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Technical Bulletin

Date:	**June 10, 2022**
Topic:	**Call to Action: Rising Rates of Congenital Syphilis in Nevada and Updated Syphilis Screening Requirements for Pregnant Women (NRS 442.010)**
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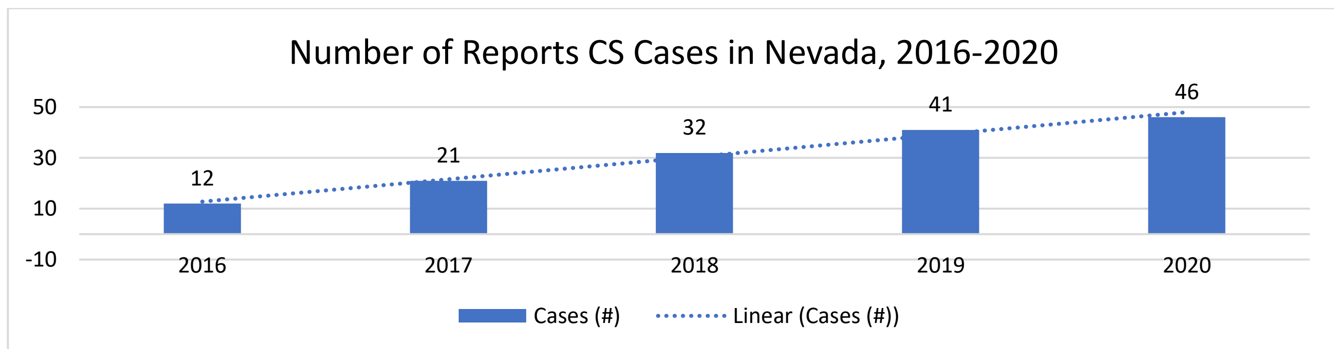
To:	**Health Authorities, Health Care Providers, Medical Facilities, Maternity Care Providers**

Summary:

In 2020, Nevada ranked first in the nation in reported cases of primary and secondary (P&S) syphilis and fourth in the nation for congenital syphilis (CS). While the rate of syphilis among males is much higher than among females, over the past several years there has been a rise in syphilis cases among women, both nationally and in Nevada. As demonstrated in the chart below, Nevada nearly quadrupled the number of reported congenital syphilis cases from 2016 to 2020:



The purpose of this technical bulletin is to inform clinicians and health authorities about:

1. The increasing rates of CS in Nevada and across the United States.
2. The Centers for Disease Control and Prevention (CDC) campaign to talk, test and treat for sexually transmitted infections (STIs), particularly syphilis.
3. Changes made in the 2021 Legislative Session to require additional syphilis testing during delivery for at-risk women (Assembly Bill 192). This is in addition to the prior requirement under Nevada law to test pregnant women for chlamydia, gonorrhea, Hepatitis B and Hepatitis C during pregnancy, and syphilis during the first and third trimesters.

Background

Congenital syphilis is a disease that occurs due to vertical transmission of *Treponema pallidum* when a woman with syphilis passes the infection on to her infant during pregnancy. CS can cause major negative health impacts including spontaneous miscarriage, stillbirth, premature delivery, low birth weight or infant mortality shortly after birth. Approximately 40% of babies born to women with untreated syphilis may be stillborn or die from the

infection as a newborn. Newborn babies with CS can have bone deformities, severe anemia, hepatosplenomegaly, jaundice, blindness, deafness, neuropathy, meningitis and skin rashes.[1]

Prevention of Congenital Syphilis

CS can be prevented with early detection and appropriate treatment in pregnant women and sexually active women of childbearing age. To diagnose and treat timely, preconception and prenatal care should include screening for HIV, Hepatitis C and other sexually transmitted infections, including syphilis and Hepatitis B.

Recommendation: Talk. Test. Treat. Clinicians who may see pregnant women and sexually active women of childbearing age are strongly advised to review and follow current CDC recommendations and be aware of the increasing case rates of CS nationally and in Nevada. Nevada is endorsing CDC's Talk. Test. Treat. campaign to try to curb the increase of CS.

Talk. A routine risk assessment as well as a thorough sexual history should be conducted each time a woman of childbearing age sees a clinician (as well as throughout pregnancy) to determine risk factors. In addition, providers need to discuss STI prevention methods. Clinicians should advise patients to tell their sexual partner(s) about the risk of infection and encourage them to get tested and treated to avoid (re)infection.

All pregnant women and women of childbearing age should be screened for syphilis, but there are some risk factors about which clinicians should be aware. These risk factors would present themselves during a risk assessment or through a clinician/patient discussion about risk factors and sexual history.

Women at increased risk of syphilis may have:

- Signs and symptoms of syphilis infection.
- A history of syphilis or another STI.
- Receive late or limited prenatal care.
- Not been tested in the first or second trimester of their pregnancy.
- Partners that may have other partners or partners with male partners.
- A history of incarceration.
- Multiple sex partners.
- A history of, or a current, substance use disorder.
- An occupation where they exchange sex for money, housing or other resources.
- History of delivering a stillborn baby.

Women who live in areas with high rates of syphilis, particularly among females, are also at increased risk.

Test. Prenatal screening is not only important, it is the law. As of 2021, it is required by Nevada Revised Statutes 442.010 that pregnant women be tested for syphilis:

- at their first prenatal visit;
- early in the third trimester (28-32 weeks gestational age); and
- at delivery for pregnant women as outlined in NRS 442.010.

