San Joaquin County
Public Health Services
health grows here

Sexually Transmitted Disease (STD) Guide

Community Services
1601 E Hazelton Ave | Stockton, CA 95205
209-468-3820

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

San Joaquin County Public Health Services

1601 East Hazelton Avenue . Stockton, CA 95205
209/468-3411; Fax 209/468-3823; www.sjcphs.org

October 3, 2016

Dear Provider,

San Joaquin County (SJC) is experiencing an increase in heterosexual transmission of syphilis, syphilis in women, and congenital syphilis. Over 140 primary and secondary (infectious) syphilis cases have been reported so far this year along with four babies diagnosed with congenital syphilis. In addition, eleven babies have been reported as possible congenital syphilis in the past three months and are under investigation.

On May 15, 2015, SJC Public Health Services (PHS) sent out a Health Advisory alerting providers to an increase in congenital syphilis. On March 23, 2016, PHS sent out a Health Alert declaring SJC as an area with high syphilis morbidity and calling for all clinicians to screen for syphilis three times during ALL pregnancies: at the initial prenatal visit, again EARLY in the third trimester of pregnancy, and again at delivery.

California Code of Regulations, Title 17, Section 2500 requires health care providers to report any case or suspected case of a disease of public health importance to the local health department. A list of these diseases can be found in this packet and on the California Department of Public Health website at http://www.cdph.ca.gov/HealthInfo/Documents/Reportable_Diseases_Conditions.pdf. Syphilis, gonorrhea, and chlamydia are included on that list.

To report to PHS, 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 refer to the Centers for Disease Control and Prevention's 2015 Sexually Transmitted Diseases Treatment Guidelines http://www.cdc.gov/std/tg2015/default.htm or call PHS at (209) 468-3845.

Thank you for all your work to protect and improve the health of San Joaquin County residents.

Julie Vaishampayan, MD, MPH
Assistant Health Officer
San Joaquin County Public Health Services

Table of Contents

San Joaquin County Public Health Services http://www.sjcphs.org/

CONFIDENTIAL MORBIDITY REPORT

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

DISEASE BEING REPORTED

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 | ***Gender*** ☐ Male ☐ Female ☐ M to F Transgender ☐ F to M Transgender ☐ Other: _____

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

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 ☐ Hmong ☐ Thai
☐ Cambodian ☐ Japanese ☐ Vietnamese
☐ Chinese ☐ Korean ☐ Other *(specify)*: _____
☐ Filipino ☐ Laotian
☐ Pacific Islander *(check all that apply)*
☐ Native Hawaiian ☐ Samoan
☐ Guamanian ☐ Other *(specify)*: _____
☐ White
☐ Other *(specify)*: _____
☐ Unknown

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
P.O. Box 2009
Stockton, CA 95201-2009

STDs Reporting (No HIV):
Phone: (209) 468-3845 FAX: (209) 468-3495

All Other CDs Reporting (No HIV):
Phone: (209) 468-3822 FAX: (209) 468-8222

(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 ☐ M to F Transgender
☐ Female ☐ F to M Transgender
☐ Unknown ☐ 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 latent < 1 year
☐ Latent (unknown duration)
☐ Late latent > 1 year
☐ Late (tertiary)
☐ Congenital

Neurosyphilis? ☐ Yes ☐ No ☐ Unknown

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 Chlamydia and/or 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

If reporting Pelvic Inflammatory Disease: *(check all that apply)*
☐ Gonococcal PID
☐ Chlamydial PID
☐ Other/Unknown Etiology PID

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 D
☐ 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	☐	☐

Remarks:

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).
= All other diseases/conditions should be reported by electronic transmission (including FAX), telephone, or mail within seven calendar days of identification.

REPORTABLE COMMUNICABLE DISEASES §2500(i)(1)

- FAX ✆ ✉ Amebiasis
- Anaplasmosis
- ✆ ! Anthrax, human or animal
- FAX ✆ ✉ Babesiosis
- ✆ ! Botulism (Infant, Foodborne, Wound, Other)
- Brucellosis, animal (except infections due to *Brucella canis*)
- ✆ ! Brucellosis, human
- FAX ✆ ✉ Campylobacteriosis
- Chancroid
- FAX ✆ ✉ Chickenpox (Varicella) (outbreaks, hospitalizations and deaths)
- FAX ✆ ✉ Chikungunya Virus Infection
- *Chlamydia trachomatis* infections, including lymphogranuloma venereum (LGV)
- ✆ ! Cholera
- ✆ ! Ciguatera Fish Poisoning
- Coccidioidomycosis
- Creutzfeldt-Jakob Disease (CJD) and other Transmissible Spongiform Encephalopathies (TSE)
- FAX ✆ ✉ Cryptosporidiosis
- Cyclosporiasis
- Cysticercosis or taeniasis
- ✆ ! Dengue Virus Infection
- ✆ ! Diphtheria
- ✆ ! Domoic Acid Poisoning (Amnesic Shellfish Poisoning)
- Ehrlichiosis
- FAX ✆ ✉ Encephalitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic
- ✆ ! *Escherichia coli*: shiga toxin producing (STEC) including *E. coli* O157
- ✆ ! Flavivirus infection of undetermined species
- † FAX ✆ ✉ Foodborne Disease
- Giardiasis
- Gonococcal Infections
- FAX ✆ ✉ *Haemophilus influenzae,* invasive disease, all serotypes (report an incident of less than five years of age)
- FAX ✆ ✉ Hantavirus Infections
- ✆ ! Hemolytic Uremic Syndrome
- FAX ✆ ✉ Hepatitis A, acute infection
- Hepatitis B (specify acute case or chronic)
- Hepatitis C (specify acute case or chronic)
- Hepatitis D (Delta) (specify acute case or chronic)
- Hepatitis E, acute infection
- Human Immunodeficiency Virus (HIV) infection, stage 3 (AIDS)
- ✆ Human Immunodeficiency Virus (HIV), acute infection
- Influenza, deaths in laboratory-confirmed cases for age 0-64 years
- ✆ ! Influenza, novel strains (human)
- Legionellosis
- Leprosy (Hansen Disease)
- Leptospirosis
- FAX ✆ ✉ Listeriosis
- Lyme Disease
- FAX ✆ ✉ Malaria
- ✆ ! Measles (Rubeola)
- FAX ✆ ✉ Meningitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic
- ✆ ! Meningococcal Infections
- Mumps
- ✆ ! Novel Virus Infection with Pandemic Potential
- ✆ ! Paralytic Shellfish Poisoning
- FAX ✆ ✉ Pertussis (Whooping Cough)
- ✆ ! Plague, human or animal
- FAX ✆ ✉ Poliovirus Infection
- FAX ✆ ✉ Psittacosis
- FAX ✆ ✉ Q Fever
- ✆ ! Rabies, human or animal
- FAX ✆ ✉ Relapsing Fever
- Respiratory Syncytial Virus (only report a death in a patient less than less than five years of age)
- Rickettsial Diseases (non-Rocky Mountain Spotted Fever), including Typhus and Typhus-like Illnesses
- Rocky Mountain Spotted Fever
- Rubella (German Measles)
- Rubella Syndrome, Congenital
- FAX ✆ ✉ Salmonellosis (Other than Typhoid Fever)
- ✆ ! Scombroid Fish Poisoning
- ✆ ! Shiga toxin (detected in feces)
- FAX ✆ ✉ Shigellosis
- ✆ ! Smallpox (Variola)
- FAX ✆ ✉ Streptococcal Infections (Outbreaks of Any Type and Individual Cases in Food Handlers and Dairy Workers Only)
- FAX ✆ ✉ Syphilis
- Tetanus
- FAX ✆ ✉ Trichinosis
- FAX ✆ ✉ Tuberculosis
- Tularemia, animal
- ✆ ! Tularemia, human
- FAX ✆ ✉ Typhoid Fever, Cases and Carriers
- FAX ✆ ✉ *Vibrio* Infections
- ✆ ! Viral Hemorrhagic Fevers, human or animal (e.g., Crimean-Congo, Ebola, Lassa, and Marburg viruses)
- FAX ✆ ✉ West Nile Virus (WNV) Infection
- ✆ ! Yellow Fever
- FAX ✆ ✉ Yersiniosis
- ✆ ! Zika Virus Infection
- ✆ ! OCCURRENCE of ANY UNUSUAL DISEASE
- ✆ ! OUTBREAKS of ANY DISEASE (Including diseases not listed in **§ 2500**). Specify if institutional and/or open community.

HIV REPORTING BY HEALTH CARE PROVIDERS §2641.30-2643.20

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, §2641.30-2643.20 and http://www.cdph.ca.gov/programs/aids/Pages/tOAHIVRptgSP.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):

* This form is designed for health care providers to report those diseases mandated by Title 17, California Code of Regulations (CCR). 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.

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To Assist With Mandated **Syphilis** Follow-up

Please Include The Following Items:

1. Confidential Morbidity Report (CMR)
2. Progress Notes
3. History & Physical Exam Notes
4. All Syphilis Lab Results dated back **1 year** from this reported positive:

   -RPR

   -TPPA

   -FTA-ABS

   -VDRL

5. Any Herpes results taken within **6 months** from this reported positive Syphilis
6. Medication Information (Treatments)

Please contact STD Control Program if you have any questions and/or concerns at (209) 468-3845, ask to speak with a Communicable Disease Investigator (CDI).

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

Physical Exam
- oral cavity
- lymph nodes
- skin
- palms & soles
- neurologic
- genitalia/pelvic
- perianal

History of syphilis
prior syphilis (last serologic test & last treatment)

†DIAGNOSTIC ISSUES IN PRIMARY SYPHILIS

Darkfield
~ 80% sensitive, varies with experience/skill of examiner & decreased sensitivity as lesion ages

RPR/VDRL
- A negative RPR/VDRL does not exclude the diagnosis of syphilis; only ~75-85% sensitive in primary syphilis
- Tests must be quantified to the highest titer & titer on the day of treatment must be used to assess treatment response
- Always use the same testing method (RPR or VDRL) in sequential testing; cannot compare titer from the two tests
- Tests lack specificity (biologic false positive); all reactive tests need to be confirmed by a treponemal test for syphilis diagnosis

TREATMENT & FOLLOW-UP

‡**Treatment of Primary Syphilis**
Recommended Regimen
- Benzathine Penicillin G 2.4 million units IM x 1

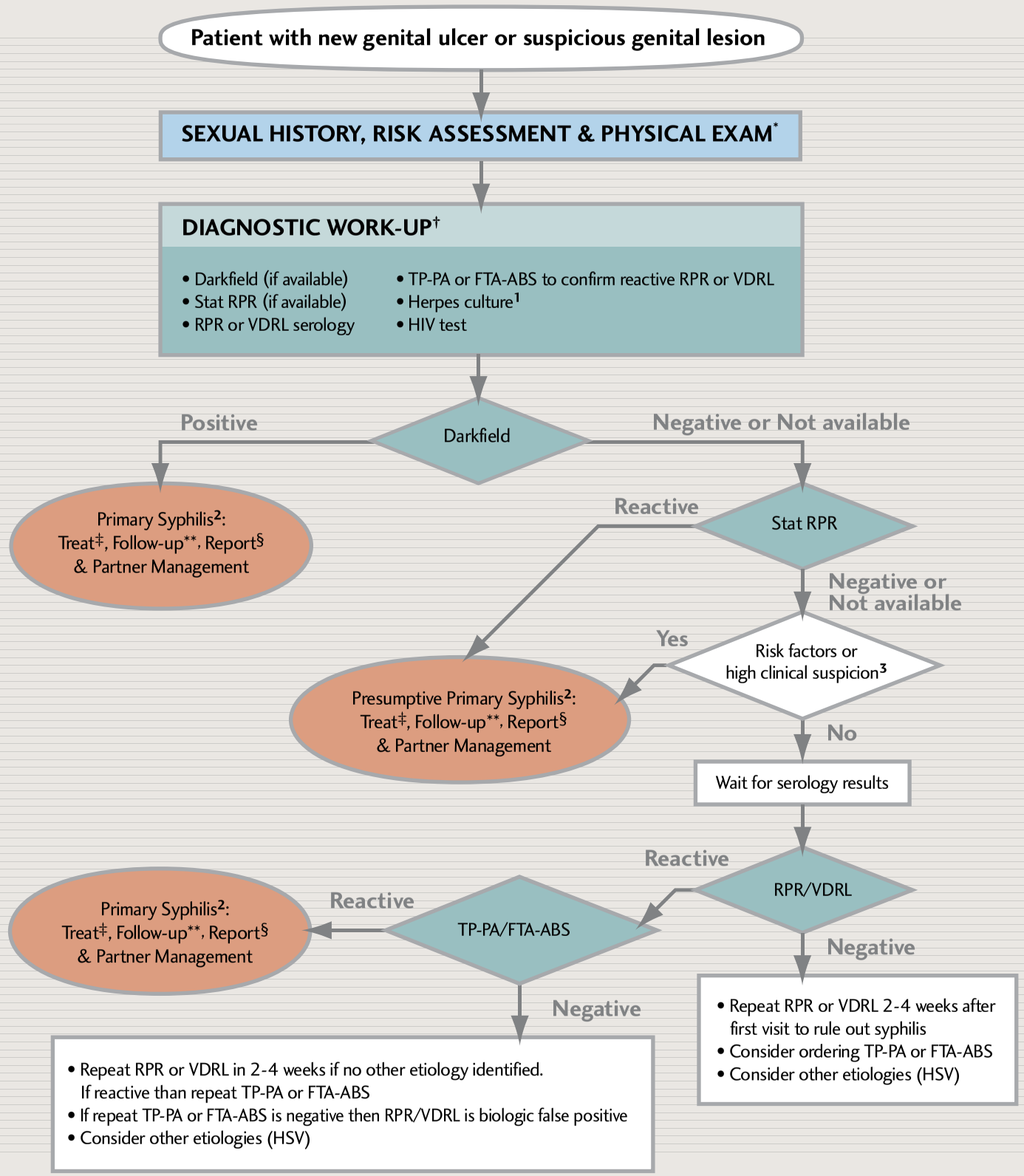
Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:
efficacy not well established & not studied in HIV infected; close follow-up essential
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks or
- Ceftriaxone 1gm IM or IV qd x 8-10 d

Also see CDC 2006 STD Treatment Guidelines: http://www.cdc.gov/std/treatment/ & CA STD Treatment Guidelines Grid: http://www.stdhivtraining.org/pdf/2006TreatmentGuidelines.pdf "

**Follow-Up To Assess Treatment Response
- 1-2 weeks & 1 month: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for HIVinfected
- 6, 12 months: serologic follow-up for HIV negative
- Treatment failure: failure of titer to decline fourfold within 6-12 months from titer at time of treatment.

