



**SOLANO
COUNTY**

**SOLANO
PUBLIC
HEALTH**



**SOLANO COUNTY PUBLIC HEALTH
STANDARDS
FOR SCREENING, EXAMINATION, TESTING,
TREATMENT AND REPORTING OF
CHLAMYDIA, GONORRHEA AND SYPHILIS**

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This guideline's objectives are:

- To provide recommendations on screening of chlamydia, gonorrhea, and syphilis in line with the California Department of Public Health and CDC guidelines;
- To provide recommendations on treatment of patients with chlamydia, gonorrhea, or syphilis symptoms prior to the return of confirmatory laboratory results. Detailed California Sexually Transmitted Diseases Treatment Guidelines can be found at:
<http://www.cdph.ca.gov/pubsforms/Guidelines/Pages/SexuallyTransmittedDiseasesScreeningandTreatmentGuidelines.aspx>
- To provide recommendations on reporting of chlamydia, gonorrhea, or syphilis to the Solano County Public Health. The Solano County Public Health Standards for Screening, examination, Testing, Treatment and Reporting of Chlamydia, Gonorrhea and Syphilis can be found at: http://www.solanocounty.com/depts/ph/health_providers/default.asp

1. CHLAMYDIA

Screening

1. Women 25 years of age and younger (should be screened annually).
2. Women 26 years of age and older should be screened if they meet the following risk factors:
 - a. Infection with chlamydia or gonorrhea during the previous 2 years;
 - b. More than one sex partner in the previous 12 months;
 - c. New partner in the previous 3 months; or
 - d. Belief that a partner from the previous 12 months may have had other sex partners at the same time
3. Screen ALL PREGNANT WOMEN at first prenatal visit. Women age 25 and younger or those over the age of 25 with risk factors should be screened again during the third trimester.
4. Pharyngeal screening for men who report oral receptive sex and rectal screening is recommended for men who report receptive anal sex.
5. Patients that present with conditions that can be caused by chlamydia including urethritis or epididymitis in men, and vaginitis, cervicitis, PID, dysuria, pyuria and intermenstrual bleeding in women.
6. Any patient who reports contact (exposure) to an STD, specifically chlamydia, gonorrhea, non-gonococcal urethritis, epididymitis, trichomoniasis, syphilis, or HIV, should be tested for chlamydia.
7. Any patient with a newly diagnosed STD, either confirmed or presumptively treated, including gonorrhea, trichomoniasis, syphilis, or HIV, should be tested for chlamydia.
8. Any patient that presents with signs or symptoms consistent of chlamydia infection.

Examination and testing of patients with a presumptive diagnosis of chlamydia

1. Examine the patient and obtain a sexual history.
2. Clinical Presentations of Chlamydia:
 - a. Females: May be asymptomatic
 - i. Signs and Symptoms: vaginal discharge, urinary frequency and dysuria, lower abdominal pain; mucopurulent cervical discharge, cervical erythema, edema, and friability.
 - b. Males: May be asymptomatic
 - i. Signs and Symptoms: dysuria and/or urethral discharge. Rectal chlamydial infections may be asymptomatic, or may resemble gonococcal proctitis with pain, bleeding, or mucous discharge.
3. Assess patient for medication and food allergies. Document in the medical record.
4. Patients with symptoms consistent with chlamydia should receive treatment according to the recommendations below, even though results are unavailable.
5. The patient should be counseled to abstain from sex for 7 days. If partner is treated, sex should not resume until 7 days after the partner is treated.

6. Collect vaginal/cervical swab and/or rectal swab from the patients for chlamydia testing depending on sites of sexual exposure. Urine specimen should only be taken if patient has a tampon in place or patient is unwilling to do a vaginal swab.
7. Collect pharyngeal swab from the patient for chlamydia testing if oropharyngeal exposure is reported.
8. Place order for NAAT chlamydia testing with collected specimen(s).
9. Patient should also be tested for gonorrhea and HIV infection.
10. Document testing performed in patient's medical record.
11. Encourage the patient to provide names of partners or to commit to notifying their partners of their exposure.
12. Offer condoms and provide counseling on STDs/HIV to the patient.
13. Complete Confidential Morbidity Report form and submit to the Solano County Communicable Disease Program by electronic submission, fax, telephone, or mail within seven calendar days of identification.

