HEALTH NOTICE FOR DISTRICT OF COLUMBIA HEALTHCARE PROVIDERS

Syphilis Testing During Pregnancy

Summary:
Rates of congenital syphilis have dramatically increased nationally over the last decade. There has been a marked increase in early syphilis diagnoses among women of reproductive age in the District of Columbia in 2019. Current DC Municipal Regulations[1] **require syphilis testing twice during pregnancy**: at the first prenatal visit **and** in the third trimester. DC Department of Health (DC Health) recommends also testing at delivery, especially for high-risk patients, those without a documented test, or those without known prenatal care. Given the increase in syphilis among women of childbearing age, DC Health recommends pregnancy testing for all women of reproductive age diagnosed with syphilis. Pregnant females should be linked to prenatal care.

Background:
The rates of congenital syphilis have steadily increased nationwide since 2012, with 1,306 cases of congenital syphilis, 78 syphilis stillbirths, and 16 infant deaths in 2018 This rate has increased 185.3% since 2014 (11.6 cases per 100,000 live births). This parallels increases in primary and secondary syphilis among women in general and those of reproductive age in particular both nationwide and in the District. In 2018, DC had the sixth highest primary and secondary syphilis rate among counties and independent cities in the United States.[2] As of November 2019, the District is on-track to have a 124% increase in cases of primary, secondary, and early latent syphilis cases among women of reproductive age. Additionally, this year DC Health has noted one probable and one confirmed case of congenital syphilis

Treponema pallidum causes syphilis and can present in several stages. The chancre of primary syphilis is painless and individuals may not notice as it resolves even without treatment. Most patients who seek care do so with secondary syphilis when symptoms include a rash that may involve the palms and soles, condyloma lata, and lymphadenopathy. Left untreated, syphilis can cause cardiac system abnormalities and neurological symptoms in later stages.

A pregnant woman can transmit syphilis to her child during any stage of syphilis and any trimester of pregnancy. However, the risk of transmission is highest if the mother is recently infected. Syphilis infection during pregnancy increases adverse pregnancy outcomes including preterm birth and stillbirth. Up to 40% of babies born to mothers with untreated syphilis (if infected within four years prior to delivery) will be stillborn or die in infancy. Congenital syphilis can lead to newborn and childhood illness including hydrops fetalis; hepatosplenomegaly; rashes; fevers; failure to thrive; deformity of the face, teeth, and bones; blindness; and deafness.

Risk factors for syphilis among women include multiple sex partners, active substance use disorders, unstable housing, history of incarceration, exchanging sex for drugs or money, and having a sex partner with a history of incarceration. Among pregnant women with syphilis, late or no prenatal care is significantly associated with delivering an infant with congenital syphilis.[3]

[1] District of Columbia Municipal Regulations 22-B-205; Available online at: https://www.dcregs.dc.gov/Common/DCMR/SectionList.aspx?SectionNumber=22-B205
[2] Centers for Disease Control and Prevention, Sexually Transmitted Disease Surveillance 2018, Primary and Secondary Syphilis – Reported Casea and Rates in Counties and Independent Cities Ranked by Number of Reported Cases, United States, 2018, Available online at: https://www.cdc.gov/std/stats18/tables/33.htm
[3] CDC Public Health Grand Rounds, Bowen V, Surveillance for Emerging Threats to Pregnant Women and Infants: Data for Action, 2018

DC Health Recommendations

Screening

All pregnant women residing in the District of Columbia **are required to be screened for syphilis *twice* – first as early as possible in pregnancy, and then again in the third trimester.**

- A third test at delivery is recommended at the discretion of the provider.
- Testing at delivery *SHOULD* occur for the following patients:
    - For high-risk patients;
    - Patients without a documented test; and
    - Patients without known prenatal care.

Women who experience a stillbirth after 20 weeks of pregnancy should be tested for syphilis.

- Laboratory criteria for the diagnosis of congenital syphilis must demonstrate Treponema pallidum by one of the following methods:
    - Darkfield microscopy of lesions, body fluids, or neonatal nasal discharge;
    - Polymerase chain reaction (PCR) or other equivalent direct molecular methods of lesions, neonatal nasal discharge, placenta, umbilical cord, or autopsy material; or
    - Immunohistochemistry (IHC), or special stains (e.g., silver staining) of specimens from lesions, placenta, umbilical cord, or autopsy material. The fetus should also be tested.

All pregnant women should undergo routine comprehensive STI screening in prenatal care early in pregnancy.

- Follow up STI screening is recommended through pregnancy based on risk.

Pregnancy status should be determined for all women of reproductive age diagnosed with any stage of syphilis.

- Pregnant females should be linked to prenatal care.

Diagnosis of syphilis requires at least two (2) tests:

1. a non-treponemal assay (i.e., Venereal Disease Research Laboratory [VDRL] or Rapid Plasma Reagin [RPR]); and
2. a confirmatory treponemal test (i.e., fluorescent treponemal antibody absorbed [FTA-ABS] tests, the pallidum passive particle agglutination [TP-PA] assay, etc). False positive non-treponemal tests can occur in pregnancy so confirmatory testing with a treponemal test is necessary to diagnose syphilis.

Treatment and Care

Adequate treatment of syphilis in pregnant women as soon as possible during pregnancy dramatically decreases the rate of congenital syphilis. Syphilis known to be acquired within the prior 12 months (primary, secondary, early non-primary non-secondary) should be treated with **2.4 million units of IM Benzathine penicillin G**. Syphilis acquired >12 months prior (late syphilis) or of unknown duration should be treated with **Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals**. If doses are further apart than 10 days or missed, the treatment schedule must restart from the beginning.

Pregnant patients with documented penicillin allergy should be desensitized and treated with penicillin as it is the only known effective antimicrobial for preventing maternal transmission to the fetus and treating fetal infection.

Partners should, at a minimum, be presumptively treated (2.4 million units of IM Benzathine penicillin G) to prevent reinfection during pregnancy. Ideally, the provider should evaluate the partner for syphilis, determine syphilis stage, and treat appropriately.

All pregnant women should be referred for prenatal care.

Reporting
Report all cases of syphilis to DC Health within 48 hours, if possible with our online case report form at https://dchealth.dc.gov/publication/hahsta-notifiable-disease-report-form.

Resources Available
Providers are encouraged to reference the CDC STD Treatment guidelines regarding treatment for syphilis available on the CDC website at https://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm. Providers may contact the DC Health and Wellness Center for information regarding historical test results or treatment history at 202-741-7692. Treatment can also be provided at no cost at the DC Health and Wellness Center regardless of address of record. Additional information regarding reporting syphilis can be obtained from the HIV/AIDS, Hepatitis, STD and TB Administration at 202-6714-900. I am available for both education and information regarding syphilis for healthcare providers at the below contact information.

Sincerely,

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