§REPORTING & PARTNER MANAGEMENT

- All syphilis cases or suspected 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



***, †, ‡, §, ** see color coded boxes**

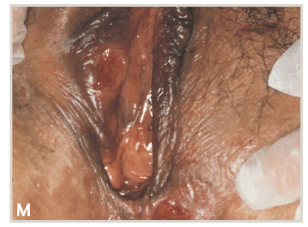
1. Also consider culture for Haemophilus ducreyi if exposure in endemic areas or if lesion does not respond to syphilis treatment.
2. All patients with suspected syphilis should be tested for HIV infection & screened for other STDs. Repeat HIV testing of patients with primary syphilis 3 months after the first HIV test, if the first test is negative.
3. If the patient is MSM (men who have sex with men) or has high risk sexual behavior (multiple partners, exchange of sex for money or drugs) or clinical exam with classic features of a syphilitic ulcer then presumptive treatment is recommended. Also consider presumptive treatment if patient follow-up is a concern.

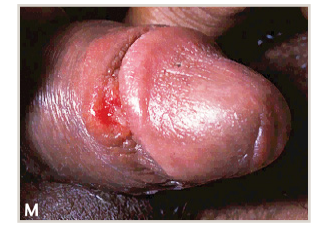
Clinical Presentations Of Primary Syphilis

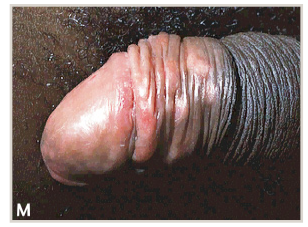
- Lesion appears 10-90 days after contact at site of exposure; may persist for 2-3weeks then resolves
- Usually genitorectal but may be extragenital, depends on exposure site
- Clinical presentation typical or atypical
  - Typical: single painless, indurated, clean-based ulcer with rolled edges & bilateral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

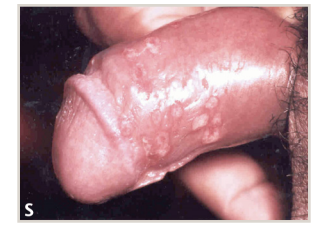
Differential Diagnosis

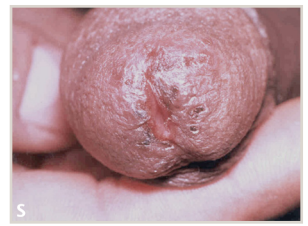
Herpes, chancroid, primary HIV ulcers, trauma & many non-STD causes of genital ulcers

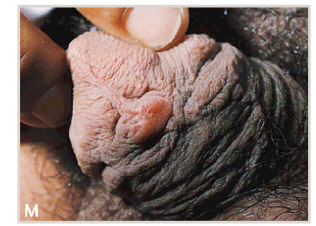

Multiple syphilitic ulcers, vulva

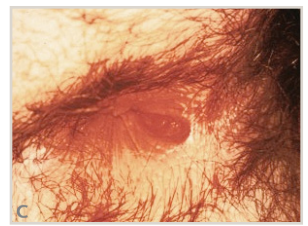

Syphilitic ulcer, corona


Multiple syphilitic ulcers, glans


Multiple syphilitic ulcers resembling herpes


Crusted syphilitic ulcer, urethra


Healing syphilitic ulcer


Syphilitic ulcer, perianal

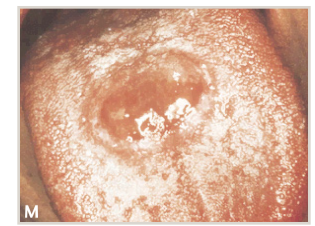

Syphilitic ulcer, tongue

Photo Credits

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CALIFORNIA STD/HIV PREVENTION TRAINING CENTER

For additional copies,

see the online version of the Primary Syphilis Algorithm (3-07) on the resources page of the CA STD/HIV PTC website: http:// www.stdhivtraining.org

Acknowledgements

The California STD/HIV Prevention Training Center thanks the Medical Directors from the National Network of Prevention Training Centers, The California STD Controllers Association and the Division of STD Prevention of the Centers for Disease Control and Prevention for their assistance in preparing this document.

Evaluating Patients For Secondary Syphilis

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- lymph nodes
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- palms & soles
- neurologic
- 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
- Tests must be quantified to the highest titer & titer on the day of treatment must be used to assess treatment response
- Always use the same testing method (RPR or VDRL) in sequential testing; cannot compare titer from the two tests
- Tests lack specificity (biologic false positive); all reactive tests need to be confirmed by a treponemal test for syphilis diagnosis
- Prozone Reaction: false negative RPR or VDRL from excess antibody blocking the antigen-antibody reaction
  - ~1% of secondary syphilis cases
  - Request lab to dilute the serum to at least 1/16 to rule out

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 infected; close follow-up essential
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks or
- Ceftriaxone 1gm IM or IV qd x 8-10 d

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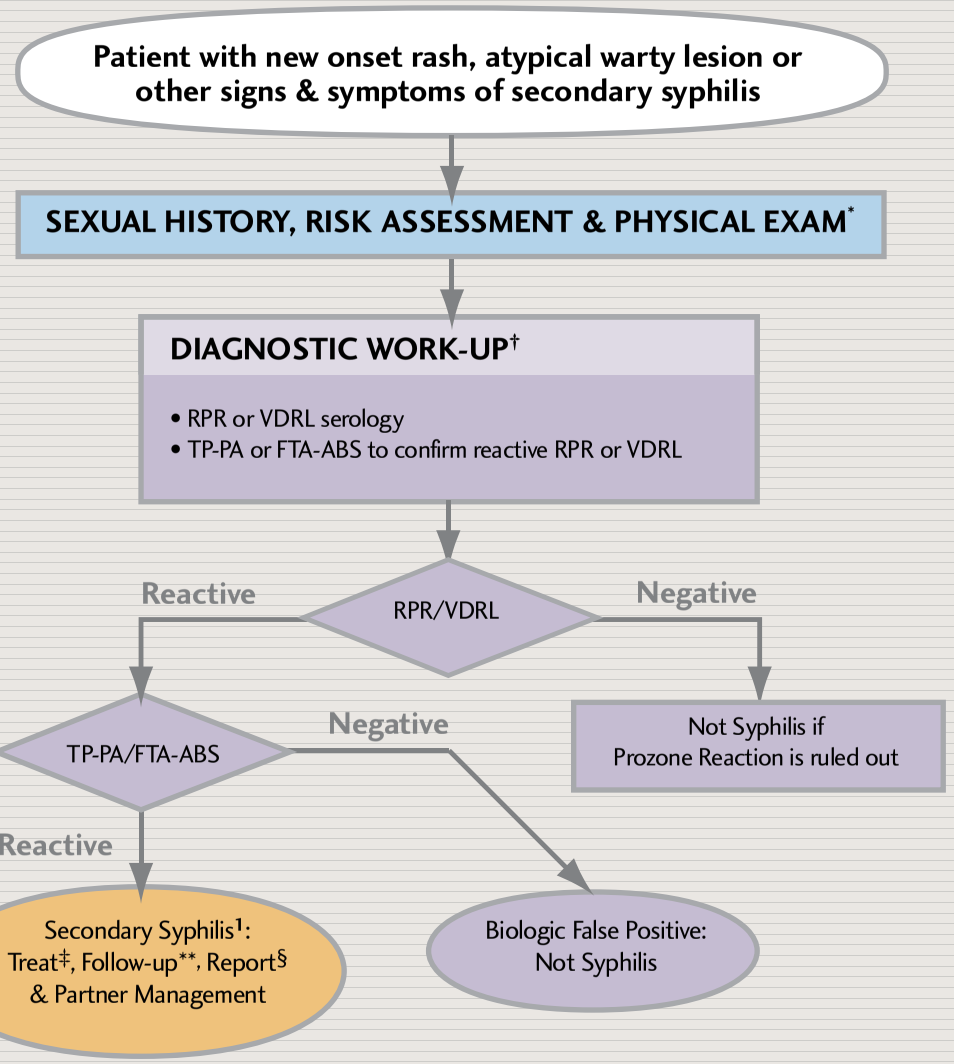
- Local health departments will assist in partner notification & management
- Contact Number at Local Health Department



*, †, ‡, §,** **see color coded boxes**

1. All patients with suspected syphilis should be tested for HIV infection & 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

For additional copies,

see the online version of the Secondary Syphilis Algorithm (3-07) on the resources page of the CA STD/HIV PTC website: http:// www.stdhivtraining.org

CALIFORNIA STD/HIV PREVENTION TRAINING CENTER

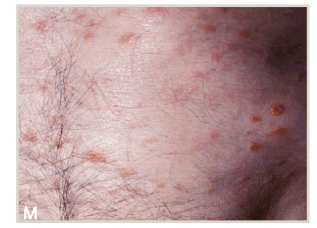
Acknowledgements

The California STD/HIV Prevention Training Center thanks the Medical Directors from the National Network of Prevention Training Centers, The California STD Controllers Association and the Division of STD Prevention of the Centers for Disease Control and Prevention for their assistance in preparing this document.

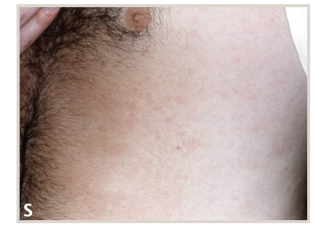
Clinical Presentations Of Secondary Syphilis

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

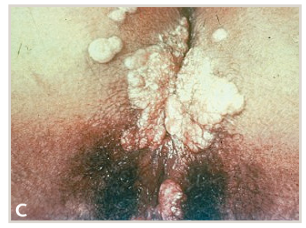
Signs & Symptoms of Secondary Syphilis
- **Rash:** most common feature (75-90%); can be macular, papular, squamous (scale), pustular (rare), vesicular (very rare) or combination; usually nonpruritic; may involve palms & soles (60%)
- **Generalized Lymphadenopathy:** (70-90%); inguinal, axillary & cervical 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



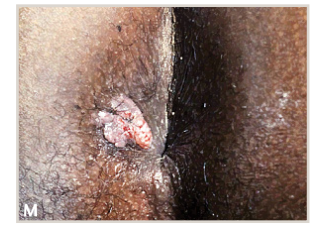
Macular & Papulosquamous Rash



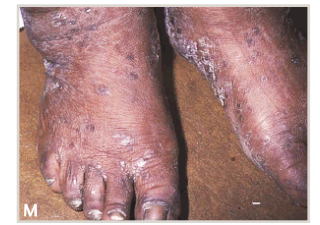
Subtle Macular Rash



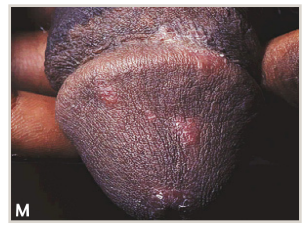
Condyloma lata



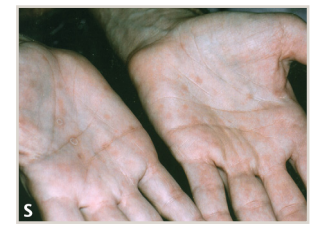
Condyloma lata



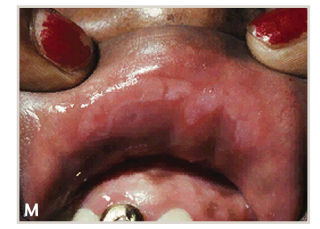
Papulosquamous Rash



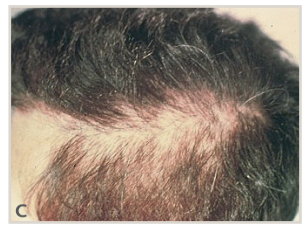
Papulosquamous Rash



Macular Rash

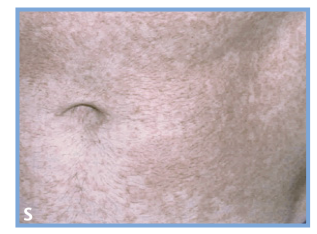


Mucous Patches

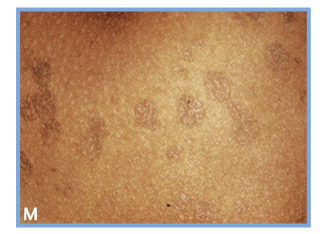


Alopecia

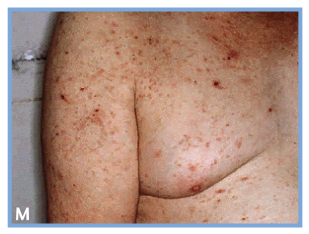
Differential Diagnosis of the rash of secondary syphilis includes: pityriasis rosea, psoriasis, erythema multiforme, tinea versicolor, scabies, drug reaction (e.g. from HAART medications), primary HIV infection



Drug Reaction



Tinea Versicolor



Generalized Scabies

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C Centers for Disease Control and Prevention

Syphilis Fact Sheets

Syphilis - CDC Fact Sheet

Syphilis is a sexually transmitted disease (STD) that can have very serious complications when left untreated, but it is simple to cure with the right treatment.

What is syphilis?

Syphilis is an STD that can cause long-term complications if not treated correctly. Symptoms in adults are divided into stages. These stages are primary, secondary, latent, and late syphilis.

How is syphilis spread?

You can get syphilis by direct contact with a syphilis sore during anal, vaginal, or oral sex. Sores can be found on the penis, vagina, anus, in the rectum, or on the lips and in the mouth. Syphilis can also be spread from an infected mother to her unborn baby.

What does syphilis look like?

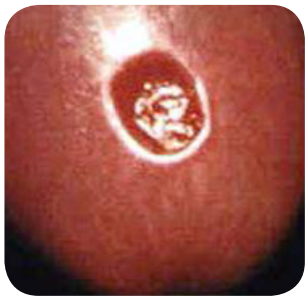
Syphilis has been called 'the great imitator' because it has so many possible symptoms, many of which look like symptoms from other diseases. The painless syphilis sore that you would get after you are first infected can be confused for an ingrown hair, zipper cut, or other seemingly harmless bump. The non-itchy body rash that develops during the second stage of syphilis can show up on the palms of your hands and soles of your feet, all over your body, or in just a few places. Syphilis can also affect the eye and can lead to permanent blindness. This is called ocular syphilis. You could also be infected with syphilis and have very mild symptoms or none at all.