Treatment of patients for presumptive or actual diagnosis of CHLAMYDIA

1. Provide treatment as follows:

	Recommended Regimen	Alternative Regimens
Uncomplicated Genital/Rectal/Pharyngeal Infections in Non-Pregnant Women and Men	<ul style="list-style-type: none"> • Azithromycin 1 gram to be taken orally in one dose; OR • Doxycycline 100 mg orally twice daily for 7 days 	<ul style="list-style-type: none"> • Erythromycin base 500 mg orally four times a days for 7 days; OR • Erythromycin ethylsuccinate 800 mg orally four times a day for 7 days; OR • Ofloxacin 300 mg orally twice a day for 7 days; OR • Levofloxacin 500 mg orally once a day for 7 days
Pregnant Women	<ul style="list-style-type: none"> • Azithromycin 1 gram to be taken orally in one dose • Amoxicillin 500 mg orally three times daily for 7 days 	<ul style="list-style-type: none"> • Erythromycin base 500 mg orally four times a days for 7 days; OR • Erythromycin base 250 mg orally four times a days for 14 days; OR • Erythromycin ethylsuccinate 800 mg orally four times a day for 7 days; OR • Erythromycin ethylsuccinate 400 mg orally four times a day for 14 days

Follow Up for Patients Treated for chlamydia

1. All patients diagnosed with chlamydia should have repeat testing at 6 months to rule out reinfection.
2. Pregnant women should have a test-of-cure after three weeks and again during the third trimester if they are at high risk for reinfection.
3. All sex partners in the previous 60 days should be treated and tested for chlamydia, including gonorrhea and HIV.

Reporting of chlamydia cases to the Solano County Public Health

All chlamydia cases should be reported to the Solano County Public Health within seven calendar days of identification in line with the Title 17 of California Code of Regulations

Reportable Diseases and Conditions. Failure to report is a misdemeanor (Health & Safety Code 120295).

2. GONORRHEA

Screening

1. Women 25 years of age and younger (should be screened annually).
2. Women 26 years of age and older should be screened if they meet the following risk factors:
 - a. Infection with chlamydia or gonorrhea during the previous 2 years;
 - b. More than one sex partner in the previous 12 months;
 - c. New partner in the previous 3 months; or
 - d. Belief that a partner from the previous 12 months may have had other sex partners at the same time
3. Screen pregnant women who are AT RISK for gonorrhea at the first prenatal visit. At-risk women include:
 - a. Women 25 years or younger
 - b. History of gonorrhea in the prior two years
 - c. More than one sex partner in past year
 - d. Partner with other partners
 - e. Commercial sex
 - f. Drug use
 - g. Living in an area with high gonorrhea prevalence (certain geographic regions)African American women are also at higher risk for gonorrhea. Women age 25 and younger or those over the age of 25 with risk factors should be screened again during the third trimester.
4. Any patient who reports contact (exposure) to an STD, specifically chlamydia, gonorrhea, non-gonococcal urethritis, epididymitis, trichomoniasis, syphilis, or HIV, should be tested for gonorrhea.
5. Any patient with a newly diagnosed STD, either confirmed or presumptively treated, including chlamydia, trichomoniasis, syphilis, or HIV, should be tested for gonorrhea.
6. Any patient that presents with signs or symptoms consistent of gonorrhea infection.

Examination and testing of patients with a presumptive diagnosis of gonorrhea

1. Examine the patient and obtain a sexual history.
2. Clinical Presentations of Gonorrhea:
 - a. Cervix: asymptomatic or patients may present with vaginal discharge, lower abdominal pain, pain with intercourse, post coital bleeding or pain with urination; mucopurulent or frankly purulent cervical discharge, redness, and friability
 - b. Urethra: asymptomatic or pain with urination, discharge; purulent discharge, possibly phimosis and swelling, tender inguinal adenopathy.
 - c. Rectum: asymptomatic or discharge (usually described as mucous on stools), tenesmus, perianal itching, rectal pain and possibly rectal bleeding; purulent exudate.
 - d. Pharynx: Usually asymptomatic, or patients may complain of a sore throat or pain with swallowing; rarely redness, exudate.

