

# Prenatal Syphilis Screening, Staging, Treatment, and Monitoring for Congenital Syphilis Prevention



## Screen all patients at first prenatal visit, regardless of risk

Non-treponemal test such as RPR or VDRL, with reflex confirmatory treponemal test such as TP-PA

### SYPHILIS DIAGNOSIS AT INITIAL PRENATAL SCREENING

### RESCREENING IF FIRST TEST IS NEGATIVE

<p><b>Primary</b> + Chancere</p> <hr/> <p><b>Secondary</b> + Rash and/or other signs<sup>1</sup></p> <hr/> <p><b>Early-Latent</b> <i>NO symptoms and infection occurred within one year<sup>2</sup></i></p>	<p><b>Late-Latent</b></p> <p>or</p> <p><b>Unknown Duration</b></p> <p><i>NO symptoms, and infection does not meet criteria for early latent<sup>2</sup></i></p>	<p><b>Neurosyphilis<sup>3</sup></b></p> <p>+ CNS sign or symptoms</p> <p>+ CSF findings on lumbar puncture (LP)</p>	<p><b>Rescreen all patients at 28-32 weeks gestational age (regardless of risk).</b></p> <p><b>Also rescreen at delivery if patient at risk:</b></p> <ul style="list-style-type: none"> <li>• Missed 28-32 week rescreen</li> <li>• Lives in high morbidity area</li> <li>• HIV-positive</li> <li>• Other STD diagnosed within the past 12 months</li> <li>• Illicit substance use</li> <li>• Reports sex exchange</li> <li>• Homeless/ Unstable housing</li> <li>• History of incarceration within the past 12 months</li> <li>• Multiple sex partners, or partner with other partners</li> </ul>
<p><b>Benzathine penicillin G</b></p> <p>2.4 Million Units, Intramuscularly (IM)</p> <p><u>Once</u></p>	<p><b>Benzathine penicillin G</b></p> <p>2.4 Million Units IM <u>every 7 days</u>, for 3 doses (7.2 mu total)</p> <p><i>If any doses are late or missed, restart the entire 3-dose series. A 6-8 day interval may be acceptable. Consult your local STD controller.</i></p>	<p><b>Aqueous penicillin G</b></p> <p>3-4 Million Units Intravenously every 4 hours for 10-14 days</p>	
<p><b>Repeat follow-up titers at 28-32 weeks. Consider monthly titers until delivery if at high risk for reinfection.</b></p> <p>Post-treatment serologic response during pregnancy varies widely. Many women do not experience a fourfold decline by delivery. If fourfold increase occurs after treatment completion, evaluate for reinfection and neurosyphilis.</p>			

1. Signs of secondary syphilis also include condyloma lata, alopecia, and mucous patches.
2. Persons can receive a diagnosis of early latent if, during the prior 12 months, they had a) seroconversion or sustained fourfold titer rise (RPR or VDRL); b) unequivocal symptoms of P&S syphilis, or c) a sex partner with primary, secondary, or early latent syphilis.
3. Neurosyphilis can occur at any stage. Patients should receive a neurologic exam including ophthalmic and otic; LP is recommended if signs/symptoms present.

## Screen early, treat as soon as possible

Treatment failure, and subsequent congenital syphilis, has been associated with a later gestational age at time of treatment.

## Treatment is safe and highly effective

Prenatal therapy treats both mother and fetus; effectiveness approaches 100%.

**Benzathine Penicillin G (or Bicillin-LA) is the ONLY recommended therapy** for pregnant women infected with syphilis.

**Someone with signs, symptoms, or exposure to syphilis** may receive treatment for early disease while serology results are pending.

## ADDITIONAL RESOURCES

- **For detailed treatment guidelines**, including complete penicillin desensitization recommendations see the CDC 2015 STD Treatment Guidelines: [www.cdc.gov/std/tg2015](http://www.cdc.gov/std/tg2015)
- **For clinical questions**, enter your consult online at the STD Clinical Consultation Network: [www.stdccn.org](http://www.stdccn.org)

## What if my patient is allergic to penicillin?

- **Verify the nature of the allergy.** Approximately 10% of the population reports a penicillin allergy, but less than 1% of the whole population has a true Ig-E mediated allergy.
- **Symptoms of an IgE-mediated (type 1) allergy include:** Hives, angioedema, wheezing and shortness of breath, and anaphylaxis. Reactions typically occur within 1 hour of exposure.
- **Refer for penicillin skin testing** if the nature of the allergy is uncertain or cannot be determined.
- **Refer for oral desensitization with penicillin** if the skin test is positive or the patient has a true penicillin allergy.
- **Desensitization should be performed in a hospital.** Serious allergic reactions can occur. Consult an allergist.
- **Treat the patient with Benzathine penicillin G.** Treatment according to appropriate stage of syphilis (see opposite page for treatment regimen).

MORE INFORMATION ABOUT IgE-MEDIATED PENICILLIN ALLERGY CAN BE FOUND ONLINE: "Is it Really a Penicillin Allergy?"  
[www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf](http://www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf)

## Sources

Workowski KA, Bolan G. Sexually Transmitted Diseases Treatment Guidelines, 2015. In: Center for Disease Control and Prevention, ed. *MMWR Morbidity and Mortality Weekly Report*, 2015; Assessment, U. Screening for syphilis infection in pregnancy: US Preventive Services Task Force reaffirmation recommendation statement. *Ann Intern Med*, 2009. 150: p. 705-709; Alexander JM, Sheffield JS, Sanchez PJ, et al. Efficacy of treatment for syphilis in pregnancy. *Obstetrics & Gynecology* 1999;93(1):5-8; Plotzker RE, Murphy RD, Stoltey, JE. "Congenital Syphilis Prevention: Strategies, Evidence, and Future Directions." *Sexually Transmitted Diseases* (2018); Wendel GO, Jr, Stark BJ, Jamison RB, Melina RD, Sullivan TJ. Penicillin Allergy and Desensitization in Serious Infections During Pregnancy. *N Engl J Med* 1985;312:1229-32.