCV) followed by HCV RNA if positive **CDPH:** Order anti-HCV with an automatic reflex to HCV RNA to ensure timely diagnostic testing	▪ Periodic screening for persons reporting ongoing risk factors (e.g., people who inject drugs [PWID], hemodialysis patients) including those with new diagnosis of an STI or HIV [8] ▪ Annual screening for men who have sex with men [MSM], transgender women and PWID on PrEP [3] ▪ Persons with signs/symptoms or laboratory findings consistent with hepatitis ▪ Persons potentially exposed to HCV ▪ **CDPH:** Persons with new, non-sterile tattoos received during detention/incarceration	During each pregnancy
HBV	All persons. Test for hepatitis B surface antigen (HBsAg), total hepatitis B surface antibody (anti-HBs), and total hepatitis B core antibody (anti-HBc)	▪ Periodic screening for persons reporting ongoing risk factors (e.g., PWID, MSM) including those with new diagnosis of an STI, HIV, HCV[9] ▪ Periodic routine testing for persons serving long-term sentences ▪ Persons with signs/symptoms or laboratory findings consistent with hepatitis ▪ Persons potentially exposed to HBV	During each pregnancy [10]
HIV	All persons. [11] Test with an immunoassay that detects HIV-1 & HIV-2 antibodies (Ab) and HIV-1 p24 antigen (Ag), with supplemental testing after a reactive assay	▪ Periodic screening for persons reporting ongoing risk factors (e.g., PWID, MSM) including those with new diagnosis of an STI, HCV, HBV or TB ▪ At least every 3 months for individuals on oral PrEP, or every 2 months on injectable PrEP [3] ▪ Persons with signs/symptoms of STIs, hepatitis, TB, or other HIV co-morbid or co-transmitted infections ▪ Persons potentially exposed to HIV [4]	During each pregnancy; repeat testing during third trimester and delivery for those at increased risk [12]
Syphilis	All persons based on local area and institutional prevalence of early (primary, secondary, and early latent) infectious syphilis **CDPH [13]:** ALL persons 15-44 years who enter a correctional facility should be screened, ideally at intake. If not at intake, as close to intake as possible or included as part of the initial medical examination/health appraisa	▪ Periodic screening for those with new diagnosis of another STI, HIV, or HCV ▪ At least every 3-6 months for individuals on PrEP [3] ▪ Persons reporting/presenting with signs/symptoms of syphilis[14] or other STIs ▪ Persons potentially exposed to an STI or HIV [4] ▪ **CDPH [13]:** Persons of any age when tested for HIV or other sexually transmitted infections, including mpox ▪ **CDPH [13]:** Offer screening annually for all sexually active persons 15-44 years old	During each pregnancy ▪ at intake (treat as first prenatal visit) ▪ early in third trimester (28 weeks gestation) ▪ at delivery
TB	All persons should be screened for symptoms of pulmonary TB.[15] Persons with new risk factors for TB infection or risk for progression to TB disease since last TB test [16] should be further screened with an Interferon-Gamma Release Assay (IGRA)^, a tuberculin skin test (TST), or chest radiograph	▪ Persons serving long-term sentences who have history of positive TB test result should be screened annually for TB symptoms ▪ Anyone with an exposure to infectious TB should receive a TB test if the exposed person has no history of a positive TB test; exposed persons with a history of a positive TB test should be screened for symptoms of TB	None
Trichomonas	All females [2] ≤35 years of age	▪ Persons reporting/presenting with vaginal discharge	None

* California Penal Code 4023.8(a) requires that a person incarcerated in a county jail who is identified as possibly pregnant or capable of becoming pregnant during an intake health examination or at any time during incarceration shall be offered a pregnancy test upon intake or by request, within 72 hours of arrival at the jail. Pregnancy tests shall be voluntary and not mandatory, and may only be administered by medical or nursing personnel.

^ Interferon-Gamma Release Assay (IGRA) is preferred over tuberculin skin test (TST), especially among individuals born outside of the United States.

Additional Recommended Actions During Period of Incarceration/Detention

- Offer immunization against hepatitis A (HAV), HBV, human papillomavirus (HPV), [1] and mpox [17] as clinically appropriate.
- Additional immunizations recommended for all adults include influenza and COVID-19 vaccines. [18]

CDC-Recommended Actions for Release Planning and Linkage to Care [1]

All	▪ Treat persons with diagnosed infections in accordance with established clinical guidance (*see table below*). [19] ▪ Provide all persons or their identified health care provider with an individual health record (including information on immunizations, medications, and follow up care and treatment needed) upon release.
HIV	▪ Provide persons with HIV with an adequate supply of antiretroviral medication upon release to bridge the gap until the patient can receive care from a community-based HIV provider. ▪ Provide information on pre-exposure prophylaxis (PrEP) to all persons who are known to be at risk of HIV infection in their community.
HIV & viral hepatitis	▪ Refer persons with HBV infection, HCV infection, or HIV to community-based medical and social services as needed to support continued medical care, risk-reduction, and, where needed, treatment for substance use disorder.
HIV, viral hepatitis, & STIs	▪ Provide persons with HIV, viral hepatitis, or any STI with counseling on how to prevent transmission to household, sexual, and drug-use contacts as applicable (including risk reduction and condom use).
TB & latent TB infection (LTBI)	▪ Communicate with local/state public health and community healthcare providers to facilitate treatment completion after release for persons on treatment for TB disease or LTBI. ▪ Provide persons being treated for TB or LTBI counseling on the importance of completing a full course of treatment.

Clinical Treatment Guidance [1]

Disease/Conditio	Clinical Treatment Guidance: General	Clinical Treatment Guidance: For Pregnant Persons
STIs*	CDC 2021 STI Treatment Guidelines	CDC Sexually Transmitted Infections Treatment Guidelines: Pregnant Women
HIV	▪ Health & Human Services (HHS) Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV ▪ CDC US Public Health Service: Preexposure prophylaxis for the prevention of HIV infection in the United States—2021 Update: a clinical practice guidelin	HHS Recommendations for the Use of Antiretroviral Drugs During Pregnancy
HBV	Update on prevention, diagnosis, and treatment of chronic hepatitis B: American Association for the Study of Liver Diseases (AASLD) 2018 hepatitis B guidance	CDC Screening and Referral Algorithm for HBV Infection Among Pregnant People
HCV	Recommendations for Testing, Managing, and Treating Hepatitis C	AASLD/Infectious Disease Society of America (IDSA) HCV Guidance: HCV in Pregnancy
TB	Treatment for TB Disease	CDC Treatment for TB Disease & Pregnancy
LTBI	Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from National TB Controllers Association (NTCA) and CDC, 2020 (short-course, rifamycin-based regimens are preferred)	CDC Treatment for TB Disease & Pregnancy

***** CDPH encourages health care providers to empirically treat for syphilis while awaiting confirmatory testing, if clinically indicated, among persons who have preliminary positive treponemal or non-treponemal test results -- particularly if pregnant or the likelihood of successful patient follow-up is uncertain.[13]

Technical Assistance and Available Support

CDPH offers consultation and training on best practices for the implementation and evaluation of STI screening and testing within adult jails and juvenile facilities. For more information, please contact the STD Control Branch at stdcb@cdph.ca.gov.

For technical assistance related to TB testing and treatment, contact your local health department TB program. A directory can be found on the CA Tuberculosis Controllers Association website.

Notes and Sources

[1] Unless otherwise noted, source is CDC, Summary of CDC Recommendations for Correctional Settings | Correctional Health | CDC, reviewed 4/24/2023.

[2] The experience and needs of transgender and gender diverse persons is not well reflected in gender-based screening recommendations. CDC recommends that gender-based STI screening recommendations be adapted on the basis of anatomy. For example, recommendations to screen females ≤35 years of age for chlamydia/gonorrhea should be extended to transgender men and nonbinary persons with a cervix in the age group. See: CDC, STI Treatment Guidelines, 2021: Transgender and Gender Diverse Persons, reviewed 7/22/2021.

[3] CDC, US Public Health Service: Preexposure prophylaxis for the prevention of HIV infection in the United States—2021 Update: a clinical practice guideline, published 2021.

[4] CDC recommends routine (e.g., annual) STI/HIV risk assessments. Although risk behaviors including drug use and sexual activity are prohibited in correctional and detention environments, they may still occur. Clinicians should note that individuals may be hesitant to report these behaviors due to fear of reprisal.

[5] "Increased risk" means new or multiple sex partners, sex partner with concurrent partners, or a sex partner who had an STI. (CDC, Screening and Testing for HIV, Viral Hepatitis, STD & Tuberculosis in Pregnancy, published 1/25/2024.)

[6] CDPH, California STI/HIV Screening Recommendations in Pregnancy, updated 11/17/2023.

[7] Kilpatrick SJ, Papile LA, et al., editors. Guidelines for Perinatal Care. 8th ed. American Academy of Pediatrics (AAP) & American College of Obstetricians & Gynecologists (ACOG), September 2017.

[8] See also: U.S. Preventive Services Task Force (USPSTF), Hepatitis C Virus Infection in Adolescents and Adults: Screening, published 3/2/2020.

[9] See also: USPSTF, Hepatitis B Virus Infection in Adolescents and Adults: Screening, published 12/15/2020.

[10] See also: USPSTF, Hepatitis B Virus Infection in Pregnant Women: Screening, published 7/23/2019.

[11] CDC recommends that facilities should initiate opt-out HIV screening at intake unless the prevalence of undiagnosed HIV infection in their facility population has been documented to be <0.1%. In California, the prevalence of undiagnosed HIV infection in jail settings has been 0.4% thus California facilities should provide opt-out HIV screening. If specific California correctional and detention facilities have established that the diagnostic yield in their facility population is <1 HIV diagnosis per 1,000 persons screened, alternative HIV testing strategies such as risk-based testing can be considered.

[12] HIV.gov, Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States: Maternal HIV Testing and Identification of Perinatal HIV Exposure, updated 1/31/2024.

[13] CDPH, Health Update: California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations, published 10/14/2024.

[14] See: Workowski KA, Bachmann LH, Chan PA, et al. STI Treatment Guidelines, 2021. MMWR Recomm Rep. 2021;70(4):1-187. Published 7/23/2021.

[15] Symptoms of pulmonary TB include prolonged cough (>3 weeks), hemoptysis (bloody sputum), or chest pain.

[16] New risk factors since the last TB test was performed should include: a) Birth, travel, or residence in a country with an elevated TB rate; b) Immunosuppression, current or planned; c) Close contact to someone with infectious TB during lifetime (CDPH, TB Risk Assessment, updated 8/13/2024).

[17] See: CDC, Interim Clinical Considerations for Use of Vaccine for Mpox Prevention in the United States, published 9/13/24.

[18] See: CDC, Adult Immunization Schedule by Age (Addendum updated June 27, 2024) , updated 6/27/24.

[19] Some medications (e.g., for HCV and for syphilis) may be cost prohibitive for county jails without access to discounted medications (e.g., via the 340B program). However, screening and diagnosis supports patient awareness and linkages to care. Resources from the Department of Health Care Services (DHCS) Cal-AIM Justice Involved Initiative may be available for pre-release planning, treatment during incarceration, and/or post-release linkages to medical care and social supports for eligible adults (e.g. with mental health/substance use disorder diagnosis or suspected diagnosis, chronic condition, pregnant/postpartum) and all youth.

Prenatal/Perinatal STI Screening Recommendations

ERICA PAN, MD, MPH, FIDSA, FAAP
Director and State Public Health Officer

GAVIN NEWSOM
Governor

Original post date: November 16, 2021

Updated: March 3, 2025, to reflect CDPH's 2024 Syphilis Screening Recommendations[2]

Subject: Call to expand HIV and syphilis testing for pregnant women

Dear Colleague,

The California Department of Public Health (CDPH) requests your assistance in responding to alarming increases in congenital syphilis and perinatal HIV transmissions in California. In 2019, 446 congenital syphilis cases were reported in California, the highest number of cases since 1993. In 2020 there were also six perinatal HIV transmissions in California, compared to four in 2019 and three in 2018. Most of the birthing parents of children with perinatal HIV were co-infected with or had a recent history of syphilis, one of the indicators for offering HIV prevention medication (i.e., Pre-Exposure Prophylaxis or PrEP), highlighting the need for an integrated approach to these devastating and preventable infections. In addition, significant racial disparities have been observed, as rates of congenital syphilis are significantly higher among Black/African American and American Indian/Alaska Native infants than the statewide rate.

Perinatal HIV transmission and congenital syphilis can be prevented with timely testing and treatment. A common risk factor, however, is receiving late or no prenatal care. HIV and syphilis testing and treatment must expand beyond prenatal care clinics to other settings serving women at elevated risk for HIV and syphilis. CDPH requests your assistance to implement the following policies and best practices to Screen, Treat and Prevent, and Prepare for perinatal transmissions including, but are not limited to, the following:

Screen

- **Confirm HIV and syphilis status of all pregnant patients receiving care or services at emergency departments; urgent care clinics; jails; mental health, drug treatment, and syringe services programs; and street medicine or homeless outreach programs** with documented lab results or by providing opt-out HIV and syphilis testing.

- Screen all pregnant patients for HIV at least once[1] and for syphilis three times during pregnancy: the first test should be as early as possible (during the first trimester), the second test should be during the third trimester (at 28 weeks gestation, or as soon as possible thereafter), and the third test should be at delivery[2]. Pregnant women who initially test negative for HIV but are at higher risk should have repeat HIV testing during third trimester or at delivery if not tested during 3rd trimester.

Treat and Prevent Syphilis and HIV

- **Pregnant women with syphilis should be treated with the recommended penicillin regimen for their stage of infection as soon as possible**.
- **Infants born to mothers with syphilis during pregnancy should be evaluated and treated for congenital syphilis** per recommendations in CDC's Sexually Transmitted Infection Treatment Guidelines.
- **Pregnant women newly diagnosed with HIV or previously diagnosed with HIV but not on antiretroviral therapy should start treatment as soon as possible**. Pregnant women with HIV should receive antiretroviral therapy throughout pregnancy (including the intrapartum period). Pregnant women on antiretroviral therapy but not virally suppressed should have their therapy urgently optimized to achieve viral suppression.
- **Infants born to mothers with HIV should immediately receive appropriate antiretroviral medications to prevent perinatal HIV transmission[3].** Local health departments, Ryan White clinics, and CDPH can help facilitate rapid consultations for HIV care. The National Perinatal HIV Hotline (1-888-448-8765) provides free clinical consultation on all aspects of perinatal HIV care.

Prepare

- **Refer and navigate all women diagnosed with bacterial STIs (syphilis or gonorrhea) for HIV Pre-Exposure Prophylaxis (PrEP) which can safely be provided during pregnancy.**

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[1] Repeat HIV testing in the third trimester is recommended for pregnant women who are at increased risk of acquiring HIV, including those receiving care in facilities that have an HIV incidence of ≥1 case per 1,000 pregnant women per year. Repeat HIV testing is also recommended for pregnant women with a sexually transmitted infection (STI) or with signs and symptoms of acute HIV infection.

[2] California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations. Available at: https://www.cdph.ca.gov/Programs/OPA/Pages/CAHAN/CDPH-Updates-Syphilis-Screening-Recommendations.aspx

[3] Panel on Treatment of Pregnant Women with HIV Infection and Prevention of Perinatal Transmission. Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States is available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal/.

- **Birthing hospitals should have expedited HIV and syphilis testing available 24 hours a day with results available within 1 hour** during labor or delivery for women with undocumented HIV or syphilis status, including women who were not retested in the third trimester.
- If HIV or syphilis results are positive, a protocol should be in place to provide immediate intrapartum antiretroviral prophylaxis (HIV) or penicillin G treatment (syphilis) to the mother.
- Pregnant patients with HIV or syphilis may require intensive case management to ensure that they have access to treatment and care. Contact your local health department (and Ryan White clinic if HIV) to assist with navigation and support services. Preventing perinatal HIV and congenital syphilis are critical priorities for public health in California.

Early diagnosis and treatment can prevent perinatal HIV transmission and congenital syphilis but can only be achieved if testing and treatment are expanded beyond traditional settings. Thank you for your work to improve the sexual health of all Californians. Together, we can end these epidemics and eliminate perinatal HIV transmission and congenital syphilis. Additional information and resources are appended below.

Sincerely,

Philip Peters, MD
Office of AIDS Medical Officer
Center for Infectious Diseases
California Department of Public Health

Kathleen Jacobson, MD
Chief, STD Control Branch
Center for Infectious Diseases
California Department of Public Health

Additional Resources

Perinatal HIV

- Perinatal HIV Clinical Guidelines: https://clinicalinfo.hiv.gov/en/guidelines/perinatal/whats-new-guidelines
- Perinatal HIV Clinical Consultation center: https://nccc.ucsf.edu/clinician-consultation/perinatal-hiv-aids/ or call (888) 448-8765.
- Fetal Infant Mortality Review/HIV Prevention Methodology National Resource Center: https://www.fimrhiv.org/methodology.php

Syphilis/Congenital Syphilis/STDs

- California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations: https://www.cdph.ca.gov/Programs/OPA/Pages/CAHAN/CDPH-Updates-Syphilis-Screening-Recommendations.aspx
- CDPH STD Control Branch Congenital Syphilis Webpage: https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/CongenitalSyphilis.aspx
  Information and resources on congenital syphilis for providers, patients, and local health jurisdictions
- U.S. Centers for Disease Control and Prevention (CDC) 2021 STI Treatment Guidelines: https://www.cdc.gov/std/treatment-guidelines/
  STI Treatment Guidelines, including guidelines for the treatment of syphilis for adults and pregnant patients
- California Prevention Training Center: https://californiaptc.com/
  Educational opportunities and training materials for syphilis and congenital syphilis
- STD Clinical Consultation Network: https://stdccn.org/
  Online consultation for questions about the evaluation and management of STDs, including congenital syphilis

Hepatitis C

- CDPH Perinatal HCV Case Report Form: https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8704.pdf
- Association for the Advanced Study of Liver Diseases / Infectious Diseases Society of America Hepatitis C Guidelines – Unique Populations: https://www.hcvguidelines.org/unique-populations

California Sexually Transmitted Infections* (STIs), HIV, and Viral Hepatitis Screening Recommendations in Pregnancy[1]

*The California Department of Public Health (CDPH) Office of STIs and Hepatitis C Virus (HCV) recommends against screening with broad, multiplex STI tests that may include microorganisms not otherwise indicated.

First Prenatal Visit

(Regardless of gestational age)

- **HIV-1,2 antigen/antibody (Ag/Ab) combination immunoassay[2,5]**
- **Syphilis[5] serology[6]**
- **Chlamydia (CT)[7]**
- **Gonorrhea (GC)[7]**
- **Hepatitis B (HBV) surface antigen (HBsAg), HBV core antibody (anti-HBc), and HBV surface antibody (anti-HBs)[8]**
- **Hepatitis C (HCV) antibody (anti-HCV) with reflex HCV RNA if anti-HCV positive[10]**
- **Human Papilloma Virus (HPV)/Cervical cancer screening if age ≥ 21 years and indicated by national guidelines[11]**
- **NOT recommended routinely:**
  Type-specific Herpes Simplex Virus (HSV) serology[12]
  ***Mycoplasma genitalium* (MG)[13]**

Third Trimester

(If no previous prenatal visit - see above First Prenatal Visit recommendations)

- **HIV if high risk[2,3,5]**
- **Syphilis[5] serology[6] at approximately 28 weeks gestation or as soon as possible thereafter**
- **CT and GC if age <25 years, positive test earlier in pregnancy, or if at increased risk[7]**
- **Elicit history of genital HSV symptoms/recurrences[12]**

During Labor & Delivery

(Review symptoms & exposure history for ALL STIs; include physical examination/visual inspection for rash or lesions)

- **Expedited HIV testing (results within one hour) if HIV status undocumented or if not re-tested in third trimester but remain at increased risk for HIV[3,4]**
- **Syphilis[5] serology[6] on all pregnant people at delivery**
- **Hepatitis B (HBV) surface antigen (HBsAg), HBV core antibody (anti-HBc), and HBV surface antibody (anti-HBs) on admission if no documentation of prior screening or at increased risk[8,9]**
- **Hepatitis C virus (HCV) antibody (anti-HCV) with reflex HCV RNA if anti-HCV positive on admission if no documentation of prior screening[10]**

Recommended Vaccinations during Pregnancy:

- COVID-19, influenza
- Tdap (between 27-36 weeks of each pregnancy)
- RSV (between 32-36 weeks of pregnancy during September-January).
- HBV vaccine may also be given during pregnancy to people who are susceptible and at increased risk[9] of Hepatitis B infection.

See Guidelines for Vaccinating Pregnant Persons | Pregnancy & Vaccines | CDC

CDPH

Developed by the California Department of Public Health & California Prevention Training Center.
Version Date: December 2025

CAPTC

Additional Notes:

1. Local health jurisdictions may have additional screening recommendations during pregnancy (e.g., HIV screening). Clinicians should screen according to their local guidelines.
2. **HIV.** All pregnant people should be tested with an HIV-1,2 antigen/antibody (Ag/Ab) combination immunoassay as early as possible in each pregnancy. Additionally, partners of pregnant people should be referred for HIV testing if their HIV status is unknown. A reactive HIV Ag/Ab test result should be followed by supplemental testing to differentiate between HIV-1 and HIV-2 antibodies. If supplemental testing for HIV-1/HIV-2 antibodies is nonreactive or indeterminate, or if an acute HIV infection or recent HIV exposure is suspected or reported, then an HIV-1 nucleic acid test (NAT; e.g., HIV RNA) is recommended to differentiate acute HIV-1 infection from a false-positive screening HIV test result. For any reactive HIV screening test late in pregnancy or during labor, consider concurrent HIV-1 NAT (e.g., HIV RNA assay) and HIV-1/HIV-2 antibody differentiation assay.
3. **Risk factors for acquiring HIV:** injection drug use; sex partner of a person who injects drugs; exchanging sex for money or drugs; sex partner of a person with HIV; new sex partner or more than one sex partner during the current pregnancy; suspected or diagnosed STI during pregnancy (e.g., syphilis); signs and/or symptoms of acute HIV infection or exposure to HIV; or those receiving care in facilities with an HIV incidence rate of >1 case per 1000 pregnant persons per year or residing in a local health jurisdiction with high HIV incidence rates. See Maternal HIV Testing and Identification of Perinatal HIV Exposure | NIH.
4. **Expedited HIV testing** is defined as testing with a very short turnaround time for results (e.g., one hour). Although HIV-1,2 Ag/Ab combination immunoassays are the recommended test for HIV screening in clinical settings, expedited testing is dependent on the available HIV tests in a particular facility and may include antigen/antibody combination immunoassays, antibody-only assays, or HIV nucleic acid tests (e.g., HIV RNA). If the pregnant person has a positive HIV test result during labor and delivery, or postpartum, or when a newborn's expedited antibody test is positive, supplemental HIV testing should be performed on the mother (e.g., an HIV-1/HIV-2 antibody differentiation assay and in most cases an HIV RNA assay) and the infant (HIV RNA assay).
5. **Confirm HIV and syphilis status** of all pregnant persons receiving care or services at emergency departments; urgent care clinics; jails; mental health, drug treatment, and syringe services programs; and street medicine or homeless outreach programs with documented lab results or by providing opt-out HIV and syphilis testing. See Dear Colleague Letter: Call to Expand HIV and Syphilis Testing for Pregnant Women and also California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations.
6. **Syphilis.** Screening for syphilis is based on serologic tests for the detection of treponemal and nontreponemal antibodies using either the traditional or reverse sequence screening algorithm. See California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations, American College of Obstetricians and Gynecologists (ACOG) Syphilis Screening Algorithm, and the California Prevention Training Center (CAPTC) Clinical Interpretation of Syphilis Screening Algorithms.
7. **Chlamydia/Gonorrhea (CT/GC).** CDPH recommends universal GC/CT screening in the first trimester based on the high prevalence of GC/CT among Californians who could become pregnant. The U.S. Centers for Disease Control and Prevention (CDC) recommends screening for GC/CT in the first trimester if age <25 or at increased risk. Both CDC and CDPH recommend screening for GC/CT in the third trimester if age <25 or at increased risk. **Risk factors for CT or GC**: Prior CT or GC infection (particularly in past 24 months); new or multiple partners; suspicion a recent partner may have had concurrent partners; sex partner diagnosed with an STI; exchanging sex for money or drugs; illicit drug use; history of incarceration; and/or community prevalence of infection.
8. **Hepatitis B.** Hepatitis B virus (HBV) screening is recommended for all pregnant persons during each pregnancy. CDC guidance (2023) recommends screening all adults (including pregnant persons) at least once with a triple panel of HBsAg, anti-HBs, and anti-HBc. Prior guidance recommended screening of pregnant persons with HBsAg alone. Based on new guidance, pregnant persons with a history of appropriately timed triple panel screening and without subsequent risk for exposure to HBV (i.e., no new HBV exposures since triple panel screening) only need HBsAg screening. United States Preventative Services Task Force (USPSTF) and California law (AB 789) continue to recommend risk-based screening of adults. USPSTF recommends use of HBsAg as the initial screening test for pregnant persons. See Clinical Testing and Diagnosis for Hepatitis B.
9. **Risk factors for hepatitis B**: injection drug use; new STI diagnosis in pregnancy; new or multiple partners; or HBsAg-positive partner.
10. **Hepatitis C.** Hepatitis C virus (HCV) screening is recommended for all pregnant persons - and during each pregnancy. To test for HCV, order an HCV antibody (anti-HCV) test with automatic reflex HCV RNA for specimens testing anti-HCV positive/reactive. For persons who are immunocompromised, testing for HCV RNA can be considered. For persons who might have been exposed to HCV within the past six months, testing for HCV RNA two weeks after exposure or testing for anti-HCV six months after exposure is recommended. If, after implementing routine HCV screening for all pregnant persons, a health care facility consistently finds <0.1% HCV RNA positivity, the facility may reevaluate the costs and benefits of routine HCV screening in pregnancy. See CDC Recommendations for Hepatitis C Screening Among Adults — United States, 2020 | MMWR.
11. Updated Cervical Cancer Screening Guidelines | ACOG.
12. **Herpes Simplex Virus (HSV).** Routine HSV serologic screening of pregnant people is *not* recommended. Type-specific serologic tests can be useful for pregnant persons without known prior HSV at increased risk for HSV infection (e.g., sex partner with HSV). **For pregnant persons with a history of recurrent genital herpes, suppressive treatment is recommended starting at 36 weeks gestation.** See Herpes – STI Treatment Guidelines | CDC.
13. **Mycoplasma genitalium (MG).** Currently available evidence *does not* support routine screening for *M. genitalium* in asymptomatic individuals or in any specific population (including pregnant patients) and is not recommended by CDC. Mycoplasma genitalium Management in Adults - Clinical Guidelines Program; Mycoplasma genitalium - STI Treatment Guidelines.

STI Treatment Guidelines

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

TOMÁS J. ARAGÓN, MD, DrPH
Director and State Public Health Officer

GAVIN NEWSOM
Governor

September 12, 2023

Special Considerations for the Treatment of Syphilis using Alternative Therapies in Non-pregnant Persons

Dear Colleague,

In early June, the California Department of Public Health (CDPH) released a Health Advisory informing providers of **long-acting penicillin G benzathine injectable suspension product (Bicillin® L-A) shortages**, along with acceptable alternatives (e.g., doxycycline), recommendations for Bicillin® L-A prioritization (e.g., pregnant people & infants), and conservation guidance (e.g., non-Bicillin® L-A based antimicrobials for non-syphilis infectious diseases). Regrettably, updated estimates from the U.S. Food & Drug Administration indicate inadequate Bicillin® L-A supplies at least until the 2nd quarter of 2024 due to increased demand and limited manufacturing capacity.

In the setting of Bicillin® L-A supply shortages, CDPH would like to provide further guidance regarding the use of alternative syphilis treatment regimens for non-pregnant persons in unique situational and clinical case scenarios:

Combining the Use of Bicillin® L-A and Doxycycline:

Late latent syphilis or syphilis of unknown duration

Providers may be compelled to switch non-pregnant patients to doxycycline after receiving their first or second weekly injection (Bicillin® L-A 2.4 mu IM). Currently, there are no data supporting effective combination therapy. **Therefore, when using doxycycline following only one or two injections of Bicillin® L-A in the treatment of late or unknown duration syphilis, the safest and most conservative approach would be:**

- **Prescribe full 28 days of doxycycline 100mg BID following one or two injections of Bicillin® L-A**

CDPH is aware some providers may use less than 28 days of doxycycline after one or two doses of Bicillin® L-A, however currently there are no available data to support the following:

- Prescribing three weeks of doxycycline 100mg BID one week after a single injection of Bicillin® L-A
- Prescribing two weeks of doxycycline 100mg BID one week after two weekly injections of Bicillin® L-A

***If the above regimens are used, CDPH recommends getting more frequent serologies (RPR/VDRL titer) in follow up (i.e., every 3 months).**

Sexually Transmitted Diseases Control Branch, Division of Communicable Disease Control
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Ceftriaxone:

Based on limited data, CDC 2021 STI Treatment Guidelines include ceftriaxone as an effective therapy option for the treatment of primary and secondary syphilis, and neurosyphilis. However, optimal dosing and duration have not been well established.

Primary and secondary syphilis

Available evidence to date suggests a 10-day regimen of ceftriaxone 1g IM/IV daily is "noninferior" to two weekly doses of Bicillin® L-A.[1] Notably, CDC recommends a *single* IM dose of Bicillin® L-A for primary and secondary syphilis, as evidence shows a second dose does not add benefit.[2] Despite pharmacologic studies showing ceftriaxone achieves necessary treponemacidal MIC levels (0.0006 micro gms/mL) at 1g daily, there are no data to support a shorter duration of therapy, such as a 7-day course. **Therefore, for an alternative treatment of primary and secondary syphilis, the safest and most conservative approach would be:**

- **Prescribe full 10 days of ceftriaxone 1 g IM or IV**

Neuro/ocular or otic syphilis:

CDC recommends aqueous crystalline penicillin G IV 3-4 mu every 4-6 hours for 10-14 days as the preferred treatment for neurosyphilis. However, lest this also becomes unavailable, and the fact CDC's recommended alternative treatment option for neurosyphilis, procaine penicillin IM, has been discontinued, CDC takes into account the use of ceftriaxone as an option based on limited evidence. Two case reports have found *ceftriaxone 1g daily for a total of 14 days* achieves significant decreases in both serum and cerebrospinal fluid IgG reactivity.[3,4] Additionally, a retrospective multicenter study concluded *ceftriaxone 2g for "at least 10 days"* provides an effective alternative compared to aqueous crystalline penicillin IV 3-4 mu every 4-6 hours for 10 days.[5,6] **Therefore, in the event of aqueous crystalline penicillin G IV shortages, and no available procaine penicillin G IM, an alternative approach to the treatment of neuro/ocular or otic syphilis would be:**

- **Prescribe at least 10 days ceftriaxone 2g daily IM or IV** -OR-
- **Prescribe at least 14 days ceftriaxone 1g daily IM or IV**

Follow-up:

All patients treated for primary and secondary syphilis, late latent syphilis or syphilis of unknown duration, and/or neurosyphilis, should receive routine clinical and serologic (i.e., RPR or VDRL titer) follow up at 6 and 12 months to confirm treatment efficacy. **Providers should consider more frequent clinical and serologic follow up (e.g., 3-month intervals) in patients who are treated with any of the above alternative medication modalities.**

Additionally, providers should consider prescribing doxycycline post-exposure prophylaxis (doxy-PEP) to prevent syphilis infections (and gonorrhea & chlamydia), which in turn reduces Bicillin® L-A demand and preserves current supplies.