3. Patients with symptoms consistent with gonorrhea should receive treatment according to the recommendations below, even though results are unavailable.
4. The patient should be counseled to abstain from sex for 7 days. If partner is treated, sex should not resume until 7 days after the partner is treated.
5. Collect vaginal/cervical swab and/or rectal swab from the patients for chlamydia testing depending on sites of sexual exposure. Urine specimen should only be taken if patient has a tampon in place or patient is unwilling to do a vaginal swab.
6. Collect pharyngeal swab from the patient for chlamydia testing if oropharyngeal exposure is reported.
7. Place order for NAAT gonorrhea testing with collected specimen(s).
8. Patient should also be tested for chlamydia and HIV infection.
9. Document testing performed in patient's medical record.
10. Encourage the patient to provide names of partners or to commit to notifying their partners of their exposure.
11. Offer condoms and provide counseling on STDs/HIV to the patient.
12. Complete Confidential Morbidity Report form and submit to the Solano County Communicable Disease Program by electronic submission, fax, telephone, or mail within seven calendar days of identification.

Treatment of patients for presumptive or actual diagnosis of GONORRHEA

1. Provide treatment as follows:

	Recommended Regimen	Alternative Regimens
Uncomplicated Genital/Rectal Infections in Non-Pregnant Women and Men	Dual Therapy with <ul style="list-style-type: none"> • Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 gram orally in a single dose; OR • Ceftriaxone 250 mg IM in a single dose PLUS Doxycycline 100 mg orally twice daily for 7 days 	Dual Therapy with <ul style="list-style-type: none"> • Cefixime 400 mg orally PLUS • Azithromycin 1 gram orally in a single dose; OR • Cefixime 400 mg orally PLUS Doxycycline 100 mg orally twice daily for 7 days; <p>If patient is allergic to cephalosporins or have severe penicillin allergy:</p> <ul style="list-style-type: none"> • Azithromycin 2 gram orally in a single dose
Pharyngeal Infections in Non-Pregnant Women and Men	Dual Therapy with <ul style="list-style-type: none"> • Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 gram orally in a single dose; OR • Ceftriaxone 250 mg IM in a single dose PLUS Doxycycline 100 mg orally twice daily for 7 days 	<ul style="list-style-type: none"> • Azithromycin 2 gram orally in a single dose
Gonorrhea Treatment for Pregnant Women	Dual Therapy with <ul style="list-style-type: none"> • Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 gram orally in a single dose 	Dual Therapy with <ul style="list-style-type: none"> • Cefixime 400 mg orally in a single dose PLUS • Azithromycin 1 gram orally in a single dose

Follow Up for patients treated for gonorrhea

1. All patients diagnosed with gonorrhea should have repeat testing at 6 months to rule out reinfection.
2. Pregnant women should have a test-of-cure after three weeks and again during the third trimester if they are at high risk for reinfection.
3. Patients treated for gonorrhea with any regimen other than ceftriaxone plus either azithromycin or doxycycline should have a test-of-cure done at seven days using culture or NAAT.
4. All sex partners in the previous 60 days should be treated and tested for gonorrhea, including chlamydia and HIV.

Reporting of gonococcal infection cases to the Solano County Public Health

All gonococcal infection cases should be reported to the Solano County Public Health within seven calendar days of identification in line with the Title 17 of California Code of Regulations Reportable Diseases and Conditions. Failure to report is a misdemeanor (Health & Safety Code 120295).

3. SYPHILLIS

Screening

1. Screen ALL PREGNANT WOMEN at first prenatal visit.
2. Any patient who report contact (exposure) to an STD, specifically chlamydia, gonorrhea, non-gonococcal urethritis, epididymitis, trichomoniasis, syphilis, or HIV, should be tested for syphilis.
3. Any patient with a newly diagnosed STD, either confirmed or presumptively treated, including chlamydia, trichomoniasis, gonorrhea, or HIV, should be tested for syphilis.
4. Any patient that presents with signs or symptoms consistent of syphilis infection.

