



Strengthening STD Prevention and Control for Health Departments

Technical Assistance Note # 11c | Benzathine penicillin G (Bicillin L-A®) tracking and forecasting

From Strategy Area III: Promote CDC-Recommended Screening, Diagnosis, and Treatment

11. Promote CDC-recommended treatment for gonorrhea and syphilis
 - c. Implement a Benzathine penicillin G forecasting inventory management system to monitor supply, and have a plan to address shortages in the applicant's project area. Assist providers and organizations who are unable to provide timely, recommended treatment for syphilis in getting access to medication or dispensing the treatment to the patient, as needed

Why DSTDP included these strategies

In recent years, the demand for Benzathine penicillin G in the US has outstripped its supply. As a result, some providers have faced drug shortages needing emergency supplies and/or not prescribed the best treatment of syphilis or administered it in a timely manner, as recommended by CDC. Health departments have a responsibility to play an active role in monitoring these issues, mitigating shortages, and facilitating recommended treatment of syphilis. Providing prompt treatment to reduce the spread of syphilis in the community is a core public health function required in many states by statute or regulation.

This TA Note addresses the first part of the strategy outlined above.

Considerations for implementation

Forecast and monitor Benzathine penicillin G (Bicillin L-A®) inventory

- Monitor local supply of Benzathine penicillin G and determine local pattern of use. At regular intervals, proactively take inventory of any supplies maintained by the public health sector. Do so more frequently if product is found to be low in order to inform ordering of product
- Determine rate of increase of syphilis cases and contacts in the previous year and contact distributors to procure Benzathine penicillin G based on a projection of future cases and contacts expected rather than based on prior orders. For example, the simplest approximation of potential cases for 2019 would be to apply the percentage increase in syphilis cases from 2017 to 2018 to the number of cases of syphilis treated in 2018

Plan for shortages

- Implement a usage strategy, if inventory is less than 2 months of product, based on projections
- Identify inventories with sufficient product based on the usage pattern, and facilitate movement of product, if feasible, in your project area
- Communicate with healthcare providers and pharmacists regarding any limited supply issues. Remind health care providers and pharmacists of the limited availability of Benzathine penicillin G so they are aware, can plan, and forecast demand based on the epidemiology of syphilis in the project area. Ask providers to report to you

any shortages when inventory is less than 2 months of product based on projected use and inform DSTDP of limited supply issues

- Discourage the use of Benzathine penicillin G for treatment of other infectious diseases (e.g. streptococcal pharyngitis) where other effective antimicrobials are available
- Encourage the adherence to the recommended dosing regimen of 2.4 million units of Benzathine penicillin G IM for the treatment of primary, secondary, and early latent syphilis (early syphilis) as outlined in the most current STD Treatment Guidelines. Additional doses to treat early syphilis do not enhance efficacy, including among patients living with HIV infection
- Encourage clinicians with questions about syphilis clinical management to contact the on-line National Network of STD Clinical Prevention Training Centers (NNPTC) STD Clinical Consultation Network (<https://www.stdccn.org>) or a local ID specialist

Other resources

- CDC's website on the Benzathine penicillin G (Bicillin L-A®) shortage: <https://www.cdc.gov/std/treatment/drugnotices/bicillinshortage.htm>
- FDA Drug Shortage website (search here for Benzathine penicillin G): <https://www.accessdata.fda.gov/scripts/drugshortages>
- National Coalition of STD Directors website: <http://www.ncsddc.org/resource/bicillin-forecasting-and-inventory/>
 - This includes a link to an Excel-based forecasting tool

For more information or feedback on this document, contact your DSTDP Prevention Specialist or email STD_PCHD@cdc.gov. CDC's Division of STD Prevention, Program Development and Quality Improvement Branch, developed this document for recipients of PS19-1901 STD PCHD to provide additional clarification of strategies outlined in that NOFO and to support program implementation. The content here does not represent additional NOFO requirements nor official CDC recommendations. Issue date: April 2019