How can I reduce my risk of getting syphilis?

The only way to avoid STDs is to not have vaginal, anal, or oral sex.

If you are sexually active, you can do the following things to lower your chances of getting syphilis:

- Being in a long-term mutually monogamous relationship with a partner who has been tested and has negative STD test results; and
- Using latex condoms the right way every time you have sex.



Example of a primary syphilis sore.

Washing your genitals, urinating, or douching after sex will not protect you from getting syphilis.

Am I at risk for syphilis?

Any sexually active person can get syphilis through unprotected anal, vaginal, or oral sex. Have an honest and open talk with your health care provider and ask whether you should be tested for syphilis or other STDs. You should get tested regularly for syphilis if you are pregnant, are a man who has sex with men, have HIV infection, and/or have partner(s) who have tested positive for syphilis.

I'm pregnant. How does syphilis affect my baby?

If you are pregnant and have syphilis, you can give the infection to your unborn baby. Having syphilis can lead to a low birth weight baby. It can also make it more likely you will deliver your baby too early or stillborn (a baby born dead).

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To protect your baby, y**ou should be tested for syphilis during your pregnancy and at delivery and receive immediate treatment if you test positive.**

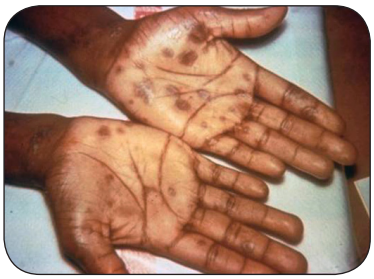
An infected baby may be born without signs or symptoms of disease. However, if not treated immediately, the baby may develop serious problems within a few weeks. Untreated babies can have health problems such as cataracts, deafness, or seizures, and can die.

How do I know if I have syphilis?

Symptoms of syphilis in adults can be divided into stages:

Primary Stage

During the first (primary) stage of syphilis, you may notice a single sore, but there may be multiple sores. The sore is the location where syphilis entered your body. The sore is usually firm, round, and painless. Because the sore is painless, it can easily go unnoticed. The sore lasts 3 to 6 weeks and heals regardless of whether or not you receive treatment. Even though the sore goes away, you must still receive treatment so your infection does not move to the secondary stage.



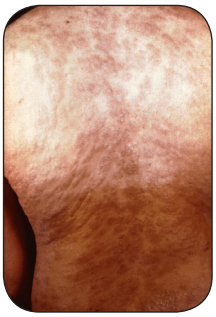
Secondary rash from syphilis on palms of hands.

Secondary Stage

During the secondary stage, you may have skin rashes and/or sores in your mouth, vagina, or anus (also called mucous membrane lesions). This stage usually starts with a rash on one or more areas of your body. The rash can show up when your primary sore is healing or several weeks after the sore has healed. The rash can look like rough, red, or reddish brown spots on the palms of your hands and/or the bottoms of your feet. The rash usually won't itch and it is sometimes so faint that you won't notice it. Other symptoms you may have can include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and fatigue (feeling very tired). The symptoms from this stage will go away whether or not you receive treatment. Without the right treatment, your infection will move to the latent and possibly late stages of syphilis.

Latent and Late Stages

The latent stage of syphilis begins when all of the symptoms you had earlier disappear. If you do not receive treatment, you can continue to have syphilis in your body for years without any signs or symptoms. Most people with untreated syphilis do not develop late stage syphilis. However, when it does happen it is very serious and would occur 10–30 years after your infection began. Symptoms of the late stage of syphilis include difficulty coordinating your muscle movements, paralysis (not able to move certain parts of your body), numbness, blindness, and dementia (mental disorder). In the late stages of syphilis, the disease damages your internal organs and can result in death.

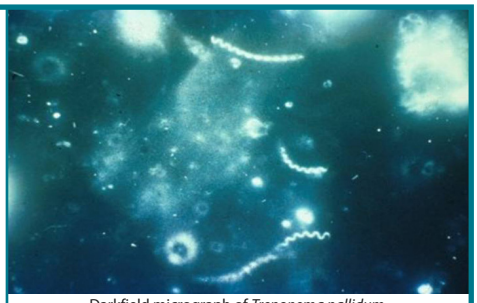


Secondary rash from syphilis on torso

A syphilis infection is called an 'early' case if a patient has been infected for a year or less, such as during the primary or secondary stages of syphilis. People who have 'early' syphilis infections can more easily spread the infection to their sex partners. The majority of early syphilis cases are currently found among men who have sex with men, but women and unborn children are also at risk of infection.

How will my doctor know if I have syphilis?

Most of the time, a blood test can be used to test for syphilis. Some health care providers will diagnose syphilis by testing fluid from a syphilis sore.



Darkfield micrograph of *Treponema pallidum*

Can syphilis be cured?

Yes, syphilis can be cured with the right antibiotics from your health care provider. However, treatment will not undo any damage that the infection has already done.

I've been treated. Can I get syphilis again?

Having syphilis once does not protect you from getting it again. Even after you've been successfully treated, you can still be re-infected. Only laboratory tests can confirm whether you have syphilis. Follow-up testing by your health care provider is recommended to make sure that your treatment was successful.

Because syphilis sores can be hidden in the vagina, anus, under the foreskin of the penis, or in the mouth, it may not be obvious that a sex partner has syphilis. Unless you know that your sex partner(s) has been tested and treated, you may be at risk of getting syphilis again from an untreated sex partner.

Where can I get more information?

Sexually Transmitted Diseases
http://www.cdc.gov/std/

Syphilis
http://www.cdc.gov/std/syphilis/

Syphilis and MSM Fact Sheet
http://www.cdc.gov/std/syphilis/STDFact-MSM-Syphilis.htm

STDs and Pregnancy Fact Sheet
http://www.cdc.gov/std/pregnancy/STDFact-Pregnancy.htm

STD information and referrals to STD Clinics
CDC-INFO Contact Center
1-800-CDC-INFO (1-800-232-4636)
Contact https://wwwn.cdc.gov/dcs/ContactUs/Form

Congenital Syphilis - CDC Fact Sheet

Recently, there has been a sharp increase in the number of babies born with syphilis in the United States. Protect your baby from congenital syphilis by getting tested for syphilis during your pregnancy.

What is congenital syphilis (CS)?

Congenital syphilis (CS) is a disease that occurs when a mother with syphilis passes the infection on to her baby during pregnancy. Learn more about syphilis (www.cdc.gov/std/syphilis/stdfact-syphilis.htm).

How can CS affect my baby?

CS can have major health impacts on your baby. How CS affects your baby's health depends on how long you had syphilis and if — or when — you got treatment for the infection.

CS can cause:

- Miscarriage (losing the baby during pregnancy),
- Stillbirth (a baby born dead), or
- Death shortly after birth.

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

Babies born with CS can have:

- Deformed bones,
- Severe anemia (low blood count),
- Enlarged liver and spleen,
- •aundice (yellowing of the skin or eyes),
- Nerve problems, like blindness or deafness,
- Meningitis, and
- Skin rashes.

Do all babies born with CS have signs or symptoms?

No. It is possible that a baby with CS won't have any symptoms at birth. But without treatment, the baby may develop serious problems. Usually, these health problems develop in the first few weeks after birth, but they can also happen years later.

Babies who do not get treatment for CS and develop symptoms later on can die from the infection. They may also be developmentally delayed or have seizures.

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How common is CS?

After a steady decline from 2008–2012, data show a sharp increase in CS rates. In 2015, the number of CS cases was the highest it's been since 2001.

Public health professionals across the country are very concerned about the growing number of congenital syphilis cases in the United States. That's why it's so important to make sure you get tested for syphilis during your pregnancy.

I'm pregnant. Do I need to get tested for syphilis?

Yes. All pregnant women should be tested for syphilis at the first prenatal visit (the first time you see your doctor for health care during pregnancy). If you don't get tested at your first visit, make sure to ask your doctor about getting tested during a future checkup.

Keep in mind that you can have syphilis and not know it. Symptoms of syphilis may be very mild, or be similar to signs of other health problems. The only way to know for sure if you have syphilis is to get tested.

Is there treatment for syphilis?

Yes. Doctors can treat pregnant women who have syphilis with antibiotics. If you test positive for syphilis during pregnancy, be sure to get treatment right away.

If you are diagnosed with and treated for syphilis, your doctor should do follow-up testing for at least one year to make sure that your treatment is working. Ask your doctor about the number of syphilis cases in your area to determine if you need to get tested again at the beginning of the third trimester, and again when your baby is born.

How will my doctor know if my baby has CS?

Your doctor must consider several factors to determine if your baby has CS. These factors will include the results of your syphilis blood test and, if you were diagnosed with syphilis, whether you received treatment for syphilis during your pregnancy. Your doctor may also want to test your baby's blood, perform a physical exam of your baby, or do other tests, such as a spinal tap or an x-ray, to determine if your baby has CS.

CDC has specific recommendations for your healthcare provider (www.cdc.gov/std/tg2015/congenital.htm) on how to evaluate babies born to women who have positive syphilis tests during pregnancy.

My baby was born with CS. Is there a way to treat the infection?

Yes. There is treatment for CS. Babies who have CS need to be treated right away -- or they can develop serious health problems. Depending on the type of CS infection your baby has, it may receive antibiotics in a hospital for 10 days, or, in some cases, the infection can be cured with one injection of antibiotic.

It's also important that babies treated for CS get follow-up care to make sure that the treatment worked.

How can I reduce the risk of my baby getting CS or having health problems associated with CS?

Your baby will not get CS if you do not have syphilis. There are two important things you can do to protect your baby from getting CS and the health problems associated with the infection:

- Get a syphilis test at your first prenatal visit.
- Reduce your risk of getting syphilis before and during your pregnancy.

Talk with your doctor about your risk for syphilis. Have an open and honest conversation about your sexual history and STD testing. Your doctor can give you the best advice on any testing and treatment that you may need.

Get a syphilis test at your first prenatal visit

If you are pregnant, and get syphilis, you can still reduce your risk of CS complications in your unborn baby. Getting tested, and treated, for syphilis can prevent serious health complications that may otherwise result in infection to both mother and baby.

Prenatal care is essential to the overall health and wellness of you and your unborn child. The sooner you begin receiving medical care during pregnancy, the better the health outcomes will be for you and your unborn baby.

At your first prenatal visit, ask your doctor about getting tested for syphilis. It is important that you have an open and honest conversation with your doctor at this time. Discuss any new or unusual physical symptoms you may be experiencing, as well as any drugs you are using, and whether you have new or multiple sex partners. This information will allow your doctor to make the appropriate testing recommendations. Even if you have been tested for syphilis in the past, you should be tested again when you become pregnant.

If you test positive for syphilis, you will need to be treated right away. Do not wait for your next prenatal visit. It is also important that your sex partner(s) receive treatment. In addition, having syphilis once does not protect you from getting it again. Even after you've been successfully treated, you can still be reinfected. For this reason you must continue to take actions that will reduce your risk of getting a new infection.

Reduce your risk of getting syphilis before and during your pregnancy

Preventing syphilis in women and their sex partners is the best way to prevent CS.

If you are sexually active, you can do the following things to lower your chances of getting syphilis:

- Get into a long-term mutually monogamous relationship with a partner who has been tested and has received negative syphilis test results.
- Using latex condoms the right way every time you have sex. Although condoms can prevent transmission of syphilis by preventing contact with a sore, you should know that sometimes syphilis sores occur in areas not covered by a condom, and contact with these sores can still transmit syphilis.

Also, talk with your doctor about your risk for syphilis. Have an open and honest conversation with your doctor about your sexual history and about STD testing. Your doctor can give you the best advice on any testing and treatment that you may need.

Remember that it's possible to get syphilis and not know it, because sometimes the infection causes only very mild symptoms, or symptoms that mimic other illnesses.

Where can I get more information?

STD information and referrals to STD Clinics
CDC-INFO
1-800-CDC-INFO
(1-800-232-4636)
TTY: 1-888-232-6348
In English, en Español
Email CDC-INFO
https://wwwn.cdc.gov/dcs/

Resources:
CDC National Prevention Information Network (NPIN)
https://npin.cdc.gov/disease/stds
P.O. Box 6003
Rockville, MD 20849-6003
E-mail: npin-info@cdc.gov

American Sexual Health Association (ASHA)
www.ashasexualhealth.org/stdsstis/
P. O. Box 13827
Research Triangle Park, NC 27709-3827
1-800-783-9877

Syphilis & MSM (Men Who Have Sex With Men) - CDC Fact Sheet

Once nearly eliminated in the U.S., syphilis is increasing, especially among gay, bisexual, and other men who have sex with men (MSM).

What is syphilis?

Syphilis is a sexually-transmitted disease (STD) caused by a specific type of bacteria. If not treated promptly and correctly syphilis can cause long-term complications. Symptoms of syphilis in adults are divided into stages. The terms used for these stages are primary, secondary, latent, and late syphilis.

Should I be concerned about syphilis?

Syphilis continues to increase among gay, bisexual, and other men who have sex with men. Recent outbreaks among MSM have been marked by high rates of HIV coinfection and high-risk sexual behaviors (such as sex without a condom, new or multiple partners, and substance abuse). Cases of ocular syphilis have also been reported among MSM. Ocular syphilis occurs when syphilis affects the eye and can lead to permanent blindness. While the health problems caused by syphilis in adults are serious, it is also known that the genital sores caused by syphilis in adults also make it easier to get and give HIV infection sexually.

How could I get syphilis?

Any sexually-active person can get syphilis. Syphilis is passed from person to person through direct contact with a syphilis sore. In men, sores occur mainly on the external genitals, the anus, or in the rectum. Sores also can occur on the lips and in the mouth. As a gay or bisexual man, you should know that you can get infected with syphilis during anal or oral sex, as well as vaginal sex. Sometimes sores can occur in areas not covered by a condom, so you could still get syphilis from contact with these sores, even if you are wearing a condom. You cannot get syphilis through casual contact with objects such as toilet seats, doorknobs, swimming pools, hot tubs, bathtubs, shared clothing, or eating utensils.

What does syphilis look like?