Please reach out to stdcb@cdph.ca.gov if you have any questions about this guidance.

Sincerely,

Kathleen Jacobson, MD
Chief, STD Control Branch
California Department of Public Health

Resources:

- CDPH Health Advisory: Bicillin® L-A (Benzathine Penicillin G) Shortage
- FDA Bicillin® L-A shortage webpage
- CDC CDC - STD Treatment - Drug notices
- CDC Syphilis - STI Treatment Guidelines, 2021
- CDC Congenital Syphilis - STI Treatment Guidelines, 2021
- CDC Syphilis | Effects and Burden | Pregnancy
- FDA Ceftriaxone (Rocephin) Package Insert
- CDPH Doxy-PEP Recommendations for Prevention of STIs

References:

1. Cao Y *et al*. *A Multicenter Study Evaluating Ceftriaxone and Benzathine Penicillin G as Treatment Agents for Early Syphilis in Jiangsu, China*; *Clinical Infectious Diseases*, Volume 65, Issue 10, 15 Nov 2017;1683-1688. https://doi.org/10.1093/cid/cix611
2. Rolfs RT *et al*. *The Syphilis and HIV Study Group. A randomized trial of enhanced therapy for early syphilis in patients with and without human immunodeficiency virus infection*. N Engl J Med 1997;337:307–14. PMID:9235493 https://doi.org/10.1056/NEJM199707313370504
3. Hook EW 3rd, *et al*. *Ceftriaxone therapy for asymptomatic neurosyphilis. Case report and Western blot analysis of serum and cerebrospinal fluid IgG response to therapy.* Sex Transm Dis. 1986 Jul-Sep;13(3 Suppl):185-8. PMID: 3764632.
4. Shann S, Wilson J; *Treatment of neurosyphilis with ceftriaxone*. Case Report. Sexually Transmitted Infections 2003;79:415-416. Treatment of neurosyphilis with ceftriaxone (nih.gov)
5. Bettuzzi T *et al*. *Ceftriaxone compared with benzylpenicillin in the treatment of neurosyphilis in France: a retrospective multicentre study*. Lancet Infect Dis. 2021 Oct;21(10):1441-1447. doi: 10.1016/S1473-3099(20)30857-4. Epub 2021 May 26. Erratum in: Lancet Infect Dis. 2021 Aug 5; PMID: 34051142. DOI: 10.1016/s1473-3099(20)30857-4
6. Ceftriaxone for Neurosyphilis, *Clinical Infectious Diseases*, Volume 73, Issue 7, 1 October 2021, Pages i–ii, https://doi.org/10.1093/cid/ciab775

California Sexually Transmitted Infections (STIs) Treatment Guidelines Table for Adults & Adolescents

These guidelines reflect the 2021 CDC STI Treatment Guidelines for adults and adolescents who are HIV negative as well as those with HIV. Call the local health department for assistance with confidential notification of sexual partners of patients with STIs or HIV. For complex STI clinical management consultation (such as in cases of multiple allergies or treatment failure), contact the California Department of Public Health Office of STIs and Hepatitis C Virus (HCV) via email (stdcb@cdph.ca.gov) or phone (510-620-3400) or submit your question online to the STD Clinical Consultation Network (stdccn.org).

Infection/Disease	Recommended Regimens	**Alternative Regimens:** To be used if medical contraindication to recommended regimen.
Chlamydia (CT)	**Urogenital/Rectal/Pharyngeal Infections** • Doxycycline[1] 100 mg po bid x 7 d	**Urogenital/Rectal/Pharyngeal Infections** • Azithromycin 1 g po x 1 dose **or** • Levofloxacin 500 mg po once daily x 7 d
	Pregnant Patients[2] • Azithromycin 1 g po x 1 dose	**Pregnant Patients[2]** • Amoxicillin 500 mg po tid x 7 d
Gonorrhea (GC) *Monotherapy with IM ceftriaxone is recommended for all patients with gonorrhea, including pregnant patients. If co-infection with chlamydia has not been excluded, add doxycycline 100 mg po bid x 7 d for non-pregnant persons or azithromycin 1 g po x 1 dose for pregnant persons.*	**Urogenital/Rectal Infections[3]** • Ceftriaxone 500 mg IM x 1 dose for persons weighing <150 kg[4] **or** • Ceftriaxone 1 g IM x 1 dose for persons weighing ≥150 kg **Pharyngeal Infections[3,6]** • Ceftriaxone 500 mg IM x 1 dose for persons weighing <150 kg[4] **or** • Ceftriaxone 1 g IM x 1 dose for persons weighing ≥150 kg	**Urogenital/Rectal Infections[3]** If cephalosporin allergy: dual therapy with • Gentamicin[1] 240 mg IM x 1 dose **plus** Azithromycin 2 g po x 1 dose If ceftriaxone not available or feasible, but no allergy concerns: • Cefixime 800 mg x 1 dose[5] **Pharyngeal Infections[3,6]** No reliable treatment alternatives. Consult an infectious disease specialist or submit a question online STD Clinical Consultation Network (stdccn.org).
Pelvic Inflammatory Disease (PID)[7] *(Etiologies: CT, GC, anaerobes, possibly* M. genitalium, *others)*	**Parenteral** • Ceftriaxone 1 g IV q 24 hrs **plus** Doxycycline[1] 100 mg IV or po q 12 hrs **plus** Metronidazole 500 mg IV or po q 12 hrs **or** • Either Cefotetan 2 g IV q 12 h **or** Cefoxitin 2 g IV q 6h, **plus** Doxycycline[1] 100 mg po or IV q 12 hrs	**Parenteral** • Ampicillin/Sulbactam 3 g IV q 6 hrs **plus** Doxycycline[1] 100 mg po or IV q 12 hrs **or** • Clindamycin 900 mg IV q 8 hrs **plus** Gentamicin[1] 2 mg/kg IV or IM x 1 as loading dose **followed by** Gentamicin[1] 1.5 mg/kg IV or IM q 8 h as maintenance dose (or can substitute with Gentamicin[1] 3-5 mg/kg IM or IV 1x daily)
	IM/Oral[9] • Ceftriaxone 500 mg IM x 1 dose[4] (or another 3rd generation cephalosporin[8]) **plus** Doxycycline[1] 100 mg po bid x 14 d **with** Metronidazole 500 mg po bid x 14 d **or** • Cefoxitin 2 g IM x 1 dose administered with Probenecid 1 g po x 1 dose **plus** Doxycycline[1] 100 mg po bid x 14 d **with** Metronidazole 500 mg po bid x 14 d	**IM/Oral[9]** • Either Levofloxacin 500 mg po daily with Metronidazole 500 mg po bid x 14 d **or** • Moxifloxacin 400 mg po daily **or** • Azithromycin 500 mg IV daily x 1-2 doses followed by 250 mg po daily **with** Metronidazole 500 mg po bid x 12-14 d
Cervicitis[10] *(Etiologies: CT, GC,* T. vaginalis, *HSV, possibly* M. genitalium*)*	• Doxycycline[1] 100 mg po bid x 7 d	• Azithromycin 1 g po x 1 dose
Nongonococcal Urethritis (NGU)[10]	• Doxycycline[1] 100 mg po bid x 7 d	• Azithromycin 1 g po x 1 dose **or** • Azithromycin 500 mg po x 1 dose, then 250 mg po daily x 4 d
Recurrent/ Persistent NGU *(Etiolgies:* M. genitalium, T.vaginalis, *other bacteria)*	**1) Test for *M. genitalium* (MG)** If MG test positive but resistance testing unavailable, use: • Doxycycline[1] 100 mg po bid x 7 d **followed by** Moxifloxacin 400 mg po daily x 7 d If MG test positive and resistance testing is available, use: *Macrolide sensitive:* • Doxycycline[1] 100 mg po bid x 7 d **followed by** Azithromycin 1 g po once, then 500 mg daily on next 3 d *Macrolide resistant:* • Doxycycline[1] 100 mg po bid x 7 d **followed by** Moxifloxacin 400 mg po daily x 7 d **2) Test and treat presumptively for *T. vaginalis* in men who have sex with women (MSW) in areas where infection is prevalent** • Metronidazole 2 g po x 1 dose **or** • Tinidazole 2 g po x 1 dose	For settings without MG resistance testing and when moxifloxacin cannot be used: • Doxycycline[1] 100 mg po bid x 7 d **followed by** Azithromycin 1 g po x 1 dose on first day, then 500 mg po once daily for 3 d • Perform a test of cure 21 d after treatment
Proctitis: *(Etiologies: GC, CT including LGV, HSV,* T. pallidum, *possibly* M. genitalium*);*	• Ceftriaxone 500 mg IM x 1 dose for persons weighing <150 kg[4] **or** • Ceftriaxone 1 g IM x 1 dose for persons weighing ≥150 kg **plus** Doxycycline[1] 100 mg po bid x 7 d[11]	• None
Lymphogranuloma Venereum (LGV)	• Doxycycline[1] 100 mg po bid x 21 d	• Azithromycin 1 g po once weekly x 3 weeks[12] **or** • Erythromycin base 500 mg po qid x 21 d
Trichomoniasis[13] *NOTE: Treatment recommendations do not vary by HIV status.*	**Cervicovaginal infection** • Metronidazole 500 mg po bid x 7 d	**Cervicovaginal infection** • Tinidazole[14] 2 g po x 1 dose **or** • Secnidazole[15] 2 g po x 1 dose
	Penile infection • Metronidazole 2 g po x 1 dose	**Penile infection** • None
Bacterial Vaginosis	• Metronidazole 500 mg po bid x 7 d **or** • Metronidazole gel 0.75% one full applicator (5 g) intravaginally once daily x 5 d **or** • Clindamycin cream 2% one full applicator (5 g) intravaginally qhs x 7 d	• Tinidazole[14] 2 g po daily x 2 d **or** • Tinidazole[14] 1 g po daily x 5 d **or** • Secnidazole[15] 2 g po x 1 dose **or** • Clindamycin 300 mg po bid x 7 d **or** • Clindamycin ovules[16] 100mg intravaginally qhs x 3 d

Infection/Disease	Recommended Regimens	**Alternative Regimens:** To be used if medical contraindication to recommended regimen.
Epididymitis	If likely due to GC or CT • Ceftriaxone 500 mg IM x 1 dose[4] **plus** Doxycycline 100 mg po bid x 10 d If likely due to GC, CT or enteric organisms (history of insertive anal sex) • Ceftriaxone 500 mg IM x 1 dose[4] **plus** Levofloxacin 500 mg po daily x 10 d If most likely due to enteric organisms alone (GC and CT tests negative) • Levofloxacin[17] 500 mg po daily x 10 d	• None
Anogenital Warts - External Genital/Perianal Warts	**Patient-Applied** • Imiquimod[18,19] 5% cream topically qhs 3x/wk up to 16 wks **or** • Imiquimod[18,19] 3.75% cream topically qhs for up to 8 wks **or** • Podofilox 0.5% solution or gel topically bid x 3 d then 4 d off, repeat up to 4 cycles **or** • Sinecatechins[18] 15% ointment topically tid for up to 16 wks **Provider-Administered** • Cryotherapy with liquid nitrogen, apply once q1-2 wks **or** • Trichloroacetic acid (TCA) 80%-90%, apply once q 1-2 wks **or** • Bichloroacetic acid (BCA) 80%-90%, apply once q 1-2 wks **or** • Surgical removal	**Patient-Applied** • None **Provider Administered (fewer data available)** • Podophyllin resin[20] 10-25% in tincture of benzoin, applied weekly PRN **or** • Intralesional interferon **or** • Photodynamic therapy **or** • Topical cidofovir
Anogenital Warts - Mucosal Genital Warts	**Urethral meatus, Vaginal, Cervical, Intra-Anal** • Cryotherapy[21] with liquid nitrogen **or** • Surgical removal **or** **Vaginal, Cervical, Intra-anal** • TCA or BCA 80-90%	**Urethral meatus, Vaginal, Cervical, Intra-Anal** • None **Vaginal, Cervical, Intra-anal** • None
Anogenital Herpes	**First Clinical Episode of Herpes[22]** • Acyclovir 400 mg po tid x 7-10 d **or** • Valacyclovir 1 g po bid x 7-10 d **or** • Famciclovir 250 mg po tid x 7-10 d	**First Clinical Episode of Herpes[22]** • None
	Daily Suppressive Therapy for Recurrences (if no HIV co-infection) • Acyclovir 400 mg po bid **or** • Valacyclovir 500 mg po daily[23] **or** • Valacyclovir 1 g po daily **or** • Famciclovir[24] 250 mg po bid	**Daily Suppressive Therapy for Recurrences (if no HIV co-infection)** • None
	Daily Suppressive Therapy in Pregnant Patients (start at 36 weeks gestation) • Acyclovir 400 mg po tid **or** • Valacyclovir 500 mg po bid	**Daily Suppressive Therapy in Pregnant Patients (start at 36 weeks gestation)** • None
	Episodic Therapy for Recurrences (If no HIV co-infection) • Acyclovir 800 mg po bid x 5 d **or** • Acyclovir 800 mg po tid x 2 d **or** • Valacyclovir 500 mg po bid x 3 d **or** • Valacyclovir 1 g po daily x 5 d **or** • Famciclovir 1 gm po bid x 1 d **or** • Famciclovir 500 mg po once, then 250 mg po bid x 2 d **or** • Famciclovir 125 mg po bid x 5 d	**Episodic Therapy for Recurrences (If no HIV co-infection)** • None
Anogenital Herpes - Persons with HIV[25]	**Daily Suppressive Therapy** • Acyclovir 400-800 mg po 2-3 times daily **or** • Valacyclovir 500 mg po bid **or** • Famciclovir[24] 500 mg po bid	**Daily Suppressive Therapy** • None
	Episodic Therapy for Recurrences • Acyclovir 400 mg po tid x 5-10 d **or** • Valacyclovir 1 gm po bid x 5-10 d **or** • Famciclovir 500 mg po bid x 5-10 d	**Episodic Therapy for Recurrences** • None
Syphilis[26] *NOTE: Treatment recommendations do not vary by HIV status.*	**Primary, Secondary, and Early Latent** • Benzathine penicillin G 2.4 million units IM x 1 dose	**Primary, Secondary, and Early Latent** • Doxycycline[27] 100 mg po bid x 14 d **or** • Tetracycline[27] 500 mg po qid x 14 d **or** • Ceftriaxone[27] 1 g IM or IV daily x 10-14 d
	Late Latent or Syphilis of Unknown Duration or Tertiary Syphilis with normal CSF • Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1 week intervals[28]	**Late Latent or Syphilis of Unknown Duration or Tertiary Syphilis with normal CSF** • Doxycycline[27] 100 mg po bid x 28 d **or** • Tetracycline[27] 500 mg po qid x 28 d
	Neurosyphilis, Ocular Syphilis, and Otosyphilis[29] • Aqueous crystalline penicillin G 18-24 million units daily, administered as 3-4 million units IV q 4 hrs or as continuous infusion x 10-14 d	**Neurosyphilis, Ocular Syphilis, and Otosyphilis[29]** • Procaine penicillin G 2.4 million units IM daily x 10-14 d **plus** Probenecid 500 mg po qid x 10-14 d **or, in the setting of severe penicillin allergy** • Ceftriaxone[27] 1-2 gm IM or IV daily x 10-14 d
Syphilis in Pregnant Patients[30] *NOTE: Pregnant patients who miss any dose of therapy must repeat full course of treatment.*	**Primary, Secondary, and Early Latent** • Benzathine penicillin G 2.4 million units IM x 1 dose[31]	**Primary, Secondary, and Early Latent** • None
	Late Latent or Syphilis of Unknown Duration OR Tertiary Syphilis with normal CSF • Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each, at 1-week intervals[32]	**Late Latent or Syphilis of Unknown Duration OR Tertiary Syphilis with normal CSF** • None
	Neurosyphilis, Ocular Syphilis, and Otosyphilis[29] • Aqueous crystalline penicillin G 18-24 million units daily, administered as 3-4 million units IV q 4 hrs or as continuous infusion x 10-14 d	**Neurosyphilis, Ocular Syphilis, and Otosyphilis[29]** • Procaine penicillin G 2.4 million units IM daily x 10-14 d **plus** Probenecid 500 mg po qid x 10-14 d

Additional Notes:

[1] Contraindicated for pregnant patients.

Chlamydia (CT):

[2] Every effort should be made to use a recommended regimen. Test-of-cure follow-up with a nucleic acid amplification test (NAAT) 4 weeks after completion of therapy is recommended in pregnancy.

Gonorrhea (GC):

[3] See Gonorrhea Treatment Guidelines and Management of Suspected Treatment Failure (PDF) if suspected GC treatment failure.

[4] For persons weighing ≥150 kg, use 1 gm IM ceftriaxone x 1 dose instead.

[5] Oral cephalosporins give lower and less-sustained bactericidal levels than ceftriaxone. Cefixime should only be used when ceftriaxone is not available.

[6] Test-of-cure by culture or NAAT is recommended 14 days after treatment of pharyngeal GC.

Pelvic Inflammatory Disease (PID):

[7] If parenteral therapy is selected initially, discontinue 24-48 hours after patient improves clinically and continue with either IM or oral therapy for a total of 14 days.

[8] Other parenteral third-generation cephalosporin (e.g., cefotaxime or ceftizoxime) could be substituted for ceftriaxone.

[9] If allergy to cephalosporins, can consider fluoroquinolones/azithromycin for PID treatment if community prevalence and individual risk of GC is low and follow-up is assured. Obtain NAAT testing and GC culture before using fluoroquinolone/azithromycin treatment. If community prevalence of GC is not low, follow-up is uncertain, and culture with antimicrobial susceptibility testing is not available, consider using the alternative treatment for GC (gentamicin and azithromycin) plus 14 days of doxycycline and metronidazole in patients with true cephalosporin allergies.

Cervicitis:

[10] If patient lives in community with high GC prevalence or has risk factors (e.g., age <25 years, new partner, partner with concurrent sex partners, or sex partner with an STI), consider empiric treatment for GC.

Lymphogranuloma Venereum (LGV):

[11] Extend doxycycline course to 21 days to cover LGV if perianal or mucosal ulcers, bloody rectal discharge, or tenesmus and rectal CT positive. If perianal or mucosal ulcers present, consider treating for HSV as well.

[12] Because this regimen has not been rigorously validated, consider a test of cure with CT NAAT four weeks after treatment.

Trichomoniasis and/or Bacterial Vaginosis:

[13] For suspected drug-resistant trichomoniasis consult the 2021 CDC STI treatment guidelines, contact the CDPH Office of STIs and HCV, or consult the STD Clinical Consultation Network webpage.

[14] Safety in pregnancy has not been established, avoid during pregnancy. When using tinidazole, breastfeeding should be deferred for 72 hours after 2 g dose.

[15] Sprinkle oral granules on applesauce/yogurt/pudding before ingestion. Glass of water after dose can aid in swallowing. FDA-approved for treatment of trichomonas after the release of the CDC's 2021 STI Treatment Guidelines.

[16] Clindamycin ovules may weaken latex or rubber products (such as condoms and diaphragms). Use of such products within 72 hours following use of clindamycin ovules is not recommended.

Epididymitis:

[17] Gonorrhea should be ruled out prior to starting a fluroquinolone-based regimen.

Anogenital Warts:

[18] May weaken condoms and vaginal diaphragms. Advise patients to follow package insert directions carefully. Imiquimod users wash area 6-10 hours after application. Sinecatechin ointment should not be washed off.

[19] Limited human data on imiquimod use in pregnancy; animal data suggest low risk.

[20] Podophyllin resin is an alternative rather than recommended regimen due to reports of severe toxicity. The safety of podophyllin in pregnancy has not been established.

[21] The use of a cryoprobe in the vagina is not advised due to risk of vaginal perforation and fistula formation.

Anogenital Herpes (HSV):

[22] Treatment can be extended if healing is incomplete after 10 days of antiviral therapy.

[23] Valacyclovir 500 mg once a day might be less effective than other valacyclovir or acyclovir dosing regimens for persons who have frequent recurrences (i.e., ≥10 episodes/year.

[24] Famciclovir is somewhat less effective for suppression of viral shedding.

[25] If concern for resistance based on persistent HSV lesions, obtain a viral isolate for sensitivity testing. Consultation with an infectious disease expert is recommended.

Syphilis:

[26] Benzathine penicillin G is available in only one long-acting formulation, Bicillin® L-A (the trade name), which contains only benzathine penicillin G. Other combination products, such as Bicillin® C-R, contain both long- and short-acting penicillins and are not effective for treating syphilis.

[27] Alternative regimens should be used only for penicillin-allergic patients. If compliance or follow-up cannot be ensured, the patient should be desensitized and treated with benzathine penicillin.

[28] In non-pregnant patients, pharmacologic considerations reveal an interval of 7-9 days is ideal.

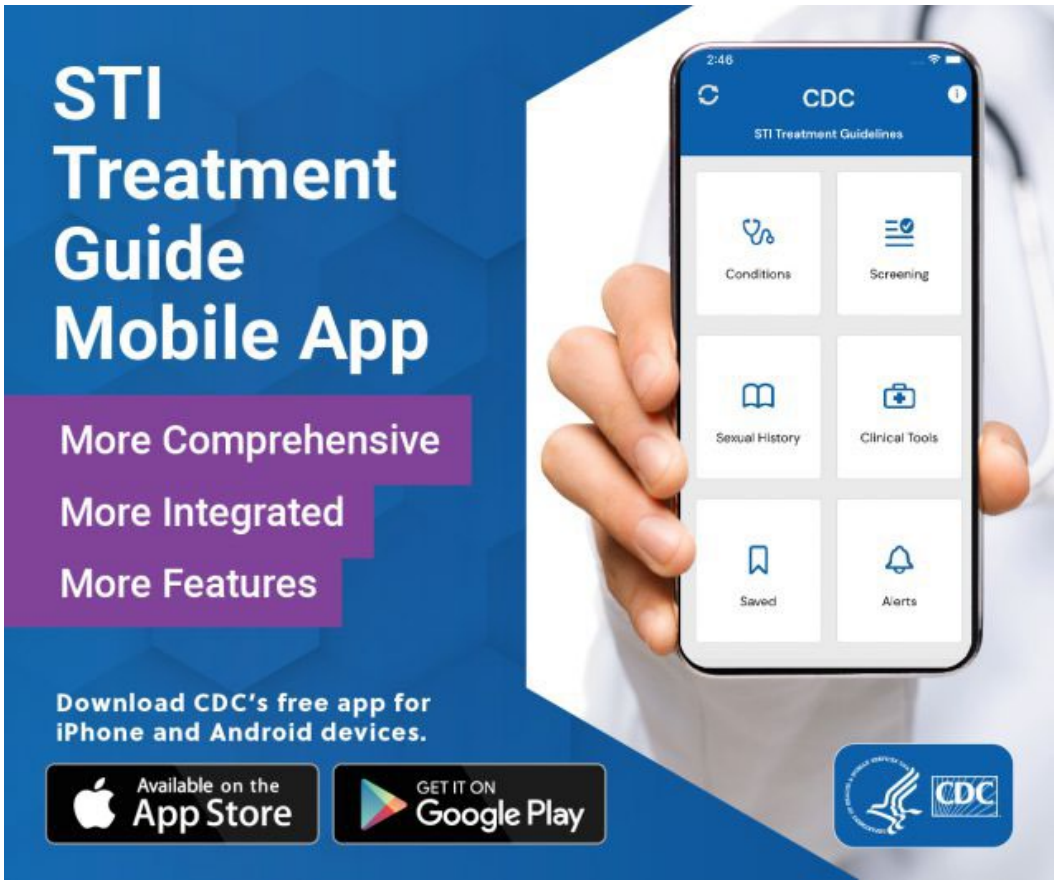
[29] Some specialists recommend 2.4 million units of benzathine penicillin G once weekly for 1 to 3 weeks immediately after completion of neurosyphilis treatment.

[30] Pregnant patients allergic to penicillin should be desensitized and treated with penicillin. There are no alternatives.

[31] For early syphilis, many experts give a 2nd dose of benzathine penicillin G 2.4 million units IM one week after the initial dose.

[32] The optimal treatment interval in pregnancy is 7 days. If treatment occurs outside of 6–8-day intervals, the full treatment course should be restarted

Provider Resources



STI Treatment (Tx) Guide Mobile App

The new app offers quick and easy access to streamlined STI prevention, diagnostic, and treatment recommendations. The user-friendly interface includes more clinical care guidance, sexual history resources, patient materials, and other features to assist with patient management. Download the free app for Apple and Android mobile devices.

Prenatal/Perinatal STI Treatment Recommendations

California Sexually Transmitted Infections (STIs) Treatment Recommendations in Pregnancy

These treatment regimens reflect updates in the CDC STI Treatment Guidelines and are specific to PREGNANT PATIENTS. Non-pregnant patients may have different recommended regimens. See CDC STI Treatment Guidelines (cdc.gov/std/treatment-guidelines/toc.htm) for comprehensive recommendations. Call the local health department for assistance with management of pregnant patients with syphilis and confidential notification of sexual partners of patients with STIs or HIV. For STI clinical management consultation, submit your question online to the STD Clinical Consultation Network (stdccn.org) or consult the California Department of Public Health (CDPH) Office of STIs and Hepatitis C Virus (HCV) via email (stdcb@cdph.ca.gov) or phone (510-620-3400).

DISEASE	RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen
CHLAMYDIA (CT)[1]	• Azithromycin 1 g po once	• Amoxicillin 500 mg po tid x 7 d
GONORRHEA (GC)[2]	**Uncomplicated GC** • Monotherapy with IM ceftriaxone is recommended for all patients with uncomplicated GC, inclusive of pregnant persons. If co-infection with CT has not been excluded, add azithromycin 1 g po x 1 dose in pregnant persons.[1]	**Uncomplicated GC** • None
	Genital, Rectal Infections • Ceftriaxone 500 mg IM once for persons weighing <150kg (330 lb) • Ceftriaxone 1g IM once for persons weighing ≥150kg (330 lb)	**Genital, Rectal Infections** If ceftriaxone not available or not feasible: • Cefixime 800 mg x 1 dose[3] If cephalosporin allergy: • Azithromycin 2 g po x 1 dose[4]
	Pharyngeal Infections[5] • Ceftriaxone 500 mg IM once for persons weighing <150kg (330 lb) • Ceftriaxone 1g IM once for persons weighing ≥150kg (330 lb)	**Pharyngeal Infections**[5] • No reliable treatment alternatives. Consult an infectious disease specialist or submit your question online to the STD Clinical Consultation Network (stdccn.org)
CERVICITIS[6]	• Azithromycin 1 g po once	• None
PELVIC INFLAMMATORY DISEASE (PID)[6]	• Pregnant patients with PID have high risk for maternal morbidity and pre-term delivery. Such patients should be hospitalized and treated with IV antibiotics in consultation with an Infectious Diseases specialist.	• None
MYCOPLASMA GENITALIUM (MG)[7]	• None. Consult an infectious disease (ID) and/or STI specialist, your local health department, OR contact CDPH via email (stdcb@cdph.ca.gov) OR submit your question online to STD Clinical Consultation Network (stdccn.org).	• None. Some experts[7] may consider extended-dose azithromycin-only treatment (1g day 1; 500mg daily days 2, 3, and 4)* *** However, high risk of treatment failure due to macrolide resistance. Specialist consultation advised.**
SYPHILIS[8,9]	**Primary, Secondary, AND Early Latent** • Benzathine penicillin G 2.4 million units (mu) IM once[10]	**Primary, Secondary, AND Early Latent** • None
	Late Latent and Unknown Duration • Benzathine penicillin G 7.2 mu, as 3 doses of 2.4 mu IM each, in 1-week intervals (not >8 days apart)[9]	**Late Latent and Unknown Duration** • None
	Neurosyphilis and Ocular Syphilis • Aqueous crystalline penicillin G 18-24 mu daily, administered as 3-4 mu IV q 4 hours x 10-14 d[11]	**Neurosyphilis and Ocular Syphilis** • Procaine penicillin G 2.4 mu IM daily for 10-14d PLUS Probenecid 500 mg po qid for 10-14 d
LYMPHOGRANULOMA VENEREUM[12]	• Azithromycin 1 g po once weekly x 3 weeks[13] **or** • Erythromycin base 500 mg po qid x 21 d	• None
TRICHOMONIASIS[14]	• Metronidazole[15] 500 mg po bid x 7 d	• None
BACTERIAL VAGINOSIS	• Metronidazole[15] 500 mg po bid x 7 d **or** • Metronidazole 0.75% gel 0.75%, 5 g intravaginally daily x 5 d **or** • Clindamycin 2% cream, 5 g intravaginally qhs x 7 d	• Clindamycin 300 mg po bid x 7 d **or** • Clindamycin ovules[16] 100 mg intravaginally qhs x 3 d
ANOGENITAL HERPES	**First Clinical Episode of Herpes**[17] • Acyclovir 400 mg po tid x 7-10 d **or** • Valacyclovir[18] 1 g po bid x 7-10 d	**First Clinical Episode of Herpes**[17] • None
	Episodic Therapy for Recurrences • Acyclovir 800 mg po bid x 5 d **or** • Acyclovir 800 mg po tid x 2 d **or** • Valacyclovir[18] 500 mg po bid x 3 d **or** • Valacyclovir[18] 1 g po daily x 5 d	**Episodic Therapy for Recurrences** • None
	Daily Suppressive Therapy in Pregnant Patients (start at 36 weeks gestation) • Acyclovir 400 mg po tid **or** • Valacyclovir[18] 500 mg po bid	**Daily Suppressive Therapy in Pregnant Patients (start at 36 weeks gestation)** • None
ANOGENITAL WARTS[19]	**External Genital/Perianal** • Cryotherapy once q 1-2 weeks **or** • Trichloroacetic acid (TCA) 80%-90% once q 1-2 weeks **or** • Bichloroacetic acid (BCA) 80%-90% once q 1-2 weeks **or** • Surgical removal	**External Genital/Perianal** • None
	Mucosal Genital Warts (Vaginal, Vulvar, Anal) • Cryotherapy[20] **or** • Surgical removal **or** • TCA or BCA 80%-90%	**Mucosal Genital Warts (Vaginal, Vulvar, Anal)** • None

Additional Notes:

Gonorrhea/Chlamydia (GC/CT)

1. CT test-of-cure follow-up by NAAT 4 weeks after completion of therapy is recommended in pregnancy.
2. See CDPH Gonorrhea Treatment Guidelines and Management of Suspected Treatment Failure (cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CAGCTreatmentFailureProtocol_Providers.pdf) if suspect treatment failure.
3. Oral cephalosporins give lower and less-sustained bactericidal levels than ceftriaxone. Cefixime should only be used when ceftriaxone is not available.
4. Obtain a test-of-cure in 14 days if using azithromycin monotherapy.
5. Test-of-cure by culture or NAAT is recommended 14 days after treatment for pharyngeal GC.
6. Test for GC/CT, bacterial vaginosis, and trichomoniasis (consider Mycoplasma genitalium in PID). If patient lives in community with high GC prevalence, or has risk factors (e.g. age <25, new partner, partner with concurrent sex partners, or sex partner with an STI), consider empiric treatment for GC.