Examination and testing of patients with a presumptive diagnosis of SYPHILIS

1. Clinical Presentations of Primary Syphilis include:
 - a. Genital, anal, or oral ulcer lesions that appear 10-90 days after contact at site of exposure; may persist for 2-3 weeks then resolve without scarring
 - i. Appears as a small red papule that can progress to an ulcer with elevated border
 - ii. Typical: single, painless, indurated, clean-based ulcer with rolled edges and bilateral painless adenopathy
 - iii. Atypical: painful, lack induration, flat; can mimic herpes and other genital ulcers
 - b. Examination: All possible exposed sites should be carefully examined.
 - i. Refer to the genital ulcer protocol for the characteristics of the ulcer(s) and lymph nodes that should be evaluated and noted.
 - ii. Note that multiple chancres are more likely in HIV-positive individuals.
2. Clinical Presentations of Secondary Syphilis include:
 - a. Symptoms typically occur 3-6 weeks after primary stage (can overlap with primary); resolve in 2-10 weeks
 - b. Signs and Symptoms:
 - i. Lesions on trunk, palms, soles, scrotum, and genitals
 - ii. Rash: most common; can be macular, popular, squamous (scale, or pustular (rare), vesicular (rare), or combination; usually non-pruritic; may involve palms and soles
 - iii. Generalized Lymphadenopathy: inguinal, axillary & cervical sites most commonly affected
 - iv. Constitutional Symptoms: malaise, fever, headache, fatigue, sore throat, night sweats
 - v. Mucous patches: flat gray-white patches in oral cavity & genital area
 - vi. Condyloma lata: moist, heaped, wart-like lesions in genital, peri-rectal, rectal areas, and oral cavity
 - vii. Alopecia: patchy hair loss, loss of lateral eyebrows
 - c. Examination: A complete exam including the oral cavity (mucous patches, chancre), anogenital region (condyloma lata, chancres, mucous patches, rash), skin (including chest, back, palms and soles), and lymph nodes (including neck, axilla, epitrochlear

and inguinal) should be done. Any rash on the genitals, especially the scrotum should be suspect for syphilis.

3. Clinical Presentations of Early Latent Syphilis:
 - a. Infected within the last year and no clinical signs or symptoms of syphilis.
 - b. Examination: Assess for signs or symptoms of primary or secondary stage of syphilis.
4. Clinical Presentations of Late Latent Syphilis:
 - a. Infected more than a year ago and no clinical signs or symptoms of syphilis.
 - b. Patient has been diagnosed with syphilis and did not complete treatment or received inadequate treatment.
 - c. Examination: Assess for signs or symptoms of primary or secondary stage of syphilis.
5. Clinical Presentations of Neurosyphilis:
 - a. May occur at any stage
 - b. Patients with acute syphilitic meningitis, which usually occurs in patients with early syphilis, may complain of headache, fever, photophobia, neck stiffness, nausea, vomiting, blurred vision, seizures, aphasia, focal weakness, hemiplegia, or cranial nerve palsies (including hearing loss).
 - c. Patients with general paresis or tabes dorsalis, which are neurologic complications of late syphilis, may present with dementia, psychosis, gait disturbances, lightning pains, or incontinence.
6. Perform a neurological exam on all patients. Patient should be referred for CSF analysis, evaluation, and treatment if there are any signs or symptoms suggestive of Neurosyphilis. CSF should be sent for cell count, differential, CSF VDRL, protein and glucose.
7. Collect a sexual history including last sexual contact and STD history.
8. A darkfield microscopic exam of any ulcers should be done. All ulcerative lesions should also be swabbed for HSV PCR.
9. All patients should have a nontreponemal test (RPR) and treponemal test (TPPA).
10. Patients should be questioned about penicillin allergy. Document allergy history in the medical record. For pregnant patients that are allergic to penicillin, await the results of the RPR test prior to initiating treatment.
11. Collect a blood specimen and place order for HIV testing. Test for chlamydia and gonorrhea if patient is at risk.
12. Document testing performed in patient's medical record.
13. Offer condoms and provide counseling on STDs/HIV to the patient.
14. Complete Confidential Morbidity Report form and submit to the Solano County Communicable Disease Program by electronic submission, fax, telephone, or mail within one working day of identification.
15. Women that are tested positive for syphilis should have a stat pregnancy test.