Syphilis has been called 'the great imitator' because it has so many possible symptoms, many of which look like symptoms from other diseases. The painless syphilis sore that you would get after you are first infected can be confused for an ingrown hair, zipper cut, or other seemingly harmless bump. This is a symptom of the primary stage of syphilis. The non-itchy body rash that develops during the secondary stage of syphilis can show up on the palms of your hands and soles of your feet, all over your body, or in just a few places. You could also be infected with syphilis and have very mild symptoms, or no symptoms at all.

A detailed description of each stage of syphilis can be found on CDC's syphilis fact sheet http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm .

How common is syphilis among MSM?

Between 2013 and 2014, the number of reported primary and secondary (P&S) cases increased by 15%. Most cases are among MSM. In 2014, 83% of the reported male P&S syphilis cases where sex of sex partner was known were among gay, bisexual, and other men who have sex with men.

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How can I reduce my risk of getting syphilis?

The only way to avoid getting syphilis or other STDs is to not have anal, oral, or vaginal sex.

If you are sexually active, doing the following things will lower your chances of getting syphilis:

- Being in a long-term mutually monogamous relationship with a partner who has been tested and has negative STD test results.
- Using latex condoms the right way every time you have sex. Condoms prevent the spread of syphilis by preventing contact with a sore. Sometimes sores can occur in areas not covered by a condom, so you could still get syphilis from contact with these sores, even if you are wearing a condom.

How do I know if I have syphilis?

The only way to know is by getting tested. Many men who are infected with syphilis do not have any symptoms for years, yet they remain at risk for health problems later on if they are not treated. Additionally, the painless sores that show up during the early stages of a syphilis infection often go unrecognized by the person who has them. Individuals who are unaware of their infection may be spreading it to their sex partners.

How will my doctor know if I have syphilis?

Have an honest and open talk with your healthcare provider about your sexual history and ask whether you should be tested for syphilis or other STDs. Your doctor can do a blood test to determine if you have syphilis. Sometimes, healthcare providers will diagnose syphilis by testing fluid from a syphilis sore. If you are a man who has sex with men, has HIV infection, and/or has partner(s) who have tested positive for HIV, you should get tested regularly for syphilis.

What is the link between syphilis and HIV?

In the United States, people who get syphilis often also have HIV, or are more likely to get HIV in the future. This is because having a sore or break in the skin from an STD such as syphilis may allow HIV to more easily enter your body. You may also be more likely to get HIV because the same behaviors and circumstances that put you at risk for getting other STDs can also put you at greater risk for getting HIV.

Can syphilis be cured?

Yes, syphilis can be cured with the right medicine from your healthcare provider. However, treatment might not undo damage that the infection has already done.

I've been treated. Can I get syphilis again?

Having syphilis once does not protect you from getting it again. Even after you've been successfully treated, you can still be reinfected. Only laboratory tests can confirm whether you have syphilis. Follow-up testing by your healthcare provider is recommended to make sure that your treatment was successful.

Because syphilis sores can be hidden in the vagina, anus, under the foreskin of the penis, or in the mouth, it may not be obvious that a sex partner has syphilis. Unless you know that all of your sex partner(s) have been tested and treated, you may be at risk of getting syphilis again from an untreated partner.

Where can I get more information?

Sexually Transmitted Diseases Home Page
http://www.cdc.gov/STD

Syphilis Topic Page
http://www.cdc.gov/std/syphilis/default.htm

Syphilis Fact Sheet
http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm

CDC-INFO
1-800-CDC-INFO
(1-800-232-4636)
TTY: (888) 232-6348
In English, en Español

Resources:

CDC National Prevention Information Network (NPIN)
https://npin.cdc.gov/disease/stds
P.O. Box 6003
Rockville, MD 20849-6003
E-mail: npin-info@cdc.gov

American Sexual Health Association (ASHA)
www.ashasexualhealth.org/stdsstis/
P. O. Box 13827
Research Triangle Park, NC
27709-3827
1-800-783-9877

Prenatal/ Congenital Syphilis

SAN JOAQUIN COUNTY
Public Health Services
Healthy Future

Date: March 23, 2016
To: Medical Care Providers
From: Alvaro Garza, MD, MPH, Health Officer
Julie Vaishampayan, MD, MPH, Assistant Health Officer

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

Health Alert

Ongoing Increase in Syphilis in Women Calls for Testing All Pregnant Women in the First & Third Trimester, and at Delivery

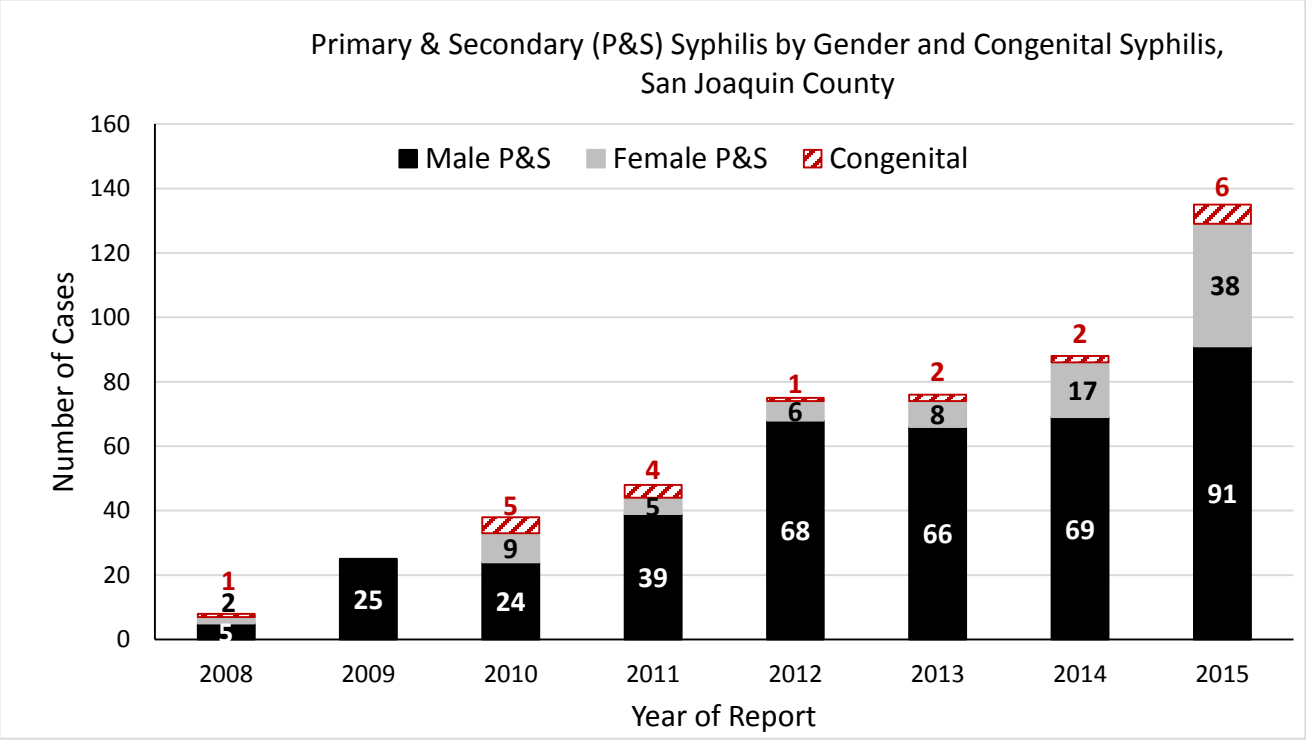
Situation: San Joaquin County is experiencing an increase in heterosexual transmission of syphilis, syphilis in women, and congenital syphilis. In 2015, 57% of syphilis was transmitted through heterosexual contact. Syphilis in women has increased dramatically and now accounts for 29% of all reported syphilis in the county. Six babies were reported with congenital syphilis in 2015 compared to two babies diagnosed with congenital syphilis in 2014. See Figure below.

The Health Officer is designating San Joaquin County as an area with high syphilis morbidity.

Such a designation calls for all clinicians to follow best practices and guidelines as established by the CDPH, CDC, and USPSTF. Those dictate screening for syphilis three times during ALL pregnancies: at the initial prenatal visit, again EARLY in the third trimester of pregnancy, and again at delivery.

Background: Reported cases of primary and secondary (P&S) syphilis have increased dramatically in the past seven years, from seven P&S syphilis cases reported in 2008 to 129 reported in 2015. While, in the recent past, syphilis has been transmitted primarily between men having sex with other men, San Joaquin County (and the whole Central Valley) has seen a dramatic increase in heterosexual transmission, raising the risk for women becoming infected before and during pregnancy.

Figure. Infectious Syphilis by Gender, and Congenital Syphilis, by Year, San Joaquin County



ACTIONS REQUESTED OF CLINICIANS:

Think of finding syphilis early, during prenatal visits. During this syphilis outbreak with such high heterosexual transmission, it is not possible to confidently screen for syphilis risk based on assessment of high risk sexual activity.

Test all pregnant women for syphilis at their first prenatal visit, at the beginning of their 3rd trimester, **and** at time of delivery. Testing in both first and third trimester will improve the chances of diagnosing and treating pregnant women with syphilis, which may reduce or eliminate the infection spreading to the fetus and reduce or avoid congenital syphilis.

Third trimester testing is recommended at the same time that Tdap vaccine is recommended, so link both prevention activities.

Infants should not be discharged from the hospital unless the syphilis serologic status of the mother has been confirmed at the time of delivery.

Treat syphilis in pregnant women as soon as infection is identified. Pregnant women should be treated with a penicillin regimen appropriate for their stage of infection. If a woman is allergic to penicillin, she must be de-sensitized prior to treatment with penicillin. It is imperative to also treat all partners to avoid re-infection. Contact PHS if you have any treatment questions.

Prevent congenital syphilis in newborn babies by treating the infected mother early.

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

California Guidelines for Screening and Treatment in Pregnancy can be found at
http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/CA-STD-Screening-and-Treatment-in-Pregnancy.pdf

California Department of Public Health update for health care providers on syphilis in women and congenital syphilis can be found at
http://www.cdph.ca.gov/programs/std/Documents/CDPH-CS-Provider-Update.pdf

For more information, call PHS Community Services at 468-3845

SAN JOAQUIN COUNTY
Public Health Services
Healthy Future

Date: May 15, 2015
To: Medical Care Providers
From: Julie Vaishampayan, MD, MPH
Assistant Health Officer

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

Health Advisory:
Increase in Congenital Syphilis

Situation: San Joaquin County is experiencing an increase in congenital syphilis. Three babies have been reported with congenital syphilis in the first four months of 2015 compared to three babies diagnosed with congenital syphilis in all of 2014. This advisory is to notify healthcare providers (HCP) about this ongoing syphilis increase and ask HCP to ensure that all pregnant women are tested for syphilis and treated according to standard guidelines.

Background: Reported cases of primary and secondary (P&S) syphilis have increased over ten-fold in the past six years, from seven P&S syphilis cases reported in 2008 to 88 in 2014. This increase in P&S syphilis cases indicates ongoing transmission. Due to the increase in syphilis transmission in the community, women are at increased risk for syphilis infection before and during pregnancy.

ACTIONS REQUESTED OF CLINICIANS:

Think syphilis during every prenatal visit. Ensure all pregnant women are screened for risk factors for syphilis infection as soon as possible during pregnancy. Risk factors for syphilis include multiple sex partners, substance use, sex in exchange for drugs or money, and late to prenatal care or poor prenatal care.

Test all pregnant women for syphilis at their first prenatal visit. Retest all high-risk women again in their 3rd trimester **and** at time of delivery. Testing in both first and third trimester will improve the chances of diagnosing and treating pregnant women with syphilis, which may reduce or eliminate the infection spreading to the fetus and reduce or avoid the related complications. If testing during pregnancy cannot be verified, ensure the mother is tested at time of delivery.

Treat syphilis in pregnant women as soon as infection is identified. Pregnant women should be treated with a penicillin regimen appropriate for their stage of infection. Contact PHS if you have any treatment questions. It is imperative to also treat their partners to avoid re-infection.

Prevent congenital syphilis in newborn babies by treating the infected mother early.

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

For more information, call PHS Community Services at 468-3845

Concerning Increases in Syphilis in Women and Congenital Syphilis:

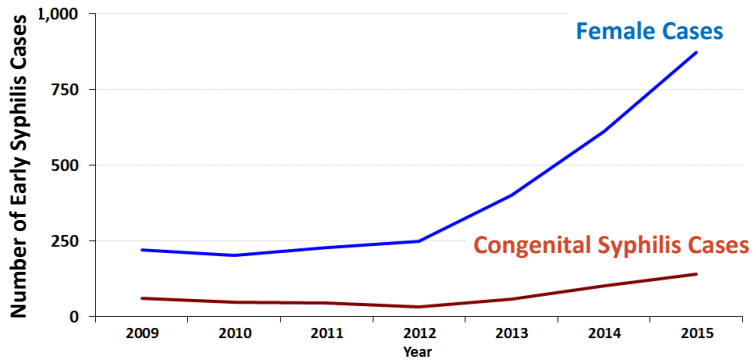
An Update for California Health Care Providers

The Problem: Increasing Congenital Syphilis in California

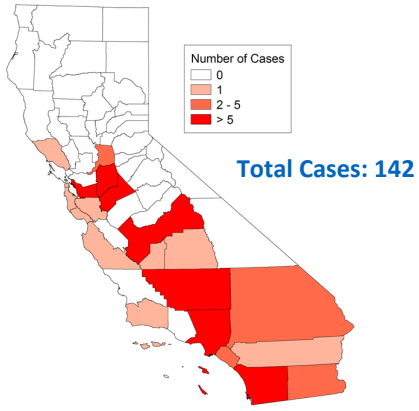
California has had a concerning increase in syphilis among women. This has been accompanied by a three-fold increase in congenital syphilis cases from 2011 to 2015. In 2015, most female early syphilis cases and congenital syphilis cases in California were reported from the Central Valley.[1] Most women who gave birth to babies with congenital syphilis received prenatal care late in pregnancy or not at all.

This increase in numbers of congenital syphilis cases in California is an important public health problem requiring immediate attention from medical providers caring for pregnant women and women of reproductive age.

Female Syphilis and Congenital Syphilis Cases, California, 2009-2015



Congenital Syphilis in Infants < 1 Year of Age, Number of Cases by County, California, 2015



What Is Congenital Syphilis?

Congenital syphilis occurs when syphilis is transmitted from an infected mother to her fetus during pregnancy. It is a potentially devastating disease that can cause severe illness in babies including premature birth, low birth weight, birth defects, blindness and hearing loss. It can also lead to stillbirth and infant death.[2]

Congenital Syphilis Can Be Prevented!