Mycoplasma Genitalium (MG)

7. While some studies have suggested an association between MG infection during pregnancy and complications like pre-term labor, data are limited and it is unknown whether treating MG in this context prevents pregnancy complications. **Typical first-line antimicrobials for MG (doxycycline and moxifloxacin) are contraindicated during pregnancy.** Experts may recommend delaying treatment for pregnant patients with MG until after delivery, particularly if the patients have minimal or no symptoms. For highly symptomatic patients who prefer not to defer treatment, experts may recommend extended-dose azithromycin-only treatment (1 g on day 1 followed by 500 mg once daily on days 2, 3, and 4). Please note that this regimen may fail, given high rates of azithromycin (macrolide) resistance among MG isolates. Mycoplasma genitalium Management in Adults - Clinical Guidelines Program.

Syphilis

8. Benzathine penicillin G is available only in one long-acting formulation, Bicillin® L-A (the trade name). Other combination products, such as Bicillin® C-R, contain long- and short-acting penicillins, and do not effectively treat syphilis.
9. Pregnant patients allergic to penicillin should be desensitized and treated with benzathine penicillin G. There are no alternatives. The optimal treatment interval in pregnancy is 7 days. If treating outside of 6-8 day intervals, the full treatment course should be restarted.
10. Some specialists recommend a second dose of benzathine penicillin G 2.4 million units IM administered 1 week after the initial dose in pregnant patients with primary, secondary, or early latent syphilis.
11. Some specialists recommend 2.4 million units of benzathine penicillin G once weekly for up to 3 weeks after completion of neurosyphilis treatment.

Lymphogranuloma venereum (LGV)

12. Perform a test-of-cure 4 weeks after the initial CT-positive NAAT test in all pregnant patients treated for LGV.
13. Because this regimen has not been rigorously studied, consider a test-of-cure four weeks after treatment.

Trichomoniasis/Bacterial Vaginosis

14. For suspected drug-resistant trichomoniasis consult the 2021 CDC STI treatment guidelines, contact the CDPH Office of STIs and HCV, or consult the STD Clinical Consultation Network (stdccn.org).
15. Although metronidazole crosses the placenta, there is no evidence of teratogenicity or mutagenic effects. Metronidazole at a dose of 500 mg PO BID for up to a week is considered compatible with breastfeeding. Drug levels peak 2-4 hours after dosing, so breastfeeding times may be shifted to peak drug levels if patient prefers.
16. May weaken latex condoms and contraceptive diaphragms. Use of such products within 72 hours after treatment with clindamycin ovules is not recommended.

Anogenital Herpes

17. Treatment may be extended if healing is incomplete after 10 days.
18. Data regarding prenatal exposure to valacyclovir are limited. Animal trials indicate these drugs pose a low risk to pregnant patients.

Anogenital Warts

19. Anogenital warts may proliferate and become friable during pregnancy. Although removal of warts during pregnancy can be considered, resolution might be incomplete or poor until pregnancy is complete.
20. The use of a cryoprobe in the vagina is not advised due to risk of vaginal perforation and fistula formation.

Is it Really a Penicillin Allergy?

Evaluation and Diagnosis of Penicillin Allergy for Healthcare Professionals

Did You Know?

5 Facts About Penicillin Allergy (Type 1, Immunoglobulin E (IgE)-mediated)

1. Approximately 10% of all U.S. patients report having an allergic reaction to a penicillin class antibiotic in their past.
2. However, many patients who report penicillin allergies do not have true IgE-mediated reactions. When evaluated, fewer than 1% of the population are truly allergic to penicillins.[1]
3. Approximately 80% of patients with IgE-mediated penicillin allergy lose their sensitivity after 10 years.[1]
4. Broad-spectrum antibiotics are often used as an alternative to penicillins. The use of broad-spectrum antibiotics in patients labeled "penicillin-allergic" is associated with higher healthcare costs, increased risk for antibiotic resistance, and suboptimal antibiotic therapy.[1]
5. Correctly identifying those who are not truly penicillin-allergic can decrease unnecessary use of broad-spectrum antibiotics.[1]

10% of the population reports a penicillin allergy but <1% of the whole population is truly allergic.

Before prescribing broad-spectrum antibiotics to a patient thought to be penicillin-allergic, evaluate the patient for true penicillin allergy (IgE-mediated) by conducting a history and physical, and, when appropriate, a skin test and challenge dose.

History and Physical Examination

The history and physical examination are important components when evaluating a patient's drug reactions.[1]

- Questions to ask during the examination:
  - What medication were you taking when the reaction occurred?
  - What kind of reaction occurred?
  - How long ago did the reaction occur?
  - How was the reaction managed?
  - What was the outcome?[2]
- Characteristics of an IgE-mediated (Type 1) reaction:
  - Reactions that occur immediately or usually within one hour[1]
  - Hives: Multiple pink/red raised areas of skin that are intensely itchy[3]
  - Angioedema: Localized edema without hives affecting the abdomen, face, extremities, genitalia, oropharynx, or larynx[4]
  - Wheezing and shortness of breath
  - Anaphylaxis

- Broad-spectrum antibiotics are often used as an alternative to narrow-spectrum penicillins.
- Using broad-spectrum antibiotics can increase healthcare costs and antibiotic resistance, and may mean your patient receives less than the best care.
- Correctly identifying if your patient is actually penicillin-allergic can decrease these risks by reducing unnecessary use of broad-spectrum antibiotics.

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

CS262696A-PO

- Anaphylaxis[1] requires signs or symptoms in at least two of the following systems:
  - Skin: Hives, flushing, itching, and/or angioedema
  - Respiratory: Cough, nasal congestion, shortness of breath, chest tightness, wheeze, sensation of throat closure or choking, and/or change in voice-quality (laryngeal edema)
  - Cardiovascular: Hypotension, faintness, tachycardia or less commonly bradycardia, tunnel vision, chest pain, sense of impending doom, and/or loss of consciousness
  - Gastrointestinal: Nausea, vomiting, abdominal cramping, and diarrhea[5]

Penicillin Skin Tests and Challenge Doses

Based on the patient history and physical exam, additional tests may be needed to confirm a penicillin allergy.

Penicillin skin testing and challenge doses are reliable and useful methods for evaluating for IgE-mediated penicillin allergy.[5]

Penicillin Skin Testing

A positive result means the patient is likely to have a penicillin allergy. If negative, the skin test is usually followed by an oral penicillin class challenge (e.g., with amoxicillin) to safely rule out an IgE-mediated penicillin allergy.[1,7]

- The current standard of care is to perform a skin test with the major determinant penicilloylpolylysine and commercially-available penicillin G.
- To rule out penicillin allergy, an oral challenge dose can be done after skin testing. The negative predictive value of skin testing with the major and minor determinants is more than 95%, but approaches 100% when followed by a challenge dose.[2]

A direct oral challenge without prior skin testing may also be performed in selected patients and can rule out penicillin allergy. For more information, please consult an allergist.

Special Considerations

Patients with severe hypersensitivity syndromes

Patients with other severe hypersensitivity syndromes—like Stevens-Johnson syndrome, toxic epidermal necrolysis, serum sickness, acute interstitial nephritis, hemolytic anemia, and drug rash with eosinophilia and systemic symptoms (DRESS)—should not use the offending drug in the future. The skin test and challenge described here are not appropriate for patients with these severe hypersensitivity syndromes.[1,2,6]

Cephalosporin use in penicillin-allergic patients

Many cephalosporins, especially in the later generations, can be safely tolerated despite a penicillin allergy.[6,8] Patients with anaphylaxis or other severe reactions to penicillin may require further evaluation prior to the use of cephalosporins.

Pediatric patients

Children who are receiving amoxicillin or ampicillin and have Epstein-Barr virus infection can develop a non-allergic, non-pruritic rash that can appear similar to an allergic reaction.[1,9]

For more information about antibiotic use, visit www.cdc.gov/antibiotic-use.

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Syphilis

San Joaquin County Public Health Services

Provider Clinical Reference: SYPHILIS

Syphilis remains a significant public health concern in San Joaquin County, with ongoing cases of primary and secondary syphilis and continued risk of congenital syphilis. Because infection may present with varied symptoms or remain asymptomatic, routine screening, early diagnosis, and timely treatment are essential to prevent complications and reduce transmission. Providers play a critical role in testing, treatment, follow up, and reporting to public health.

Clinical Presentation	▪ Primary (infectious): Painless chancre, firm and indurated; Balanitis of Follman ▪ Secondary (infectious): Diffuse rash on palms/soles and body, mucous patches condyloma lata, lymphadenopathy, fever, muscle aches, patchy hair loss, fatigue ▪ **Early Latent:** Asymptomatic, symptoms, 4-fold increase, seroconversion <12 months ▪ **Late Latent:** Asymptomatic, no symptoms, testing history >12 months ▪ **Tertiary (late):** Can occur 10-30 years after infection began. Gummas, cardiovascular disease, neurologic complications (tabes dorsalis, general paresis) ▪ **Neurosyphilis/Ocular/Otic:** Invasion of the nervous system, eyes, and ear ▪ **Congenital:** Stillbirth, neonatal death, or multisystem disease in surviving infants Syphilis Overview
Who Should Be Screened	**Screening is recommended for the following patients:** ▪ Pregnant patients: At first prenatal visit, in the third trimester, and at delivery ▪ Patients with symptoms of genital ulcers, rash, or neurologic signs ▪ MSM, people living with HIV, or multiple/anonymous partners ▪ Patients with a recent STI diagnosis
Testing	▪ Use treponemal and non-treponemal tests (reverse sequence algorithm recommended) ▪ Always confirm non-reactive treponemal reactive non-treponemal screens with a second treponemal test such as TPPA ***Consider CSF evaluation if neurologic, ocular, or otic involvement is suspected*
Treatment	**Primary, Secondary, Early Latent:** Benzathine penicillin G 2.4 million units IM × 1 dose ▪ **Alternative (non-pregnant, non-neuro):** Doxycycline 100 mg PO BID × 14 days **Late Latent or Unknown Duration:** Benzathine penicillin G 2.4 million units IM weekly × 3 doses ▪ **Alternatives (non-pregnant, non-neuro):** Doxycycline 100 mg PO BID × 28 days **Neurosyphilis / Ocular / Otic:** Aqueous crystalline penicillin G 18–24 million units IV daily (q4h dosing or continuous infusion) × 10–14 days Syphilis Treatment ⚠ Benzathine Penicillin G and Doxycycline are not interchangeable Full treatment course must be completed using either Benzathine penicillin G or doxycycline
Treatment In Pregnancy	CDPH Treatment Guidelines in Pregnancy ⚠ Benzathine penicillin G required; desensitize if patient has penicillin allergy
Follow-up	▪ Repeat quantitative RPR/VDRL titers at 6, 12, and 24 months ▪ Monitor for a fourfold decline in titers indicating adequate treatment response ▪ Re-treat if treatment failure or reinfection is suspected ▪ Counsel on partner treatment and prevention ⚠ Partners of syphilis positive pregnant individuals should be tested and preventively treated
Reporting to Public Health	**Syphilis *(suspected or confirmed)* is reportable in California** Immediately report to San Joaquin County Public Health Services within **one (1) working day**: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information.* Report to SJCPHS

Syphilis Screening Recommendations

December 19, 2025

U.S. Centers for Disease Control (CDC) and Prevention and California Department of Public Health (CDPH) Laboratory Recommendations for Syphilis Testing

Dear Health Care Providers and Laboratory Directors,

CDPH Office of Sexually Transmitted Infections (STIs) and Hepatitis C Virus (HCV) would like to highlight **best practices regarding syphilis testing** to accurately diagnose, manage, and treat syphilis cases in California. Given the complexity of syphilis management, this letter summarizes key points from CDC Laboratory Recommendations for Syphilis Testing in addition to providing guidance on syphilis case scenarios and follow-up care.

Diagnosing syphilis based on laboratory findings requires interpreting TWO types of serologic antibody tests: treponemal and nontreponemal[1].

- **Treponemal** antibody tests (Table 1) specifically react to *T. pallidum*, the causative agent of syphilis, and generally persist after treatment and cannot be used to distinguish between a current infection or a previously treated infection.
- **Nontreponemal** antibody tests (Table 2) broadly react to both host and *T. pallidum*, and provide a quantitative measure of infection, often referred to as titers. Nontreponemal tests are important to help determine active infection or reinfection and are used to monitor response to treatment over time.

- **Both a treponemal AND a nontreponemal test are required** to confirm an initial diagnosis of syphilis.
    - The best practice is to order syphilis testing that includes reflex confirmatory testing if the initial test is reactive

[1] The term, "nontreponemal" is a misnomer as assays measure antibodies to lipoidal antigens of both host cells and *Treponema pallidum* (causative bacterium of syphilis), with potential false positive results from recent conditions such as infections, vaccinations, or injection drug use, or underlying autoimmune or chronic conditions. Correct terminology, therefore, is "lipoidal antigen tests." For brevity, this document will use the singular term, nontreponemal.

Diagnosing syphilis requires understanding of the two syphilis screening algorithms: traditional and reverse sequence (as defined by the order in which treponemal and nontreponemal tests are performed).

- Either the traditional OR the reverse sequence screening algorithm is acceptable for use.
- Algorithm preference may be based on patient populations served or laboratory resources, including staff, space, costs, and test volume.
- Each algorithm has limitations: more false positives might occur with the reverse sequence algorithm in low-prevalence populations, and the traditional algorithm might be less sensitive for detecting early or late latent syphilis infections.
- Health care providers should be aware of their institution's chosen syphilis screening algorithm to ensure all required tests have been done.

The following are more details on treponemal and nontreponemal tests:

- **Treponemal tests** (Enzyme Immunoassay [EIA], Chemiluminescence Immunoassay [CIA], *T. pallidum* Particle Agglutination [TPPA], Fluorescent Treponemal Antibody-Absorption [FTA-ABS])
    - Ordered as the initial test in the reverse sequence algorithm.
    - Will remain positive in patients with a known history of syphilis even if their infection was previously adequately treated.
    - Newer, automated treponemal immunoassays (e.g., EIA/CIA) perform similarly (except the Trep-Sure EIA, which is not recommended for use).
    - TPPA is the preferred manual treponemal test (vs FTA-ABS).
    - Serologic point-of-care (POC) tests
        - Syphilis Health Check (Diagnostics Direct) and Dual Path Platform HIV-Syphilis assay (Chembio Diagnostics) are treponemal tests and currently the only FDA-cleared CLIA-waived tests to detect syphilis.
        - First to Know is a treponemal test and is currently the only over-the-counter syphilis test available.
        - Any positive treponemal POC test result requires follow-up laboratory-based nontreponemal testing to confirm the diagnosis of syphilis.
        - Empiric treatment prior to confirmatory testing should be considered for patients with symptoms of primary or secondary syphilis, or patients who are at risk of more severe outcomes (e.g., pregnant patients) or loss to follow-up (e.g., patients with unstable housing).

- **Nontreponemal (lipoidal antigen) tests** (Rapid Plasma Reagin [RPR], Venereal Disease Research Laboratory [VDRL])
    - Ordered as the initial test in the traditional algorithm.

- RPR ≠ VDRL and are not interchangeable due to different test methods and results can vary between laboratories. Ideally using the same test type and laboratory is recommended whenever possible.
- Quantitatively referred to as titers.
- Require an endpoint titer (i.e., definitive number without “>” or “<” mathematical symbols).
    - Some automated RPR tests have constrained serum dilution ranges (e.g., 1:4-1:64) and are thus reported as "<1:4" or ">1:64."
        - In such cases, specimens require a manual RPR test to establish an endpoint titer to accurately monitor treatment response.
        - Laboratory systems should have reflex policies to automate this, and health care providers should contact their laboratories to request endpoint titers and new policies if this occurs.
- A **day of treatment titer** should ideally be drawn on the first day treatment is started, regardless of when the initial test was performed, to provide an accurate baseline titer.
- **Monitor titers at intervals following treatment:**
    - **Primary and secondary syphilis**
        - 6 and 12 months;
        - Persons with HIV - 3, 6, 9, 12, and 24 months.
    - **Latent or unknown duration syphilis**
        - 6, 12, and 24 months;
        - Persons with HIV - 6, 12, 18 and 24 months in.
    - See 2021 CDC Treatment Guidelines.
    - A **fourfold change in titer** (equivalent to two dilutions) between two results with the same type of tests over time is considered clinically significant. Ideally, follow up titers are performed at the same lab. Examples: a fourfold decrease (e.g., 1:16 to 1:4) can indicate an adequate serologic response to treatment, or “serologic cure,” while a fourfold increase (e.g., 1:8 to 1:32) that is sustained for more than 2 weeks can indicate re-infection in a previously treated individual.
    - **Serofast** is the term used when titers have at least a fourfold decline but fail to revert to nonreactive after adequate treatment and remain persistently reactive; typically these titers are <1:8. See Syphilis - STI Treatment Guidelines (cdc.gov).
- False-negative RPR tests caused by concentrated antibodies (**prozone effect**) are rare (<0.85%). Dilution is not recommended in most cases but should be performed if a patient presents with signs/symptoms of syphilis and a nonreactive nontreponemal test.

Nontreponemal and treponemal tests should be interpreted in the same manner regardless of **pregnancy** or **HIV** status.

Persons with reactive syphilis serologies should be evaluated for signs and symptoms of **neuro/otic/ocular syphilis**; if present, a lumbar puncture with cerebrospinal fluid (CSF) examination may be warranted. Additional details and review of supporting literature on syphilis laboratory testing such as **CSF**, **direct detection** (e.g., darkfield microscopy, nucleic acid amplification), or **serologic POC tests**, can be found on CDC's official Laboratory Recommendations for Syphilis Testing

CDPH released updated Recommendations for Syphilis Screening in October 2024. Additionally, the CDPH STD Control Branch can answer questions regarding syphilis test result interpretations by contacting stdcb@cdph.ca.gov, and the California Prevention Training Center (CAPTC) at the University of California San Francisco has resources for clinical interpretation of syphilis screening results and provides an online clinical consultation service for syphilis and other sexually transmitted infections.

As a reminder, per Title 17, California Code of Regulations 2500 requires every health care provider to report on a case or suspected case of syphilis, and 2505 requires laboratories to report initial findings as well as any subsequent findings to the local health officer for the local health jurisdiction in which the patient resides. Even if laboratory reports are automated, providers are still required to submit **Confidential Morbidity Reports** (CMRs) with additional patient and treatment information. Providing applicable information to the local health jurisdiction is required—see Healthcare Provider HIPAA Disclosure 2021 for additional details. Reports should include the entire set of treponemal and nontreponemal test results.

If you have any questions about this guidance, please reach out to stdcb@cdph.ca.gov.

Sincerely,

Kathleen Jacobson, MD

Chief, Office of STIs and HCV
California Department of Public Health

Table 1. Treponemal Tests

Test Acronym	Test Name (available commercial brands in US)	Mode of Test*	Algorithm (Testing Sequence$^{\delta}$)
EIA^{o}	Enzyme ImmunoAssay(s) - (ADVIA Centaur, Bioplex 2200 Syphilis IgG, Diasorin Liaison, Trep-Sure, INNO-LIA) - (Captia Syphilis IgG EIA, Trep-Sure EIA, Zeus Scientific EIA)	Automated (Automated) (Manual)	Reverse (1st)
CIA^{o}	Chemiluminescence ImmunoAssay	Automated	Reverse (1st)
TPPA^{o}	*T. pallidum* Particle Agglutination	Manual	Reverse (2nd)$^{\varphi}$
FTA-ABS	Fluorescent Treponemal Antibody-Absorption	Manual	Reverse (2nd)$^{\varphi}$
MFIA	Multiplex Flow (microbead) ImmunoAssays	Automated	Reverse (1st)
TPHA$^{\approx}$	*T. pallidum* Hemagglutination Assay	Manual	
MHA-TP$^{\approx}$	Micro Hemagglutination Assay for *T. pallidum* antibodies	Manual	
POC	Point of Care (serologic testing) -Syphilis Health Check (Diagnostics Direct) -Dual Path Platform (DPP) HIV-Syphilis Assay (Chembio Diagnostics) -First to Know over-the-counter (NOWDx)	Manual	
DBS	Dried Blood Spot tests	Both	

Table 2. Nontreponemal (lipoidal antigen) Tests

Test Acronym	Test Name	Mode of Test*	Algorithm as Initial Test
RPR^{o}	Rapid Plasma Reagin	Manual	Traditional
VDRL^{o}	Venereal Disease Research Laboratory	Manual	Traditional
TRUST$^{\approx}$	Toluidine Red Unheated Serum Test	Manual	
USR$^{\approx}$	Unheated Serum Reagin	Manual	

*This column depicts usual performance; however, many tests can be performed both manually and with automation

$^{\delta}$Common sequence of test performance per specified algorithm

^{o}Denotes the most commonly available and performed tests per specified algorithm

$^{\varphi}$In the reverse sequence algorithm, discordant results should be adjudicated by a second treponemal assay (TPPA preferred)

$^{\approx}$Not commonly used or no longer available in US

References:

1. CDC Laboratory Recommendations for Syphilis Testing, United States, 2024 |MMWR
2. Syphilis Health Check™ – Diagnostics Direct, LLC (diagnosticsdirect2u.com)
3. DPP® HIV Syphilis USA – Chembio Diagnostics, Inc.
4. Waived Tests | Laboratory Quality | CDC
5. Sexually Transmitted Infections Treatment Guidelines, 2021 | MMWR (cdc.gov)
6. Syphilis - STI Treatment Guidelines (cdc.gov)
7. California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations
8. First to Know syphilis test by NOWDiagnostics

Resources:

1. Clinical Interpretation of Syphilis Screening Algorithms - California PTC
2. CLIA-Waived Syphilis Point-of-Care Testing Options for Providers
3. Considerations for the Implementation of Point of Care Tests for Syphilis
4. STDCCN Ask Your Question
5. How to Report STDs with the CMR

State of California
Health and Human Services Agency

TOMÁS J. ARAGÓN, M.D., Dr.P.H.
State Public Health Officer & Director,

Gavin Newsom
Governor

California Department of Public Health

Health Update

TO: Healthcare Providers
California Department of Public Health (CDPH) Updates Syphilis Screening Recommendations
10/14/2024

Key Messages

- California is issuing updated syphilis serologic screening recommendations in response to rising syphilis and congenital syphilis (CS) rates in the state. These recommendations are applicable statewide, regardless of local case rates.
- All sexually active persons 15-44 years old, regardless of gender identity or sexual orientation, should now be screened for syphilis at least once in their lifetime. Following the initial screen, CDPH recommends that syphilis screening be offered annually.
- Syphilis testing should be included whenever a person of any age is tested for HIV or other sexually transmitted infections, including mpox.
- All pregnant persons should now be screened for syphilis three times: (1) at confirmation of pregnancy or first prenatal encounter, (2) early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and (3) at delivery.
- All persons 15-44 years old who enter a correctional facility should ideally be screened for syphilis at intake.
- Emergency departments and hospital-affiliated urgent care clinics should screen all pregnant persons for syphilis prior to discharge if syphilis test results are not available for the current pregnancy.
- CDPH encourages health care providers to empirically treat for syphilis while awaiting confirmatory testing, if clinically indicated, among persons who have preliminary positive treponemal or non-treponemal test results -- particularly if the likelihood of successful patient follow-up is uncertain.
- Table 1 below compares these updated recommendations to current Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis (CS) (PDF).

Table 1: Crosswalk comparing prior and updated CDPH syphilis screening recommendations

Population or Setting	Former CDPH Recommendations	Updated CDPH Recommendations (2024)
Sexually active people	All sexually active people who could become pregnant should receive at least one lifetime screen for syphilis, with additional screening for those at increased risk.	INCLUSIVE OF ALL GENDERS AND SEXUAL ORIENTATIONS: All sexually active persons 15-44 years old should be screened for syphilis at least once in their lifetime and be offered screening annually thereafter. More frequent screening should be considered for sexually active adults and adolescents of any age at increased risk of syphilis infection.
During other STI screening	All sexually active people who could become pregnant should be screened for syphilis at the time of each HIV test.	Syphilis testing should be included whenever a person of any age is tested for HIV or other sexually transmitted infections, including mpox.
Pregnant persons	All pregnant persons should be screened for syphilis at least twice during pregnancy: once at either confirmation of pregnancy or at the first prenatal encounter (ideally during the first trimester) – and again during the third trimester (ideally between 28-32 weeks gestation), regardless of whether such testing was performed or offered during the first two trimesters. Patients should be screened for syphilis at delivery except those at low risk who have a documented negative screen in the third trimester.	All pregnant persons, regardless of risk behaviors, should be screened for syphilis three times: 1. Once at confirmation of pregnancy or at the first prenatal encounter (ideally in the first trimester), 2. Early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and 3. Again at delivery.
Correctional facilities	All people who are or could become pregnant entering an adult correctional facility located in a local health jurisdiction with high-CS morbidity should be screened for syphilis at intake, or as close to intake as feasible.	All persons 15-44 year old who enter a correctional facility should ideally be screened for syphilis at intake. If not completed at intake, syphilis testing should be done as close to intake as possible or included as part of the initial medical examination/health appraisal.
Emergency departments & hospital-affiliated urgent care clinics	Emergency department (ED) providers in local health jurisdictions with high-CS morbidity should consider confirming the syphilis status of all pregnant patients prior to discharge, either via documented test results in pregnancy, or a syphilis test in the ED if documentation is unavailable.	REGARDLESS OF LOCAL CS RATES: Emergency departments and hospital-affiliated urgent care clinics should screen all pregnant persons for syphilis prior to discharge if syphilis test results are not available for the current pregnancy.

Background

In 2020, the California Department of Public Health (CDPH) Sexually Transmitted Diseases (STD) Control Branch released Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis (CS) (PDF)[1] to enable more timely identification of new syphilis infections in people who are or could become pregnant. Despite these efforts, syphilis rates in adults/adolescents and CS rose by 131 and 125 percent, respectively, from 2020 through 2022. CDPH STD Control Branch is thus releasing updated serologic screening guidelines to mitigate the ongoing syphilis and CS epidemics.

The purpose of this letter is to inform clinicians in California of updated syphilis serologic screening recommendations for pregnant and non-pregnant persons. Recommendations now apply statewide, regardless of local syphilis or CS case rates, and include people of all genders and sexual orientations.

Recommendations

1. All sexually active persons 15-44 years old, regardless of gender identity or sexual orientation, should now be screened for syphilis at least once in their lifetime. Following the initial screen, CDPH recommends that syphilis screening be offered annually to all sexually active people 15-44 years old. More frequent screening should be considered for sexually active adults and adolescents of any age at increased risk[i] of syphilis infection.
2. Syphilis testing should be included whenever a person of any age is tested for HIV or other sexually transmitted infections, including mpox.
3. All pregnant persons, regardless of risk behaviors, should be screened for syphilis three times:
    1. Once at confirmation of pregnancy or at the first prenatal encounter (ideally in the first trimester),
    2. Early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and
    3. Again at delivery[ii].
4. All persons 15-44 years old who enter a correctional facility should ideally be screened for syphilis at intake. If not completed at intake, syphilis screening should be done as close to intake as possible or included as part of the initial medical examination/health appraisal.
5. Emergency departments and hospital-affiliated urgent care clinics should screen all pregnant persons for syphilis prior to discharge if syphilis test results are not available for the current pregnancy.

Rationale

Recommendations #1 and #2: CDPH first recommends all sexually active persons 15-44 years old – regardless of sex listed at birth, gender identity, or sexual orientation – receive at least one lifetime screen for syphilis and be offered screening annually thereafter. This change aligns with a recent U.S. Centers for Disease Control and Prevention (CDC) recommendation to offer syphilis screening to all sexually active persons aged 15-44 years old in counties with a primary and secondary syphilis rate among women 15-44 years old that is greater than 4.6/100,000 population (CDC MMWR[2][3]) – a threshold derived from Healthy People 2030 (HP 2030) objectives[4]. Although CDC does not delineate a screening frequency, given California's high rates of syphilis and the fact that most individuals remain

sexually active throughout their lifetime, CDPH believes offering annual screening will identify syphilis infections and control the epidemic.

In California, the cumulative incidence of primary and secondary syphilis among women 15-44 years old (at 20.7/100,000 in 2022) far exceeds the HP 2030 threshold. This HP 2030 threshold is also exceeded in 48 of the state's 61 local health jurisdictions (with these 48 jurisdictions collectively encompassing 97.7% of California's male and female populations 15-44 years old in 2022), further supporting statewide implementation of at least one-time syphilis screening among all sexually active people 15-44 years old.

The expansion of syphilis screening to a minimum of one lifetime screen for sexually active people will also remove any requirement for patients to disclose or for clinicians to assess potentially stigmatizing sexual health risk factors and behaviors to determine eligibility for initial syphilis screening. Syphilis testing should also be included whenever a person of any age is tested for HIV or any other sexually transmitted infection (including mpox), given overlapping risk factors for these infections.

Of note, the recommendation for a minimum of one lifetime screening for syphilis is inclusive of males aged 15-44, regardless of the genders of their sex partners. Current CDC guidelines recommend screening asymptomatic men who have sex with women (MSW) for syphilis only if certain risk factors are present, including age less than 29 years old. However, in California from 2021-2023 the incidence of total syphilis among MSW was higher among men 30-34 and 35-39 years old (99.6 and 90.4/100,000 respectively) than it was among people younger than 29 years old (25–29-year-olds: 83.2/100,000; 20–24-year-olds: 45.5/100,000; 15-19 year olds: 12.2/100,000). During this same time, MSW 25-39 years old also had an incidence of syphilis that surpassed the cumulative incidence among the total population of men who have sex with men of any age (MSM) (73.8/100,000) – a population that, regardless of age, is currently recommended to receive more frequent screening (at least annually) per current California and CDC screening guidelines. In 2022, the rate of total syphilis among women 15-44 years old was 110.6/100,000 people, higher than the rates of total syphilis among MSW or MSM. Hence, performing at least one lifetime syphilis screening for MSW 15-44 years old, and offering annual screening thereafter, are data-driven approaches to the prevention and control of syphilis. CDPH also anticipates that screening MSW for syphilis has the potential to reduce syphilis transmission to people who are or could become pregnant.

This guidance regarding at least one lifetime syphilis screening for people aged 15-44 years old extends to non-binary populations, transgender women (TGW), transgender men (TGM), and other gender identities. While estimates of the rate of syphilis in these populations are difficult to determine because of limited population estimates, in 2022, the most recent year for which data were available, the rates of total early syphilis in transgender men and women were 29.2 and 423.2 cases per 100,000 people, with the rate of total early syphilis among TGW being 5.26 times the rate of cisgender men and the rate in TGM 1.5 times that of cisgender women. CDC recommends for trans/gender diverse individuals to consider screening at least annually based on reported sexual behaviors and exposure.

Following the initial screen, CDPH recommends that syphilis screening be offered annually to all sexually active people 15-44 years old. Offering annual screening is not a requirement to test but allows for a recurring discussion around syphilis screening between health care providers and patients, thereby facilitating access to screening when desired. Patients who are at lower risk of syphilis exposures may be more likely to opt out of annual screening, thereby increasing the positive predictive value of the screening tests when performed. This approach is likely to: (1) diagnose syphilis infections that would not have otherwise been identified, and (2) allow providers to identify syphilis more effectively when 15–44-year-olds present for care, since people in this age range are less likely to access care than their older counterparts.

Recommendation #3: For all pregnant persons, regardless of risk behaviors, CDPH now recommends screening for syphilis three times – once at confirmation of pregnancy or at the first prenatal encounter (ideally during the 1st trimester), early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and again at delivery. This change to universal three-time screening in pregnancy is consistent with new recommendations recently put forth in April 2024 by the American College of Obstetricians and Gynecologists (ACOG)[5] and is a practice already implemented in multiple other states (including but not limited to Alabama, Arizona, Georgia, New Jersey, North Carolina, and Texas), some of which had lower rates of CS in 2022 than California.

