

Penicillin G Benzathine (Bicillin L-A)

The preferred treatment recommendation for infectious syphilis in an adult is long-acting benzathine penicillin G 2.4 million units (Bicillin L-A) as a single dose. Consult the Public Health Agency of Canada (PHAC) Canadian Guidelines for Sexually Transmitted Infections (STI) for further guidance.¹

This medication is dispensed as two separate, preloaded 1.2 million unit syringes, administered one in each ventrogluteal muscle, for a total of 2.4 million units. The ventrogluteal site is free from the sciatic nerve and large blood vessels, and it has the greatest thickness of muscle when compared to other sites.²

Store under refrigeration (2°- 8°C). May be removed from refrigerator and stored for 7 days at a temperature not exceeding 30°C. Protect from freezing.³

Prior to administration of this drug, carefully read the product insert for warnings, adverse reactions, dosage, and administration.⁴ Inform patient of potential Jarisch-Herxheimer reaction to penicillin treatment.

For patient medication information refer to https://www.pfizer.ca/files/Bicillin-L-A_PI_EN_268414_18-Apr-2023.pdf

Locating the Ventrogluteal Site³

- Position patient lateral (side-lying) with the upper leg flexed and slightly in front of the lower leg.
- Place the heel of your hand over the greater trochanter of the femur. Use whichever hand so your thumb is pointing to the client's front.
- Palpate anterior superior iliac spine with index finger, then move your middle finger across the iliac crest to form a "V". (Figure 1).
- The center of the formed triangle or "V" is the ventrogluteal site.
- The needle is to be inserted at an almost 90° angle to the muscle but pointed slightly up toward the iliac crest.
- Move the hand that made the V before injecting.
- Inject medication slowly and steadily (about 1 ml per ten seconds to allow muscle to accommodate the fluid).



Figure 1: Locating the Ventrogluteal Site⁵

For video demonstration ventrogluteal IM injection see:

https://www.youtube.com/watch?v=orBAy6Aqc9k&list=UUtaL_B4sC87gErvaJvM6wzFQ.

1. Public Health Agency (2022). Canadian Guidelines for Sexually Transmitted Infections. Retrieved from <https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines/syphilis.html>
2. <https://pressbooks.bccampus.ca/facultycanillaryresourceforclinicalproceduresfor saferpatient/chapter/7-5/>
3. Pfizer Canada. (2023). Product Monograph: Bicillin L-A. Retrieved from: https://www.pfizer.ca/files/Bicillin-L-A_PM_EN_268414_18-Apr-2023.pdf
4. Province-wide Immunization program Standards and Quality (2013). Alberta Health Services Vaccine Administration Standards.
5. Alberta Health Services (2020). Penicillin G Benzathine (Bicillin L-A) Injections. Retrieved from: <https://www.albertahealthservices.ca/assets/info/hp/srh/if-hp-srh-administering-bicillin-l-a-ventrogluteal.pdf>