



Background

There is a national shortage of LA bicillin in the United States. As a result, the FDA has approved temporary importation of Lentocilin® for select indications. This is a long-acting penicillin similar to LA bicillin. As it is a limited resource, use will be restricted by the P&T Committee.

Eligible Patients

- Syphilis.
- Patients with established rheumatic heart disease or acute rheumatic fever who need monthly prophylaxis.

Restrictions

NOT to be used for patients with acute Group A Strep pharyngitis infections.

Useful Links

- [Lentocilin® Information for Clinicians](#) (including instructions for preparation and administration).
- [Prescribing information.](#)

Contraindications

- Allergy to a penicillin.
- Allergy to soy. (Ingredients contain soy phospholipids and may cause hypersensitivity reactions in people with history of allergy to soybeans.)
- Allergy to lidocaine or local anesthetics of the amide type.
- Due to lidocaine, use with caution in patients with cardiovascular, hepatic, or renal disease.

Dosing

Syphilis:

- Primary, secondary and early latent syphilis: 50,000 units/kg (maximum dose 2,400,000 units/dose) in a single dose.
- Late latent syphilis or latent syphilis of unknown duration: 50,000 units/kg (maximum dose: 2,400,000 units/dose) weekly for 3 weeks.

Prophylaxis of rheumatic fever:

25,000 - 50,000 units/kg in a single dose (maximum dose 1,200,000 units/dose)

OR

- Weight < 27 kg: 300,000 - 600,000 units in a single dose
- Weight ≥ 27 kg: 1,200,000 units in a single dose.

Preparation & Administration

Prepare aseptically.

1. Draw up 4 mL diluent into a needle per standard medication administration procedures.
2. Disinfect the rubber stopper of the vial with alcohol and insert the needle through its center. Without touching the powder, carefully inject the diluent into the vial. Do not inject the diluent directly into the powder. Remove the needle from the vial.
3. Homogenize the suspension by rotating the vial tightly between the hands for about 20 seconds. Do not shake.
4. Transfer the suspension immediately into a syringe and proceed to administer as soon as possible. After reconstitution the 4 mL suspension will contain approximately 1,200,000 units of benzathine benzylpenicillin.

For doses of Lentocilin® less than 1,200,000 units: withdraw the appropriate volume of the reconstituted product and discard the remainder.

Must be administered exclusively by deep intramuscular (IM) injection. IV administration has been associated with cardiorespiratory arrest and death.

Administer into the upper, outer quadrant of the buttock (dorsogluteal) or the ventrogluteal site; in neonates, infants, and small children it may be preferable to administer in the midlateral aspect of the thigh.

This guideline is designed for the general use of most patients but may need to be adapted to meet the special needs of a specific patient as determined by the medical practitioner.
Approved by Clinical Guideline Committee 6/26/26. Click [here](#) to see the supplemental resources for this guideline.
If comments about this guideline, please contact Someone@ykhc.org.