Congenital syphilis can be prevented with early detection and timely and effective treatment of syphilis in pregnant women and women who could become pregnant. Preconception and interconception care should include screening for HIV and sexually transmitted diseases (STDs), including syphilis, in women at risk, in addition to access to highly effective contraception.

Prenatal Screening: It's the Law!

All pregnant women should receive routine prenatal care which includes syphilis testing. **In California, it is required by law that pregnant women get tested for syphilis at their first prenatal visit.**[3]

Syphilis testing should be repeated during the third trimester (28-32 weeks gestational age) and at delivery in women who are at high risk for syphilis or live in areas with high rates of syphilis,[4] particularly among females. Routine risk assessment should be conducted throughout pregnancy to assess the risk factors highlighted in the box on page 2; this should inform the need for additional testing.

Infants should not be discharged from the hospital unless the syphilis serologic status of the mother has been determined at least once during pregnancy and, for at-risk women, again at delivery.

1. California Department of Public Health (CDPH) Sexually Transmitted Diseases Control Branch 2015 STD Surveillance Report http://www.cdph.ca.gov/data/statistics/Pages/STDData.aspx and Congenital Syphilis Prevention Guidance https://www.cdph.ca.gov/programs/std/Documents/Bauer-CA-STD-Controllers-Letter-Congenital-Syphilis.pdf
2. Centers for Disease Control and Prevention Syphilis Fact Sheet http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm.
3. California State Code http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=120001-121000&file=120675-120715.
4. Centers for Disease Control and Prevention 2015 Treatment Guidelines for Syphilis in Pregnancy http://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm.

Updated 9.6.2016

Women Who Would Benefit from Additional Syphilis Testing in the Third Trimester (28-32 Weeks) and at Delivery Include Those Who:

- Have signs and symptoms of syphilis infection.
- Live in areas with high rates of syphilis, particularly among females.
- Receive late or limited prenatal care.
- Did not get tested in the first or second trimester.
- Have partners that may have other partners, or partners with male partners.
- Are involved with substance use or exchange sex for money, housing, or other resources.

Common Mistakes

Not reporting syphilis cases to local health departments within 24 hours.

Not strictly adhering to treatment guidelines for pregnant women with syphilis.

Not properly conducting routine risk assessment throughout pregnancy to determine need for additional testing.

Diagnosing Syphilis

Syphilis is diagnosed by reviewing patient history, taking a sexual risk assessment, physical exam, and blood tests. Making the diagnosis of syphilis requires interpretation of both treponemal and non-treponemal serology tests results. For guidance on interpreting syphilis test results, refer to the CDPH screening and diagnostic guide listed in the *Resources for Health Care Providers* section.

Syphilis Treatment

Treatment for a pregnant woman is based on the stage of her infection. To prevent adverse pregnancy outcomes, physicians should treat patients as soon as possible.[5] Treating a pregnant woman infected with syphilis also treats her fetus.[6]

Treatment for Early Syphilis (determined to *be less than one year's duration*)
Benzathine penicillin G 2.4 million units by intramuscular injection in a single dose

OR

Treatment for Late Latent Syphilis or Unknown Duration
Benzathine penicillin G 2.4 million units by intramuscular injection every 7 days for 3 weeks (7.2 million units total)

In pregnancy, penicillin is the only recommended therapy. Pregnant women with penicillin allergies should be desensitized and treated with penicillin.[7] There are no alternatives.

For pregnant women, benzathine penicillin doses for treatment of late latent syphilis must be administered at 7-day intervals; if a dose is missed or late, the entire series must be restarted.

Partner Treatment and the Role of Local Health Departments

Because sex with an untreated partner can cause re-infection, it is especially important to ensure that the partner(s) receive treatment and to inform pregnant women about the risk to their infants if they have sex with an untreated partner. Local health departments are key collaborators in the prevention of congenital syphilis, and can assist with partner treatment.

California law requires that all syphilis infections be reported to the local health department where the patient resides within 24 hours of diagnosis. Contact information for local health department staff working on syphilis prevention and reporting can be found here: *http://www.cdph.ca.gov/HealthInfo/Documents/LHD_CD_Contact_Info.doc*

Resources For Health Care Providers

Centers for Disease Control and Prevention: *http://www.cdc.gov/std/syphilis/stdfact-congenital-syphilis.htm*

California Department of Public Health (CDPH): *https://www.cdph.ca.gov/HealthInfo/discond/Pages/CongenitalSyphilis.aspx*

CDPH, Use of Treponemal Immunoassays for Screening and Diagnosis of Syphilis *http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/Treponemal_Immunoassays_for_Syphilis_Screening_and_Diagnosis.pdf*

5. CDC 2015 STD Treatment Guidelines Syphilis During Pregnancy http://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm.
6. De Santis, M., De Luca, C., Mappa, I., Spagnuolo, T., Licameli, A., Straface, G., & Scambia, G.(2012). Syphilis infection during pregnancy: Fetal risks and clinical management. *Infectious Diseases in Obstetrics and Gynecology, 2012.*

SAN JOAQUIN COUNTY
Public Health Services
Healthy Future

P.O. Box 2009 • 1601 East Hazelton Ave. • Stockton, CA 95201-2009
phone (209) 468.3411 • fax (209) 468.3823. • www.sjcphs.org

SJCPHS STD Program
(209) 468-3845
Please call us to request a syphilis update!

Congenital Syphilis Summary and Clinical Guidance

Transmission, Detection and Prevention

- The most important element of congenital syphilis prevention is early detection of maternal syphilis infection through prenatal serologic testing. Testing should be done at the initiation of prenatal care in all patients. Due to the current increase in syphilis and congenital transmission, testing is also indicated for **all** women at 28 weeks **and** at the time of delivery in San Joaquin County.
- **No infant or mother should be discharged from the hospital unless maternal syphilis serostatus has been documented and addressed.**
  Maternal/fetal transmission can occur via the transplacental route at any stage of syphilis, but is much more likely in the early stages of syphilis (1^0>2^0>early latent>late latent). Untreated 1^0 or 2^0 maternal syphilis can result in fetal loss in 40% of affected pregnancies.
- Since maternal syphilis infection can cause fetal loss, any woman delivering a stillborn infant >20 weeks EGA should be tested for syphilis.
- HIV status of pregnant patients with syphilis should be verified, and HIV testing should be repeated as indicated with consideration of the "window period" for HIV antibody development.

Clinical Manifestations of Congenital Syphilis

- Early symptoms of congenital syphilis (first 2 years of life) include long-bone abnormalities, hepatosplenomegaly, skin lesions, lymphadenopathy, jaundice, and "snuffles" (rhinitis).
- Late symptoms of congenital syphilis include frontal bossing and other facial and dental deformities, interstitial keratitis, deafness, and neurologic abnormalities.

Workup of Potentially Infected Neonates (see Figure below)

- All infants of mothers with reactive syphilis serology should have a serum non-treponemal test done (generally an RPR). Cord blood should not be used. Treponemal testing (EIA or TPPA) is not recommended for infants.
- Interpretation of the infant's serology is complicated by passive transfer of maternal non-treponemal and treponemal antibodies. In a newborn with the RPR titer greater than four times the maternal titer drawn at the same time as the infant's, the diagnosis of congenital syphilis is straightforward. In practice, diagnosis is often based on maternal serology and adequacy of pre-partum treatment.
- In an infant with suspected or presumed congenital syphilis, a full clinical and laboratory/radiologic evaluation are required. This may include:
  - Full physical exam, auditory brainstem response testing, eye examination
  - CBC, platelet count, liver function tests
  - Lumbar puncture with CSF sent for protein, cell count, and quantitative VDRL
  - Long-bone and chest films

Criteria for Treatment (see Figure below for treatment dosing and duration)

- An infant whose mother had syphilis infection during pregnancy should be treated for congenital syphilis if he/she has clinical disease, has an RPR titer 4 times greater than the mother's, or was born to a mother who:
  - had untreated syphilis at delivery or had evidence of relapse or re-infection after treatment

- had potentially inadequate treatment (was treated with a non-penicillin regimen during pregnancy or was treated fewer than 4 weeks prior to delivery)

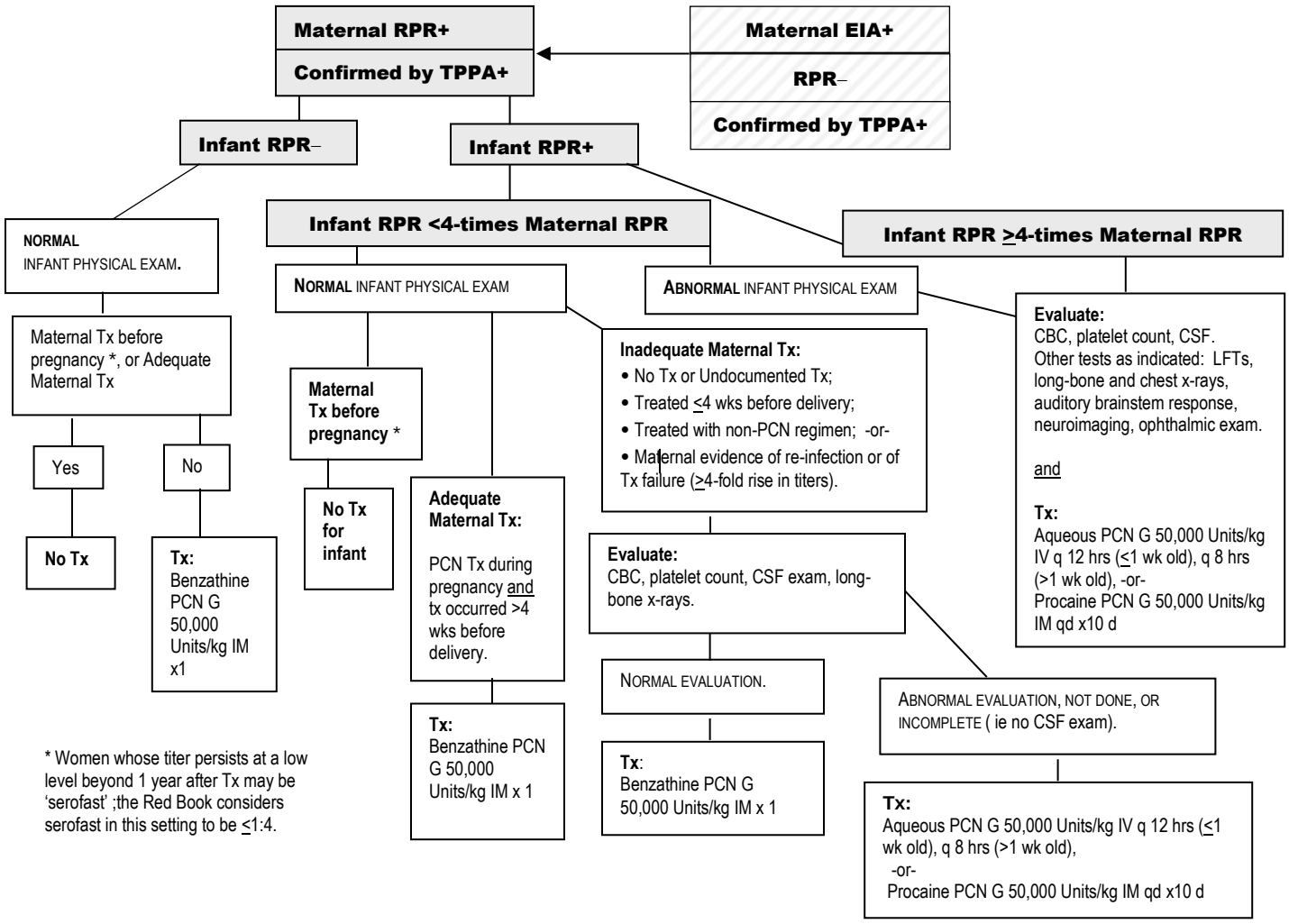
Follow-up of Infants with Reactive RPRs

- The RPR titer should decrease by three months and become nonreactive by 6 months if the infant was initially reactive due to passive maternal antibody transfer rather than true infection. Infants with reactive RPRs should receive repeat RPR testing every 2 to 3 months until either the titer is non-reactive or it decreases 4-fold.

Special considerations involving laboratory testing protocols

- Some laboratories use EIA as the initial syphilis test, with confirmation by RPR/TPPA testing. For testing to evaluate for congenital syphilis, this protocol can lead to delay in identification of maternal and congenital syphilis at the time of delivery. If an institution generally uses EIA as the initial syphilis test, it is recommended that **both** maternal and infant blood be tested for RPR without waiting for maternal EIA results. If there is a high clinical suspicion of congenital syphilis, an infant may be worked up and treated while results are pending. If the mother is already known to have reactive syphilis serology, the infant's blood should be sent for RPR per algorithm below. (Maternal RPR should be redrawn at the time of delivery in order to allow for comparison with the infant's titer level.)

INFANTS BORN TO MOTHERS WITH REACTIVE SYPHILIS SEROLOGY: EVALUATION & TREATMENT (Tx)



Neurosyphilis/ Ocular Syphilis

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

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: 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:** http://www.cdph.ca.gov/HealthInfo/Documents/LHD_CD_Contact_Info.doc. This can be done by telephone or by using a Confidential Morbidity Report (CMR) form which is available at www.cdph.ca.gov/pubsforms/forms/CtrldForms/cdph110a.pdf. Information on how to fill out the form is available at http://www.cdph.ca.gov/programs/std/Documents/CMR-CA-62013.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.

Department of Health and Human Services
Centers for Disease Control and Prevention

STDs during Pregnancy-CDC Fact Sheet

Disease	CDC Recommendation
Chlamydia	***First prenatal visit:*** Screen all pregnant women <25 years of age and older pregnant women at increased risk for infection. ***Third trimester:*** Rescreen if <25 years of age or at continued high risk. **Risk Factors:** • New or multiple sex partners • Sex partner with concurrent partners • Sex partner who has a sexually-transmitted disease (STD) **NOTE:** Pregnant women found to have chlamydial infection should have a test-of-cure three to four weeks after treatment and then be retested within three months.
Gonorrhea	***First prenatal visit:*** Screen all pregnant women <25 years of age and older pregnant women at increased risk for gonorrhea at first prenatal visit. ***Third trimester:*** Rescreen for women at continued high risk. **Risk factors:** • Living in a high-morbidity area • Previous or coexisting STI • New or multiple sex partners • Inconsistent condom use among persons not in mutually monogamous relationships • Exchanging sex for money or drugs
Syphilis	***First prenatal visit:*** Screen all pregnant women. ***Early third trimester:*** Rescreen women who are • At high risk for syphilis, • Who live in areas with high numbers of syphilis cases, and/or • Who were not previously tested, or had a positive test in the first trimester.
Bacterial Vaginosis (BV)	Evidence does not support routine screening for BV in asymptomatic pregnant women at high or low risk for preterm delivery.
Trichomoniasis	Evidence does not support routine screening for trichomoniasis in asymptomatic pregnant women.
Herpes (HSV)	Evidence does not support routine HSV-2 serologic testing among asymptomatic pregnant women.
HIV	***First prenatal visit:*** Screen all pregnant women. ***Third trimester:*** Rescreen women at high risk for acquiring HIV infection.

