

Overview for Local Health Departments: Lentocilin® for Treatment of Syphilis During Bicillin® L-A Shortage

Background:

The shortage of Bicillin® L-A, the only brand of benzathine penicillin G (BPG) in the US, is currently expected to continue [through the fourth quarter of 2027](#). To address this shortage, the US Food and Drug Administration [authorized Lentocilin® for temporary importation](#). Lentocilin® is BPG manufactured in Portugal; it's been used in other countries for years.

About Lentocilin®:

- **Lentocilin® is clinically equivalent to Bicillin® L-A.** It may be used for treatment of syphilis following the same [dosing regimen](#) as Bicillin® L-A.
- **Lentocilin® is safe for use in pregnant patients** and should be administered following [standard protocols for treatment of syphilis in pregnancy](#) (PDF). The Society for Maternal-Fetal Medicine specifically [supports the use of Lentocilin®](#) for the treatment of patients with syphilis in pregnancy when Bicillin® L-A is unavailable.
- **Lentocilin® requires reconstitution immediately prior to use.** It is supplied as a powder with lidocaine diluent. Reconstitution supplies are not included.
- **Prescribing precautions:** Contraindicated in patients with known hypersensitivity to penicillin, other beta-lactams, or lidocaine/amide-type local anesthetics. Providers may also need to consider pertinent medical history (e.g., renal, cardiovascular, hepatic dysfunction) if using lidocaine as the diluent per standard of care. Lentocilin® contains soy lecithin and may cause hypersensitivity reactions in patients with soy allergies.
- **Consider pre-assembling a reconstitution kit to streamline clinic workflows.** An example of supplies needed to prepare one standard adult dose:
 - Two boxes of Lentocilin®
 - Two 5cc syringes
 - Two gauze (or alcohol swab pads) to open glass ampule
 - Two alcohol swabs to disinfect vial rubber stopper
 - Two 1½ inch filter needle (e.g., blunt 18G or 21G) to draw up pre-packaged diluent from glass ampule
 - Set of needles for injecting diluent into vial and then drawing up suspension
 - *Option 1: Two 18G needles without safety locks to use the same needle to inject diluent, recap, and then draw up suspension. Either 1 inch or 1½ inch.*
 - *Option 2: Four needles with safety lock. The needles for injecting lidocaine alone can be 21G, 20G, or 18G. Only larger bore (at least 18G) can be used for drawing up the suspension to avoid blockage of the needle. Either 1 inch or 1½ inch.*
 - Two 1½ inch, 18G needles for deep IM administration
- **Available for purchase at Cost Plus Drug Pharmacy**—see this [ordering Lentocilin resource](#). For urgent requests with CDPH supply (limited): CDPHSTDProcurement@cdph.ca.gov.

	Bicillin® L-A	Lentocilin®
Indications for prioritized use during shortage	• Syphilis infection (or exposure) in pregnancy • Infants* exposed to syphilis in utero • Contraindication to syphilis treatment with doxycycline	
Active ingredient	Benzathine benzylpenicillin a.k.a. benzathine penicillin G (BPG)	
Route	Deep intramuscular injection only. Use dorsogluteal or ventrogluteal site for adults (with contralateral gluteal sites for split dosing). In infants and small children, it may be preferable to administer in the midlateral aspect of the thigh.	
Supplied as	Either 1,200,000 units (1.2 mu) or 2,400,000 units (2.4 mu) as (1) pre-filled syringe with needle	1,200,000 units (1.2 mu) as - (1) vial of BPG powder with - (1) glass ampule of 4 mL diluent, lidocaine 1.5%
Preparation	Warm syringe between hands for several minutes, otherwise ready-to-use	- Requires reconstitution immediately before use - Supplies for reconstitution and injection are not included
Administration needle size	21G, 1½ inch needle	18G, 1½ inch needle
Injection volume	2 mL per 1.2 mu dose or 4 mL per 2.4 mu dose	4 mL per 1.2 mu dose
Injections per standard adult treatment dose	1 or 2 deep IM injections, depending on dose formulation	2 deep IM injections
Storage	Must be kept refrigerated.	Does not need to be refrigerated. Store below 25°C (77°F).
Procurement	Case-by-case requests: - Pfizer medical request form - CDPH OSH if/when available Otherwise, wholesalers as available (often backordered)	- Available via Cost Plus Drug Pharmacy: Approx \$30/dose. See Ordering Lentocilin® (PDF). - CDPH OSH for case-by-case requests

*Prioritize Bicillin® L-A for infants ≤ 1 month of age pending further guidance. As a reminder, infants with proven or highly probable congenital syphilis require treatment with IV aqueous crystalline penicillin G.

Resources

Lentocilin use:

- [CDPH: Accessing Bicillin L-A and Lentocilin Tips and Tricks](#)
Tip sheet on how to access Bicillin L-A and Lentocilin® during the Bicillin L-A shortage
- [Minnesota Department of Health: Ordering Lentocilin®](#) (PDF).
Tip sheet on how to order Lentocilin® from Cost Plus Drug Pharmacy.
- [National Network of STD Clinical Prevention Training Centers: Bicillin L-A Shortage: Implementing Lentocilin \(May 6, 2026 webinar\)](#). *Helpful overview on Lentocilin®, addresses FAQ (e.g., patient tolerance, safety) and gives practical implementation tips from STI clinics that are using it.*
- [National Network of STD Clinical Prevention Training Centers: Lentocilin® Information for Clinicians](#) (PDF). *Details on Lentocilin® ingredients, reconstitution and administration.*
- [US FDA Letter to Providers: Temporary Importation of Lentocilin®, \(Benzathine Benzylpenicillin Tetrahydrate\) Powder and diluent for suspension for injection, 1,200,000 units with Foreign, non-U.S. Labeling to Address Supply Shortage](#) (PDF).
Manufacturer letter which includes similar information to a package insert.
- [YouTube: Bicillin L-A Shortage – How to Reconstitute Lentocilin S \(Updated 3.27.26\)](#).
Five minute, step-by-step video showing supplies and steps needed for reconstitution.

Clinical guidance and support during shortage:

- [CDPH: Update on Bicillin L-A \(penicillin G benzathine injectable suspension\) Shortage: Inventory Review and Clinical Guidance \(2/23/2026\)](#).
- [CDPH: Special Considerations for the Treatment of Syphilis Using Alternative Therapies in Non-Pregnant Persons \(9/12/2023\)](#) (PDF).
- [CDPH and California Prevention Training Center: Prenatal Syphilis Screening, Staging, and Management for Congenital Syphilis Prevention](#) (PDF).
- [CDPH: California STI Treatment Guidelines](#).
- [Centers for Disease Control and Prevention: Bicillin L-A Shortage Dear Colleague Letter \(March 10, 2026\)](#).
- For case consultations or other clinical support, contact the [Sexually Transmitted Diseases Clinical Consultation Network](#) run by the California Prevention Training Center at the University of California San Francisco.