For communities and populations in which the prevalence of syphilis is high (such as in several Nevada counties including Clark and Washoe) and for women at high risk for infection, serologic testing should also be performed twice during the third trimester, once at 28-32 weeks' gestation and again at delivery.[2]

- If a woman of childbearing age tests positive for syphilis, it is important to test for pregnancy as well.
- Syphilis is diagnosed by reviewing patient history, taking a thorough sexual risk assessment, conducting a physical exam and obtaining blood tests.

[1] Centers for Disease Control and Prevention, Syphilis, updated June 2020

[2] CDC's 2021 Treatment Guidelines

- Making the diagnosis of syphilis requires the interpretation of **both** treponemal and non-treponemal serology test results. **In populations for which receipt of prenatal care is not optimal, rapid plasma reagin (RPR) test screening and treatment (if the RPR is reactive) should be performed at the time pregnancy is confirmed.**[1]
- It is important to follow up with the mother to ensure she is aware of her results, treatment plan and risk to her and the baby if syphilis is left untreated.
- Some women may be in the asymptomatic stage of syphilis. Asymptomatic women can still spread the infection to their unborn babies.
- Screening for syphilis in nonpregnant populations is an important public health approach to preventing the sexual transmission of syphilis and subsequent vertical transmission of congenital syphilis.

Treat. If your patient is diagnosed with syphilis, take immediate action. All pregnant women diagnosed with syphilis should be treated immediately according to CDC's 2021 STD treatment guidelines.[3] **Treatment at least 30 days before delivery is likely to prevent congenital syphilis.**

Treatment for a pregnant woman is based on the stage of her infection.

Treatment for Early Syphilis (Determined to *be less than one year's duration)*	Treatment for Late Latent Syphilis or Unknown Duration
Benzathine penicillin G 2.4 million units by intramuscular injection in a single dose	Benzathine penicillin G 2.4 million units by intramuscular injection every 7 days for 3 weeks (7.2 million units total)

In pregnancy, penicillin is the only recommended therapy. Pregnant women with penicillin allergies should be properly desensitized and treated with penicillin. **There are no alternatives.**

- **Before discharging any newborn infant from the hospital, ensure the mother has been tested for syphilis at least once during her pregnancy or at delivery.** If the test is positive, ensure that the mother and baby are evaluated appropriately before discharge and, if necessary, treated. Any woman who delivers a stillborn infant (greater than 20 weeks or 500g) should be tested for syphilis.

Reporting

Per Nevada Administrative Code 441A, cases of CS are required to be reported. To report, follow the instructions on the state's morbidity form linked here.

Partner Treatment and the Role of Local Health Departments

Because sex with an untreated partner can result in re-infection, it is especially important to ensure that all sexual partners receive treatment and to inform pregnant women about the significant risk to their infants if they have sex with an untreated partner. State and local health departments are key participants in the prevention of congenital syphilis and can assist with partner treatment. In addition, such institutes can collaborate with other local organizations (e.g., WIC, Medicaid, perinatal substance use programs and emergency departments) in addressing barriers to obtaining early and adequate prenatal care for the most vulnerable pregnant women in your community.

Requirements and Updates to Syphilis Screening Requirements During Pregnancy from the 2021 Legislative Session

Changes were made in the 2021 Legislative Session to require additional syphilis testing during delivery for at-risk women (AB 192). This is in addition to the previous requirement under NRS 442.010 to test pregnant women for chlamydia, gonorrhea, Hepatitis B and Hepatitis C during pregnancy and syphilis during the first and third trimesters.

NRS 442.010 requires individuals providing medical care to pregnant women to provide an examination for the discovery of syphilis:

1. During the first trimester of pregnancy at the first visit to a physician or other person permitted by law to attend upon pregnant women, a non-hospital medical facility or an emergency department or labor and delivery unit of a hospital or as soon thereafter as practicable;
2. During the third trimester of pregnancy between the 27th and 36th week of gestation or as soon thereafter as practicable; and
3. At delivery for a pregnant woman who:
    a. Should be routinely tested for infection with syphilis, as recommended by the CDC;
    b. Lives in an area designated by the Division of Public and Behavioral Health as having high syphilis morbidity, such as Clark and Washoe County;
    c. Did not receive prenatal care; or
    d. Delivers a stillborn infant after 20 weeks of gestation.

In addition to testing, if a serological or physical examination test shows that a pregnant woman is infected with syphilis, the physician, other person, non-hospital medical facility, emergency department or labor and delivery unit shall:

1. If the physician, other person, non-hospital medical facility, emergency department or labor and delivery unit is capable of providing treatment for syphilis, seek the consent of the pregnant woman to begin such treatment and, if such consent is obtained, commence treatment; or
2. If the physician, other person, non-hospital medical facility, emergency department or labor and delivery unit is not capable of providing treatment for syphilis, seek the consent of the pregnant woman to refer her for such treatment and, if such consent is obtained, issue the referral.

For the complete text, see NRS 442.010.

Questions

For updated guidance, please review the DPBH Technical Bulletin web page. For questions about this document, contact Elizabeth Kessler, Surveillance Manager, Office of Public Health Investigations and Epidemiology (OPHIE) at (775) 447-4494 or ekessler@health.nv.gov.

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