SAMPLE STD SCREENING PROTOCOL
FOR MEN WHO HAVE SEX WITH MEN (MSM)

In all MSM patients, the following screening tests should be performed at the initial visit and repeated at least yearly. Repeat screening at 3-6 month intervals is recommended for MSM at highest risk (e.g. multiple sex partners, anonymous partners, or sex in conjunction with drug use).[i] In general, screening should be performed regardless of reported condom use.

MOST STDs ARE ASYMPTOMATIC, SO SCREENING IS VITALLY IMPORTANT.

Routine periodic (at least yearly) sexual risk screening and assessment should precede and inform physical examination and laboratory-based screening.

Patient should not urinate for 1.5 hours before testing

1) Screen for Gonorrhea and Chlamydia at the urethral site:
   a) Examine the genitalia for any of the following: ulcers, papules, rashes or penile discharge. Collect a sample of any penile discharge for Gram Stain and/or GC & CT culture, AND
   b) Collect first-void urine sample for nucleic acid amplified testing (NAAT) for GC and CT, if available.[ii]

2) Screen for Gonorrhea at the pharyngeal site in patients with history of receptive oral sex:
   a) Collect NAAT[ii] specimen according to test kit directions,[iii] OR
   b) If NAAT unavailable, collect culture specimen according to lab directions.

3) Screen for Gonorrhea and Chlamydia at the rectal site in patients with history of receptive anal sex:
   a) Collect NAAT[ii] specimen according to test kit directions,[iii] OR
   b) If NAAT unavailable, collect culture specimen according to lab directions.

4) Perform blood draw [with red top tubes] for serologic testing for:
   a) HIV (unless known positive),
   b) Syphilis (RPR and/or VDRL),
   c) Hepatitis C virus (unless known positive), AND
   d) Consider Herpes Simplex Virus Type 2 (HSV-2) type-specific serologic test (unless known positive).

VACCINATE MSM FOR HEPATITIS A AND B (UNLESS KNOWN POSITIVE OR VACCINATED)

Pre-vaccination antibody testing may be cost-effective in MSM, but should not be a barrier to vaccination. Vaccinating an already-immune person is not harmful. If pre-vaccination testing is done, the first vaccine dose should be given at the same visit that serologic testing is done.

[i] Sources: MMWR—Sexually Transmitted Diseases Treatment Guidelines, 2006; MMWR—Incorporating HIV Prevention into the Medical Care of Persons Living with HIV, June 2003.

[ii] NAATs are available commercially under the names Amplicor (by Roche), Aptima (by GenProbe) and Probe Tec (by BD). If NAAT urine testing not available, use NAAT urethral swab or perform urethral culture for GC & CT.

[iii] NAATs for pharyngeal and rectal GC & CT require internal validation by the lab that processes your test samples. see Renault, et al. Use of NAATs for STD diagnosis of GC and CT in non-FDA-cleared anatomic specimens. MLO. 11-22. July 2006. Available on the web at www.sfdph.org/sfcityclinic/providers/UseofNAATsforSTD.pdf

CALIFORNIA STD TREATMENT GUIDELINES TABLE FOR ADULTS & ADOLESCENTS 2015

These guidelines reflect recent updates in the 2015 CDC STD Treatment Guidelines for both HIV-uninfected and HIV-infected adults and adolescents; treatments that differ for HIV-infected populations are designated by a red ribbon. Call the local health department for assistance with confidential notification of sexual partners of patients with syphilis, gonorrhea, chlamydia or HIV infection. For STD clinical management consultation, call (510-620-3400) or submit your question online to the STD Clinical Consultation Network at www.stdccn.org

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen.
CHLAMYDIA (CT)			
Uncomplicated Genital/Rectal/Pharyngeal Infections[1]	• Azithromycin **or** • Doxycycline[2]	1 g po 100 mg po bid x 7 d	• Erythromycin base 500 mg po qid x 7 d **or** • Erythromycin ethylsuccinate 800 mg po qid x 7 d **or** • Levofloxacin[2] 500 mg po qd x 7 d **or** • Ofloxacin[2] 300 mg po bid x 7 d **or** • Doxycycline[2] (delayed release) 200 mg po qd x 7 d
Pregnant Women[3]	• Azithromycin	1g po	• Amoxicillin[4] 500 mg po tid x 7 d **or** • Erythromycin base 500 mg po qid x 7 d **or** • Erythromycin base 250 mg po qid x 14 d **or** • Erythromycin ethylsuccinate 800 mg po qid x 7 d **or** • Erythromycin ethylsuccinate 400 mg po qid x 14 d
GONORRHEA (GC): Dual therapy with ceftriaxone 250 mg IM PLUS azithromycin 1 g po is recommended for all patients with gonorrhea regardless of chlamydia test results.[5] Dual therapy should be simultaneous and by directly observed therapy. Azithromycin is preferred second antimicrobial; if allergy to azithromycin, can use doxycycline 100 mg po bid x 7 days.			
Uncomplicated Genital/Rectal Infections[1,5]	Dual therapy with • Ceftriaxone PLUS • Azithromycin	250 mg IM 1 g po	Dual therapy with • Cefixime[6] 400 mg po PLUS Azithromycin 1 g po **or** Doxycycline 100 mg po bid x 7 d **Cephalosporin allergy or IgE mediated penicillin allergy** • Gemifloxacin[2] 320 mg po PLUS Azithromycin 2 g po **or** • Gentamicin[2] 240 mg IM PLUS Azithromycin 2 g po
Pharyngeal Infections[5]	Dual therapy with • Ceftriaxone PLUS • Azithromycin	250 mg IM 1 g po	If cephalosporin allergy or IgE mediated penicillin allergy (e.g., anaphylaxis, Stevens-Johnson syndrome, or toxic epidermal necrolysis), limited data exist on alternatives. See footnotes.[7]
Pregnant Women[3,5]	Dual therapy with • Ceftriaxone PLUS • Azithromycin	250 mg IM 1 g po	• Cefixime[6] 400 mg po PLUS • Azithromycin 1g po If cephalosporin allergy or IgE mediated penicillin allergy, consult with specialist, see footnotes.[3]
PELVIC INFLAMMATORY DISEASE[8,9]	Parenteral • **Either** Cefotetan **or** Cefoxitin **plus** Doxycycline **or** • Clindamycin **plus** Gentamicin IM/Oral • **Either** Ceftriaxone **or** Cefoxitin with Probenecid **plus** Doxycycline **plus** Metronidazole if BV is present or cannot be ruled out	2 g IV q 12 hrs 2 g IV q 6 hrs 100 mg po or IV q 12 hrs 900 mg IV q 8 hrs 2 mg/kg IV or IM followed by 1.5 mg/kg IV or IM q 8 hrs 250 mg IM 2 g IM, 1 g po 100 mg po bid x 14 d 500 mg po bid x 14 d	Parenteral • Ampicillin/Sulbactam 3 g IV q 6 hrs **plus** Doxycycline 100 mg po or IV q 12 hrs Oral[10] • Levofloxacin[2] 500 mg po qd x 14 d **or** • Ofloxacin[2] 400 mg po bid x 14 d **or** • Moxifloxacin[2] 400 mg po qd x 14 d **or** • Ceftriaxone 250 mg IM in a single dose **plus** Azithromycin 1 g po once a week for 2 weeks **plus** • Metronidazole 500 mg po bid x 14 d if BV is present or cannot be ruled out
CERVICITIS[8,11]	• Azithromycin **or** • Doxycycline	1 g po 100 mg po bid x 7 d	
NONGONOCOCCAL URETHRITIS[8,12]	• Azithromycin **or** • Doxycycline	1 g po 100 mg po bid x 7 d	• Erythromycin base 500 mg po qid x 7 d **or** • Erythromycin ethylsuccinate 800 mg po qid x 7 d **or** • Levofloxacin 500 mg po qd x 7 d **or** • Ofloxacin 300 mg po bid x 7 d
EPIDIDYMITIS[8]	Likely due to GC or CT • Ceftriaxone **plus** Doxycycline Likely due to GC, CT or enteric organisms (history of anal insertive sex) • Ceftriaxone **plus** • Levofloxacin **or** • Ofloxacin Likely due to enteric organisms • Levofloxacin[13] **or** • Ofloxacin[13]	250 mg IM 100 mg po bid x 10 d 250 mg IM 500 mg po qd x 10 d 300 mg po bid x 10 d 500 mg po qd x 10 d 300 mg po bid x 10 d	
CHANCROID	• Azithromycin **or** • Ceftriaxone **or** • Ciprofloxacin **or** • Erythromycin base	1 g po 250 mg IM 500 mg po bid x 3 d 500 mg po tid x 7 d	
LYMPHOGRANULOMA VENEREUM	• Doxycycline	100 mg po bid x 21 d	• Erythromycin base 500 mg po qid x 21 d
TRICHOMONIASIS[14,15]			
Adults/Adolescents	• Metronidazole **or** • Tinidazole[16]	2 g po 2 g po	• Metronidazole 500 mg po bid x 7 d
Pregnant Women	• Metronidazole	2 g po	
HIV-infected Women	• Metronidazole	500 mg po bid x 7 d	

[1] Annual screening is recommended for women aged < 25 years. Nucleic acid amplification tests (NAATs) are recommended. All patients should be re-tested 3 months after treatment for CT or GC.

[2] Contraindicated for pregnant and nursing women.

[3] Every effort should be made to use a recommended regimen. Test-of-cure follow-up (preferably by NAAT) 3-4 weeks after completion of therapy is recommended in pregnancy. In case of allergy to both alternative and recommended regimens, consult with the CA STD Control Branch at at 510-620-3400 or the STD Clinical Consultation Network at www.stdccn.org

[4] Amoxicillin is now an alternative regimen due to chlamydial persistence in animal and in vitro studies.

[5] If the patient has been treated with a recommended regimen for GC, reinfection has been ruled out, and symptoms have not resolved, perform a test-of-cure using culture and antibiotic susceptibility testing and report to the local health department. For clinical consult and for help in obtaining GC culture call the CA STD Control Branch at 510-620-3400. For specific treatment guidance, go to www.std.ca.gov ("STD Guidelines, California Gonorrhea Treatment Guidelines --- Suspected Gonorrhea Treatment Failure").

[6] Oral cephalosporins give lower and less-sustained bactericidal levels than ceftriaxone 250 mg; limited efficacy for treating pharyngeal GC. Cefixime should only be used when ceftriaxone is not available.

[7] Dual therapy with gemifloxacin 320 mg po plus azithromycin 2 g po or gentamicin 240 mg IM plus azithromycin 2 g po are potential alternatives. ID specialist consult may be prudent. Azithromycin monotherapy is no longer recommended due to resistance concerns and treatment failure reports. Pharyngeal GC patients treated with an alternative regimen should have a test of cure (with culture or NAAT) 14 days after treatment.

[8] Testing for gonorrhea and chlamydia is recommended because a specific diagnosis may improve compliance and partner management and because these infections are reportable by state law.

[9] Evaluate for bacterial vaginosis. If present or cannot be ruled out, also use metronidazole. If parenteral therapy is selected, discontinue 24-48 hours after patient improves clinically and continue with oral therapy for a total of 14 days.

[10] In the setting of allergy to cephalosporins, fluoroquinolones can be considered for PID if the risk of GC is low, a NAAT test for GC is performed, and follow-up of the patient can be assured. If GC is documented, the patient should be re-treated based on antimicrobial susceptibility test results (if available). If antimicrobial susceptibility testing reveals fluoroquinolone resistance or if testing is unavailable then consultation with ID specialist is recommended for treatment options.

[11] 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 a STD), consider empiric treatment for GC.

[12] Mycoplasma genitalium is the most common cause of recurrent/persistent urethritis. Men who fail a regimen of azithromycin for urethritis should be treated with moxifloxacin 400 mg orally for 7 days.

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

[14] For suspected drug-resistant trichomoniasis, rule out re-infection; see 2015 CDC Guidelines, Persistent or Recurrent Trichomonas section, for other treatment options, and evaluate for metronidazole-resistant *T. vaginalis*. For consultation call (510-620-3400) or contact the STD Clinical Consultation Network at www.stdccn.org

[15] All women should be retested for trichomoniasis 3 months after treatment.