In 2022, over 98% of pregnancies in California were in local health jurisdictions that would have been screened for syphilis at delivery based on the previous 2020 syphilis screening guidelines. The purpose of changing to universal at-delivery screening is to simplify implementation since providers may not always know the syphilis rates in the counties where their patients (or their partners) live, thus making testing routine rather than risk-based. The goals of these updated pregnancy screening include: (1) detecting CS cases that may otherwise be missed, (2) providing prompt treatment, and (3) averting potential CS sequelae. Similar to CDC recommendations[6], CDPH continues to recommend that third trimester syphilis screening be done early in the third trimester – at approximately 28 weeks gestation or as soon as possible thereafter. Since syphilis treatment among pregnant persons must begin at least 30 days prior to delivery to prevent CS, screening as early as possible in the third trimester increases the likelihood of timely diagnosis and treatment to effectively prevent CS.

Recommendations #4 and #5: Finally, CDPH recommends dedicated syphilis screening in correctional facilities, emergency departments, and hospital-affiliated urgent care clinics – regardless of local CS rates – because these facilities serve as vital touchpoints for patients who may not otherwise have regular access to healthcare.

In correctional settings, CDPH now recommends that all persons 15-44 years old should ideally be screened for syphilis at intake. If not completed at intake, syphilis screening should be done as close to intake as possible or included as part of the initial medical examination/health appraisal. This builds on the previous CDPH screening recommendation (which focused on incarcerated persons who are or may become pregnant) and reflects the new recommendation to offer annual screening for all sexually active persons 15-44 years old. This new recommendation also prioritizes screening in a population that can experience barriers to routine preventive care.

In emergency departments and hospital-affiliated urgent care clinics, CDPH now recommends screening all pregnant persons for syphilis prior to discharge if syphilis test results are not available for the current pregnancy. Inadequate screening is the most frequently identified missed opportunity for CS prevention in pregnant persons (CDC MMWR[2]); emergency departments and urgent care clinics may be the only place where pregnant persons with otherwise limited healthcare access encounter the medical system. From 2020 to 2023, 288 (24 percent) of 1204 interviewed pregnant people with syphilis in California reported accessing healthcare in emergency departments during their pregnancy, underscoring the fact that emergency departments and hospital-affiliated urgent care clinics can be a crucial safety net for equitable syphilis diagnosis, treatment, and linkage to care.

Additional notes on syphilis screening: Opt-out testing and use of rapid tests (PDF) [7] may increase screening uptake, and either the traditional or reverse sequence screening algorithm (PDF) [8] can be used. Both algorithms have upsides and downsides: the traditional algorithm may be less sensitive in detecting early or late latent syphilis, while the reverse sequence algorithm may have more false positives in populations with lower prevalence of syphilis [9]. Regardless of screening algorithm selected, CDPH encourages health care providers to empirically treat for syphilis while awaiting

confirmatory testing, if clinically indicated, among persons with preliminary positive treponemal or non-treponemal test results -- particularly if the likelihood of successful patient follow-up is uncertain.

Conclusion: CDPH appreciates your attention to these further expanded California syphilis screening recommendations as health care providers and public health practitioners work together to stem the syphilis and CS epidemics in our state. Clinicians should otherwise continue to adhere to all CDPH sexually transmitted infection (STI), human immunodeficiency virus (HIV), and hepatitis C virus screening guidelines[10].

References

[1] CDPH STD Control Branch. Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis (PDF). Accessed May 10th 2024.

[2] McDonald et al. Vital Signs: Missed Opportunities for Prevention Congenital Syphilis – United States, 2022. MMWR November 17, 2023 / 72(46);1269–1274. Accessed May 10, 2024.

[3] CDC County Level Syphilis Rates to Direct Screening Efforts. Accessed June 17, 2024

[4] US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2030: Reduce the Syphilis Rate in Females – STI-03. Accessed May 10, 2024.

[5] American College of Obstetricians and Gynecologists. Practice Advisory: Screening for Syphilis in Pregnancy. April 2024. Accessed May 10, 2024.

[6] CDC. Screening Recommendations and Considerations Referenced in the Treatment Guidelines and Original Sources. Accessed May 20, 2024.

[7] National Syphilis and Congenital Syphilis Federal Task Force. Considerations for Implementation of Point of Care (POC) Tests for Syphilis (PDF). Accessed June 14, 2024.

[8] California Prevention Training Center at the University of California San Francisco. Clinical Interpretation of Syphilis Screening Algorithms (PDF). Accessed June 6, 2024.

[9] Papp et al. CDC Laboratory Recommendations for Syphilis Testing, United States, 2024. MMWR Recomm Rep. 2024 Feb 8;73(1):1-32. Accessed July 11, 2024.

[10] CDPH STD Control Branch. California STI Screening Recommendations. Accessed May 10, 2024.

[i]Individuals at increased risk for syphilis include men who have sex with men, persons with HIV or on HIV pre-exposure prophylaxis, pregnant people with late or limited prenatal care, and people experiencing homelessness or unstable housing, methamphetamine use, incarceration (within past year), or with a new/recent STI diagnosis.

[ii] California Health and Safety Code 120685(a) requires “every licensed health care professional engaged in providing prenatal care or attending a birthing patient at the time of delivery” to provide syphilis screening as outlined in the most recent CDPH guidelines.

California Department of Public Health
PO Box, 997377, MS 0500, Sacramento, CA 95899-7377
Department Website (cdph.ca.gov)

Primary/Secondary Syphilis Evaluation

Evaluating Patients For Primary Syphilis

SEXUAL HISTORY, RISK ASSESSMENT, & PHYSICAL EXAM

Sexual History, Risk Assessment (past year)
- Gender of partners, number of partners (new, anonymous, serodiscordant HIV status, exchange of sex for drugs or money)
- Types of sexual exposure
- Recent STDs; HIV serostatus
- Substance abuse
- Condom use

History of Syphilis
- Prior syphilis (last serologic test & last treatment)

Physical Exam
- Oral cavity
- Lymph nodes
- Skin
- Palms & soles
- Neurologic
- Eyes
- Genitalia/pelvic
- Perianal

DIAGNOSTIC ISSUES IN PRIMARY SYPHILIS

- **Darkfield** ~ 80% sensitive, varies with skill of examiner; decreased sensitivity as lesion ages
- A negative RPR/VDRL does not exclude syphilis diagnosis; ~75-85% sensitive in primary syphilis
- Use same test (RPR or VDRL) in sequential testing; titers are not interchangeable
- Need both non-treponemal (RPR or VDRL) and treponemal test (TP-PA, FTA-ABS, EIA, CIA) to make syphilis diagnosis
- Treponemal tests can remain positive for life; utility limited in patients with history of prior syphilis, comparison of non-treponemal titers needed
- RPR/VDRL titer interpretation should be taken in context of prior titers, clinical scenario and documented treatment history

Note: Evaluate for neurosyphilis (assess if neurologic, ophthalmic or otic symptoms present, as neurosyphilis can occur at any stage of syphilis)

TREATMENT & FOLLOW-UP

Treatment of Primary Syphilis

Recommended Regimen

- Benzathine Penicillin G 2.4 million units IM x 1

Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:

Efficacy not well established & not studied in HIV+ patients; close follow-up essential:

- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks

*Pregnant patients with penicillin allergy should be desensitized and treated with penicillin

See CDC STD Treatment Guidelines: www.cdc.gov/std/treatment

California STD Treatment Guidelines Grid:
https://bit.ly/CAstiguide

****Additional Testing and Follow-up**

Note: Also test for HIV, GC/CT, and pregnancy (if female of reproductive age)

- 1-2 weeks: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for HIV+ patients
- 6, 12 months: serologic follow-up for HIV- patients
- Failure of titer to decline fourfold (e.g. 1:64 to ≤ 1:16) within 6-12 months from titer at time of treatment may indicate treatment failure. Titer decline may be slower in HIV+ patients.
- Consider retreatment and CSF evaluation if titer fails to decline appropriately

REPORTING & PARTNER MANAGEMENT

- All syphilis cases and presumptive cases must be reported to the local health department within one working day of diagnosis
- Local health departments will assist in partner notification & management
- Contact Number at Local Health Department: _____

Patient with new genital lesion or suspicious genital ulcer

SEXUAL HISTORY, RISK ASSESSMENT, & PHYSICAL EXAM

DIAGNOSTIC WORK-UP
- Darkfield (if available)
- Stat RPR (if available)
- RPR or VDRL serology (quantitative)
- Treponemal test[1] (TP-PA/FTA-ABS/EIA/CIA)
- Herpes culture or PCR[2]
- HIV Test

Darkfield
- POSITIVE → **Primary Syphilis[3]**: Treat, obtain quantitative RPR and treponemal tests on treatment date, report to health department, partner management, & follow-up.
- NEGATIVE OR UNAVAILABLE → **Stat RPR**
  - REACTIVE → **Presumptive Primary Syphilis[3]**: Treat, obtain quantitative RPR and treponemal tests on treatment date, report to health department, partner management, & follow-up. (If stat RPR non-reactive, repeat RPR 2 weeks after treatment.)
  - NON-REACTIVE OR UNAVAILABLE → **Risk factors or high clinical suspicion (e.g., MSM)[4]**
    - YES → **Presumptive Primary Syphilis[3]** (same as above)
    - NO → Obtain treponemal and non-treponemal tests at the same time.

Obtain treponemal and non-treponemal tests at the same time.

- **RPR+/RPR TP-PA +** → **Primary Syphilis[3] or Presumptive Primary Syphilis[3,5] with RPR**: Treat, obtain quantitative RPR on treatment date, report to health department, partner mangement, & follow-up. *If RPR non-reactive*, repeat RPR 1-2 weeks after treatment.
- **RPR + TP-PA** → Repeat RPR/VDRL 2 - 4 weeks after initial visit. If reactive, then repeat TP-PA or FTA-ABS. If repeat TP-PA/FTA-ABS is negative, then RPR/VDRL is likely biologic false positive. Consider other etiologies.
- **RPR TP-PA** → Repeat RPR/VDRL 2 - 4 weeks after initial visit. If reactive, repeat TP-PA or FTA-ABS. Consider other etiologies.
- **EIA/CIA[5]**
  - NON-REACTIVE → Repeat EIA/CIA test 2 - 4 weeks after initial visit. Consider other etiologies.
  - REACTIVE → **Quantitative RPR/VDRL**
    - REACTIVE → **Primary Syphilis[3]**: Treat, obtain quantitative RPR on treatment date, report to health department, partner management, & follow-up.
    - NON-REACTIVE → **TP-PA**
      - REACTIVE → **Presumptive Primary Syphilis with RPR – [3,5]**: Treat, obtain quantitative RPR on treatment date, report to health department, partner management, & follow-up. Repeat RPR 2-4 weeks after treatment.
      - NON-REACTIVE → Reassess patient. If alternate diagnosis favored or confirmed by laboratory testing, no further action. If clinical suspicion for syphilis persists then treat, obtain quantitative RPR on treatment date, report to health department, partner management, & follow-up. If treatment date RPR negative, repeat RPR 2-4 weeks after treatment.

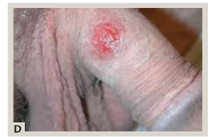
[1] Treponemal tests may be more sensitive than non-treponemal tests during primary syphilis.
[2] Also consider culture for Haemophilus ducreyi (chancroid) if exposure in endemic areas or if lesion does not respond to syphilis treatment.
[3] All patients with suspected syphilis should be tested for HIV infection and screened for other STDs. Repeat HIV testing of patients with primary syphilis 3 months after the first HIV test, if the first test is negative.
[4] If the patient is a man who has sex with men (MSM) or has high risk sexual behavior or clinical exam with classic features of a syphilitic ulcer, then standard of care includes presumptive treatment at the time of the inital visit before diagnostic test results are available. Presumptive treatment is also recomended if patient follow-up is a concern.
[5] If the patient does not respond to treatment, repeat RPR/VDRL after treatment and consider other etiologies.

CLINICAL PRESENTATIONS OF PRIMARY SYPHILIS

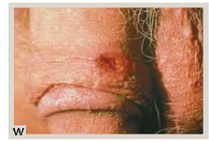
- Lesion appears 10-90 days after contact at site of exposure; may persist for 2-3 weeks then resolves
- Usually genitorectal but may be extragenital, depending on exposure site
- Clinical presentation, typical or atypical
- Typical: single painless, indurated, clean-based ulcer with rolled edges & bilateral painless adenopathy
- Atypical: can mimic herpes & other genital ulcers
- ~25% present with multiple lesions
- Lesions of primary and secondary syphilis can be present at the same time, especially in HIV positive individuals

Differential Diagnosis

- Herpes (most common), primary HIV ulcers, chancroid, granuloma inguinale, trauma, and many non-STD infectious and non-infectious causes of genital ulcers
- More than one etiology can be present at the same time



Syphilitic Ulcer, Shaft



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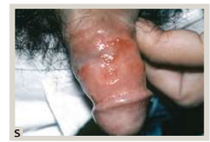
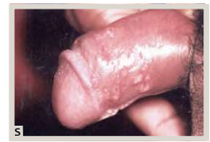
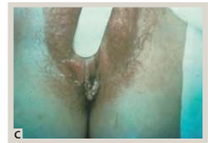


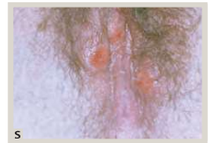
Multiple Syphilitic Ulcers, Shaft



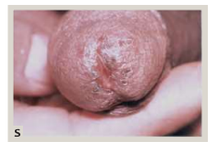
Multiple Syphilitic Ulcers Resembling Herpes



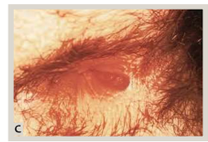
Syphilitic Ulcer, Vulva



Multiple Syphilitic Ulcers, Vulva



Crusted Syphilitic Ulcer, Urethra



Syphilitic Ulcer, Perianal

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Acknowledgements
Medical Directors from the National Network of STD Clinical Prevention Training Centers, California STD Controllers Association, Division of STD Prevention of the Centers for Disease Control and Prevention

Revised 7/2024

California PTC

Evaluating Patients For Secondary Syphilis

SEXUAL HISTORY, RISK ASSESSMENT & PHYSICAL EXAM

Sexual History, Risk Assessment (past year)
- Gender of partners
- Number of partners (new, anonymous, serodiscordant HIV status, exchange of sex for drugs or money)
- Types of sexual exposure
- Recent STDs; HIV serostatus
- Substance abuse
- Condom use

Physical Exam
- Oral cavity
- Lymph nodes
- Skin
- Palms & soles
- Neurologic
- Eyes
- Genitalia/pelvic
- Perianal

History of Syphilis
- Prior syphilis (last serologic test & last treatment)

DIAGNOSTIC ISSUES IN SECONDARY SYPHILIS

- RPR/VDRL ~100% sensitive in secondary syphilis
  - Rare caveat: prozone reaction, false negative RPR/VDRL from excess antibody interfering with antibody/antigen reaction
  - Prozone occurs <1% of secondary syphilis cases; if suspected ask lab to dilute serum to at least 1/16
- Use same test (RPR or VDRL) in sequential testing; titers are not interchangeable
- Need both non-treponemal (RPR or VDRL) and treponemal test to make syphilis diagnosis
- Treponemal tests (TP-PA, FTA-ABS, EIA, CIA) can remain positive for life; utility limited in patients with history of prior syphilis, comparison of non-treponemal titers needed
- RPR/VDRL titer interpretation should be taken in context of prior titers, clinical scenario and documented treatment history

Note: Evaluate for neurosyphilis (assess if neurologic, ophthalmic, or otic symptoms present, as neurosyphilis can occur at any stage of syphilis)

TREATMENT & FOLLOW-UP

Treatment of Secondary Syphilis

Recommended Regimen
- Benzathine Penicillin G 2.4 million units IM x 1

Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:
Efficacy not well established & not studied in HIV+ patients; close follow-up essential:
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks

*Pregnant patients with penicillin allergy should be desensitized and treated with penicillin

See CDC STD Treatment Guidelines: www.cdc.gov/std/treatment

California STD Treatment Guidelines Grid:
https://bit.ly/CAstiguide

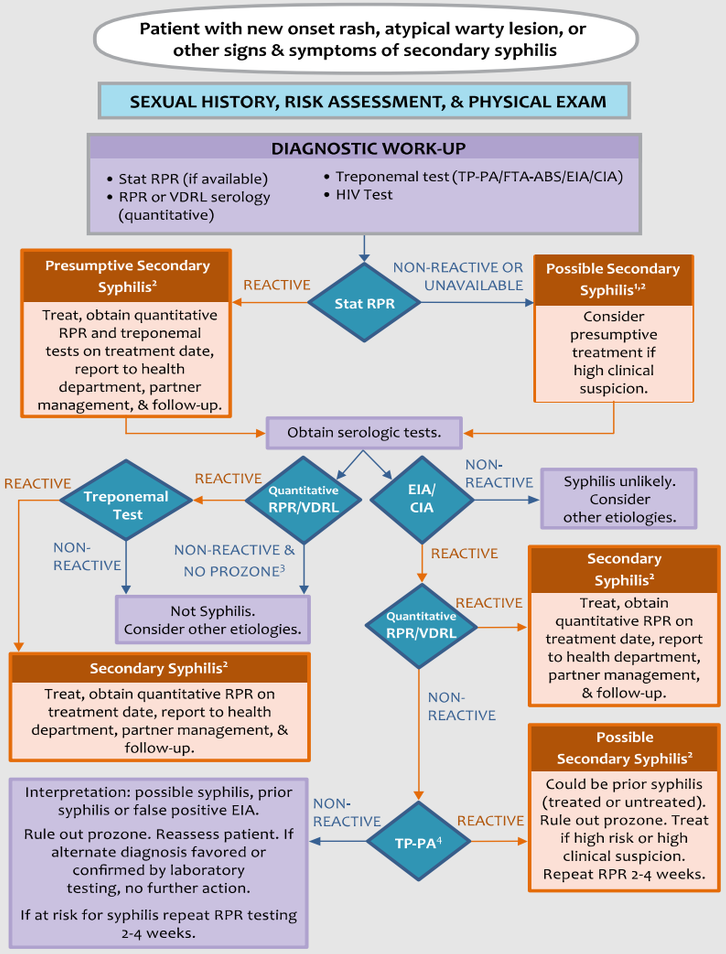
****Additional Testing and Follow-up**
Note: Also test for HIV, GC/CT, and pregnancy (if female of reproductive age)

- 1-2 weeks: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for HIV+ patients
- 6, 12 months: serologic follow-up for HIV- patients
- Failure of titer to decline fourfold (e.g. 1:64 to ≤1:16) within 6-12 months from titer at time of treatment may indicate treatment failure. Titer decline may be slower in HIV+ patients.
- Consider retreatment and CSF evaluation if titer fails to decline appropriately

Refer to CDC Treatment Guidelines for management of treatment failure & consult the STD Clinical Consultation Network at www.STDCCN.org

REPORTING & PARTNER MANAGEMENT

- All syphilis cases and presumptive cases must be reported to the local health department within one working day of diagnosis
- Local health departments will assist in partner notification & management
- Contact Number at Local Health Department: _____

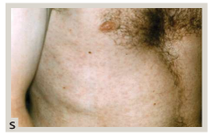


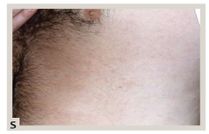
[1] If the patient is a man who has sex with men (MSM) or clinical exam with classic features of secondary syphilis, consider presumptive treatment at the time of initial visit before the diagnostic tests results are available. Presumptive treatment is also recomended if patient follow-up is a concern.
[2] All patients with secondary syphilis should be tested for HIV infection and screened for other STDs. Repeat HIV testing of patients with secondary syphilis 3 months after the first HIV test, if the first test is negative.
[3] Prozone reaction is a false negative RPR or VDRL from excess antibody interfering with the antigen-antibody reaction.
[4] FTA-ABS is no longer considered the gold standard treponemal test given concerns regarding specificity. TP-PA should be used for a second treponemal test when EIA/CIA is reactive and RPR is non-reactive.

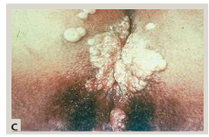
CLINICAL PRESENTATIONS OF SECONDARY SYPHILIS

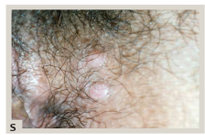
- Symptoms typically occur 3-6 weeks after primary stage (can overlap with primary); resolve in 2-10 weeks
- 25% may have relapse of signs & symptoms in first year

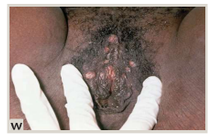
Signs & Symptoms of Secondary Syphilis
- **Rash:** most common feature (75-90%); can be macular, papular, squamous (scale), pustular (rare), vesicular (very rare) or combination; usually nonpruritic; may involve palms & soles (60%)
- **Lymphadenopathy:** (70-90%); inguinal, epitrochlear, axillary & cervical sites most commonly affected
- **Constitutional Symptoms:** (50-80%); malaise, fever
- **Mucous Patches:** (5-30%); flat gray-white patches in oral cavity & genital area
- **Condyloma Lata:** (5-25%); moist, heaped, wart-like lesions in genital, peri-rectal & rectal areas, & oral cavity
- **Alopecia:** (10-15%); patchy hair loss, loss of lateral eyebrows
- **Neurosyphilis:** (<2%); visual loss, hearing loss, cranial nerve palsies among other

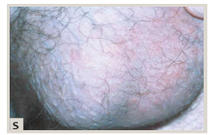

Maculopapular Rash

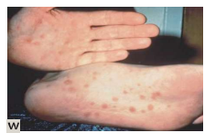

Subtle Macular Rash


Condyloma Lata

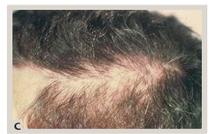

Condyloma Lata


Condyloma Lata

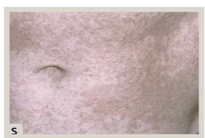

Subtle Scrotal Rash

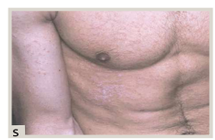

Macular Rash

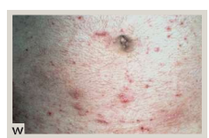

Mucous Patches


Alopecia

Differential Diagnosis of the rash of secondary syphilis includes: pityriasis rosea, psoriasis, erythema multiforme, tinea versicolor, scabies, drug reaction, primary HIV infection


Drug Reaction


Guttate Psoriasis


Scabies

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Acknowledgements: Medical Directors from the National Network of STD Clinical Prevention Training Centers, California STD Controllers Association, Division of STD Prevention of the Centers for Disease Control and Prevention
Revised 7/2024

California PTC

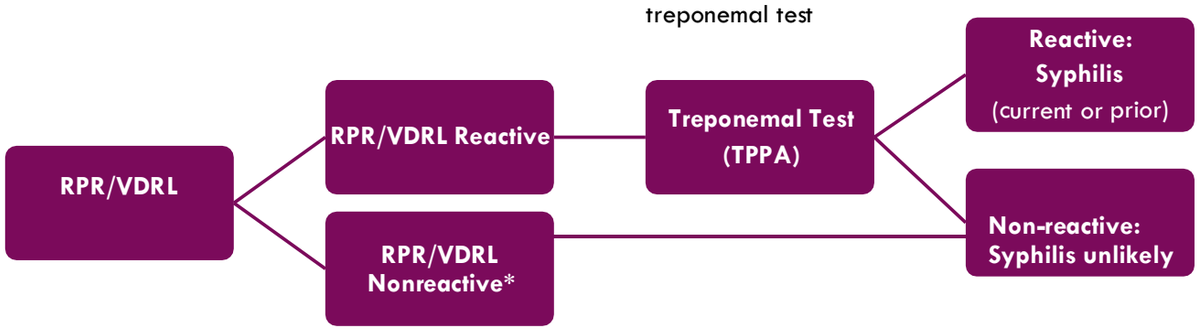
Clinical Interpretation of Syphilis Screening Algorithms

Clinical Interpretation of Syphilis Screening Algorithms

Testing: Traditional Algorithm[a]

1. Screen with non-treponemal test (RPR/VDRL)

2. Confirm reactive non-treponemal test with treponemal test



*Early primary syphilis and late untreated syphilis possible if RPR/VDRL are nonreactive; see below for recommended actions

Table 1: Interpretation of Syphilis Serologies, Traditional Algorithm

Non-Treponemal (RPR/VDRL)	Treponemal (TPPA)	Possible Interpretations	Recommended Actions
Nonreactive	Nonreactive or not done	1. No syphilis 2. Early/incubating syphilis (too early to be detected by serology)	▪ If syphilis unlikely, no further action needed. ▪ If early syphilis suspected, consider ordering a treponemal test (if not done initially) and repeating an RPR/VDRL in 1-2 weeks; if either test is reactive, treat for syphilis. ▪ If concerned for early syphilis (e.g., chancre present or known exposure) treat presumptively. If treating presumptively, repeat RPR/VDRL on day of treatment and, if nonreactive, again in 2-4 weeks to assess for seroconversion.
	Reactive	1. Prior treated syphilis 2. Untreated syphilis	▪ Treponemal tests (e.g., TPPA) often stay reactive for life; if patient has a history of adequate treatment for syphilis & no new exposures/ symptoms, no further action needed. ▪ If early syphilis suspected (e.g., chancre present or known exposure), treat presumptively according to stage. If treating presumptively, repeat RPR/VDRL on day of treatment and, if nonreactive, again in 2-4 weeks to assess for seroconversion. ▪ If no signs or symptoms, order a second treponemal test (e.g., EIA or CIA); see table 2 for recommendations based on results.
Reactive	Nonreactive	1. False positive RPR or VDRL	▪ Likely false positive (not syphilis).[b] ▪ In pregnancy or in patients at high risk for syphilis, consider rescreening with serologic testing in 2-4 weeks – if unchanged, no action needed.[c]
	Reactive	1. Current syphilis 2. Treated syphilis with residual/ persistent RPR/VDRL titer	▪ If RPR/VDRL is newly reactive, stage and treat. ▪ If previously treated and sustained (≥2 weeks) 4-fold rise in RPR/VDRL titer, manage as treatment failure versus re-infection.[d] ▪ Note that RPR/VDRL may still be reactive after treatment; if there is a fourfold decline within 12-24 months, treatment is considered to have been adequate even if RPR/VDRL remains reactive. ▪ Some treated patients may have a persistent low level RPR/VDRL titer for a prolonged period; re-treatment is not necessary in the absence of new exposures or symptoms.

[a] The traditional algorithm starts with a non-treponemal test (RPR or VDRL) which, if reactive, is followed by a confirmatory treponemal test (TPPA). In interpreting serologies, it is helpful to know which testing algorithm (traditional vs reverse) is being used in your lab.

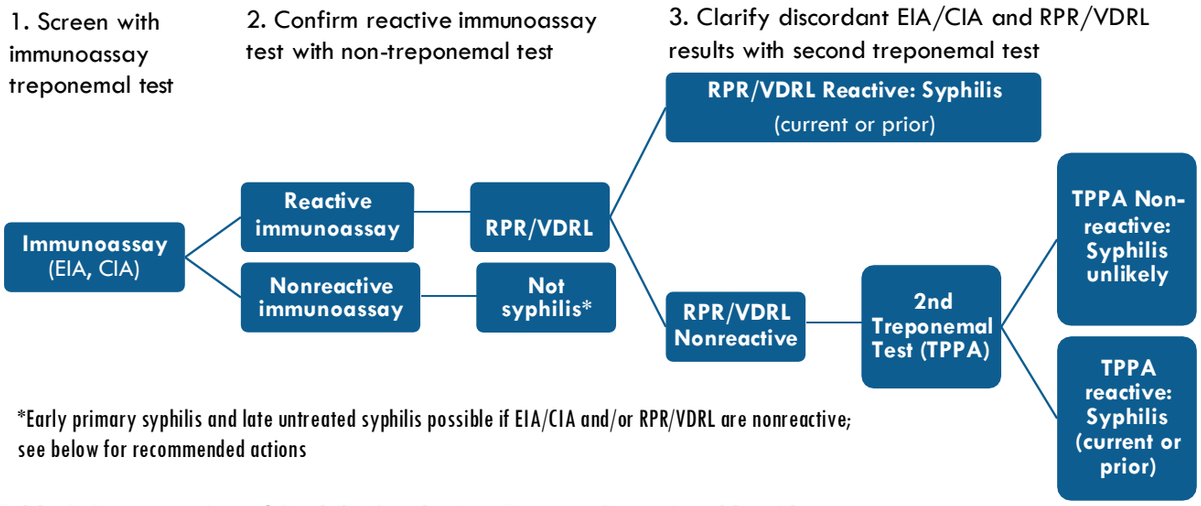
[b] False positives can be seen in pregnancy and/ in patients with autoimmune diseases, Lyme disease, certain viral infections (including HIV), injection drug use, and other conditions.

[c] In California, all pregnant people should be screened for syphilis three times during pregnancy: (1) at confirmation of pregnancy or first prenatal encounter, (2) early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and (3) at delivery. The American College of Obstetrics and Gynecology also recommends screening all pregnant patients universally for syphilis three times: once at the first prenatal care visit, again during the third trimester, and again at birth.

[d] For patients determined to have new syphilis or treatment failure, refer to the Centers for Disease Control STD treatment guidelines at https://www.cdc.gov/std/treatment-guidelines/syphilis.htm for treatment and follow up recommendations.

Clinical Interpretation of Syphilis Screening Algorithms

Testing: Reverse Algorithm[a]



*Early primary syphilis and late untreated syphilis possible if EIA/CIA and/or RPR/VDRL are nonreactive; see below for recommended actions

Table 2: Interpretation of Syphilis Serologies, Reverse Screening Algorithm

Immuno-assay (CIA or EIA)	RPR/ VDRL	TPPA	Possible Interpretations	Recommended Actions
Non-reactive	Non-reactive or not done	Non-reactive or not done	1. Syphilis unlikely 2. Early/incubating syphilis (too early to be detected by serology)	▪ If syphilis unlikely, no further action needed. ▪ If immunoassay nonreactive but high clinical suspicion (such as a chancre or known exposure), treat presumptively for early syphilis. If treating presumptively, obtain RPR/VDRL on day of treatment and, if nonreactive, again in 2-4 weeks to assess for seroconversion.
Reactive	Non-reactive	Non-reactive or not done	1. False positive immunoassay 2. Early/incubating syphilis 3. Latent or prior syphilis (treated or untreated)	▪ If no signs/symptoms and low risk for syphilis, most likely a false positive immunoassay.[b] No further action needed. ▪ If concerned for early infection or in pregnant patients, re-screen in 2-4 weeks.[c] ▪ If signs/symptoms or contact to syphilis, treat presumptively. Repeat RPR/VDRL on day of treatment and, if nonreactive, again in 2-4 weeks to assess for seroconversion.
		Reactive	1. Latent or prior syphilis (treated or untreated) 2. Early syphilis (prior to RPR/VDRL seroconversion)	▪ No further action needed if patient treated appropriately for syphilis in past, assuming no new exposures/symptoms and a negative clinical exam. ▪ If no symptoms and no known prior adequate treatment, treat presumptively for latent syphilis. ▪ If early syphilis suspected (symptoms or known exposure), treat presumptively. Obtain RPR/VDRL on day of treatment. If nonreactive, repeat in 2-4 weeks to assess for seroconversion.
	Reactive	Not done or Reactive	1. Current syphilis 2. Prior syphilis (treated or untreated)	▪ If RPR/VDRL is newly reactive, stage and treat. ▪ If previously treated and sustained (≥2 weeks) 4-fold rise in RPR/VDRL titer, manage as treatment failure versus re-infection.[d] ▪ If known prior adequate treatment for stage of infection and RPR/VDRL declining appropriately (i.e., a fourfold decline within 12-24 months), no further action needed. ▪ Some treated patients may have a persistent low level RPR/VDRL titer for a prolonged period; re-treatment is not necessary in the absence of new exposures or symptoms.

