

## Health Advisory: Benzathine Penicillin Shortage and Syphilis – June 6, 2023

## **Actions Requested:**

- Medical providers should use doxycycline to treat syphilis in cisgender men and other patients who are not capable of becoming pregnant if the provider believes they can adhere to a recommended doxycycline treatment regimen.
  - Early syphilis (primary, secondary, and early non-primary non-secondary syphilis) can be treated with doxycycline 100mg po twice a day for 14 days. Patients are classified as having early syphilis if they meet any one of the following criteria: 1) signs or symptoms or primary or secondary syphilis in a patient with a positive syphilis serology; 2) a new syphilis diagnosis based on positive syphilis serologies (positive treponemal test and RPR) in a person with negative syphilis serologies in the prior year; 3) a sustained (>2 weeks) 4-fold increase in RPR titer compared to a titers obtained in the prior year; 4) a new serologic diagnosis of syphilis in a person with an unequivocal history of symptoms or primary or secondary syphilis in the prior year or a sex partner with a diagnosis of primary, secondary or early non-primary non-secondary syphilis.
  - Late latent syphilis or syphilis of unknown duration can be treated with doxycycline 100 mg po twice a day for 28 days. Patients should be classified as having late latent syphilis or syphilis of unknown duration if they are asymptomatic, have a new positive syphilis serologic test (treponemal test and RPR) or a sustained 4-fold increase in RPR, and do not meet the criteria for early syphilis defined above.
- **Pregnant persons and babies diagnosed with syphilis should continue to be treated with benzathine penicillin**. Medical providers should perform pregnancy tests on patients they diagnosis with syphilis if the patient is not already known to be pregnant and is capable of becoming pregnant. Insofar as the supply of benzathine penicillin is limited, its use should be prioritized for pregnant patients and babies with congenital syphilis.
- Non-pregnant persons who are capable of becoming pregnant should continue to be treated with benzathine penicillin if a healthcare organization has an adequate supply of benzathine penicillin.
- In patients with late latent syphilis or syphilis of unknown duration whose adherence with weekly injections of benzathine is uncertain, medical providers should consider giving the patient a single 2.4 million unit intramuscular dose of benzathine penicillin plus a 28 days course of doxycycline 100mg po twice a day. Many patients with late latent syphilis or syphilis of unknown duration struggle to adhere to a regimen of weekly benzathine penicillin injections. In such instances, medical provider should consider providing patients with a single dose of benzathine penicillin and a course of doxycycline. Such a regimen may improve patient adherence.

## Background:

Pfizer pharmaceuticals has reported a shortage of benzathine penicillin (Bicillin LA) due to increased demand for the drug related to the growing national and international epidemic of syphilis. Pfizer is the sole supplier of benzathine penicillin in the U.S. Local medical providers have alerted Public Health that they have had trouble securing benzathine penicillin to treat patients with syphilis. In the face of this shortage, Public Health is asking medical providers to treat selected patients with syphilis with doxycycline if they believe that the patient can adhere to a recommended course of treatment. Additionally, because it is often difficult to assure that patients with late latent syphilis or syphilis of unknown duration receive three injections of benzathine penicillin at weekly intervals, medical providers should consider treating such patients with a regimen that combines a single intramuscular dose of benzathine penicillin with a 28-day course of doxycycline. The decision to use such a regimen should be made in collaboration with the patient receiving the treatment.