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

Developed by the California Prevention Training Center and
California Department of Public Health STD Control Branch
Updated June 2015

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen
BACTERIAL VAGINOSIS			
Adults/Adolescents	• Metronidazole or • Metronidazole gel or • Clindamycin cream[17]	500 mg po bid x 7 d 0.75%, one full applicator (5 g) Intravaginally qd x 5 d 2%, one full applicator (5 g) Intravaginally qhs x 7 d	• Tinidazole[16] 2 g po qd x 2 d or • Tinidazole[16] 1 g po qd x 5 d or • Clindamycin 300 mg po bid x 7 d or • Clindamycin ovules[17] 100 mg intravaginally qhs x 3 d
Pregnant Women	• Metronidazole or • Metronidazole gel or • Clindamycin cream[17]	500 mg po bid x 7 d 0.75%, one full applicator (5 g) Intravaginally qd x 5 d 2%, one full applicator (5 g) Intravaginally qhs x 7 d	• Clindamycin 300 mg po bid x 7 d or • Clindamycin ovules[17] 100 mg intravaginally qhs x 3 d
ANOGENITAL WARTS			
External Genital/Perianal Warts	Patient-Applied • Imiquimod[17,18] 5% cream or • Imiquimod[17,18] 3.75% cream or • Podofilox[16] 0.5% solution or gel or • Sinecatechins[16,17] 15% ointment Provider-Administered • Cryotherapy or • Trichloroacetic acid (TCA) 80%-90% or • Bichloroacetic acid (BCA) 80%-90% or • Surgical removal	 Topically qhs 3 times/ wk up to 16 wks Topically qhs up to 16 wks Topically bid x 3 d followed by 4 d no tx for up to 4 cycles Topically tid, for up to 16 wks Apply once q 1-2 wks Apply once q 1-2 wks Apply once q 1-2 wks	Alternative Regimen – Provider Administered • Podophyllin resin[16,19] 10%-25% in tincture of benzoin apply q 1-2 wks or • Intralesional interferon or • Photodynamic therapy or • Topical cidofovir
Mucosal Genital Warts[20]	• Cryotherapy or • Surgical removal or • TCA or BCA 80%-90%	Vaginal, urethral meatus, cervical, anal Vaginal, urethral meatus, cervical, anal Vaginal, cervical, anal	
ANOGENITAL HERPES[21]			
First Clinical Episode of Anogenital Herpes	• Acyclovir or • Acyclovir or • Valacyclovir or • Famciclovir	400 mg po tid x 7-10 d 200 mg po 5x/day x 7-10 d 1 g po bid x 7-10 d 250 mg po tid x 7-10 d	
Established Infection Suppressive Therapy[22]	• Acyclovir or • Valacyclovir or • Valacyclovir or • Famciclovir[22]	400 mg po bid 500 mg po qd 1 g po qd 250 mg po bid	
Suppressive Therapy for Pregnant Women (start at 36 weeks gestation)	• Acyclovir or • Valacyclovir	400 mg po tid 500 mg po bid	
Episodic Therapy for Recurrent Episodes	• Acyclovir or • Acyclovir or • Acyclovir or • Valacyclovir or • Valacyclovir or • Famciclovir or • Famciclovir or • Famciclovir	400 mg po tid x 5 d 800 mg po bid x 5 d 800 mg po tid x 2 d 500 mg po bid x 3 d 1 g po qd x 5 d 125 mg po bid x 5 d 1g po bid x 1 d 500 mg po once, then 250 mg bid x 2 d	
HIV Co-Infected[23]			
Suppressive Therapy[22]	• Acyclovir or • Valacyclovir or • Famciclovir[22]	400-800 mg po bid or tid 500 mg po bid 500 mg po bid	
Episodic Therapy for Recurrent Episodes	• Acyclovir or • Valacyclovir or • Famciclovir	400 mg po tid x 5-10 d 1g po bid x 5-10 d 500 mg po bid x 5-10 d	
SYPHILIS[24,25]			
Primary, Secondary, and Early Latent	• Benzathine penicillin G	2.4 million units IM	• Doxycycline[26] 100 mg po bid x 14 d or • Tetracycline[26] 500 mg po qid x 14 d or • Ceftriaxone[26] 1 g IM or IV qd x 10-14 d
Late Latent	• Benzathine penicillin G	7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals	• Doxycycline[26] 100 mg po bid x 28 d or • Tetracycline[26] 500 mg po qid x 28 d
Neurosyphilis and Ocular Syphilis[27]	• Aqueous crystalline penicillin G	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	• Procaine penicillin G, 2.4 million units IM qd x 10-14 d plus Probenecid 500 mg po qid x 10-14 d or • Ceftriaxone[26] 2 g IM or IV qd x 10-14 d
Pregnant Women[28] NOTE: Pregnant women 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	• None
Late Latent	• Benzathine penicillin G	7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals	• None
Neurosyphilis and Ocular Syphilis[27]	• Aqueous crystalline penicillin G	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	• Procaine penicillin G, 2.4 million units IM qd x 10-14 d plus Probenecid 500 mg po qid x 10-14 d

[16] Safety in pregnancy has not been established; avoid during pregnancy. When using tinidazole, breastfeeding should be deferred for 72 hours after 2 g dose.
[17] May weaken latex condoms and contraceptive diaphragms. Patients should follow directions on package insert carefully regarding whether to wash area after treatment (e.g. imiquimod) versus leaving product on the affected area (e.g. sinecatechins).
[18] Limited human data on imiquimod use in pregnancy; animal data suggest low risk.
[19] Podophyllin resin is now an alternative rather than recommended regimen; severe toxicity has been reported.
[20] Cervical and intra-anal warts should be managed in consultation with specialist.
[21] Counseling about natural history, asymptomatic shedding, and sexual transmission is an essential component of herpes management.
[22] The goal of suppressive therapy is to reduce recurrent symptomatic episodes and/or to reduce sexual transmission. Famciclovir is somewhat less effective for suppression of viral shedding.
[23] If HSV lesions persist or recur during antiviral treatment, drug resistance should be suspected. Obtaining a viral isolate for sensitivity testing and consulting with an infectious disease expert is recommended.
[24] Benzathine penicillin G (generic name) is the recommended treatment for syphilis not involving the central nervous system and 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.
[25] Persons with HIV infection should be treated according to the same stage-specific recommendations for primary, secondary, and latent syphilis as used for HIV-negative persons. Available data demonstrate that additional doses of benzathine penicillin G, amoxicillin, or other antibiotics in early syphilis do not result in enhanced efficacy, regardless of HIV status.
[26] Alternates should be used only for penicillin-allergic patients because efficacy of these therapies has not been established. Compliance with some of these regimens is difficult, and close follow-up is essential. If compliance or follow-up cannot be ensured, the patient should be desensitized and treated with benzathine penicillin.
[27] Some specialists recommend 2.4 million units of benzathine penicillin G once weekly for up to 3 weeks after completion of neurosyphilis treatment.
[28] Pregnant women allergic to penicillin should be desensitized and treated with penicillin. There are no alternatives. Pregnant women who miss any dose of therapy (greater than 7 days between doses) must repeat the full course of treatment.

STDs and HIV – CDC Fact Sheet

People who have STDs are more likely to get HIV, when compared to people who do not have STDs.

Are some STDs associated with HIV?

Yes. In the United States, people who get syphilis, gonorrhea, and herpes often also have HIV, or are more likely to get HIV in the future.

Why does having an STD put me more at risk for getting HIV?

If you get an STD you are more likely to get HIV than someone who is STD-free. This is because the same behaviors and circumstances that may put you at risk for getting an STD can also put you at greater risk for getting HIV. In addition, having a sore or break in the skin from an STD may allow HIV to more easily enter your body.

What activities can put me at risk for both STDs and HIV?

- Having anal, vaginal, or oral sex without a condom;
- Having multiple sex partners;
- Having anonymous sex partners;
- Having sex while under the influence of drugs or alcohol can lower inhibitions and result in greater sexual risk-taking.

What can I do to prevent getting STDs and HIV?

The only way to avoid STDs is to not have vaginal, anal, or oral sex. If you are sexually active, you can do the following things to lower your chances of getting STDs and HIV:

- Choose less risky sexual behaviors.
- Use condoms consistently and correctly.
- Reduce the number of people with whom you have sex.
- Limit or eliminate drug and alcohol use before and during sex.
- Have an honest and open talk with your healthcare provider and ask whether you should be tested for STDs and HIV.
- Talk to your healthcare provider and find out if pre-exposure prophylaxis, or PrEP, is a good option for you to prevent HIV infection.

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If I already have HIV, and then I get an STD, does that put my sex partner(s) at an increased risk for getting HIV?

It can. If you already have HIV, and then get another STD, it can put your HIV-negative partners at greater risk of getting HIV from you.

Your sex partners are less likely to get HIV from you if you

- Use antiretroviral therapy (ART). ART reduces the amount of virus (viral load) in your blood and body fluids. ART can keep you healthy for many years, and greatly reduce your chance of transmitting HIV to sex partners, if taken consistently.
- Choose less risky sexual behaviors.
- Use condoms consistently and correctly.

The risk of getting HIV may also be reduced if your partner takes pre-exposure prophylaxis, or PrEP, after discussing this option with his or her healthcare provider and determining whether it is appropriate.

Will treating STDs prevent me from getting HIV?

No. It's not enough.

If you get treated for an STD, this will help to prevent its complications, and prevent spreading STDs to your sex partners. Treatment for an STD other than HIV does not prevent the spread of HIV.

If you are diagnosed with an STD, talk to your doctor about ways to protect yourself and your partner(s) from getting reinfected with the same STD, or getting HIV.

Where can I get more information?

Sexually Transmitted Diseases
www.cdc.gov/std/

HIV/AIDS and STDs
www.cdc.gov/std/hiv/

PrEP
(pre-exposure prophylaxis)
www.cdc.gov/hiv/basics/prep.html

CDC-INFO Contact Center
1-800-CDC-INFO
(1-800-232-4636)
TTY: (888) 232-6348
https://wwwn.cdc.gov/dcs/ContactUs/Form

CDC National Prevention Information Network (NPIN)
npin.cdc.gov/disease/stds
P.O. Box 6003
Rockville, MD 20849-6003
E-mail: npin-info@cdc.gov

American Sexual Health Association (ASHA)
www.ashasexualhealth.org/stdsstis/
P. O. Box 13827
Research Triangle Park, NC
27709-3827
1-800-783-9877

PrEP Fact Sheet

Is PrEP right for you?

PrEP is not for everyone. However, if **you are HIV-negative** and at risk of getting HIV, then PrEP might be right for you. Here are some questions to consider:

- Do you have an HIV positive partner?
- Have you had sex without a condom recently?
- Have you had an STD recently (especially syphilis)?
- Are you a man who has sex with other men?
- Are you having sex with people whose HIV status you don't know?
- Are you having sex with different partners?
- Do you or your sex partner(s) use alcohol and/or drugs when having sex?
- Have you or your sex partner(s) traded sex for money, housing, drugs, alcohol or other needs?
- Have you or your sex partner(s) ever injected drugs or shared needles?

If you answered "yes" to *any* of these, then you are likely a candidate for PrEP.

PrEP Frequently Asked Questions

What is PrEP?
PrEP (Pre-Exposure Prophylaxis) is a daily pill (Truvada) that can keep HIV infection from happening.

Does PrEP work?
PrEP is used along with condoms. When taken daily, PrEP can lower the chance of getting HIV. If not taken daily, PrEP will not be as protective against HIV.

Does PrEP have side effects?
PrEP can cause side effects like nausea in some people, but these usually go away after the 1st month. If you are taking PrEP, talk to your health care provider about any side effects that are very bad or do not go away.

How do I get PrEP?
Public Health Services is now taking appointments for anyone interested in PrEP. For questions or to schedule an appointment, call (209) 468-3830.

1601 E. Hazelton Ave | Stockton, CA 95205 |
www.sjcphs.org

SAN JOAQUIN COUNTY
Public Health Services
Healthy Future

Gonorrhea – CDC Fact Sheet

Anyone who is sexually active can get gonorrhea. Gonorrhea can cause very serious complications when not treated, but can be cured with the right medication.

What is gonorrhea?

Gonorrhea is a sexually transmitted disease (STD) that can infect both men and women. It can cause infections in the genitals, rectum, and throat. It is a very common infection, especially among young people ages 15-24 years.

How is gonorrhea spread?

You can get gonorrhea by having anal, vaginal, or oral sex with someone who has gonorrhea.

A pregnant woman with gonorrhea can give the infection to her baby during childbirth.

How can I reduce my risk of getting gonorrhea?

The only way to avoid STDs is to not have vaginal, anal, or oral sex.

If you are sexually active, you can do the following things to lower your chances of getting gonorrhea:

- Being in a long-term mutually monogamous relationship with a partner who has been tested and has negative STD test results;
- Using latex condoms and dental dams the right way every time you have sex.

Am I at risk for gonorrhea?

Any sexually active person can get gonorrhea through unprotected anal, vaginal, or oral sex.

If you are sexually active, have an honest and open talk with your health care provider and ask whether you should be tested for gonorrhea or other STDs. If you are a sexually active man who is gay, bisexual, or who has sex with men, you should be tested for gonorrhea every year. If you are a sexually active women younger than 25 years or an older women with risk factors such as new or multiple sex partners, or a sex partner who has a sexually transmitted infection, you should be tested for gonorrhea every year.

I'm pregnant. How does gonorrhea affect my baby?

If you are pregnant and have gonorrhea, you can give the infection to your baby during delivery. This can cause serious health problems for your baby. If you are pregnant, it is important that you talk to your health care provider so that you get the correct examination, testing, and treatment, as necessary. Treating gonorrhea as soon as possible will make health complications for your baby less likely.

How do I know if I have gonorrhea?

Some men with gonorrhea may have no symptoms at all. However, men who do have symptoms, may have:

- A burning sensation when urinating;
- A white, yellow, or green discharge from the penis;
- Painful or swollen testicles (although this is less common).

Most women with gonorrhea do not have any symptoms. Even when a woman has symptoms, they are often mild and can be mistaken for

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Division of STD Prevention

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a bladder or vaginal infection. Women with gonorrhea are at risk of developing serious complications from the infection, even if they don't have any symptoms.

Symptoms in women can include:

- Painful or burning sensation when urinating:
- Increased vaginal discharge:
- Vaginal bleeding between periods.

Rectal infections may either cause no symptoms or cause symptoms in both men and women that may include:

- Discharge;
- Anal itching;
- Soreness;
- Bleeding;
- Painful bowel movements.

You should be examined by your doctor if you notice any of these symptoms or if your partner has an STD or symptoms of an STD, such as an unusual sore, a smelly discharge, burning when urinating, or bleeding between periods.

How will my doctor know if I have gonorrhea?

Most of the time, urine can be used to test for gonorrhea. However, if you have had oral and/or anal sex, swabs may be used to collect samples from your throat and/or rectum. In some cases, a swab may be used to collect a sample from a man's urethra (urine canal) or a woman's cervix (opening to the womb).

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
www.cdc.gov/std

CDC-INFO Contact Center
1-800-CDC-INFO
(1-800-232-4636) Contact
https://wwwn.cdc.gov/dcs/ContactUs/Form

Can gonorrhea be cured?

Yes, gonorrhea can be cured with the right treatment. It is important that you take all of the medication your doctor prescribes to cure your infection. Medication for gonorrhea should not be shared with anyone. Although medication will stop the infection, it will not undo any permanent damage caused by the disease.

It is becoming harder to treat some gonorrhea, as drug-resistant strains of gonorrhea are increasing. If your symptoms continue for more than a few days after receiving treatment, you should return to a health care provider to be checked again.

I was treated for gonorrhea. When can I have sex again?

You should wait seven days after finishing all medications before having sex. To avoid getting infected with gonorrhea again or spreading gonorrhea to your partner(s), you and your sex partner(s) should avoid having sex until you have each completed treatment. If you've had gonorrhea and took medicine in the past, you can still get infected again if you have unprotected sex with a person who has gonorrhea.