[a] The reverse algorithm starts with an immunoassay detecting syphilis antibodies which, if reactive, is followed by an RPR/VDRL. If there is a discrepancy between the immunoassay and RPR (one reactive, one nonreactive), a treponemal test (TPPA) serves as the tie-breaker. In interpreting serologies, it is helpful to know which testing algorithm (traditional vs reverse) is being used in your lab.

[b] False positive immunoassays can occur with Lyme disease or non-syphilis treponemal infections.

[c] In California, all pregnant people should be screened for syphilis three times during pregnancy: (1) at confirmation of pregnancy or first prenatal encounter, (2) early in the third trimester (at approximately 28 weeks gestation or as soon as possible thereafter), and (3) at delivery. The American College of Obstetrics and Gynecology also recommends screening all pregnant patients universally for syphilis three times: once at the first prenatal care visit, again during the third trimester, and again at birth.

[d] For patients determined to have new syphilis or treatment failure, refer to the Centers for Disease Control STD treatment guidelines at https://www.cdc.gov/std/treatment-guidelines/syphilis.htm for treatment and follow up recommendations.

Prenatal Syphilis Treatment Guidelines

Treatment Intervals for Pregnant Patients with Syphilis of Late Latent or Unknown Duration: Clinical Recommendations for California Providers

During pregnancy, the only recommended treatment for late latent syphilis or syphilis of unknown duration is benzathine penicillin G (BPG, also known as Bicillin L-A), administered as 3 intramuscular (IM) doses of 2.4 million units (mu), each ideally given at 7-day intervals (for a total of 7.2 mu). If strict 7-day intervals are not possible, and there are too many or too few days between BPG injections, the full 3 dose treatment series may need to be restarted. This document shares California Department of Public Health (CDPH) clinical recommendations for managing cases when BPG dosage intervals are less or greater than 7 days when treating pregnant patients with syphilis of late latent/unknown duration syphilis. CDPH recommendations regarding BPG treatment intervals in non-pregnant patients are available separately.

CDPH recommends adhering to strict 7-day BPG treatment intervals when treating pregnant patients with syphilis of late latent/unknown duration.

To eradicate the bacteria that cause late-latent syphilis, a minimum serum penicillin concentration of 0.03 IU/ml (0.018 ug/ml) must be sustained over 21 days, and not be interrupted for more than 24-30 hours.[1] Among non-pregnant patients, pharmacologic data suggest that treatment intervals of 7-9 days between each 2.4 mu BPG injection are preferable to achieve uninterrupted serum concentrations at the desired level for the full 21-day treatment period.[2,3] In pregnancy, however, physiologic changes—such as increased blood volume, cardiac output, renal blood flow, creatinine clearance, and total body water, combined with decreased plasma protein concentrations—are likely to result in lower serum penicillin concentrations and fewer days of adequate penicillin coverage per BPG injection.[4] For these reasons, and because robust pharmacologic data are lacking among pregnant patients, CDPH recommends making every effort to adhere to strict 7-day BPG treatment intervals when treating pregnant patients with syphilis of late latent/unknown duration.

Based on an analysis of available California data, 6-8 day BPG treatment intervals (i.e., 7-day intervals plus or minus one day on either side) may be effective when strict 7-day intervals are not possible.

California data indicates that 6-8-day BPG treatment intervals are likely effective for the purposes of preventing congenital syphilis (CS) in cases where strict 7-day intervals are not possible. A prior study[5] used state STD surveillance data to identify mother/infant dyads in which pregnant patients with late latent syphilis or syphilis of unknown duration received either: (1) BPG dosed as three weekly IM injections at strict 7-day intervals, (2) BPG dosed as three weekly IM injections in which at least one interval was at 6-8-days, or (3) no/inadequate treatment. The authors found that the odds of CS in infants whose parents were treated at 6-8-day intervals were equivalent to those whose parents received treatment at strict 7-day intervals (odds ratio 1.0; 95 percent confidence interval 0.4-3.0). In contrast, infants born to pregnant patients with no/inadequate treatment in pregnancy had much higher odds of CS (odds ratio 9.8, 95 percent confidence interval 6.6-14.7).

Intervals longer than 8 days may be less effective in preventing CS; therefore, CDPH does not recommend this approach.

CDC 2021 STI treatment guidelines[6] for pregnant patients state that missed doses >9 days between BPG injections are not acceptable – thus implying that 9-day intervals may be acceptable. CDPH data, however, suggest 9-day intervals may be insufficient to prevent CS. A more recent California study[7] compared mother/infant dyads in which the mother had late latent syphilis or syphilis of unknown duration in pregnancy and received: (1) BPGx3 dosed at either 6-8-or 7-day intervals, (2) BPGx3 with at least one 9-day interval (and no intervals outside 6-9-days), or (3) no/inadequate treatment. In this analysis, odds of CS were nearly four-fold higher among dyads who received BPGx3 with a 9-day interval compared with those treated at 7- or 6-8-day intervals (Odds ratio 3.7, 95 percent confidence interval 1.2-11.6). While larger studies with higher statistical power are needed, these findings hint that BPG intervals longer than 8 days may be less effective in preventing CS. For this reason, CDPH does not recommend using 9-day BPG treatment intervals in pregnancy. If patients are treated in pregnancy with 9-day intervals, CDPH recommends re-treatment, ideally using 7-day intervals (with 6–8-day intervals being acceptable).

The following table summarizes CDPH STD Control Branch recommendations for BPG treatment intervals for syphilis of late latent/unknown duration in pregnancy.

Summary of BPG Treatment Intervals for the Treatment of Late Latent Syphilis or Syphilis of Unknown Duration in Pregnant Patients:

Time interval between BPG injections	Categorization	Notes
7 days (exactly)	Ideal	• Strict 7-day intervals are best for treatment of late latent syphilis or syphilis of unknown duration. • Every effort should be made to use 7-day intervals for pregnant patients.
6-8 days	Acceptable	• California data suggests that infants are no more likely to meet criteria for congenital syphilis if pregnant patients are treated at 6–8-day intervals compared to 7-day intervals.[5]
9 days	Not recommended in California, despite being potentially permissible in CDC guidelines[6]	• California data indicates 9-day intervals may be less effective in preventing congenital syphilis. • CDPH recommends re-treatment, ideally at 7-day intervals (with 6–8-day intervals being acceptable). • If providers opt for 9-day intervals, a full CS workup for the infant at birth may be recommended (including lumbar puncture, blood draw, and long bone X-rays) as well as treatment with either IM or intravenous penicillin.
>9 days	Inadequate	• Retreatment recommended ideally at 7-day intervals (with 6-8-day intervals being acceptable).

For questions regarding recommended syphilis treatment in pregnant or non-pregnant patients, please contact the CDPH STD Control Branch via email (stdcb@cdph.ca.gov) or phone (510-620-3400). Questions can also be submitted online to the STD Clinical Consultation Network (stdccn.org), run by the California Prevention Training Center (CAPTC) at the University of California San Francisco. Also see the California STI Treatment Guidelines Table for Adults and Adolescents.[8]

Disclaimer: These guidelines are intended to be used as an educational aid to help clinicians make informed decisions about patient care. The ultimate judgment regarding clinical management should be made by the healthcare provider in consultation with their patient, in light of clinical data presented by the patient and the diagnostic and treatment options available. Further, these guidelines are not intended to be regulatory and not intended to be used as the basis for any disciplinary action against the healthcare provider.

References:

1. Ghanem K. Management of Adult Syphilis: Key Questions to Inform the 2015 Centers for Disease Control and Prevention Sexually Transmitted Diseases Treatment Guidelines. CID 2015 Dec 15;61 Suppl 8:S818-36.
2. Frentz G, et al. Penicillin concentrations in blood and spinal fluid after a single intramuscular injection of penicillin G benzathine. Eur J Clin Microbiol 1984 Apr;3(2):147-9.
3. Hagdrup HK, et al. Penicillin concentrations in serum following weekly injections of benzathine penicillin G. Chemotherapy 1986;32(2):99-101.
4. Nathan L, et al. Penicillin levels following the administration of benzathine penicillin G in pregnancy. Obstet Gynecol 1993; 82:338–42.
5. Johnson KA, et al. Comparing 7-Day Versus 6–8-Day Penicillin Treatment Intervals Among Pregnant People With Syphilis of Late or Unknown Duration: No Difference Found in Incidence of Congenital Syphilis. OFID 2023; 10(6):ofa300.
6. Centers for Disease Control and Prevention. 2021 STI Treatment Guidelines – Syphilis during Pregnancy. Available at: Syphilis During Pregnancy - STI Treatment Guidelines (cdc.gov).
7. Johnson KA, et al. Higher odds of congenital syphilis with 9 vs 7-day prenatal treatment intervals for late syphilis. Oral abstract presentation at: CROI 2025. 2025 March 11; San Francisco, CA.
8. CDPH STD Control Branch. California STI Treatment Guidelines Table for Adults and Adolescents. Available at: California STI Treatment Guidelines.

Congenital Syphilis

San Joaquin County Public Health Services
health grows here

A DIVISION OF HEALTH CARE SERVICES AGENCY

DATE: November 19, 2021
TO: Healthcare Providers
FROM: Dr. Maggie Park, Public Health Officer

Please distribute to all providers and relevant medical staff in your office.

HEALTH ADVISORY

Rising Rates of Syphilis and Congenital Syphilis

California has experienced an alarming increase in syphilis in recent years. This concerning trend has been accompanied by an increase in congenital syphilis cases. In 2019, 446 congenital syphilis cases were reported in California, the highest number of cases since 1993.

Incidence rates of syphilis and congenital syphilis in San Joaquin County have been significantly higher than state and national rates. In 2019:

- Rate of primary and secondary syphilis in San Joaquin County was 27.8 per 100,000 to rank 43rd among all counties *nationwide*—a 600% increase of syphilis from 2013.
- With 40 cases of congenital syphilis, San Joaquin County ranks 2nd among all counties in California—with 6.6 times the number of cases from 2013.

Prevention of congenital syphilis is an urgent public health matter. **Clinicians can prevent congenital syphilis by diagnosing and treating mothers without delay, as well as evaluating and treating their babies, per CDC STD Treatment Guidelines.**

ACTIONS REQUESTED OF CLINICIANS

- **Confirm HIV and syphilis status of all pregnant patients** with documented labs or providing opt-out HIV and syphilis testing for those receiving services at: emergency departments; urgent care clinics; jails; mental health, drug treatment, and syringe services programs; and street medicine or homeless outreach programs.

- **For all pregnant women, test for syphilis three times during pregnancies:** at the initial prenatal visit in the first trimester, during the third trimester, and again at delivery. Screen all women who have a still birth.

    - Treat syphilis in pregnant women as soon as infection is identified.
    - Penicillin (benzathine penicillin G [Bicillin LA] 2.4 mu IM) is the only therapy proven to be effective in pregnancy. Treatment at least 30 days before delivery is 98% effective at preventing congenital syphilis.
    - If a woman is allergic to penicillin, she must be de-sensitized prior to treatment with penicillin. Contact PHS if you have any treatment questions.

- **Screen asymptomatic adults at increased risk** due to a history of incarceration or commercial sex work, living in a low-income area in San Joaquin County, African American and Latino women, and male 30 years old and younger.

    - Men who have sex with men (MSM): At least annually, every 3-6 months if increased risk
    - Transgender and gender diverse people: Consider at least annually
    - Those on HIV PrEP: Every 3-6 months depending on risk (MSM Q3 months)
    - Persons with HIV: At first HIV evaluation; at least annually thereafter
    - Anyone diagnosed with chlamydia or gonorrhea

- **Report all syphilis cases to San Joaquin County Public Health Services (PHS) within one working day, as required by State law.**
    - Use the Confidential Morbidity Report (CMR) found at: www.sjcphs.org/disease/documents/cdph110a.pdf?2
    - Fax completed CMR to (209) 468-3495.

Additional Resources

California Guidelines for Screening and Treatment in Pregnancy:
www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CaliforniaSTD-Sxand-Tx-inPregnancy2017.pdf

CDPH Dear Colleague Letter – Call to Expand HIV and Syphilis Testing for Pregnant Women:
www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/DCL_perinatal_Nov_16_2021_final_ADA.pdf

For more information, call PHS Community Services at (209) 468-3845.

San Joaquin County Public Health Services

Provider Clinical Reference: CONGENITAL SYPHILIS

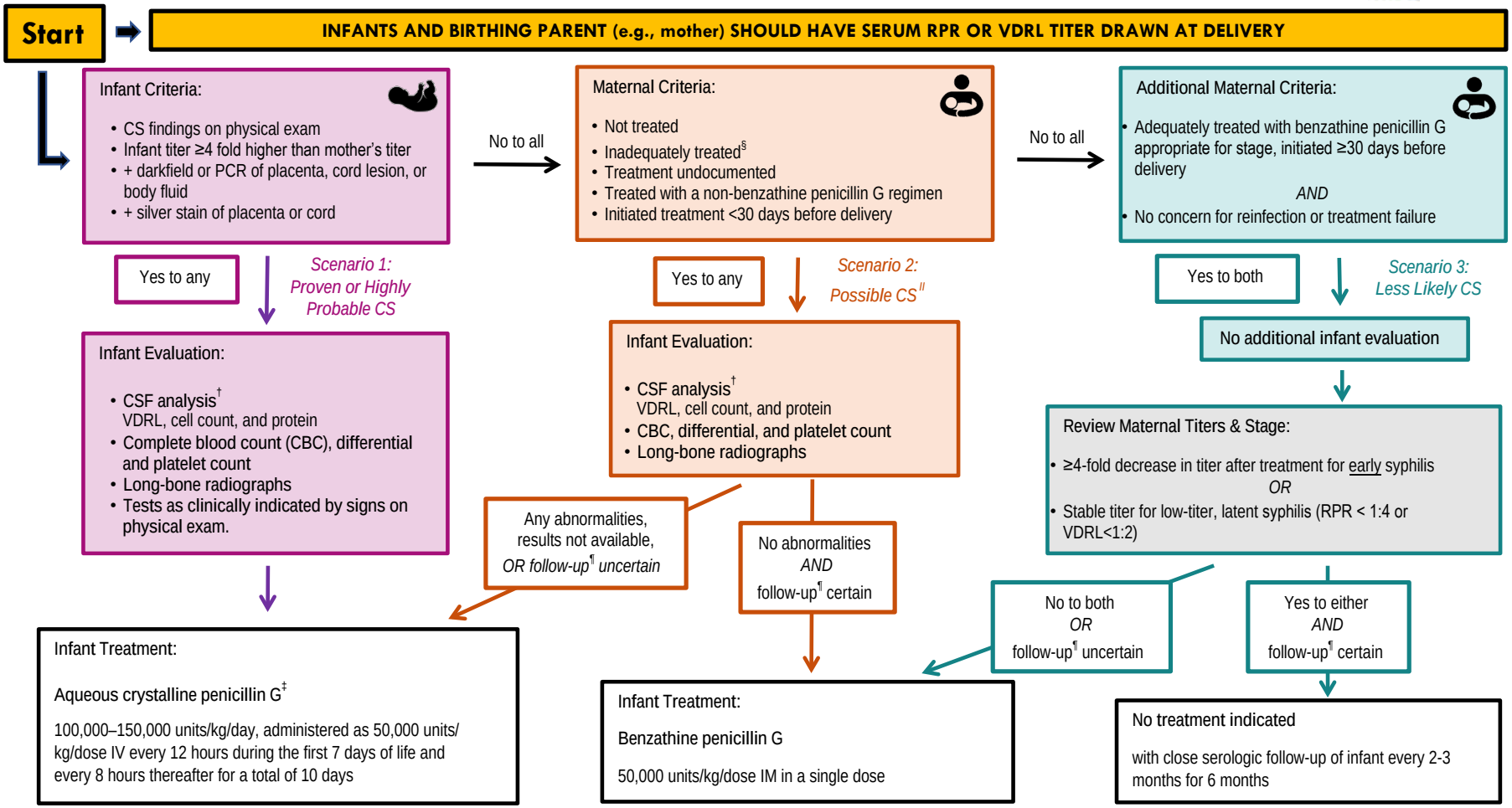
Congenital syphilis is a preventable condition that remains a serious public health crisis in San Joaquin County, largely due to missed or delayed prenatal screening and treatment. Without timely detection and intervention, congenital syphilis can lead to stillbirth, neonatal death, or severe lifelong complications in surviving infants. Early maternal screening, prompt treatment, and immediate reporting are essential to prevention

Clinical Presentation	**Early (<2 years):** ▪ Hepatosplenomegaly, jaundice, anemia, thrombocytopenia, nasal discharge ("snuffles"), rash (especially palms/soles), mucocutaneous lesions, bone changes (osteochondritis, periostitis), neurologic involvement, failure to thrive **Late (>2 years):** ▪ Hutchinson triad (interstitial keratitis, Hutchinson teeth, deafness), saber shins, saddle nose, frontal bossing, neurologic complications Congenital Syphilis
Who Should Be Screened	**Maternal Screening Recommendations** ▪ Universal screening at the 1st prenatal visit, the 3rd trimester (28–32 weeks), and at delivery ▪ Immediate testing for pregnant patients with no or late prenatal care **Infant Screening Recommendations** ▪ Maternal exposure to syphilis ▪ Infant, Maternal, or additional maternal criteria met ⚠ ***Congenital syphilis Evaluation and treatment of infants (<30 days old) exposed to syphilis in utero.***
Testing & Evaluation	**Non-treponemal tests** ▪ **RPR, VDRL:** Infant titer >4 fold higher than mother's titer **Lumbar Puncture** ▪ **CSF WBC:** > 15 cells/mm³ is consistent with congenital syphilis ▪ **CSF VDRL** **Additional Evaluations** ▪ Long-bone X-rays, ophthalmologic, and hearing evaluation as indicated Evaluation & Treatment
Treatment	**Proven or highly probable congenital syphilis** ▪ Aqueous crystalline penicillin G 100,000–150,000 units/kg/day IV divided q12h for the first 7 days of life, then q8h × 10 days **Possible congenital syphilis** ▪ Benzathine penicillin G 50,000 units/kg IM single dose ⚠ ***No infant should be discharged without documented maternal serology.***
Follow-up	▪ Repeat RPR titer at 3 months old. ▪ If Reactive, Repeat RPR titer every 2-3 months until nonreactive or 12 months old. ▪ Retreat for treatment failure if the titer is not non-reactive by 12 months old.
Reporting to Public Health	**Congenital Syphilis** *(suspected or confirmed)* is reportable in California Immediately report to San Joaquin County Public Health Services within **one (1) working day**: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information.* Report to SJCPHS

Congenital Syphilis Evaluation and Treatment

CONGENITAL SYPHILIS (CS)

Evaluation and treatment of infants (<30 days old) exposed to syphilis in utero*



* Scenario 4 – in which an infant at delivery has a normal physical exam and titer < 4-fold mother's titer, AND the mother was adequately treated prior to becoming pregnant and sustains RPR titers <1:4 or VDRL<1:2 throughout pregnancy – is not included.

† CSF test results obtained during the neonatal period can be difficult to interpret; normal values differ by gestational age and are higher in preterm infants.

‡ Alternative: Procaine penicillin G 50,000 units/kg/dose IM in a single daily dose for 10 days.

§ Benzathine Penicillin G (BPG or Bicillin-LA), administered according to stage of disease and initiated at least 30 days prior to delivery is the only adequate treatment for syphilis during pregnancy.

II Evaluation is not necessary if a 10-day course of parenteral therapy is administered, although such evaluations might be useful. If the neonate's nontreponemal test is nonreactive and the mother's risk for untreated syphilis is low, a single IM dose of BPG can be considered without evaluation.

¶ All neonates with reactive nontreponemal tests should receive careful follow-up examinations and serologic testing (i.e., a nontreponemal test) every 2–3 months until the test becomes nonreactive. Neonates with a negative nontreponemal test at birth whose mothers were seroreactive at delivery should be retested at 3 months to rule out serologically negative incubating congenital syphilis at the time of birth.

FOR MORE INFORMATION ABOUT SCENARIO 4 MANAGEMENT, TREATMENT OF SYPHILIS IN PREGNANCY, NEONATAL CSF INTERPRETATION, AND CS INFANT FOLLOW-UP, PLEASE REFER TO THE CDC 2021 STI TREATMENT GUIDELINES. Revised 2/2022

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Congenital Syphilis Evaluation and Treatment Guide

Congenital syphilis (CS) is a severe, preventable condition caused by transplacental transmission of Treponema pallidum from a pregnant woman with syphilis infection to a fetus. Early diagnosis and appropriate treatment are critical to prevent complications such as stillbirth, prematurity, neonatal death, and long-term disability. Congenital syphilis may be contracted at any stage of pregnancy or via contact with lesions at the time of delivery.

This interactive clinical reference is designed to support healthcare providers in delivering timely, evidence-based care for infants at risk for or diagnosed with congenital syphilis. It offers concise, easy-to-navigate guidance on evaluation, treatment, and follow-up, aligned with the most current national recommendations. Whether used at the bedside, during rounds, or as part of care planning, this tool serves as a quick reference to assist with clinical decision-making, streamline workflows, and promote best practices in neonatal care.

Please use the algorithm or table below to determine which evaluation and management path to follow.

Evaluation and Treatment of Infants Up To 1 Month of Age With Possible, Probable, or Confirmed Congenital Syphilis (Adapted from 2024 Red Book Table 3.72)

Proven or highly probable congenital syphilis	Abnormal physical examination consistent with congenital syphilis **OR** A serum quantitative nontreponemal serologic titer fourfold (or greater) higher than the birthing parent's titer at delivery (eg, maternal titer = 1:2, neonatal titer ≥1:8; or maternal titer = 1:8, neonatal titer ≥1:32) **OR** A positive result of darkfield test or PCR assay of lesions or body fluid(s)
Possible congenital syphilis	Normal infant examination **AND** A serum quantitative nontreponemal serologic titer less than fourfold the birthing parent's titer at delivery (eg, maternal titer = 1:8, neonatal titer ≤1:16) **AND ONE OF THE FOLLOWING:** Birthing parent was not treated, was inadequately treated, or had no documentation of receiving treatment; **OR** Birthing parent was treated with a regimen other than recommended in the guideline (ie, a nonpenicillin G regimen) **OR** Birthing parent received recommended regimen but treatment was initiated <30 days before delivery
Congenital syphilis less likely	Normal infant examination **AND** A serum quantitative nontreponemal serologic titer less than fourfold the birthing parent's titer at delivery (eg, maternal titer = 1:8, neonatal titer ≤1:16) **AND** Birthing parent was treated during pregnancy, treatment was appropriate for stage of infection, and treatment was initiated ≥30 days before delivery **AND** Birthing parent has no evidence of reinfection or relapse
Congenital syphilis is unlikely	Normal infant examination **AND** A serum quantitative nontreponemal serologic titer less than fourfold the birthing parent's titer at delivery **AND** Birthing parent was treated adequately before pregnancy **AND** Birthing parent's nontreponemal serologic titer remained low and stable (ie, serofast) before and during pregnancy and at delivery (eg, VDRL ≤1:2 or RPR ≤1:4)

Neurosyphilis, Ocular Syphilis, and Otosyphilis

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

MICHAEL WILKENING
Acting Director

EDMUND G. BROWN JR.
Governor

March 13, 2015

Clinical Advisory Regarding Ocular Syphilis in California

Since December 2014, several cases of ocular syphilis cases have been reported in San Francisco, Orange County, San Diego, and San Mateo, CA, and Seattle, WA. Cases are also under investigation in Los Angeles County. Affected individuals have included both HIV-infected and uninfected men who have sex with men as well as heterosexual men. Several of the cases have resulted in a significant and permanent decline in visual acuity, including blindness. Certain strains of *Treponema pallidum*, the bacterium that causes syphilis, may be more likely to cause central nervous system (CNS) and ocular disease. *T. pallidum* can affect many ocular structures in both the anterior and posterior segment of the eye. Manifestations can include (but are not limited to) uveitis, optic neuropathy, keratitis and retinal vasculitis.

Requests for medical providers, including eye care providers and HIV providers:

1) **Clinicians should be on the alert for ocular syphilis, and should order a syphilis serology test** (e.g., rapid plasma reagin, RPR) **in patients with visual complaints who have risk factors for syphilis.** Risk factors for syphilis include having sex with multiple or anonymous partners, sex in conjunction with illicit drug use, or having a sex partner who engages in any of these behaviors.
2) **Patients with positive syphilis serology and ocular complaints should receive immediate ophthalmologic evaluation.**
3) **Patients with suspected ocular syphilis should receive a lumbar puncture (LP) and be treated for neurosyphilis** (regardless of LP results) according to guidelines from the Centers for Disease Control and Prevention (i.e., intravenous penicillin G or intramuscular procaine penicillin plus oral probenecid for 10-14 days). Providers should refer to: 2010 STD Treatment Guidelines (www.cdc.gov/std/treatment/2010/default.htm) for more information.
4) **All patients with syphilis should be tested for HIV if not already known to be HIV-infected.**
5) **Cases of ocular syphilis should be reported to the local health department within 1 business day. Contact information for your health department is available at:** California Department of Public Health Health Information website (https://www.cdph.ca.gov/Programs/CCLHO/Pages/LHD%20Contact%20Information.aspx). This can be done by telephone or by using a Confidential Morbidity Report (CMR) form which is available at the Confidential Morbidity Report form pdf. Information on how to fill out the form is available at CDPH Document instructions pdf (https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CMR-CA-How-to-Report.pdf).

For additional consultation regarding clinical management of syphilis, contact the California Department of Public Health (CDPH) STD Control Branch provider warm-line at (510) 620-3400 or by email at stdcb@cdph.ca.gov, 8 AM - 5 PM, M-F.

San Joaquin County Public Health Services

Provider Clinical Reference: Neurosyphilis

Neurosyphilis occurs when *Treponema pallidum* invades the central nervous system. It can develop at any stage of syphilis and may present with acute or chronic **neurologic, ophthalmic, or otic** symptoms. Early recognition, CSF testing, and treatment with IV penicillin are critical to prevent irreversible damage.

Clinical Presentation	Early neurosyphilis ▪ **Neurological Manifestations:** Altered mental status, meningovascular syphilis, stroke, meningitis (headache, stiff neck, photophobia), and cranial nerve dysfunction (especially II, VII, VIII) ▪ **Ocular Manifestations:** Uveitis, optic neuritis, retinitis. ▪ **Otosyphilis Manifestation:** Hearing loss, tinnitus, vertigo Late neurosyphilis ▪ **General paresis:** dementia, psychiatric changes, tremors ▪ **Tabes dorsalis:** Ataxia, lightning pains, bladder disturbance, Argyll Robertson pupils Neurosyphilis Overview
Who Should Be Screened	▪ Patients with syphilis and any neurologic, ocular, or otic symptoms ▪ Patients with syphilis who fail therapy or have persistently high RPR titers ▪ HIV-positive patients with syphilis and neurologic signs
Testing	**Serology** ▪ Non-treponemal + treponemal tests **CSF evaluation indicated if neurologic/ocular/otic signs are present** ▪ CSF-VDRL ▪ Treatment is indicated for patients diagnosed with syphilis with ocular and/or otic symptoms ▪ Ophthalmology/otolaryngology evaluation can be considered ⚠ ***Negative CSF evaluation does not rule out ocular/otic syphilis.***
Treatment	**Preferred Treatment** ▪ Aqueous crystalline penicillin G 18–24 million units/day IV (3–4 million units q4h or continuous infusion) × 10–14 days **Alternative (if adherence assured)** ▪ Procaine penicillin G 2.4 million units IM daily + probenecid 500mg PO QID × 10–14 days **Consider additional benzathine penicillin G 2.4 million units IM weekly × 1–3 weeks after IV therapy for late latent coverage** ⚠ ***Penicillin allergy: Desensitize and treat with penicillin. No reliable alternatives.*** Neurosyphilis Treatment
Follow-up	▪ Monitor RPR titers for a fourfold decline ▪ Ensure partner notification and treatment
Reporting to Public Health	Neurosyphilis *(suspected or confirmed)* is reportable in California Immediately report to San Joaquin County Public Health Services within **one (1) working day**: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information.* Report to SJCPHS

Neurosyphilis, Ocular Syphilis, and Otosyphilis Evaluation

Neurosyphilis

» Neurosyphilis can be characterized as early/acute or late disease. Early neurosyphilis can be symptomatic or asymptomatic and can occur at any stage of syphilis, including concurrently with primary or secondary disease. Early symptomatic neurosyphilis consists of syphilitic meningitis, ocular syphilis and/or otosyphilis. Rarely, vascular complications can result from syphilitic meningitis and lead to an ischemic stroke; vascular complications are more commonly associated with late disease.

Early Neurosyphilis: Review of Systems *(pertinent positive symptoms)*

GENERAL/CONSTITUTIONAL: headache, fever, fatigue, weakness, dizziness

HEAD, EYES, EARS, NOSE AND THROAT:
- Eyes- pain, redness, loss of vision, double or blurred vision, photophobia, flashing lights or spots
- Ears- ringing in the ears, loss of hearing

GASTROINTESTINAL: nausea, vomiting

MUSCULOSKELETAL: neck pain/stiffness, muscle weakness

NEUROLOGIC: headache, dizziness, muscle weakness, confusion, loss of consciousness, seizures, difficulty speaking

PSYCHIATRIC: confusion

Early Neurosyphilis: Focused Neurologic Exam

- **Cranial Nerve Exam**: assess for cranial nerve palsies (key maneuvers in **bold**)
  - **II: visual acuity, visual fields**
  - **II, III: pupillary reactions to light and accommodation**
  - **III, IV, VI: extraocular movements, inspect for ptosis**
  - V: corneal reflexes and jaw strength/movements, facial sensation
  - **VII: facial movements (raise eyebrows, frown, tightly close eyes, show teeth smile, puff out both cheeks)**
  - **VIII: hearing (rub fingers together)**
  - IX: swallowing, gag reflex, rise of palate
  - V**, VII,** X, XII: voice and speech
  - XI: trapezius muscle inspection & shoulder shrug
  - XII: inspection of tongue and lateral movement of tongue while protruded

- **Motor**: assess for weakness/hemiplegia
  - Muscle strength testing upper and lower extremities

- **Nuchal Rigidity Testing**: assess for meningeal inflammation
  - Chin to chest- stiffness/pain with flexion of neck, flexion of hips and knees in response to neck flexion (Brudzinski's sign)
  - Jolt accentuation maneuver- worsening of headache when patient rotates head rapidly from side to side

- **Deep Tendon Reflexes**: assess for hyperreflexia
  - Biceps
  - Supinator
  - Knee
  - Ankle

Late Neurosyphilis

- **General Paresis**: chronic meningoencephalitis leading to dementia, muscle weakness and paralysis
  - Usually develops 10-20 years after initial infection
  - Progressive psychiatric and neurologic signs & symptoms including personality changes, memory loss, confusion, paranoia, seizures, weakness
  - Physical exam findings may include pupillary abnormalities including the Argyll-Robertson pupil (small pupil that constricts with accommodation but not with light), muscle weakness of the face and extremities, dysarthria, tremors of the face, tongue, hands, hyperreflexivity and eventually paralysis

- **Tabes Dorsalis**: demyelination of the posterior columns of the spinal cord
  - Usually develops 20-25 years after initial infection
  - Initial signs & symptoms may include gait abnormalities/ataxia, severe, sudden, brief stabbing pains mostly commonly occurring in the legs ("lightning pains"), paresthesias, other sensory abnormalities, bowel/bladder dysfunction, epigastric pain, nausea and vomiting, progressive loss of vision
  - Physical exam findings may include Argyll-Robertson and other pupillary abnormalities, optic atrophy, ataxia, dysmetria, sensory abnormalities, decreased/absent lower extremity reflexes

Neurosyphilis Ocular Syphilis, and Otosyphilis Treatment

Neurosyphilis, Ocular Syphilis, and Otosyphilis

Treatment

CNS involvement can occur during any stage of syphilis, and CSF laboratory abnormalities are common among per with early syphilis, even in the absence of clinical neurologic findings. No evidence exists to support variation from recommended diagnosis and treatment for syphilis at any stage for persons without clinical neurologic findings, except tertiary syphilis. If clinical evidence of neurologic involvement is observed (e.g., cognitive dysfunction, motor or sensor deficits, cranial nerve palsies, or symptoms or signs of meningitis or stroke), a CSF examination should be performed before treatment.