Treatment of patients for presumptive or actual diagnosis of SYPHILIS

1. Provide treatment as follows:

Syphilis Stage	Recommended Regimen	Alternative Regimens
Primary, Secondary, and Early Latent in Non-Pregnant Women and Men	<ul style="list-style-type: none"> • Benzathine penicillin G 2.4 million units IM 	<ul style="list-style-type: none"> • Doxycycline 100 mg orally, twice daily for 14 days; OR • Tetracycline 500 mg orally, four times a day for 14 days; OR • Ceftriaxone 1 g IM or IV, once a day for 10-14 day
Late Latent and Unknown Duration in Non-Pregnant Women and Men	<ul style="list-style-type: none"> • Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM at 1-week intervals 	<ul style="list-style-type: none"> • Doxycycline 100 mg orally, twice daily for 28 days; OR • Tetracycline 500 mg orally, four times a day for 28 days
Neurosyphilis in Non-Pregnant Women and Men	<ul style="list-style-type: none"> • Aqueous crystalline penicillin G 18-24 million units daily, administered as 3-4 million units IV every 4 hours for 10-14 days 	<p>Dual Therapy with</p> <ul style="list-style-type: none"> • Procaine penicillin G 2.4 million units IM once daily for 10-14 days PLUS Probenecid 500 mg orally four times daily for 10-14 days; OR • Ceftriaxone 2 g IM or IV once daily for 10-14 days
<u>Pregnant Women:</u> Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> • Benzathine penicillin G 2.4 million units IM once 	None. Pregnant women allergic to penicillin should be treated with penicillin after desensitization.
<u>Pregnant Women:</u> Late Latent and Unknown Duration	<ul style="list-style-type: none"> • Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM at 1-week intervals 	None. Pregnant women allergic to penicillin should be treated with penicillin after desensitization.
<u>Pregnant Women:</u> Neurosyphilis	<ul style="list-style-type: none"> • Aqueous crystalline penicillin G 18-24 million units daily, administered as 3-4 million units IV every 4 hours for 10-14 days 	<p>Dual Therapy with</p> <ul style="list-style-type: none"> • Procaine penicillin G 2.4 million units IM once daily for 10-14 days PLUS Probenecid 500 mg orally four times daily for 10-14 days. <p>Pregnant women allergic to penicillin should be treated with penicillin after desensitization.</p>

Follow Up for Patients Treated for syphilis

1. Primary, Secondary, and Early Latent Syphilis Treated:
 - a. Patients should return for examination one week, 3 months, 6 months and 12 months after treatment. At the initial follow-up visit, document whether or not the patient experienced a Jarisch-Herxheimer reaction and document the healing of lesions, diminution in extent of rash, etc. At all syphilis follow-up visits patient should be asked about any new neurological symptoms. If patients have neurological symptoms, they should be evaluated and referred promptly.
 - b. Repeat VDRL titers should be done at 3, 6, 12 and 24 months after diagnosis.
 - c. Pregnant patients should be evaluated monthly and should have a complete obstetric history documented at the initial visit to determine if there are other children who may have congenital syphilis.
 - d. If nontreponemal antibody titers have not declined fourfold by 12-18 months for secondary and early latent syphilis, or if they increased fourfold, the patient should be evaluated for re-infection or treatment failure and should be treated accordingly.
 - a. Titers may decline more slowly in patients with HIV infection. The attending physician should be consulted for such cases.
2. Late Latent and Unknown Duration Syphilis Treated:
 - a. Patients should be seen by a clinician every week for three weeks if the patient is receiving penicillin therapy. All patients should be evaluated after the initial therapy to assess whether or not the patient had a Jarisch-Herxheimer reaction. A repeat VDRL should be done at the second treatment. At follow-up visits, if titers increase fourfold, or an initially high titer (> 1:32) fails to decline after one year, or the patient has symptoms or signs attributable to syphilis, the patient should be evaluated for re-infection and neurosyphilis, and be re-treated.
 - b. Pregnant patients should be evaluated by a clinician during their weekly treatment visits, then monthly and should have a complete obstetric history to determine if they have other children who may need to be evaluated for congenital syphilis.

Reporting of syphilis cases to the Solano County Public Health

All syphilis cases should be reported to the Solano County Public Health within one working day of identification in line with the Title 17 of California Code of Regulations Reportable Diseases and Conditions. Failure to report is a misdemeanor (Health & Safety Code 120295).