What happens if I don't get treated?

Untreated gonorrhea can cause serious and permanent health problems in both women and men.

In women, untreated gonorrhea can cause pelvic inflammatory disease (PID). Some of the complications of PID are

- Formation of scar tissue that blocks fallopian tubes;
- Ectopic pregnancy (pregnancy outside the womb);
- Infertility (inability to get pregnant);
- Long-term pelvic/abdominal pain.

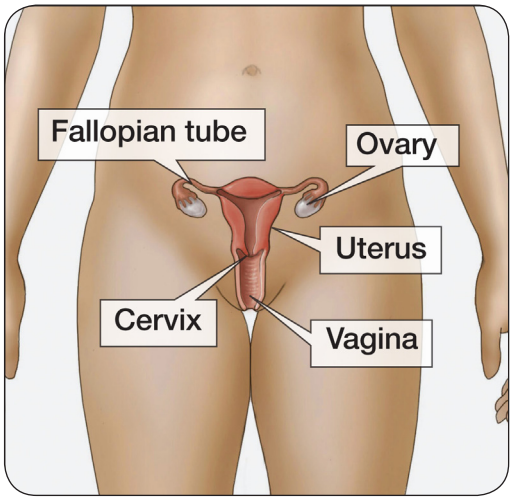
In men, gonorrhea can cause a painful condition in the tubes attached to the testicles. In rare cases, this may cause a man to be sterile, or prevent him from being able to father a child.

Rarely, untreated gonorrhea can also spread to your blood or joints. This condition can be life-threatening.

Untreated gonorrhea may also increase your chances of getting or giving HIV – the virus that causes AIDS.

Chlamydia – CDC Fact Sheet

Chlamydia is a common sexually transmitted disease (STD) that can be easily cured. If left untreated, chlamydia can make it difficult for a woman to get pregnant.



What is chlamydia?

Chlamydia is a common STD that can infect both men and women. It can cause serious, permanent damage to a woman's reproductive system, making it difficult or impossible for her to get pregnant later on. Chlamydia can also cause a potentially fatal ectopic pregnancy (pregnancy that occurs outside the womb).

How is chlamydia spread?

You can get chlamydia by having anal, vaginal, or oral sex with someone who has chlamydia.

If your sex partner is male you can still get chlamydia even if he does not ejaculate (cum).

If you've had chlamydia and were treated in the past, you can still get infected again if you have unprotected sex with someone who has chlamydia.

If you are pregnant, you can give chlamydia to your baby during childbirth.

How can I reduce my risk of getting chlamydia?

The only way to avoid STDs is to not have vaginal, anal, or oral sex.

If you are sexually active, you can do the following things to lower your chances of getting chlamydia:

- Being in a long-term mutually monogamous relationship with a partner who has been tested and has negative STD test results;
- Using latex condoms the right way every time you have sex.

Am I at risk for chlamydia?

Anyone who has sex can get chlamydia through unprotected anal, vaginal, or oral sex. However, sexually active young people are at a higher risk of getting chlamydia. This is due to behaviors and biological factors common among young people. Gay, bisexual, and other men who have sex with men are also at risk since chlamydia can be spread through oral and anal sex.

Have an honest and open talk with your health care provider and ask whether you should be tested for chlamydia or other STDs. If you are a sexually active woman younger than 25 years, or an older woman with risk factors such as new or multiple sex partners, or a sex partner who has a sexually transmitted infection, you should get a test for chlamydia every year. Gay, bisexual, and men who have sex with men; as well as pregnant women should also be tested for chlamydia.

I'm pregnant. How does chlamydia affect my baby?

If you are pregnant and have chlamydia, you can pass the infection to your baby during delivery. This could cause an eye infection or pneumonia in your newborn. Having chlamydia may also make it more likely to deliver your baby too early.

If you are pregnant, you should be tested for chlamydia at your first prenatal visit. Testing and treatment are the best ways to prevent health problems.

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Division of STD Prevention

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How do I know if I have chlamydia?

Most people who have chlamydia have no symptoms. If you do have symptoms, they may not appear until several weeks after you have sex with an infected partner. Even when chlamydia causes no symptoms, it can damage your reproductive system.

Women with symptoms may notice

- An abnormal vaginal discharge;
- A burning sensation when urinating.

Symptoms in men can include

- A discharge from their penis;
- A burning sensation when urinating;
- Pain and swelling in one or both testicles (although this is less common).

Men and women can also get infected with chlamydia in their rectum, either by having receptive anal sex, or by spread from another infected site (such as the vagina). While these infections often cause no symptoms, they can cause

- Rectal pain;
- Discharge;
- Bleeding.

You should be examined by your doctor if you notice any of these symptoms or if your partner has an STD or symptoms of an STD, such as an unusual sore, a smelly discharge, burning when urinating, or bleeding between periods.

How will my doctor know if I have chlamydia?

There are laboratory tests to diagnose chlamydia. Your health care provider may ask you to provide a urine sample or may use (or ask you to use) a cotton swab to get a sample from your vagina to test for chlamydia.

Can chlamydia be cured?

Yes, chlamydia can be cured with the right treatment. It is important that you take all of the medication your doctor prescribes to cure your infection. When taken properly it will stop the infection and could decrease your chances of having complications later on. Medication for chlamydia should not be shared with anyone.

Repeat infection with chlamydia is common. You should be tested again about three months after you are treated, even if your sex partner(s) was treated.

What happens if I don't get treated?

The initial damage that chlamydia causes often goes unnoticed. However, chlamydia can lead to serious health problems.

If you are a woman, untreated chlamydia can spread to your uterus and fallopian tubes (tubes that carry fertilized eggs from the ovaries to the uterus), causing pelvic inflammatory disease (PID). PID often has no symptoms, however some women may have abdominal and pelvic pain. Even if it doesn't cause symptoms initially, PID can cause permanent damage to your reproductive system and lead to long-term pelvic pain, inability to get pregnant, and potentially deadly ectopic pregnancy (pregnancy outside the uterus).

Men rarely have health problems linked to chlamydia. Infection sometimes spreads to the tube that carries sperm from the testicles, causing pain and fever. Rarely, chlamydia can prevent a man from being able to have children.

Untreated chlamydia may also increase your chances of getting or giving HIV – the virus that causes AIDS.

I was treated for chlamydia. When can I have sex again?

You should not have sex again until you and your sex partner(s) have completed treatment. If your doctor prescribes a single dose of medication, you should wait seven days after taking the medicine before having sex. If your doctor prescribes a medicine for you to take for seven days, you should wait until you have taken all of the doses before having sex.

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
www.cdc.gov/std

CDC-INFO Contact Center
1-800-CDC-INFO
(1-800-232-4636) Contact
https://wwwn.cdc.gov/dcs/ContactUs/Form

CDC National Prevention Information Network (NPIN)
https://npin.cdc.gov/disease/stds
P.O. Box 6003
Rockville, MD 20849-6003
E-mail: npin-info@cdc.gov

American Sexual Health Association (ASHA)
http://www.ashasexualhealth.org/stdsstis/
P.O. Box 13827
Research Triangle Park, NC 27709-3827
1-800-783-9877

Bacterial Vaginosis – CDC Fact Sheet

Any woman can get bacterial vaginosis. Having bacterial vaginosis can increase your chance of getting an STD.

What is bacterial vaginosis?

Bacterial vaginosis (BV) is an infection caused when too much of certain bacteria change the normal balance of bacteria in the vagina.

How common is bacterial vaginosis?

Bacterial vaginosis is the most common vaginal infection in women ages 15-44.

How is bacterial vaginosis spread?

We do not know about the cause of BV or how some women get it. BV is linked to an imbalance of "good" and "harmful" bacteria that are normally found in a woman's vagina.

We do know that having a new sex partner or multiple sex partners and douching can upset the balance of bacteria in the vagina and put women at increased risk for getting BV.

However, we do not know how sex contributes to BV. BV is not considered an STD, but having BV can increase your chances of getting an STD. BV may also affect women who have never had sex.

You cannot get BV from toilet seats, bedding, or swimming pools.

How can I avoid getting bacterial vaginosis?

Doctors and scientists do not completely understand how BV is spread, and there are no known best ways to prevent it.

The following basic prevention steps may help lower your risk of developing BV:

- Not having sex;
- Limiting your number of sex partners; and
- Not douching.

I'm pregnant. How does bacterial vaginosis affect my baby?

Pregnant women can get BV. Pregnant women with BV are more likely to have babies who are born premature (early) or with low birth weight than women who do not have BV while pregnant. Low birth weight means having a baby that weighs less than 5.5 pounds at birth.

Treatment is especially important for pregnant women.

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How do I know if I have bacterial vaginosis?

Many women with BV do not have symptoms. If you do have symptoms, you may notice a thin white or gray vaginal discharge, odor, pain, itching, or burning in the vagina. Some women have a strong fish-like odor, especially after sex. You may also have burning when urinating; itching around the outside of the vagina, or both.

How will my doctor know if I have bacterial vaginosis?

A health care provider will look at your vagina for signs of BV and perform laboratory tests on a sample of vaginal fluid to determine if BV is present.

Can bacterial vaginosis be cured?

BV will sometimes go away without treatment. But if you have symptoms of BV you should be checked and treated. It is important that you take all of the medicine prescribed to you, even if your symptoms go away. A health care provider can treat BV with antibiotics, but BV can recur even after treatment. Treatment may also reduce the risk for STDs.

Male sex partners of women diagnosed with BV generally do not need to be treated. However, BV may be transferred between female sex partners.

What happens if I don't get treated?

BV can cause some serious health risks, including

- Increasing your chance of getting HIV if you have sex with someone who is infected with HIV;
- If you are HIV positive, increasing your chance of passing HIV to your sex partner;
- Making it more likely that you will deliver your baby too early if you have BV while pregnant;
- Increasing your chance of getting other STDs, such as chlamydia and gonorrhea. These bacteria can sometimes cause pelvic inflammatory disease (PID), which can make it difficult or impossible for you to have children.

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
www.cdc.gov/std

CDC-INFO Contact Center
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www.ashasexualhealth.org/stdsstis/
P.O. Box 13827
Research Triangle Park,
NC 27709-3827
1-800-783-9877

Trichomoniasis - CDC Fact Sheet

What is trichomoniasis?

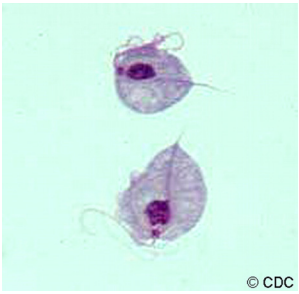
Trichomoniasis (or "trich") is a very common sexually transmitted disease (STD) that is caused by infection with a protozoan parasite called *Trichomonas vaginalis*. Although symptoms of the disease vary, most women and men who have the parasite cannot tell they are infected.

How common is trichomoniasis?

Trichomoniasis is considered the most common curable STD. In the United States, an estimated 3.7 million people have the infection, but only about 30% develop any symptoms of trichomoniasis. Infection is more common in women than in men, and older women are more likely than younger women to have been infected.

How do people get trichomoniasis?

The parasite is passed from an infected person to an uninfected person during sex. In women, the most commonly infected part of the body is the lower genital tract (vulva, vagina, or urethra), and in men, the most commonly infected body part is the inside of the penis (urethra). During sex, the parasite is usually transmitted from a penis to a vagina, or from a vagina to a penis, but it can also be passed from a vagina to another vagina. It is not common for the parasite to infect other body parts, like the hands, mouth, or anus. It is unclear why some people with the infection get symptoms while others do not, but it probably depends on factors like the person's age and overall health. Infected people without symptoms can still pass the infection on to others.



Two Trichomonas vaginalis *parasites, magnified (seen under a microscope)*

What are the signs and symptoms of trichomoniasis?

About 70% of infected people do not have any signs or symptoms. When trichomoniasis does cause symptoms, they can range from mild irritation to severe inflammation. Some people with symptoms get them within 5 to 28 days after being infected, but others do not develop symptoms until much later. Symptoms can come and go.

Men with trichomoniasis may feel itching or irritation inside the penis, burning after urination or ejaculation, or some discharge from the penis.

Women with trichomoniasis may notice itching, burning, redness or soreness of the genitals, discomfort with urination, or a thin discharge with an unusual smell that can be clear, white, yellowish, or greenish.

Having trichomoniasis can make it feel unpleasant to have sex. Without treatment, the infection can last for months or even years.

What are the complications of trichomoniasis?

Trichomoniasis can increase the risk of getting or spreading other sexually transmitted infections. For example, trichomoniasis can cause genital inflammation that makes it easier to get infected with the HIV virus, or to pass the HIV virus on to a sex partner.

How does trichomoniasis affect a pregnant woman and her baby?

Pregnant women with trichomoniasis are more likely to have their babies too early (preterm delivery). Also, babies born to infected mothers are more likely to have an officially low birth weight (less than 5.5 pounds).

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How is trichomoniasis diagnosed?

It is not possible to diagnose trichomoniasis based on symptoms alone. For both men and women, your primary care doctor or another trusted health care provider must do a check and a laboratory test to diagnose trichomoniasis.

What is the treatment for trichomoniasis?

Trichomoniasis can be cured with a single dose of prescription antibiotic medication (either metronidazole or tinidazole), pills which can be taken by mouth. It is okay for pregnant women to take this medication. Some people who drink alcohol within 24 hours after taking this kind of antibiotic can have uncomfortable side effects.

People who have been treated for trichomoniasis can get it again. About 1 in 5 people get infected again within 3 months after treatment. To avoid getting reinfected, make sure that all of your sex partners get treated too, and wait to have sex again until all of your symptoms go away (about a week). Get checked again if your symptoms come back.

How can trichomoniasis be prevented?

Using latex condoms correctly every time you have sex will help reduce the risk of getting or spreading trichomoniasis. However, condoms don't cover everything, and it is possible to get or spread this infection even when using a condom.

The only sure way to prevent sexually transmitted infections is to avoid having sex entirely. Another approach is to talk about these kinds of infections before you have sex with a new partner, so that you can make informed choices about the level of risk you are comfortable taking with your sex life.

If you or someone you know has questions about trichomoniasis or any other STD, especially with symptoms like unusual discharge, burning during urination, or a sore in the genital area, check in with a health care provider and get some answers.

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
www.cdc.gov/std

CDC-INFO Contact Center
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Resources

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