Syphilitic uveitis or other ocular syphilis manifestations (e.g., neuroretinitis and optic neuritis) can occur at any stage o syphilis and can be isolated abnormalities or associated with neurosyphilis. All persons with ocular symptoms and reactive syphilis serology need a full ocular examination, including cranial nerve evaluation. If cranial nerve dysfunct is present, a CSF evaluation is needed. Among persons with isolated ocular symptoms (no cranial nerve dysfunction or other neurologic abnormalities), reactive syphilis serology, and confirmed ocular abnormalities on examination, CSF examination is unnecessary before treatment. CSF analysis might be helpful in evaluating persons with ocular symptoms and reactive syphilis serology who do not have ocular findings on examination. If ocular syphilis is suspected, immediate referral to and management in collaboration with an ophthalmologist is crucial. Ocular syphilis should be treated similarly to neurosyphilis, even if a CSF examination is normal.

Hearing loss and other otologic symptoms can occur at any stage of syphilis and can be isolated abnormalities or associated with neurosyphilis, especially of cranial nerve 8. However, among persons with isolated auditory symp normal neurologic examination, and reactive syphilis serology, CSF examination is likely to be normal and is not recommended before treatment. Otosyphilis should be managed in collaboration with an otolaryngologist and treat by using the same regimen as for neurosyphilis.

Recommended Regimen for Neurosyphilis, Ocular Syphilis, or Otosyphilis Among Adults
Aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units IV every 4 hour continuous infusion for 10–14 days

If compliance with therapy can be ensured, the following alternative regimen might be considered.

Alternative Regimen
Procaine penicillin G 2.4 million units IM once daily PLUS **Probenecid** 500 mg orally 4 times/day, both for 10–14 days

The durations of the recommended and alternative regimens for neurosyphilis are shorter than the duration of the regimen used for latent syphilis. Therefore, benzathine penicillin, 2.4 million units IM once per week for 1–3 weeks, can be considered after completion of these neurosyphilis treatment regimens to provide a comparable total duration of therapy.

Other Management Considerations

The following are other considerations in the management of persons who have neurosyphilis:

- All persons who have neurosyphilis, ocular syphilis, or otosyphilis should be tested for HIV at the time of diagnosis. Those whose HIV test results are negative should be offered HIV PrEP.
- Although systemic steroids are used frequently as adjunctive therapy for otosyphilis and for ocular syphilis, such drugs have not been proven to be beneficial.

Follow-Up

Data from two studies indicate that, among immunocompetent persons and persons with HIV infection who are on effective ART, normalization of the serum RPR titer predicts normalization of abnormal CSF parameters after neurosyphilis treatment (*614*,*615*). Therefore, repeated CSF examinations are unnecessary for persons without HIV infection or persons with HIV infection who are on ART and who exhibit serologic and clinical responses after treatment.

Management of Sex Partners

See Syphilis, Management of Sex Partners.

Special Considerations

Penicillin Allergy

Limited data indicate that ceftriaxone 1–2 g daily either IM or IV for 10–14 days can be used as an alternative trea for persons with neurosyphilis (*603*,*616*,*617*). Cross-sensitivity between ceftriaxone and penicillin can occur; hov the risk for penicillin cross-reactivity between third-generation cephalosporins is negligible (*618*–*621*) (see Management of Persons Who Have a History of Penicillin Allergy). If concern exists regarding ceftriaxone safety patient with neurosyphilis, skin testing should be performed to confirm penicillin allergy and, if necessary, penicil desensitization in consultation with a specialist is recommended. Other regimens have not been adequately evalu for treatment of neurosyphilis.

Pregnancy

Pregnant women who are allergic to penicillin should be desensitized and treated with penicillin G. Skin testing c graded penicillin dose challenge might be helpful in identifying women at risk for acute allergic reactions (see Management of Persons Who Have a History of Penicillin Allergy).

HIV Infection

Persons with HIV infection who have neurosyphilis should be treated as described for persons without HIV (see Syphilis Among Persons with HIV Infection).

Last Reviewed: July 22, 2021

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS)

San Joaquin County Public Health Services

Provider Clinical Reference: HIV/AIDS

HIV remains a significant public health issue in San Joaquin County and across California. Because it can go undetected without routine screening, early diagnosis is critical. Prompt initiation of antiretroviral therapy and ongoing care improve health outcomes, reduce transmission, and prevent progression to AIDS.

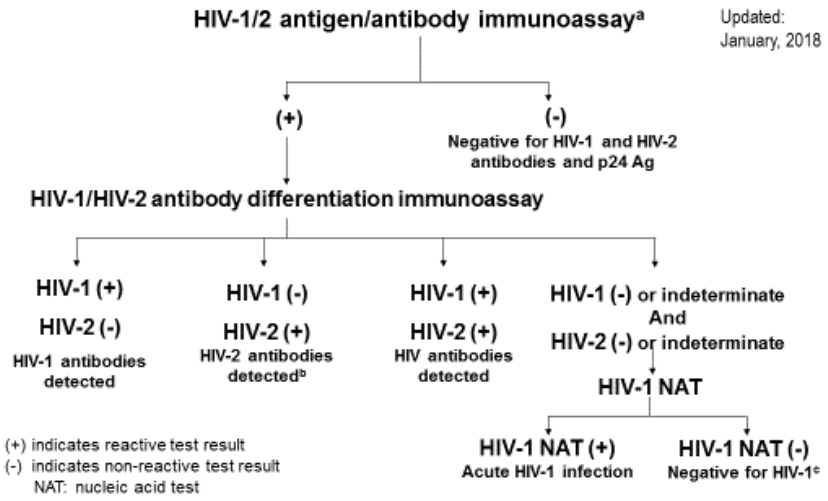
Clinical Presentation	▪ **Acute HIV infection:** May present with fever, rash, sore throat, lymphadenopathy, myalgia, or flu-like illness 2–4 weeks after exposure. Some remain asymptomatic ▪ **Chronic HIV infection:** Often asymptomatic for years; progressive immune suppression if untreated ▪ **Advanced HIV/AIDS:** Defined by CD4 <200 cells/µL or presence of AIDS-defining illnesses Common presentations include opportunistic infections (PCP pneumonia, TB, toxoplasmosis, candidiasis), malignancies (Kaposi sarcoma, lymphoma, invasive cervical cancer), chronic diarrhea, night sweats, and wasting syndrome ⚠ *Many patients are asymptomatic until advanced disease, making routine screening and early ART initiation critical* HIV/AIDS Resources

Who Should Be Screened	▪ **All patients aged 13–64:** At least once in their lifetime (opt-out recommended)
	▪ **Pregnant patients:** At first prenatal visit and again in the third trimester if at risk
	▪ **Annual or more frequent screening for:**
	  ▪ MSM
	  ▪ People who inject drugs
	  ▪ Patients with recent STIs or multiple/anonymous partners
	  ▪ Patients seeking PrEP/PEP

Testing	▪ **Initial screen:** HIV antigen/antibody (4th generation) test ▪ **If positive:** Confirm with HIV-1/HIV-2 differentiation assay ▪ **If indeterminate:** Order HIV-1 NAT (nucleic acid test) ▪ **Acute infection suspicion with negative/indeterminate test:** Order HIV RNA
Treatment	Immediate ART initiation is recommended for all patients regardless of CD4 count ▪ **Preferred regimens:** INSTI-based combinations (e.g., bictegravir/TAF/FTC, dolutegravir + TAF/FTC) ▪ **AIDS patients:** May require prophylaxis for opportunistic infection ▪ **Pregnant patients:** Use regimens recommended by perinatal guidelines ⚠ *Adherence support and linkage to care are essential to reduce transmission and improve outcomes* HIV/AIDS Treatment
Follow-up	▪ Monitor viral load and CD4 count regularly; baseline, 1–2 months after ART start, then every 3–6 months ▪ Screen for and treat STIs, hepatitis B/C, TB ▪ Vaccinate against preventable infections (HAV, HBV, HPV, influenza, pneumococcus) ▪ Provide PrEP/PEP counseling for partners as appropriate ▪ Public health supports partner services, linkage to care, and prevention interventions For AIDS patients: Ongoing OI prophylaxis and monitoring for malignancies
Reporting to Public Health	HIV/AIDS *(suspected or confirmed)* is reportable in California Immediately report new HIV diagnosis, AIDS-defining illnesses, and perinatal exposures to San Joaquin County Public Health Services within one (1) working day Complete HIV/AIDS Reporting Form (ACRF), include a copy of labs, send by certified mail to: San Joaquin County Public Health Services; Attn: DCP 1601 E. Hazelton Ave. Stockton, CA 95205 ***Advise the patient that they may be contacted by public health for follow-up information* Report to SJCPHS

HIV Testing Algorithm and Reporting Recommendations

Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens



1. Laboratories should conduct initial testing for HIV with an FDA-approved antigen/antibody immunoassay[a] that detects HIV-1 and HIV-2 antibodies and HIV-1 p24 antigen to test for established HIV-1 and HIV-2 infection and for acute HIV-1 infection, respectively. No further testing is required for specimens that are non-reactive on the initial immunoassay. However, if there is a possibility of very early infection leading to a non-reactive initial antigen/antibody immunoassay, such as when recent HIV exposure is suspected or reported, then conduct an HIV-1 nucleic acid test (NAT), or request a new specimen and repeat the algorithm according to CDC guidance (1,4,5,6).
2. Specimens with a reactive antigen/antibody immunoassay result (or repeatedly reactive, if repeat testing is recommended by the manufacturer or required by regulatory authorities) should be tested with an FDA-approved supplemental antibody immunoassay that differentiates HIV-1 antibodies from HIV-2 antibodies. Reactive results on the initial antigen/antibody immunoassay and the HIV-1/HIV-2 antibody differentiation immunoassay should be interpreted as positive for HIV-1 antibodies, HIV-2 antibodies[b], or HIV antibodies, untypable (undifferentiated).
3. Specimens that are reactive on the initial antigen/antibody immunoassay and non-reactive or indeterminate on the HIV-1/HIV-2 antibody differentiation immunoassay should be tested with an FDA-approved HIV-1 NAT.
    - A reactive HIV-1 NAT result and non-reactive or indeterminate HIV-1/HIV-2 antibody differentiation immunoassay result indicates laboratory evidence of acute HIV-1 infection.
    - A negative HIV-1 NAT result and non-reactive or HIV-1 indeterminate antibody differentiation immunoassay result indicates an HIV-1 false-positive result on the initial immunoassay.
    - A negative HIV-1 NAT result and repeatedly HIV-2 indeterminate or HIV indeterminate antibody differentiation immunoassay result should be referred for testing with a different validated supplemental HIV-2 test (antibody test or NAT) or repeat the algorithm in 2 to 4 weeks, starting with an antigen/antibody immunoassay (3).
4. Laboratories should use this same testing algorithm, beginning with an antigen/antibody immunoassay on all serum or plasma specimens submitted for testing after a preliminary positive result from any rapid HIV test conducted in a CLIA-waived setting (7).

[a]The FDA-approved single-use rapid HIV-1/HIV-2 antigen/antibody immunoassay can be used as the initial assay in the laboratory HIV testing algorithm for serum or plasma. If any instrumented antigen/antibody test is available, it is preferred due to its superior sensitivity for detecting HIV during acute infection (1,2).
[b]This includes specimens reported as HIV-2 positive with HIV-1 cross-reactivity (3).
[c]Refer to last bullet, item 3 above.

1) Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations https://stacks.cdc.gov/view/cdc/23447
2) Use of the Determine HIV 1/2 Ag/Ab Combo Test with Serum or Plasma in the Laboratory Algorithm for HIV Diagnosis https://stacks.cdc.gov/view/cdc/48472 3) Technical Update on HIV-1/2 Differentiation Assays https://stacks.cdc.gov/view/cdc/40790 4) Suggested Reporting Language for the HIV Laboratory Diagnostic Testing Algorithm https:/stacks.cdc.gov/view/cdc/45930 5) Updated Guidelines for Antiretroviral Postexposure Prophylaxis After Sexual, Injection Drug Use, or Other Nonoccupational Exposure to HIV-United States, 2016 https://stacks.cdc.gov/view/cdc/38856 6) Web content: How Soon Can Clinicians Rule Out Infection? https://www.cdc.gov/hiv/testing/clinical/index.html 7) Web content: Clinical Laboratory Improvement Amendments https://wwwn.cdc.gov/clia/

Guidance for reporting results from the HIV laboratory diagnostic algorithm for use with serum and plasma specimens (4)

Guidance for Reporting Results from the HIV Laboratory Diagnostic Testing Algorithm for Serum and Plasma Specimens[a]						
Test Outcomes	Test Sequence			Final Algorithm Interpretation[d]	Interpretation for Provider[e] (Sample should be reported as:)	Further Actions[f]
	Step 1	Step 2	Step 3			
	HIV-1/HIV-2 Ag/Ab IA[b]	HIV-1/HIV-2 Antibody Differentiation IA[c]	HIV-1 NAT			
	Nonreactive	n/a	n/a	HIV-1 antigen and HIV-1/HIV-2 antibodies were not detected. No laboratory evidence of HIV infection.	HIV negative	If recent HIV exposure is suspected or reported, conduct HIV-1 NAT or request a new specimen and repeat the algorithm according to CDC guidance. [g]
	Reactive	HIV-1 Positive	n/a	Positive for HIV-1 antibodies. Laboratory evidence of HIV-1 infection is present.	HIV-1 Positive	Link patient to HIV medical care and provide appropriate prevention counseling.[h]
	Reactive	HIV-2 Positive	n/a	Positive for HIV-2 antibodies. Laboratory evidence of HIV-2 infection is present.	HIV-2 Positive	Link patient to HIV medical care and provide appropriate prevention counseling.[h]
	Reactive	HIV-2 Positive with HIV-1 Cross reactivity	n/a	Positive for HIV-2 antibodies. Laboratory evidence of HIV-2 infection is present.	HIV-2 Positive. This result is distinct from HIV positive untypable (undifferentiated).	Link patient to HIV medical care and provide appropriate prevention counseling.[h]
	Reactive	HIV Positive untypable (undifferentiated)	n/a	Positive for HIV-1 and HIV-2 antibodies. Laboratory evidence of HIV-1 and/or HIV-2 infection is present.	HIV Positive	Link patient to HIV medical care and provide appropriate prevention counseling.[h] Provider may consider additional testing for HIV-1 RNA or DNA and HIV-2 RNA or DNA to verify or rule out HIV-1/HIV-2 dual infection. Request additional specimen if original specimen volume is insufficient.
	Reactive	HIV-1 indeterminate, HIV-2 indeterminate[i], HIV indeterminate	Detected	Positive for HIV-1. Laboratory evidence of HIV-1 infection consistent with an **acute** HIV-1 infection.	**Acute** HIV-1 Positive	Link patient to HIV medical care and provide appropriate prevention counseling immediately[h] to expedite prevention practices.
	Reactive	HIV-1 indeterminate	Not detected	HIV-1 antibodies were not confirmed and HIV-1 RNA was not detected.	HIV Negative	If recent HIV exposure is suspected or reported, request a new specimen and repeat the algorithm according to CDC guidance. [g]
	Reactive	HIV-2 indeterminate[i]	Not detected	HIV antibodies were not confirmed and HIV-1 RNA was not detected. HIV-2 inconclusive.	HIV-1 Negative, HIV-2 inconclusive	Refer sample for testing with a different validated supplemental HIV-2 test (antibody test or NAT) if available. Alternatively, redraw and repeat algorithm in 2-4 weeks to assess HIV-2 infection.
	Reactive	HIV Indeterminate	Not detected	HIV-1 antibodies were not confirmed and HIV-1 RNA was not detected. HIV-2 inconclusive.	HIV-1 Negative, HIV-2 inconclusive	Refer sample for testing with a different validated supplemental HIV-2 test (antibody test or NAT) if available. Alternatively, redraw and repeat algorithm in 2-4 weeks to assess HIV-2 infection.
	Reactive	Negative	Detected	Positive for HIV-1. Laboratory evidence of HIV-1 infection consistent with an **acute** HIV-1 infection.	**Acute** HIV-1 Positive	Link patient to HIV medical care and provide appropriate prevention counseling immediately[h] to expedite prevention practices.
	Reactive	Negative	Not detected	HIV antibodies were not confirmed and HIV-1 RNA was not detected.	HIV Negative	If recent HIV exposure is suspected or reported, request a new specimen and repeat the algorithm according to CDC guidance. [g]
	Reactive	Negative or Indeterminate	Invalid or not performed	Inconclusive	Inconclusive	Request an additional specimen and repeat the algorithm. Ensure HIV-1 NAT is performed, if indicated by results of HIV-1/HIV-2 Ag/Ab IA and HIV-1/HIV-2 Ab differentiation IA.

a. The tests outlined in this table are not FDA approved for oral fluid or dried blood spots. **b.** The need for repeating screening IA on an initial reactive test is assay dependent, refer to product package insert. **c**. This column contains the Final Assay interpretation per the Geenius package insert, the only FDA approved test for this step. We recommend excluding the individual HIV-1 and HIV-2 results on the laboratory report. If they are used, the final assay interpretation or final assay result should also be included. **d.** This column contains suggested language to be used for the laboratory report and it can be directly used for reporting from LIMS systems. **e**. This column contains simplified language of the previous column, "Final Algorithm Interpretation," and is included here for healthcare providers or other non-laboratorians that may also use this table as a reference document. This does not need to be included on the laboratory report. **f.** Comments under "Further Action" can be included as language in the laboratory report or can be used as guidance for laboratorians to discuss test results with healthcare providers or health deparment staff. **g**. Please refer to Centers for Disease Control and Prevention guidance. Available at: https://www.cdc.gov/hiv/testing/laboratorytests.html, https://stacks.cdc.gov/view/cdc/38856 and https://www.cdc.gov/hiv/testing/clinical/index.html **h.** Please refer to the Centers for Disease Control and Prevention HIV Guidelines and Recommendations to find the most appropriate information by age and risk group for the patient in question. Available at: http://www.cdc.gov/hiv/guidelines/ **i.** Follow Geenius package insert and refer to the CDC Technical Update. Available at: https://stacks.cdc.gov/view/cdc/40790

Pre-Exposure Prophylaxis (PrEP)

(Page 1 is in English, Page 2 is in Spanish)

October 2022

PrEP 101

If you don't have HIV but are at risk, PrEP can help you stay free from HIV.

WHAT IS PREP?

- PrEP (pre-exposure prophylaxis) can be pills or shots that reduce your chances of getting HIV.
- PrEP can stop HIV from taking hold and spreading throughout your body.
- Only condoms protect against other STDs like syphilis and gonorrhea.

IS PREP RIGHT FOR YOU?

PrEP can help protect you if you DON'T have HIV and ANY of the following apply to you.

You have had anal or vaginal sex in the past 6 months and

- have a sexual partner with HIV (especially if the partner has an unknown or detectable viral load),
- have not consistently used a condom, or
- have been diagnosed with an STD in the past 6 months.

You inject drugs and

- have an injection partner with HIV, or
- share needles, syringes, or other drug injection equipment (for example, cookers).

You have been prescribed PEP (post-exposure prophylaxis) and

- report continued risk behavior, or
- have used multiple courses of PEP.

If you have a partner with HIV and are considering getting pregnant, talk to your health care provider about PrEP if you're not already taking it.

VISIT YOUR HEALTH CARE PROVIDER

- To find out if PrEP is right for you.
- Routinely as recommended for follow-up visits, HIV tests, and prescription refills or shots.
- If you have any side effects while taking PrEP that become severe or don't go away.
- If you don't have a provider, visit **www.preplocator.org**.

HOW CAN YOU GET HELP TO PAY FOR PREP?

- Most insurance programs and state Medicaid plans cover PrEP. You may also receive co-pay assistance to help lower the cost of PrEP.
- The *Ready, Set, PrEP* program makes PrEP available at no cost to those who qualify. Learn more at **www.readysetprep.hiv.gov**.
- *ViiVConnect* offers a program to help patients pay for PrEP shots. Learn more at **www.viivconnect.com**.
- If you don't have insurance, consider enrolling in an insurance marketplace, PrEP assistance program, or your state's Medicaid plan, if you are eligible.
- Learn more about paying for PrEP at **www.cdc.gov/hiv/basics/prep/paying-for-prep**.

Scan to learn more!

For more information, please visit **www.cdc.gov/hiv/basics.**

CLINICIANS' QUICK GUIDE

What Is HIV PrEP?

PrEP is short for pre-exposure prophylaxis. It is the use of antiretroviral medication to prevent HIV infection among people who could be exposed to HIV through sex or injection drug use. PrEP reduces the risk of getting HIV from sex by up to 99% and from injection drug use by at least 74%.

In 2021, the US Preventive Services Task Force issued a graded recommendation to inform all sexually active adults and adolescents about PrEP (grade IIIB).

Who Is PrEP for?

PrEP is for adults and adolescents who don't have HIV, are at risk of getting HIV from sex or injection drug use, and weigh at least 35 kg (77 lb).

Health care providers should have conversations with all their sexually active patients about PrEP and how it can protect them from HIV. These conversations help to:

- Increase the number of people who know about PrEP.
- Decrease feelings of embarrassment or stigma that may prevent patients from talking about their sexual and drug use behaviors with their providers.

PrEP can be prescribed to any adult or adolescent patient who asks for it, even if they do not report HIV risk factors, as part of their comprehensive prevention plan.

To learn more about prescribing HIV prevention, visit:
cdc.gov/HIVNexus

CDC

LET'S STOP HIV TOGETHER™ Ending the HIV Epidemic

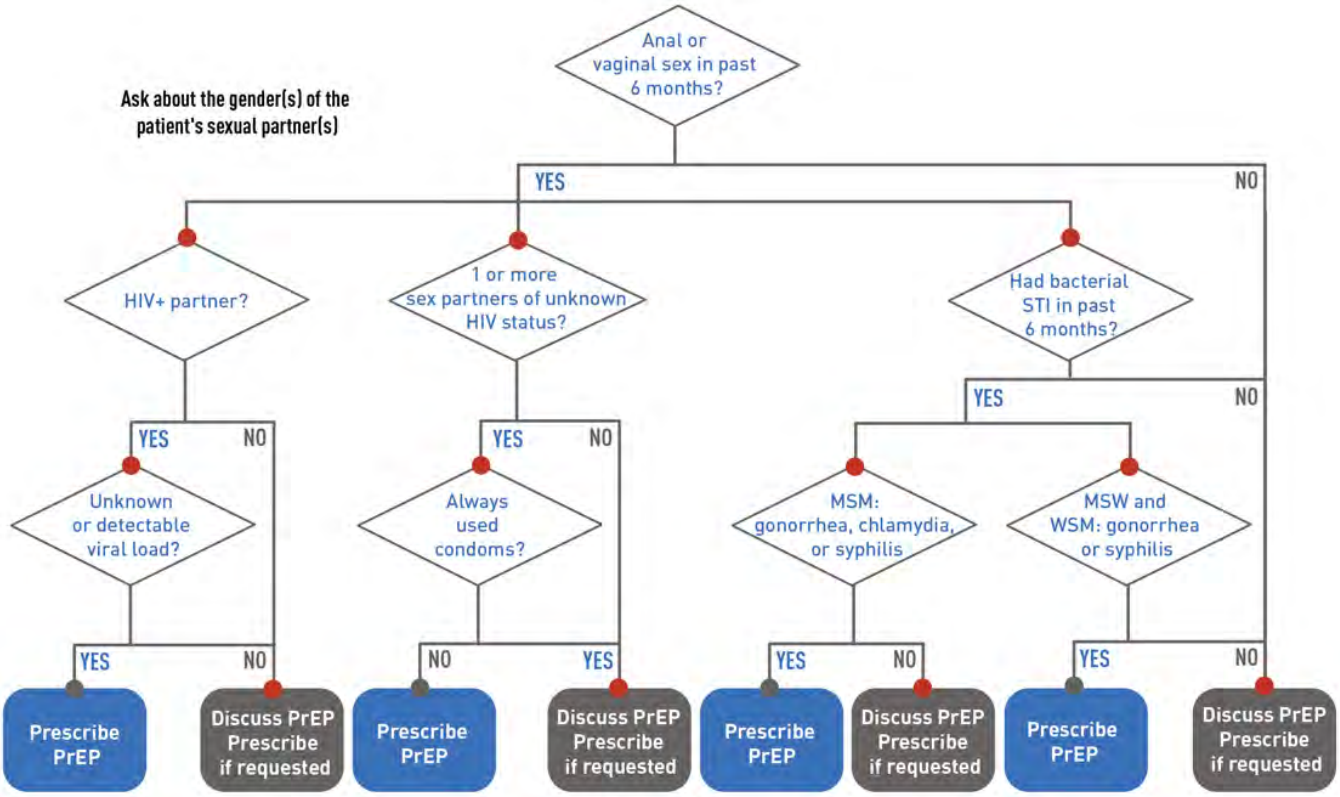
Who Can Prescribe PrEP?

Any licensed prescriber can prescribe PrEP. Specialization in infectious diseases or HIV medicine is not required. PrEP is a primary care preventive service that should be offered by any provider who cares for people without HIV.

How Can I Assess Patients for Indications for PrEP?

Whether or not a patient asks for PrEP, it is important to take a sexual and substance use history. This information is essential to understand their risk of getting HIV, if PrEP might be right for them, and what other risk-reduction services should be offered. The following flowcharts outline brief sets of questions designed to assess key sexual and injection drug use behaviors associated with getting HIV.

Assessing Sexually Active Patients



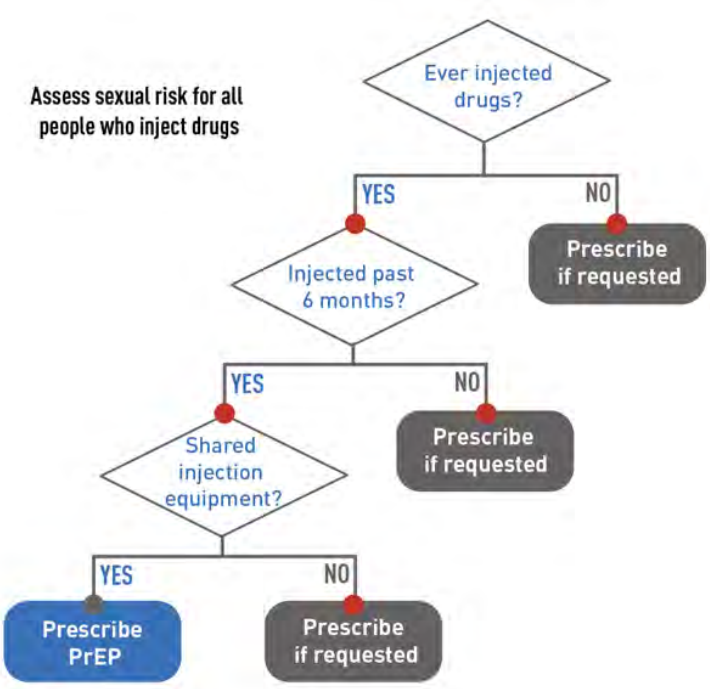
MSM: gay, bisexual, and other men who have sex with men

MSW: men who have sex with women

STI: sexually transmitted infection

WSM: women who have sex with men

Assessing Patients Who Inject Drugs



Where Can I Learn More About Prescribing and Managing Patients on PrEP?

The Centers for Disease Control and Prevention (CDC) has published comprehensive guidelines in their *Preexposure Prophylaxis for the Prevention of HIV Infection in the United States—2021 Update,* which consists of two parts:

- The *Clinical Practice Guideline for PrEP* describes CDC guidelines for prescribing PrEP, required baseline and ongoing assessments, information about how patients can pay for PrEP and related services, and evidence of PrEP's safety and efficacy. Access the guideline at: cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf.
- The *Clinical Providers' Supplement for PrEP* contains additional tools, such as a patient/provider checklist, patient and provider information sheets, a risk incidence assessment, supplemental counseling information, billing codes, and practice quality measures. Access the supplement at: cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-provider-supplement-2021.pdf.

CDC also offers additional *Clinicians' Quick Guides* on PrEP, as well as other materials for providers, patients, and practices. To download these materials, visit: cdc.gov/hiv/clinicians/materials/prevention.html.

What PrEP Options Are Available?

Various PrEP medication and dosing options are available to meet patients' needs:

Oral PrEP

Daily oral PrEP. Two medications are US Food and Drug Administration (FDA) approved to be used as daily oral PrEP by adults and adolescents weighing at least 35 kg (77 lb):

- Emtricitabine (F) 200 mg in combination with tenofovir disoproxil fumarate (TDF) 300 mg (F/TDF—brand name **Truvada**® or generic equivalent).
- Emtricitabine (F) 200 mg in combination with tenofovir alafenamide (TAF) 25 mg (F/TAF—brand name **Descovy**®).

Only F/TDF is approved for use by people who are at risk through vaginal sex. F/TAF has not yet been studied in women and other people who could get HIV through receptive vaginal sex.

Off-label 2-1-1 dosing of oral PrEP. Health care providers can prescribe F/TDF off-label using 2-1-1 dosing for adult gay, bisexual, and other men who have sex with men. This is also known as event-driven, intermittent, on-demand, or coitally timed PrEP. When using 2-1-1 dosing, the patient takes F/TDF doses based on when they plan to have sex.

Patients who could benefit from 2-1-1 dosing are those who:

- Request non-daily dosing.
- Have sex less often than once per week.
- Can anticipate or delay sex to permit the first two-pill dose at least 2 hours before sex.

Note that 2-1-1 dosing is not approved by the FDA and is not recommended by CDC.

Injectable PrEP

Cabotegravir (CAB) 600 mg injection (brand name **Apretude**®) is FDA approved to prevent HIV infection in adults and adolescents weighing at least 35 kg (77 lb). It is recommended for patients at risk for HIV through sex and may be especially useful for patients who:

- Are not oral PrEP candidates.
- Have problems taking oral medication as prescribed.
- Prefer getting an injection every 2 months instead of taking oral PrEP.

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PubNo. 301168
August 2022

PrEP 2-1-1

"On-Demand" Pre-Exposure Prophylaxis (PrEP) for Sexual Intercourse

PrEP 2-1-1 or **"On-Demand" PrEP** is a *non-daily* PrEP dosing strategy that has been evaluated in men who have sex with men (MSM) and was 86% effective at preventing HIV transmission in a clinical study in Canada and France. The PrEP 2-1-1 protocol shown below is not FDA-approved; however, PrEP 2-1-1 has been endorsed by the International AIDS Society USA.

