

Congenital syphilis

Background

Recently, there has been a sharp increase in the number of infants born with syphilis in the U.S. Utah is no exception to this concerning trend as there were 6 times as many congenital syphilis cases in 2022 compared with 2018. A major factor in this increase is the rise in syphilis infections in females of child-bearing age. In addition, many people come to Utah from other states and countries with high rates of syphilis.

Fortunately, congenital syphilis is 100% preventable. Providers who care for pregnant patients are important partners in the fight against the rise in congenital syphilis. Information on maternal risk factors, screening, and treatment, as well as guidance on working with local health departments (LHDs) is listed below.

1 Maternal risk factors

The CDC considers the following to be risk factors for syphilis during pregnancy:

- Sex with more than 1 partner
- Drug use
- Sex for money, gifts, or other services

- Delayed prenatal care
- No prenatal care
- Mother or her partner(s) are incarcerated
- Unstable housing or homelessness

2 Screening pregnant patients

- All pregnant patients should be screened for syphilis at their first prenatal visit, even if they have been tested before.
- Pregnant patients should be retested for syphilis at 28 weeks' gestation and at delivery if they are at high-risk of getting syphilis during pregnancy (see maternal risk factors above).
- Screening may be done using either the traditional or reverse syphilis testing algorithms (see CDC guidelines).
 Regardless of the algorithm used, positive results should be followed up with confirmatory testing.



3 Maternal treatment

- Pregnant patients with syphilis must be treated with Bicillin. In the case of penicillin allergy, they should work with a specialist to be desensitized and treated with Bicillin.
- Treatment for pregnant patients must be started at least 30 days before delivery to prevent infection in their infant.
- The length of treatment depends on the stage of syphilis infection.
- People who have primary, secondary, or early latent syphilis require 1 dose of 2.4 mu Bicillin.

- People who have late latent syphilis require
 3 weekly doses of 2.4 mu Bicillin. These doses should be 7 days apart, however up to
 9 days is acceptable for pregnant patients.
- If a dose is missed or falls outside of the 9-day range, treatment must be restarted.
- If patients experience neurological symptoms of syphilis, they must be treated with an IV penicillin course. This treatment must be given through a hospital or infusion clinic.

4 Bicillin shortage

- The U.S. is currently experiencing a national Bicillin shortage. Due to this shortage, it can take longer than usual for Bicillin orders to be filled and manufacturers may limit the amount you can ordered.
- This shortage is of great concern because Bicillin is the only treatment option for pregnant patients and infants.
- DHHS recommends providers who care for pregnant patients keep a supply of Bicilin on hand to rapidly treat those who have syphilis infections. Delay in treatment can result in an infant being born with congenital syphilis.

4 Previous infections

- If a pregnant patient has been diagnosed with syphilis somewhere other than Utah, work with your local health department to get their testing and treatment history.
- Without proof of appropriate treatment, a pregnant patient must be re-treated for the current stage of infection.
- If a pregnant patient's records are outside the U.S., they need to get their own records if possible. If these are not available, they will need re-treatment.
- Any infant born to a mother who tests positive for syphilis and does not have documented treatment will be counted as a congenital syphilis case.



5 Consequences of congenital syphilis

- Inadequate syphilis treatment in a pregnant person can lead to severe consequences including miscarriage, stillbirth, prematurity, or the infant's death shortly after birth.
- Infants born with congenital syphilis can have deformed bones, brain and nerve problems, meningitis, severe anemia, and an enlarged liver and/or spleen.
- Some infants born with congenital syphilis don't have any symptoms, however without treatment, they may develop serious health problems.
- The treatment for infants born with congenital syphilis is either IV penicillin for 10 days or penicillin injections given daily for 10 days.

6 Working with local health departments (LHDs)

- LHDs investigate every case of syphilis and possible cases of congenital syphilis in their jurisdiction.
- These investigations are vital for mandated reporting to the CDC and to prevent disease transmission.
- Not all LHDs stock Bicillin nor can they treat pregnant patients. Providers are highly encouraged to take an active role in providing treatment for patients who are diagnosed with syphilis.

Resources

CDC syphilis treatment guidelines

https://www.cdc.gov/std/treatment-guidelines/syphilis.htm

Patient fact sheet

https://www.cdc.gov/std/syphilis/stdfact-congenital-syphilis.htm

Utah Association of Local Health Departments

https://ualhd.org/