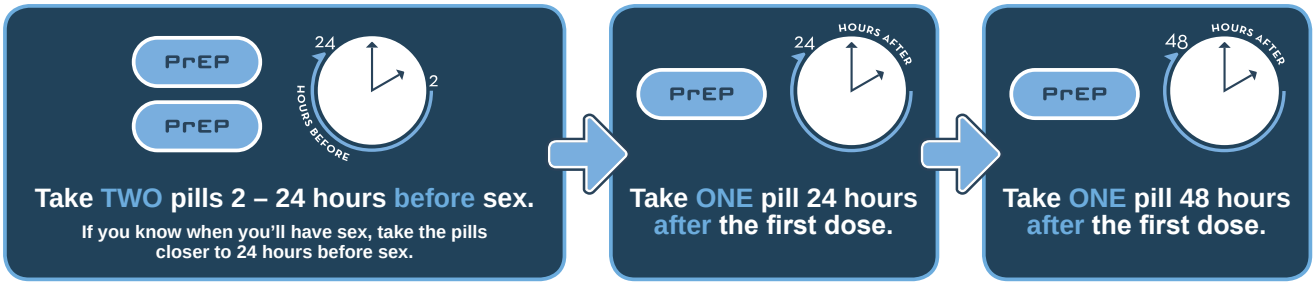
What is the Difference Between PrEP and PrEP 2-1-1?

Daily **PrEP** is the FDA-approved use of a daily pill (Truvada® or Descovy®) that combines two drugs to prevent HIV transmission. Many studies have shown that it can reduce the risk of HIV transmission by up to 99%. Studies have been done proving PrEP is effective for men, women, and transgender people, as well as preventing transmission through injection drug use. The United States Prevention Task Force has given PrEP Grade A status.

The **PrEP 2-1-1** dosing strategy has not been FDA approved but has been studied with Truvada® and shown to be an effective HIV prevention choice for MSM. PrEP 2-1-1 can prevent HIV transmission during anal sex. PrEP medication absorbs slower into vaginal tissue than anal tissue, so PrEP 2-1-1 is not an effective option for vaginal sex. PrEP 2-1-1 can be an option for people who have less frequent anal sex or for people who are unable or prefer not to take daily PrEP.

How Does PrEP 2-1-1 Work?

PrEP 2-1-1 starts by taking **TWO** pills between 2 and 24 hours before sex. Taking the pills closer to 24 hours before sex is better but you can use PrEP 2-1-1 up to 2 hours before sex. After sex, you take **ONE** pill 24 hours after the first pills, and **ONE** pill again 24 hours after that. That's PrEP 2-1-1, get it?



Important Note: The PrEP 2-1-1 dosing schedule changes if you are going to have sex within seven days of your last PrEP dose. Start by taking just **ONE** pill between 2 and 24 hours before sex. You still take **ONE** pill 24 hours after the first pill, and **ONE** pill again 24 hours after that.

- Daily PrEP has extensive clinical trial data on safety and efficacy and is the only dosing strategy recommended by the CDC.
- The State Office of AIDS recommends PrEP and financial assistance may be available through California's PrEP-Assistance Program (PrEP-AP) for uninsured and insured individuals who meet the eligibility criteria.
- PrEP 2-1-1 has only been studied in MSM. There is no data and it is not recommended for use in cis-women, cis-men who have sex with women, transgender women and men, people who inject drugs, or people with active hepatitis B coinfection.
- The PrEP 2-1-1 protocol with Truvada® is the only non-daily strategy with evidence for HIV prevention. PrEP 2-1-1 with Descovy® is not recommended outside of a clinical trial.
- PrEP 2-1-1 should be prescribed by a healthcare provider and should include HIV and STI testing at least every 3 months.
- People considering PrEP 2-1-1 should be able to plan or delay their sexual activity so that their first dose is at least 2 hours (and preferably closer to 24 hours) before sex.

Select Clinical Trials and References: **IPERGAY** (Molina *et al.* NEJM 2015): 400 MSM (France, Canada) randomized to PrEP 2-1-1- vs. placebo. 86% efficacy. Participants took median 15 pills per month. **IPERGAY open label extension** (Molina *et al.* Lancet HIV 2017): only one HIV infection detected in 361 MSM over 18 months follow-up. **San Francisco Department of Public Health Dear Colleague Letter** with recommendations for PrEP 2-1-1: http://www.gettingtozerosf.org/wp-content/uploads/2018/11/HIVUpdate_02122019_v2.pdf

PRESCRIBING

PrEP

Pre-Exposure Prophylaxis (PrEP) is recommended as an HIV prevention option for anyone with risks of acquiring HIV infection through sex or drug use.

PrEP INDICATIONS

Discuss PrEP with all sexually active adults and adolescents. Prescribe if requested, even if person denies HIV risk factors (unless contraindicated).

PrEP is recommended for anyone with:

- Condomless vaginal or anal sex with a partner of unknown HIV status
- HIV-positive sex partner (especially if partner's HIV viral load is detectable or unknown)
- A recent bacterial sexually transmitted infection (STI) (gonorrhea/chlamydia/syphilis)
- Injection drug use with sharing of needles/equipment
- Any survival/transactional sex
- Desire to conceive with a partner who is HIV-positive

CONTRAINDICATIONS

- HIV infection
- Weight < 77 lbs
- Estimated creatinine clearance (eCrCl) < 60 mL/min for TDF/FTC or < 30 mL/min for TAF/FTC
- Possible HIV exposure within the past 72 hours: instead offer nPEP, then consider PrEP. (***PEPline: 888-448-4911)***

WHAT TO PRESCRIBE

Daily Oral PrEP

- Tenofovir disoproxil fumarate/emtricitabine (TDF/FTC, Truvada, or generic equivalent)
  - 300 mg/200 mg, 1 tab orally (PO) daily, #30, 2 refills for a total supply of not more than 90 days

  OR
- Tenofovir alafenamide/emtricitabine (TAF/FTC, Descovy)
  - 25 mg/200 mg, 1 tab PO daily, #30, 2 refills for a total supply of not more than 90 days
  - Not recommended as PrEP by those at risk from receptive vaginal sex

On-Demand or 2-1-1 Oral PrEP: Alternative for men who have sex with men (MSM) who have sex infrequently

TDF/FTC (Truvada or generic equivalent)

- 300 mg/200 mg, #30 with 0 refills (test for HIV before refill)
- 2-1-1 PrEP dosing:
  - 2 tabs PO taken 2-24 hours prior to having sex, then
  - 1 tab PO 24 hours after first 2 tabs taken, then
  - 1 tab PO 48 hours after first 2 tabs taken
  - Continue 1 tab PO daily until 48 hours after last sexual encounter

Injection PrEP

- Cabotegravir (CAB, Apretude) 600 mg IM (gluteal muscle)
  (optional: CAB 30 mg PO daily x 30 days as oral lead-in before 1st injection)
  - initial dose, 2nd dose 1 month after 1st dose, then every 2 months

POSSIBLE SIDE EFFECTS

Oral PrEP (TDF/FTC, TAF/FTC)

- Nausea, diarrhea, or headache; usually mild and re-solveswithin 1 month
- Renal dysfunction; typically reversible if PrEP is stopped (risk greater with TDF)
- Slight (1%) loss of bone mineral density over 1 year; no increased risk of fractures (risk greater with TDF)
- TAF: possible weight gain

Injection PrEP (CAB)

- Injection site reactions

CAUTIONS

- Symptoms of possible acute HIV (e.g., flu-like illness); defer PrEP and evaluate immediately for acute HIV, including HIV RNA testing
- Be aware of local policies related to minors and HIV prevention/treatment
- Drug interactions: See product Prescribing Information

Oral PrEP (TDF/FTC, TAF/FTC)

- Hepatitis B (HBV) infection can flare after stopping PrEP medications; check for HBV infection before starting PrEP
- Chronic kidney disease (CKD) or significant risk of CKD
- Osteoporosis

Injection PrEP (CAB)

- Not studied for persons age < 18, not recommended
- Pregnancy/breastfeeding: discuss benefits/possible risks

LAB SCREENING AND VISITS

Assessment and counseling: At each follow up visit: assess for signs/symptoms of acute HIV; assess and support adherence and HIV risk and risk-reduction behaviors; assess and manage adverse effects; conduct contraception/conception counseling as appropriate.

Baseline labs

- **All:** HIV test within 1 week before starting PrEP (ideally HIV Ag/Ab)
- HIV RNA (if possibly infected within the past 2-4 weeks)
- STI testing: gonorrhea/chlamydia (throat, rectum, and genital/urine screening according to sites of exposure), syphilis, hepatitis C (HCV) Ab, consider hepatitis A IgG.
- **Oral PrEP:** creatinine (for estimated CrCl), hepatitis B (HBV) sAb/cAb/Ag. For TAF/FTC: cholesterol and triglycerides.

Laboratory tests: Oral PrEP

- 1 month (appropriate in some cases to ensure patient is still HIV uninfected), then at least every 3 months: HIV Ag/Ab, HIV RNA, screen for STIs (see Baseline list), pregnancy test
- Every 6 months: CrCl for persons age ≥ 50 or eCrCl < 90
- Every 12 months: cholesterol and triglyceride levels. HCV Ab for MSM, transgender women, people who inject drugs.

Laboratory tests: Injection PrEP

- 1 month: HIV RNA
- Every 2 months: HIV Ag/Ab and HIV RNA. Pregnancy test as appropriate
- Every 4 months: HIV RNA, STI testing (see Baseline list)

Follow up visits: Oral PrEP

- 1 week: Call, check if prescription filled, assess adherence and side effects
- 1 month (optional)
- At least every 3 months

Follow up visits: Injection PrEP

- 1 month (at time of 2nd injection)
- Every 2 months (timed with subsequent injections)

COUNSELING TOPICS

- Importance of close adherence
- STI and HIV prevention, i.e., condom use/risk reduction
- Safer injection drug use practices
- Need for regular follow-up visits and lab tests
- Reproductive goals/contraception
- Symptoms of acute HIV infection
- Risks of stopping (e.g., HIV infection) and cautions for re-starting (need for HIV testing, risk of inadequate treatment if HIV infected). For oral PrEP: flare of HBV (if infected). For CAB: slow decline in CAB levels after stopping (risk of CAB resistance if infected with HIV during this time).
- CAB: see product Prescribing Information for management of planned or unplanned late injections
- Insurance/medication assistance
- Procedures for refills

KEY MESSAGES

- When used as directed and with close adherence, PrEP is highly effective for preventing HIV (> 90%).
- With daily TDF/FTC, maximum blood and rectal tissue drug levels are reached after 7 days and in vaginal tissue after 20 days. For TAF/FTC and CAB, no data on time to protective drug levels are available.
- If planning to stop daily PrEP, continue for 28 days after last potential HIV exposure.
- PrEP does not prevent infection with gonorrhea, chlamydia, syphilis, genital warts, herpes, or hepatitis A, B, C viruses.
- PrEP does not prevent pregnancy.
- If a potential high-risk HIV exposure occurs while NOT on PrEP, start nPEP (within 72 hours) for 28 days, then restart PrEP if still HIV Ag/Ab negative.

RESOURCES AND REFERENCES

- **National Clinician Consultation Center PrEPline**
  (855) 448-7737 or https://nccc.ucsf.edu
  Monday – Friday, 9:00 a.m.– 8:00 p.m. ET
- CDC, US Public Health Service: **Preexposure prophylaxis for the prevention of HIV infection in the United States—2021 Update**. https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf. December 2021.
- **AETC Program PrEP Toolkit**: https://aidsetc.org/prep

AETC AIDS Education & Training Center Program

AIDS Education and Training Centers Program. December 2021.

Post-Exposure Prophylaxis (PEP)

October 2022

PEP 101

If you may have been exposed to HIV* in the last 72 hours, talk to your health care provider, an emergency room doctor, or an urgent care provider about PEP right away.

PEP can reduce your chance of getting HIV after a possible exposure.

WHAT IS PEP?

- PEP, or post-exposure prophylaxis, means taking medicine to prevent HIV after a possible exposure.
- **PEP must be started within 72 hours (3 days) after you may have been exposed to HIV.** The sooner you start PEP, the better. Every hour counts!
- If your health care provider prescribes PEP, you'll need to take it daily for 28 days.
- PEP is effective in preventing HIV, but not 100%. Always use condoms with sex partners and use safe injection practices.

IS PEP RIGHT FOR YOU?

If you don't have HIV or don't know your HIV status, and in the last 72 hours you

- May have been exposed to HIV during sex (for example, if the condom broke),
- Shared needles, syringes, or other equipment to inject drugs, or
- Were sexually assaulted,

Talk to your health care provider, an emergency room doctor, or an urgent care provider about PEP right away.

CAN I TAKE PEP EVERY TIME I HAVE SEX WITHOUT A CONDOM?

- No. You should only use PEP in **emergency situations.**
- If you engage in behaviors that may increase your chances of getting HIV, talk to your health care provider about PrEP (pre-exposure prophylaxis).

** People are exposed to HIV by coming into contact with certain body fluids of a person with HIV, including blood, semen, and vaginal fluids. This usually happens through vaginal or anal sex or by sharing needles.*

Scan to learn more!

For more information, please visit **www.cdc.gov/hiv.**

A GUIDE FOR HEALTH CARE PROVIDERS

PEP for HIV Prevention

PEP (post-exposure prophylaxis) can be used to prevent HIV after a specific, high-risk exposure to HIV. By familiarizing yourself with PEP, you can help protect your patients from HIV.

Prescribe HIV Prevention
Learn more at: cdc.gov/HIVNexus.

CDC

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What Is PEP?

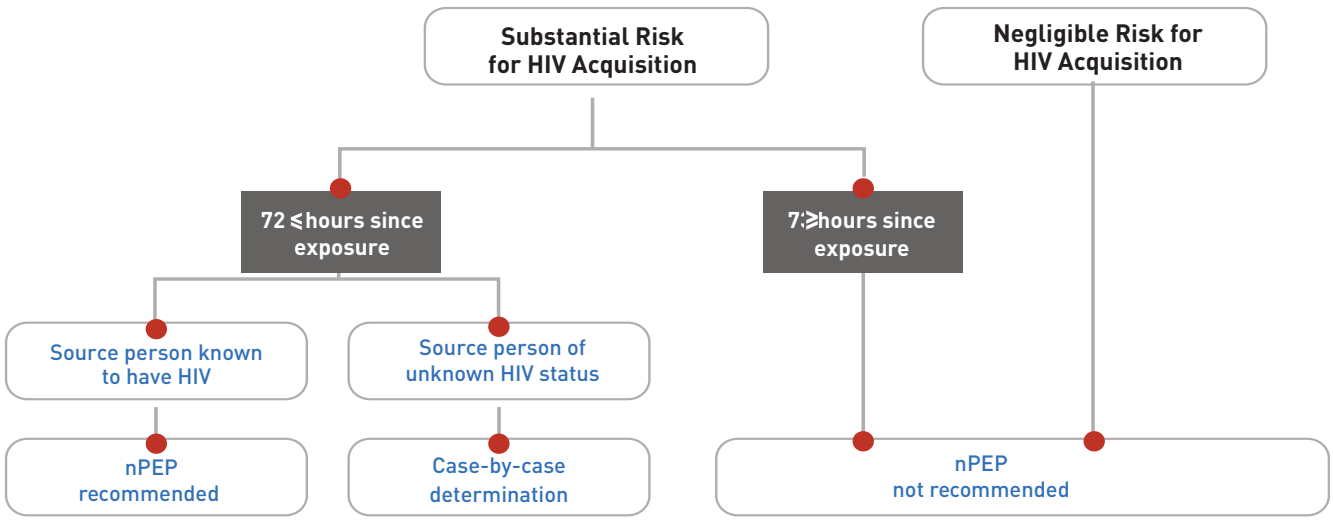
Post-exposure prophylaxis (PEP) is the use of antiretroviral medication to prevent HIV infection in an HIV-negative person who has had a specific high-risk exposure to HIV. Such an exposure typically occurs through sex or sharing syringes (or other injection equipment) with someone who has or might have HIV. **Nonoccupational post-exposure prophylaxis (nPEP) can be used to clarify that the exposure was not work related.**

Exposure to HIV is a medical emergency, because HIV establishes infection very quickly, often within 24 to 36 hours after exposure.[1-3] Health care providers should evaluate patients rapidly for PEP when care is sought
≤72 hours after a potential exposure. HIV status should be determined in patients being considered for PEP using rapid combined antigen/antibody (Ag/Ab) or antibody blood tests.

If rapid HIV blood test results are unavailable, and PEP is indicated, administration of the first dose of PEP should be started without delay. PEP can be discontinued later if the person is determined to already have HIV infection or if the source of the exposure is determined not to have HIV infection.[4]

PEP is not recommended when care is sought >72 hours after exposure.

Algorithm for Evaluation and Treatment of Possible Nonoccupational HIV Exposures



Substantial Risk for HIV Acquisition

Exposure of:
vagina, rectum, eye, mouth or other mucous membrane, nonintact skin, or percutaneous contact

With:
blood, semen, vaginal secretions, rectal secretions, breast milk, or any fluid that is visibly contaminated with blood

When:
the source is known to have HIV

Negligible Risk for HIV Acquisition

Exposure of:
vagina, rectum, eye, mouth or other mucous membrane, intact skin or nonintact skin, or percutaneous contact

With:
urine, nasal secretions, saliva, sweat, or tears if not visibly contaminated with blood

Regardless:
of the known or suspected HIV status of the source

Recommended Schedule of Laboratory Evaluations of Source and Exposed Patients for Providing nPEP With Preferred Regimens

Test	Source Baseline	Baseline	4–6 Weeks After Exposure	3 Months After Exposure	6 Months After Exposure
		*For all patients considered for or prescribed nPEP for **any exposure***			
HIV Ag/Ab testing[a] (or antibody testing if Ag/Ab test unavailable)	■	■	■	■	■[b]
HBV serology, including: HBV surface antigen HBV surface antibody HBV core antibody	■	■	—	—	■[c]
HCV antibody test	■	■	—	—	■[d]
		For all patients considered for or prescribed nPEP for sexual exposure			
Syphilis serology[e]	■	■	■	—	■
Gonorrhea[f]	■	■	■[g]	—	—
Chlamydia[f]	■	■	■[g]	—	—
Pregnancy[h]	—	■	■	—	—
		For patients prescribed: TDF + F + RAL or TDF + F + DTG			
Serum creatinine (for calculating estimated creatinine clearance[i])	—	■	■	—	—
Alanine transaminase, aspartate aminotransferase	—	■	■	—	—
		For all patients with HIV infection confirmed at any visit			
HIV viral load	■	■[j]	■[j]	■[j]	■[j]
HIV genotypic resistance	■	■[j]	■[j]	■[j]	■[j]

a. Any positive or indeterminate HIV antibody test should undergo confirmatory testing of HIV infection status.

b. Only if HCV infection was acquired during the original exposure; delayed HIV seroconversion has been seen in people who simultaneously acquire HIV and HCV infection.

c. If exposed person susceptible to HBV at baseline.

d. If exposed person susceptible to HCV at baseline.

e. If determined to be infected with syphilis and treated, should undergo serologic syphilis testing 6 months after treatment.

f. Testing for chlamydia and gonorrhea should be performed using nucleic acid amplification testing. For patients diagnosed with a chlamydia or gonorrhea infection, retesting 3 months after treatment is recommended. Comprehensive STI testing and treatment guidelines are available from CDC: cdc.gov/std/treatment-guidelines/default.htm.

- Screening of transgender and gender-diverse patients should be based on anatomy and sexual behaviors and exposure. Access CDC's full screening recommendations: cdc.gov/std/treatment-guidelines/screening-recommendations.htm.
- For men or people assigned male at birth reporting insertive vaginal, anal, or oral sex, a urine specimen (preferred) or urethral swab should be tested for chlamydia and gonorrhea.
- For women or people assigned female at birth reporting receptive vaginal sex, a vaginal (preferred) or endocervical swab or urine specimen should be tested for chlamydia and gonorrhea.
- For any patient reporting receptive anal sex, a rectal swab specimen should be tested for chlamydia and gonorrhea.
- For any patient with urogenital or rectal gonorrhea reporting receptive oral sex, pharyngeal testing for gonorrhea should be performed. If chlamydia is identified while screening for pharyngeal gonorrhea, provide appropriate treatment. Review CDC's guidelines for treating gonococcal infections: cdc.gov/std/treatment-guidelines/gonorrhea-adults.htm.

g. If not provided presumptive treatment at baseline or if symptomatic at follow-up visit.

h. If a woman or person assigned female at birth of reproductive age, not using effective contraception, and with vaginal exposure to semen.

i. eCrCl = estimated creatinine clearance calculated by the Cockcroft-Gault formula; eCrClCG= [(140 – age) x ideal body weight] ÷ (serum creatinine x 72) (x 0.85 for females).

j. At first visit where determined to have HIV infection.

Doxycycline Post-Exposure Prophylaxis (Doxy PEP)

April 28, 2023

Doxycycline Post-Exposure Prophylaxis (doxy PEP) for the Prevention of Bacterial Sexually Transmitted Infections (STIs)

Dear Colleague,

The California Department of Public Health (CDPH) would like to inform all health care providers of a compelling new biomedical intervention to prevent bacterial STIs. Evidence from a study among men who have sex with men (MSM) and transgender women (TGW) suggests **doxycycline, when taken as doxy PEP after condomless oral, anal, or vaginal sex, significantly reduces acquisition of chlamydia (CT), gonorrhea (GC), and syphilis.**[1] Given the high rates of these STIs in California[2], **CDPH recommends the following:**

1. **Recommend doxy PEP** to men who have sex with men (MSM) or transgender women (TGW) who have had ≥1 bacterial STI in the past 12 months.
2. **Offer doxy PEP using shared decision-making** to all non-pregnant individuals (e.g., cisgender women/men, transgender women/men, and non-binary persons) at increased risk for bacterial STIs and to those requesting doxy PEP, even if these individuals have not been previously diagnosed with an STI or have not disclosed their risk status.[i]
3. **Provide comprehensive preventative sexual health counseling and education** to all sexually-active individuals to include HIV/STI screening, doxy PEP, HIV pre-exposure prophylaxis (PrEP)/HIV post-exposure prophylaxis (PEP), vaccinations (e.g., Hepatitis A/B, Human Papilloma Virus, Mpox, Meningococcal/MenACWY), expedited partner therapy, and/or contraception where warranted.

[i] Doxy PEP can be offered to all non-pregnant individuals at increased risk of STIs, including cisgender women and men, transgender women and men, and non-binary persons, but data is limited. In a randomized trial of 449 cisgender Kenyan women, doxy PEP was not shown to be protective against STIs, but hair analyses suggest that nonadherence may have been the reason for lack of efficacy.[3] Pharmacologic studies suggest that doxycycline levels in vaginal fluid should be sufficient to provide such protection.[4] Doxy PEP has not been studied in transgender men or non-binary persons.

Evidence:
A randomized controlled trial (RCT) using **a single, oral dose of doxycycline 200mg within 72 hours after condomless oral, anal, or vaginal sex** in MSM and TGW, who were either persons living with HIV (PLWH) or taking HIV PrEP, showed **significant reductions in CT, GC, and syphilis** per quarter of study follow up. In persons on HIV PrEP, taking doxy PEP reduced syphilis by 87 percent, CT by 88 percent, and GC by 55 percent while in PLWH doxy PEP reduced syphilis by 77 percent, CT by 74 percent, and GC by 57 percent.[1]

Safety:
Taking doxycycline is safe and well tolerated, with no reported doxycycline associated Grade 2 or higher adverse events (AEs) and no documented laboratory-related severe AEs in the DoxyPEP RCT. Long-term use of doxycycline has been prescribed safely for other medical indications (e.g., acne treatment or malaria prophylaxis).

Unknowns:
Data continue to be collected and reviewed for possible antimicrobial resistance among bacterial STIs, commensal *Neisseria* (as a potential reservoir for tetracycline resistant plasmids), and *Staphylococcus aureus*. The effects of doxy PEP on the gut microbiome are also being studied.

Prescribing doxy PEP:
Doxycycline is not FDA approved for STI PEP and there is no national organizational guidance for its use as STI prevention. However, Centers for Disease Control and Prevention (CDC) has released considerations for doxy PEP as an STI preventative strategy[5] and San Francisco Department of Public Health has released their own guidance, including counseling messages.[6]

i. **Prescribe 200 mg of doxycycline taken within 72 hours** (ideally within 24 hours or as soon as possible) **after condomless oral, anal, or vaginal sex.** Doxycycline can be taken daily depending on sexual activity, but no more than 200 mg every 24 hours.
ii. **Screen for GC and CT at all anatomic sites of exposure** (urogenital, pharyngeal, and/or rectal), as well as test for **syphilis and HIV** (if not known PLWH) **at initiation of doxy PEP and every three months**. If diagnosed with an STI, treat according to standard CDPH and CDC STI treatment guidelines.
iii. Doxycycline should not be taken during pregnancy – counsel persons who can become pregnant.[7]
iv. Consider hematopoietic, renal, and hepatic laboratory monitoring as clinically indicated in addition to counseling patients on standard precautions and warnings while taking doxy PEP, as outlined in the drug package insert (e.g., sun sensitivity, pill esophagitis, and rarely intracranial hypertension).[8]

Please reach out to stdcb@cdph.ca.gov if you have any questions about this guidance.

Sincerely,

Kathleen Jacobson, MD
Chief, STD Control Branch
California Department of Public Health

References:

1. Luetkemeyer et al. Postexposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections. N Engl J Med. 2023;388(14):1296-1306. doi:10.1056/NEJMoa2211934
2. CDPH 2020 STI Surveillance Report
3. Stewart et al. "Doxycycline prophylaxis to prevent sexually transmitted infections in women." New England Journal of Medicine 389.25 (2023): 2331-2340. PMID: 38118022
4. Haaland et al. "Pharmacokinetics of single dose doxycycline in the rectum, vagina, and urethra: implications for prevention of bacterial sexually transmitted infections." EBioMedicine 101 (2024). PMCID: PMC10910237
5. CDC Considerations for Doxycycline as STI PEP: Primary Prevention Methods (cdc.gov)
6. San Francisco Department of Public Health, Health Update: Doxycycline Post-Exposure Prophylaxis Reduces Incidence of STIs
7. Doxycycline use by pregnant and lactating people: Doxycycline Use by Pregnant and Lactating Women | FDA
8. FDA. Package Insert for Doryx® (doxycycline hyclate) and Doryx® MPC Delayed-Release Tablets. February 2018. https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/050795s026lbl.pdf

Additional Resources:

- CDPH STD Control Branch Homepage
  - California STI Screening Recommendations
  - California STI Treatment Guidelines
- CDC
  - STI Screening Recommendations
  - 2021 STI Treatment Guidelines
  - HIV Screening Guidelines
  - PrEP & non-occupational PEP guidelines
- Expedited Partner Therapy: CDC & CDPH recommendations and California SB306 regulations
- California Prevention Training Center – Educational opportunities and training materials for STDs
- STD Clinical Consultation Network – Online consultation for questions about evaluation and management of STDs

Addendum:
This letter was revised on 1/15/2025 to define “all non-pregnant individuals” (see pg. 1 footnote) and include updates from relevant research. Changes related to this guidance were made throughout the document. Since the initial publication of this letter, CDC released Clinical Guidelines for the Use of Doxy PEP.

PRESCRIBING DOXY PEP TO PREVENT STIS

Did You Know?

Doxycycline post-exposure prophylaxis (doxy PEP) has proven to reduce the risk of getting some **sexually transmitted infections (STIs)** for some people

PER CDC GUIDELINES...

- Discuss **doxy PEP** with those who would benefit the most
- If offering, write a prescription for patients to self-administer 200 mg doxycycline within **72 hours** after sex, with enough doses until next follow-up visit
- Offer doxy PEP in the context of comprehensive **sexual health approach**

WHEN PRESCRIBING DOXY PEP

Include These Steps For A Comprehensive Sexual Health Visit

Screen for and treat **STIs**, including viral hepatitis and HIV, as indicated

Discuss other prevention strategies

- Condoms
- HIV PEP, PrEP, and treatment
- Vaccinations for:
  - Hepatitis A
  - Hepatitis B
  - Mpox
  - Human Papillomavirus

Review patient's **medication list**, including over the counter medications, to assess for potential drug interactions

Provide information on how to take doxy PEP, including how to **minimize side effects**

Set up **routine** follow-up visits

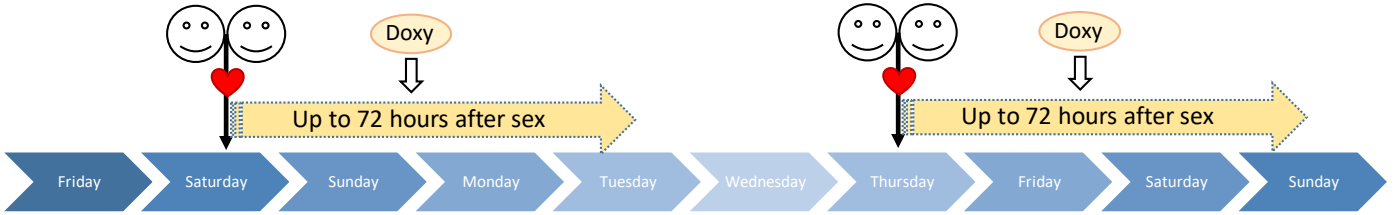
Provide enough doses of doxy PEP to last until next follow-up visit based on individual **sexual frequency**

Doxy PEP – How to Take

= sex without a condom, including oral sex

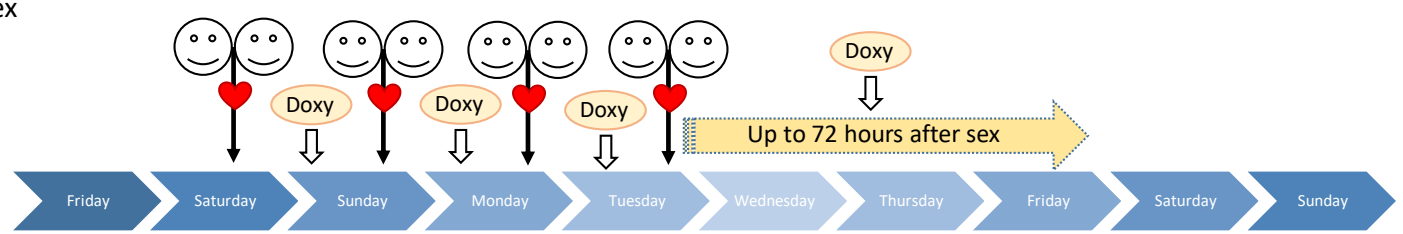
Two 100 mg pills of doxycycline ideally <u>within 24 hours</u> but no later than 72 hours after condomless oral, anal or vaginal sex

Example: Sex on Sat; take dose of doxy by Tues



Example: Sex on Thursday; take dose of doxy by Sunday

Example 2: Daily (or more) sex Sat-Tues; take daily dose of doxy and last dose within 24 hours *but not later than 72 hours* after last sex



***No more than* 200 mg every 24 hours**

Mpox

San Joaquin County Public Health Services

Provider Clinical Reference: MPOX

Mpox is an orthopoxvirus illness that spreads through close skin-to-skin contact with people who have mpox rashes and sores. Severe disease can occur in immunocompromised people, pregnant patients, children, and those with extensive mucosal disease. Casual contact is unlikely to cause transmission. Rapid recognition, testing, pain control, and timely vaccination for exposure prevention are key.

Clinical Presentation	▪ **The incubation period:** About 1-2 weeks. A person is not contagious during this period ▪ **Prodrome:** Fever, chills, malaise, lymphadenopathy, headache, myalgias (may be absent) ▪ **Rash:** macules → papules → vesicles → pustules → scabs; often painful and deep-seated ▪ **Distribution:** Frequently anogenital, perioral, or localized to the site of contact; may be disseminated ▪ **Other symptoms:** Rectal pain, proctitis, sore throat, and respiratory symptoms ▪ **Complications:** Secondary bacterial infection, severe disease in immuno-compromised individuals, ocular involvement, and encephalitis Mpox Overview
Who Should Be Screened	Screening is recommended for patients with the following: ▪ Pregnant patients: At first prenatal visit, in the third trimester, and at delivery ▪ Patients with symptoms of genital ulcers, rash, or neurologic signs ▪ MSM, people living with HIV, or multiple/anonymous partners ▪ Patients with a recent STI diagnosis
Testing	Collect ≥ 2 lesion swabs from different sites if possible ▪ Vigorously swab the lesion surface (unroofing not required) ▪ Submit to public health or clinical laboratory for orthopoxvirus/mpox PCR Screen for co-infections (HIV, syphilis, gonorrhea, chlamydia) as indicated
Treatment	**Tecovirimat (TPOXX):** May be considered for severe disease, high-risk patients (immunocompromised, pregnant, pediatrics), or painful/progressive mucosal involvement; consult ID for access ▪ Manage secondary bacterial infection if suspected ▪ Urgent ophthalmology consultation for ocular disease ▪ Avoid corticosteroids unless specifically indicated Mpox Treatment
Follow-up	▪ Cover lesions, avoid close contact, and shared items until fully healed ▪ Reassess high-risk patients for complications or worsening disease ⚠ Isolation until all lesions crust, scabs have fallen off, and new skin has formed
Reporting to Public Health	Mpox *(suspected or confirmed)* is reportable in California **Immediately** report to San Joaquin County Public Health Services: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information* Report to SJCPHS
JYNNEOS Mpox Vaccine & PEP	**The Mpox vaccine is a two-dose series given 28 days apart.** ▪ Administer intradermal (0.1 mL) for most adults or subcutaneous (0.5 mL) when indicated Post-exposure prophylaxis (PEP) is most effective if started ≤ 4 days after exposure may reduce severity up to 14 days after ▪ Consider expanded **PEP "PEP++"** for patients with ongoing risk per public health guidance

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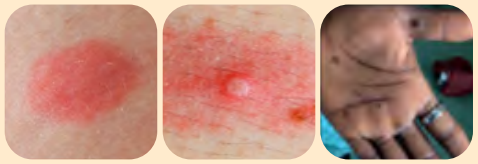
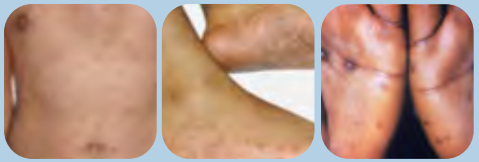
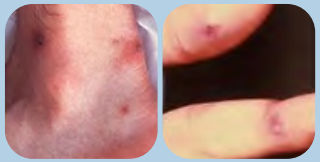
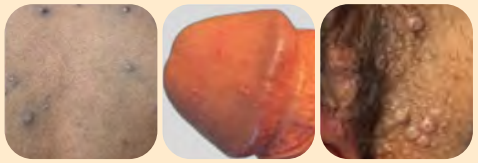
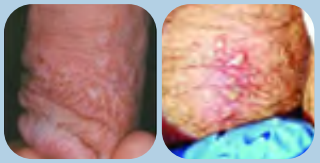
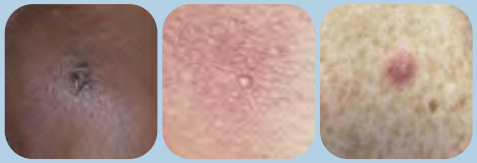
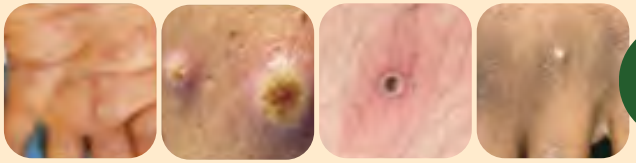
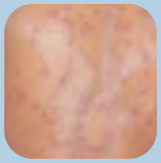
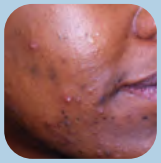
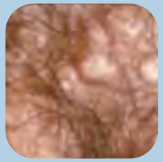
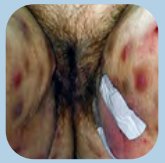
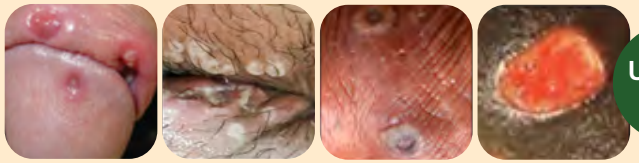
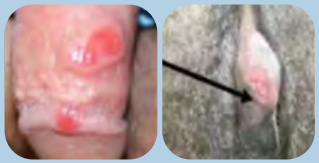
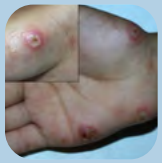
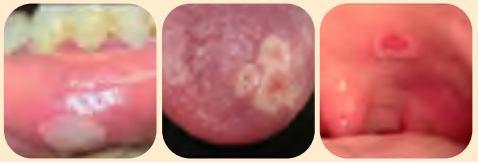
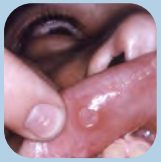
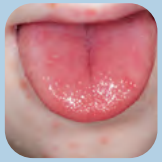
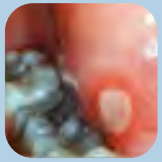
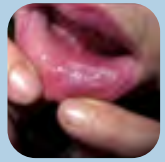
Mpox Evaluation, Testing, and Treatment

Mpox Clinical Recognition and Testing Quicksheet: Mpox Presentations vs Common Exanthems

CAPTC

Mpox		Mimickers
	**Macular/ Papular**	 Secondary Syphilis  Disseminated Gonorrhea
	**Vesicular**	 Herpes  Disseminated Gonorrhea
	**Pustule/ Scab**	 Varicella  Acne  Molluscum Contagiosum  Hidradenitis Suppurativa
	**Ulcerative Lesions**	 Primary Syphilis  Hand-foot-mouth
	**Oral Lesions**	 Herpes  Hand-foot-mouth  Aphthous ulcer (canker sore)  Secondary syphilis mucous patch

View image sources on the California PTC Website (californiaptc.org)

Revised December 2024

CONSIDERATIONS for MPOX TESTING

✓ If testing for mpox, consider STI co-infection testing including HIV, syphilis, gonorrhea, chlamydia, & herpes
✓ Testing is still warranted among persons who were previously vaccinated or had previous mpox infection
✓ Have a lower threshold for mpox testing if any of the following are on your differential diagnosis:

	Infectious Mpox Mimickers	Non-infectious Mpox Mimickers
Genital Lesions	• Herpes simplex virus (HSV; genital herpes) • Primary or secondary syphilis • Molluscum contagiosum • Lymphogranuloma venereum (LGV) • Chancroid • Granuloma inguinale	• Recurrent aphthous ulcers • Behçet's disease • Hidradenitis suppurativa • Squamous cell carcinoma • Drug-induced • Trauma
Diffuse Rash	• Secondary syphilis • Primary varicella (chickenpox) • Disseminated varicella zoster (VZV) • Disseminated HSV • Molluscum contagiosum • Disseminated fungal or gonococcal infection • Scabies • Hand, foot, and mouth disease (coxsackievirus)	• Atopic dermatitis (eczema) • Contact dermatitis • Psoriasis • Pityriasis rosea • Autoimmune • Drug-induced
Proctitis	• Gonorrhea (GC) • Chlamydia (CT), including LGV • HSV • Syphilis	• Inflammatory bowel disease (Ulcerative colitis or Crohn's disease) • Anal fissure • Hemorrhoids

Source: CDC Mpox 101 – What Clinicians Need to Know (https://archive.cdc.gov/#/details?url=https://www.cdc.gov/poxvirus/mpox/pdf/Mpox-101-What-Clinicians-Need-to-Know.pdf)

HOW to TEST for MPOX

Mpox lesion-based testing is widely available through most commercial laboratories and certain public health laboratories.* Contact your contracted lab for specimen collection criteria as swabs and tubes can vary by lab; most commercial labs list this online (e.g., search [*lab name*] *mpox-*, *monkeypox-*, or *orthopoxvirus-test* or *PCR*). Consider creating a few mpox test kits for your clinic with personal protective equipment (PPE), swabs, tubes, and lab instructions.

1. **Don PPE** (N95, eyewear, gown, gloves) prior to exam and any specimen collection.
2. **Prepare specimen collection supplies** for all co-infection and/or differential testing.
   Note: Mpox testing swabs *cannot* be combined with other swabs (e.g., HSV, CT/GC, VZV, etc.).
3. **Perform complete physical exam** of all skin, oral, genital, and perianal areas.
4. **Swab lesion(s) surface vigorously** with sterile synthetic swab(s)—do not unroof or aspirate; do not clean the site before swabbing. Ideally, submit 2 specimens from different lesions/locations/appearance into their own sterile tubes.
5. **Label, store, and/or transport specimen(s)** per designated lab instructions.

If mpox is likely or confirmed, evaluate for antiviral treatment and ensure adequate pain control:
Tecovirimat (TPOXX) is available for persons at high risk for complications or severe disease through the U.S. Centers for Disease Control and Prevention (CDC) expanded access investigational new drug (EA-IND) protocol. For more information: go.cdph.ca.gov/TPOXX.

***Contact your local health department for expedited testing ASAP if clade I mpox is suspected** and/or for reporting or testing support.

CDPH

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

Erica Pan, MD, MPH
State Public Health Officer & Director

Gavin Newsom
Governor

Health Advisory

TO: Healthcare Providers, Commercial Laboratories, and Local Health Departments
Community Spread of Clade I Mpox Within California
10/17/2025

Key Messages

- Three new unrelated clade I mpox cases have been confirmed in Southern California with no history of recent international travel. Public health investigation indicates that community transmission of clade I mpox within California is occurring among gay, bisexual, and other men who have sex with men and their social networks.
    - At this time, clade I mpox has not been shown to be more transmissible than clade II . Transmission studies are ongoing.
    - Clade I mpox transmission can occur through sexual or intimate contact (e.g., massage, cuddling) or shared living spaces or personal items.
    - Clade I mpox can be severe. Risk of severe disease and hospitalization are highest for people with weakened immune systems.
    - At this time, the overall risk of clade I mpox to the general population in California and the United States continues to be low.
- Commercial laboratories should retain positive orthopoxvirus specimens and await guidance for further testing from the public health department.
- Mpox vaccination with two doses is recommended for individuals who may be at risk for mpox and is expected to protect against both clade I and clade II mpox or any subclades. Providers should incorporate assessments for mpox risk and vaccination status at all sexual health visits.
    - Boosters (third doses) are not recommended at this time.

    - Vaccines are available at many chain pharmacies and certain clinics—see Mpox Vaccine Locator.
- Mpox testing should be considered for patients with compatible signs and symptoms (PDF), regardless of vaccination status or previous infection.

Background

In October 2025, three clade I mpox cases were identified in Southern California who did not report travel history, or contact with one another. This is indicative of community spread of clade I monkeypox virus (MPXV) in California. All prior cases of clade I mpox in California and in the United States have been associated with international travel to areas in which spread of clade I MPXV is ongoing.

As of October 15, all three patients required hospitalization and are recovering with standard medical care. Contact investigation is ongoing. The California Department of Public Health (CDPH) continues to work closely with local public health departments to conduct enhanced surveillance to detect additional clade I cases. There have also been recent increases in clade II mpox cases reported in California.

At this time, clade I mpox has not been shown to be more transmissible than clade II. Transmission studies are ongoing. Transmission can occur via sexual contact, non-sexual close contact (e.g., massage, cuddling), shared living spaces or personal items. Clade I mpox can be severe. Risk of severe disease and hospitalization are highest for people with weakened immune systems.

Recommendations

Recommendations for Commercial Laboratories

Commercial laboratories should not discard the following California specimens:

- Positive orthopoxvirus (NVO or OPXV) without clade determination
- Positive monkeypoxvirus (MPXV generic) without clade determination
- Positive orthopoxvirus (NVO or OPXV) with indeterminate clade II MPXV
- Positive orthopoxvirus (NVO or OPXV) with a negative clade II MPXV

Commercial laboratories will be contacted by the public health department. Specimens will be directed to either the local public health laboratory or to the CDPH Viral and Rickettsial Disease Laboratory: (510) 307-8585 or VRDL.Submittal@cdph.ca.gov.

Recommendations for Healthcare Providers

Mpox guidance including practice recommendations and information on clinical recognition, treatment, and vaccination are outlined in CDPH Health Advisory: Recent Rise of Mpox Cases in California and the Bay Area (8/26/2025). These recommendations apply to both clade I and clade II mpox.

Follow specimen collection guidelines and your lab submission criteria to collect specimens, from 2 lesions.

- Use 2 sterile synthetic swabs to vigorously swab each lesion, place into appropriate sterile container labeled with anatomic location.
- Do not de-r oof or aspirate lesion(s) due to risk of sharps injury and exposure.
- Do not use antiseptic or other topicals before swabbing as these can interfere with test results.

Ensure infection control measures are in place for all suspected clade I and II mpox cases at the time of presentation for clinical care.

Infection Control

- Patients with a rash should be **roomed promptly and wear appropriate source control** as able (e.g., well-fitted face mask and lesions covered with clothing or bandages).
- **Healthcare providers and assisting staff should wear full personal protective equipment (PPE)** when evaluating someone with mpox symptoms. This includes gloves, a gown, eyewear, and a fit-tested N95 respirator.
- Special precautions, including **full PPE, should also be taken when cleaning and disinfecting rooms after a visit.**

Home Isolation Recommendations

Any patients being tested for suspected clade I or II mpox should be advised to isolate at home, away from others, pending results.

- Home isolation should continue for the duration of mpox illness, until the rash is healed.
- Isolation, disinfection, and other precautions within the household are recommended. Clade I mpox may spread, including within the household (e.g., through contaminated surfaces or linens).
- Post-exposure prophylaxis (PEP) with JYNNEOS vaccine is recommended for close contacts of people with mpox—including household contacts and recent sexual contacts. PEP can be given within 14 days of last exposure but is most effective when given as soon as possible. See vaccination section below.

Vaccination

The mpox vaccine is expected to be protective against both clade I and clade II mpox and remains the best strategy to protect against complications including severe illness, hospitalization, and death.

To simplify assessment and improve community vaccination coverage among those at increased risk of exposure given current outbreak data, CDPH recommends the mpox vaccine for any person who:

- Is gay, bisexual, or other man who has sex with men *or*
- Is transgender, nonbinary, or gender-diverse *or*
- Has HIV, or is taking/eligible for HIV PrEP or doxy PEP *or*

- Was exposed to someone with mpox in the last 14 days *or*
- Is planning to travel to sub-Saharan Africa, the Middle East or a country with a clade I mpox outbreak and anticipates sexual or intimate contact while traveling *or*
- Anticipates attending a commercial sex event or venue (like a sex club or bathhouse) *or*
- Has a sex partner with any of the above risks *or*
- Requests mpox vaccination, even if they have not disclosed any risks listed above

JYNNEOS is covered by Medi-Cal and most private insurers. It is also on the formularies for AIDS Drug Assistance Program (ADAP) and Pre-Exposure Prophylaxis Program (PrEP-AP), which helps cover the cost of medications, certain vaccines, lab tests, and doctor's visits for HIV prevention in eligible Californians.

Mpox vaccines are available at many chain pharmacies and certain clinics—see Mpox Vaccine Locator.

Recommendations for Local Health Departments

Notify CDPH immediately if clade I mpox is confirmed or suspected. This includes symptomatic patients who:

- History of international travel or close contact to an international traveler in the prior 21 days, *or*
- History of close contact to a clade I mpox case *or*
- Have preliminary mpox test results that suggest clade I MPXV:
    - Positive orthopoxvirus (NVO+, OPXV+) with negative clade II MPXV
    - Positive orthopoxvirus (NVO+, OPXV+) with indeterminate clade II MPXV

Resources

- Public health contact information:
    - CDPH STD Control Branch: stdcb@cdph.ca.gov or mpoxadmin@cdph.ca.gov business hours (510) 620-3400 or after hours duty officer (916) 328-3605
    - CDPH VRDL (clade I testing): 510-307-8585 or VRDL.Submittal@cdph.ca.gov
    - CDC Poxvirus and Rabies Branch: poxvirus@cdc.gov or after hours via the CDC Emergency Operations Center (EOC) at (770) 488-7100
    - CDPH Local Health Department Communicable Disease Contact List
- California Prevention Training Center | Mpox Clinical Recognition & Testing Overview
- CDC | Infection Prevention and Control in Healthcare Settings [Monkeypox]
- CDPH | Mpox Vaccination
- CDPH | Mpox Treatment Information for Providers

- CDPH | Provider and Health System Access to Commercially Available JYNNEOS Vaccine in California
- CDPH | Health Advisory: Recent Rise of Mpox Cases in California and the Bay Area (8/26/2025)
- CDC | Clinical Features of Mpox
- CDC | Safer Sex, Social Gatherings, and Mpox
- CDC | Clade I Mpox Outbreak Originating in Africa

California Department of Public Health
PO Box, 997377, MS 0500, Sacramento, CA 95899-7377
Department Website (cdph.ca.gov)

Additional Resources

San Joaquin County Public Health Services

Provider Clinical Reference: CHLAMYDIA

Chlamydia is the most frequently reported bacterial sexually transmitted infection (STI) in California and in San Joaquin County. Young people, particularly women under 25, remain disproportionately affected. Untreated infections can lead to pelvic inflammatory disease, ectopic pregnancy, and infertility. Routine screening and prompt treatment are key to preventing complications and community transmission.

Clinical Presentation	▪ **Men (urogenital):** Often asymptomatic; may present with dysuria, clear/mucoid urethral discharge, or epididymitis (unilateral scrotal pain, swelling, tenderness) ▪ **Women (urogenital):** Frequently asymptomatic; may have dysuria, mucopurulent cervical discharge, intermenstrual or post-coital bleeding, pelvic pain (can progress to PID) ▪ **Rectal infection:** Usually asymptomatic; may cause rectal pain, discharge, or bleeding ▪ **Pharyngeal infection:** Rare and usually asymptomatic ▪ **Complications:** Pelvic inflammatory disease, infertility, ectopic pregnancy, chronic pelvic pain in women; reactive arthritis in both sexes Chlamydia Overview
Who Should Be Screened	▪ **Sexually active women <25 years old:** Annually ▪ **Women ≥25 years:** If at increased risk (new/multiple partners, prior STI) ▪ **Pregnant patients:** At the first prenatal visit and again in the third trimester if at risk ▪ **MSM and people with HIV:** At least annually, every 3-6 months if ongoing risk ▪ **All patients with a new STI diagnosis:** Screen for chlamydia and gonorrhea
Testing	▪ **Preferred test:** Nucleic acid amplification test (NAAT) ▪ **Specimens:** First-catch urine, vaginal swab (preferred for women), rectal/pharyngeal swabs as indicated ▪ **Screen for co-infections:** Gonorrhea, syphilis, HIV
Treatment	▪ **First-line:** Doxycycline 100 mg orally twice daily for 7 days ▪ **Alternative (pregnant patients):** Azithromycin 1 g orally in a single dose ▪ **Expedited Partner Therapy (EPT):** Legal in California and encouraged when partners cannot promptly access care ▪ **Prevention:** Consider Doxy PEP for patients at high risk for bacterial STIs ⚠ *Abstain from sexual activity for 7 days after treatment and until partners are treated* Chlamydia Treatment
Follow-up	▪ **Test of cure:** Not routinely needed, except in pregnancy (retest at 3–4 weeks) ▪ **Re-screen all patients:** 3 months after treatment, regardless of partner treatment
Reporting to Public Health	Chlamydia *(suspected or confirmed)* is reportable in California Immediately report to San Joaquin County Public Health Services within one (1) working day: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information.* Report to SJCPHS

1601 E. Hazelton Ave. Stockton, CA 95205 | 209-468-3822 | www.sjcphs.org

San Joaquin County Public Health Services

Provider Clinical Reference: GONORRHEA

Gonorrhea remains a significant public health concern in California and San Joaquin County, with rising rates and increasing reports of antimicrobial resistance. Untreated infections can lead to pelvic inflammatory disease, infertility, epididymitis, and facilitate HIV transmission. Prompt diagnosis, treatment, and partner management are critical to control spread and reduce complications.

Clinical Presentation	▪ **Men (urogenital):** Dysuria, purulent urethral discharge; some asymptomatic ▪ **Women (urogenital):** Often asymptomatic; may have dysuria, vaginal discharge, intermenstrual bleeding, pelvic pain (PID) ▪ **Rectal:** Frequently asymptomatic; may cause pain, discharge, bleeding ▪ **Pharyngeal:** Usually asymptomatic; may cause a sore throat ▪ **Disseminated infection (DGI):** Fever, arthritis/tenosynovitis, pustular rash; rarely septic arthritis, endocarditis, or meningitis Gonorrhea Overview
Who Should Be Screened	▪ **Sexually active women <25 years old:** annually ▪ **Women ≥25 years:** if at increased risk (new/multiple partners, prior STI) ▪ **Pregnant patients:** at the first prenatal visit and again in the third trimester if at risk ▪ **MSM and people with HIV:** at least annually, every 3-6 months if ongoing risk ▪ **All patients with a new STI diagnosis:** screen for gonorrhea and chlamydia
Testing	**Preferred test** ▪ Nucleic acid amplification test (NAAT) **Specimens** ▪ First-catch urine, vaginal swab (preferred for women), rectal/pharyngeal swabs as indicated ▪ Culture and susceptibility testing should be performed if treatment failure is suspected **Screen for co-infections** ▪ Chlamydia, syphilis, HIV
Treatment & Prevention	**First-line:** Ceftriaxone 500 mg IM in a single dose ▪ **If patient ≥150 kg:** 1g IM in a single dose ⚠ *No reliable oral-only regimen is available* ▪ **If chlamydia is not excluded:** Add doxycycline 100 mg PO twice daily for 7 days ▪ **If chlamydia is not excluded in pregnancy:** Add Azithromycin 1g po in single dose ⚠ *Abstain from sexual activity for 7 days after treatment and until partners are treated* **Prevention:** Consider Doxy PEP for patients at high risk for bacterial STIs Gonorrhea Treatment
Follow-up	**Test of cure:** Not needed for uncomplicated urogenital or rectal infections treated with the recommended regimen ▪ **Required for pharyngeal infections:** perform NAAT 7–14 days after treatment **Re-screen all patients:** 3 months after treatment, regardless of partner treatment
Reporting to Public Health	Gonorrhea *(suspected or confirmed)* is reportable in California Immediately report to San Joaquin County Public Health Services within **seven (7) working days**: (209) 468-3822 Confidential Morbidity Report (CMR) CalREDIE ***Advise the patient that they may be contacted by public health for follow-up information.* Report to SJCPHS

San Joaquin County Public Health Services

Provider Clinical Reference: MYCOPLASMA GENITALIUM

Mycoplasma genitalium (Mgen) is a sexually transmitted pathogen increasingly recognized as a cause of nongonococcal urethritis (NGU) in men and cervicitis and pelvic inflammatory disease (PID) in women. Rising rates of antimicrobial resistance make diagnosis and treatment challenging. Many infections are asymptomatic, highlighting the need for provider awareness.

Clinical Presentation	▪ **Men:** Dysuria, urethritis, persistent/recurrent symptoms after empiric STI therapy ▪ **Women:** Cervicitis, vaginal discharge, dysuria, post-coital bleeding, pelvic pain (may progress to PID) ▪ **Rectal infection:** Usually asymptomatic, may occur in MSM ▪ **Pharyngeal infection:** Rare and typically asymptomatic ▪ **During pregnancy:** Mgen may be associated with preterm (early) delivery or pregnancy loss Mgen Overview
Who Should Be Screened	Currently screening is not currently recommended ▪ **Test only:** Men with persistent or recurrent urethritis Women with persistent or recurrent cervicitis or PID when other causes have been excluded Partners of infected patients
Testing	▪ **Preferred Testing:** NAATs (nucleic acid amplification tests) Consider resistance testing where available (macrolide resistance)
Treatment	Macrolide-sensitive ▪ Doxycycline 100 mg PO BID × 7 days, then azithromycin (1 g PO once, then 500 mg PO daily × 3 days) Macrolide-resistant or resistance unknown ▪ Doxycycline 100 mg PO BID × 7 days, then moxifloxacin 400 mg PO daily × 7 days ⚠ Avoid azithromycin monotherapy due to high rates of resistance Mgen Treatment
Follow-up	**Test of cure:** Recommended if symptoms persist ▪ Retest may be considered 3–6 months after treatment in high-risk settings ▪ Ensure partner management to prevent reinfection
Reporting to Public Health	Mycoplasma genitalium is not currently reportable in California ▪ Persistent or resistant cases should be documented using the Mycoplasma genitalium (Mgen)Treatment Failure Registry ***Advise the patient that they may be contacted by public health for follow-up information* Mgen Treatment failure Registry

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Additional Resources

Genital Herpes

Disseminated Gonococcal Infection

Human Papillomavirus (HPV)

Hepatitis A

Hepatitis B

Hepatitis C

MSM Toolkit

STI Risk & Oral Sex

STIs & Pregnancy

SAN JOAQUIN COUNTY CLINIC LOCATIONS

Please note that the San Joaquin County Public Health Services office does not have full-service clinic offerings.
Please select from the list of provider locations below and contact for regular care. Thank you.

PRIMARY CARE AND FAMILY MEDICINE

SJ Health Centers
1414 N. California St, Stockton
(209) 953-6400

SJ Health Centers
500 W. Hospital Rd, French Camp
(209) 953-6400

Community Medical Centers
2415 W. Vine St., Ste. 100, Lodi
(209) 333-3135

Community Medical Centers
200 Cottage Avenue, Suite 103, Manteca
(209) 624-5800

Community Medical Centers
2349 N. California St., Stockton
(209) 469-2229

Community Medical Centers
2151 W. Grant Line Road, Tracy
(209) 820-1500

Community Medical Centers
701 E. Channel Street, Stockton
(209) 944-4700

Community Medical Centers
730 N. Central Ave, Tracy
(209) 650-4000

Community Medical Centers
747 E. Channel Street, Stockton
(209) 944-4700

Needvaccinations? FormoreVFC&VFAproviderspleasesee
ONLINE: https://eziz.org/vfc/provider-locations/

FAMILY PLANNING AND SEXUAL HEALTH

Please note all locations listed above offer
Family Planning and Sexual Health services along with locations below.

Planned Parenthood
Eastland Plaza Health Center
678 N Wilson Way #G, Stockton
(209) 466-2081

Planned Parenthood
Manteca Health Center
965 E. Yosemite Avenue #2, Manteca
(209) 239-2528

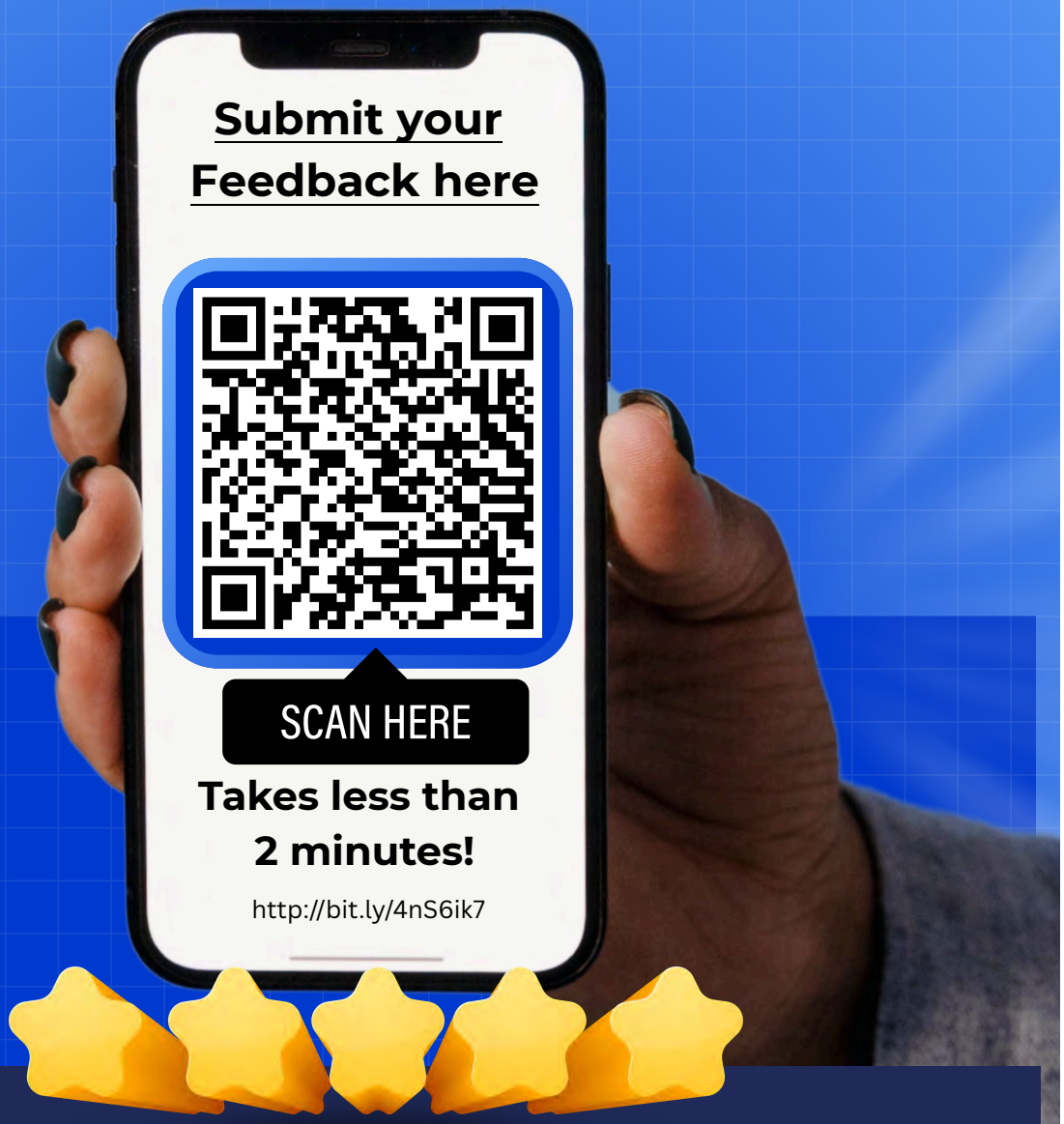
Planned Parenthood
North Stockton Health Center
4555 Precissi Lane, Stockton
(209) 477-4103

Planned Parenthood
Tracy Health Center
1441 N. Tracy Blvd, Tracy
(209) 835-8910

San Joaquin County
Public Health Services
health grows here

STI PROVIDER GUIDE FEEDBACK SURVEY

Share your input to help improve resources for San Joaquin County healthcare providers



TOGETHER, WE STRENGTHEN STI PREVENTION & CARE IN SAN JOAQUIN COUNTY

San Joaquin County Public Health Services
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