Syphilis is increasing among women of child-bearing age in New York City, 2016

Please Share this Alert with Colleagues in Obstetrics and Gynecology, Pediatrics, Adolescent Medicine, Internal Medicine, Family Medicine, Primary Care, Dermatology, Infectious Diseases, Urgent Care, and Emergency Medicine.

- Primary and secondary syphilis cases are increasing among young women of color in New York City
- Test for pregnancy and treat empirically for syphilis any woman with a syphilis exposure or any woman with lesions or rash suggestive of syphilis.
- Screen all pregnant women for syphilis at first prenatal visit and delivery
- Bicillin-LA is the only treatment for pregnant women infected with or exposed to syphilis
- Call 347-396-7201 (Monday–Friday, 8:30am–5pm) to determine the history of syphilis testing and treatment for your patient

July 11, 2016

Dear Colleagues,

After years of low and stable rates, primary and secondary (P&S) syphilis cases among women have begun to increase in New York City. Although the number of cases is still relatively small, rates of P&S syphilis increased 36% from 2014 (32 cases) to 2015 (43 cases), and the occurrence of 36 cases in the first 6 months of 2016 suggests that the trend will continue. The women with syphilis are young (median age, 26 years) and predominantly (73%) black or Hispanic. To prevent increases in congenital syphilis (CS), providers must identify and treat women with syphilis or syphilis exposure, and all pregnant women must be screened for syphilis in accordance with New York State law (1, 2). In the past several years, provider errors have resulted in several instances of fetal demise due to CS and, in 2016, one stillbirth.

Diagnosing Syphilis Infection

Diagnosis

Providers should maintain a low threshold for treating suspicious lesions and/or positive syphilis serologies, especially in pregnant women (See Resources for link to photos of clinical manifestations of syphilis). Untreated syphilis lesions are self-limited, because untreated infection progresses to the latent (i.e., asymptomatic) phase.

Syphilis serologic tests

Syphilis serologic screening and diagnostic testing requires two types of tests: non-treponemal (e.g. RPR) and treponemal (e.g. FTA, TP-PA, EIA). Some laboratories screen with a non-treponemal test and, if positive, reflexively perform a confirmatory treponemal test. Other laboratories test in reverse: treponemal test first and, if positive, reflexively perform a non-treponemal test. Providers should understand their laboratory’s syphilis screening sequence in order to interpret test results. Consult an infectious disease specialist if screening or diagnostic testing in a pregnant woman yields a treponemal
positive, non-treponemal negative result (i.e. EIA+, RPR-). Any positive results should be reviewed in the context of the patient’s prior syphilis serologies and treatment history. The Health Department maintains syphilis serologic test results and treatment histories for provider reference (see: NYC Syphilis Registry, in Resources).

**Syphilis Treatment and Serologic Follow-up**

Syphilis treatment (penicillin preparation, dose, and duration) and serologic follow-up vary by disease stage (3). Syphilis treatment does not differ with HIV status.

_Treat syphilis in pregnant women with Bicillin-LA as soon as possible to prevent congenital syphilis_

Most CS cases are preventable if maternal syphilis treatment is completed at least 30 days before delivery. Nationally and in NYC, most CS cases occur among infants born to mothers with inadequately or un-treated syphilis or whose treatment was undокументed before or during pregnancy (4). Lack of provider adherence to screening guidelines, provider errors, and limited prenatal care also have been associated with CS in NYC [4].

Bicillin-LA (Benzathine penicillin G) is the only acceptable treatment for pregnant women with syphilis or syphilis exposure. Pregnant women who are penicillin-allergic must be desensitized and treated with Bicillin-LA.

- Prioritize use of Bicillin-LA for treatment of pregnant women infected with or exposed to syphilis if Bicillin supply is in question.
- Refer patients to NYC Health Department Sexually Transmitted Disease clinics for syphilis treatment if obtaining Bicillin-LA is a hardship or if patient’s insurance will not cover the cost of medication.
- Refer penicillin-allergic pregnant women with or exposed to syphilis to an allergist/immunologist for an urgent evaluation, desensitization, and Bicillin LA treatment.
- The Health Department can help providers locate facilities offering penicillin desensitization (See Resources).

_Post-treatment follow up of pregnant women with syphilis_

Repeat syphilis titers at 28-32 weeks of gestation and at delivery to document adequacy of response to treatment. Because most women will deliver before their serologic response to treatment can be adequately assessed, post-partum follow-up of mother and newborn are critical.

**Screen women for syphilis**

_Pregnant women_

- Screen all pregnant women for syphilis at the first prenatal encounter and at delivery as mandated by law in New York State law (3), even if a woman is terminating the pregnancy.
- Obstetrical providers should assess sexual risk for syphilis and other STIs at each prenatal visit; screen immediately for syphilis if any risk identified (new sex partner, past or new STD diagnosed, or sex with MSM or transgender women) even if initial serologies were negative.
- Syphilis should be considered in any pregnant woman with a rash.
- Emergency and urgent care providers should serologically screen for syphilis any pregnant woman who: presents with an STD, presents with an unexplained rash or ulcer, or has not received adequate prenatal care (without regard to presenting complaint or stage of pregnancy).
- Screen for HIV any woman diagnosed with syphilis.

_All women_
Perform a sexual history at least annually to assess risk for syphilis and other sexually transmitted infections (STIs), including HIV. Ask about sexual behaviors over the past six months, including the number of male and female partners and sites of sexual exposure: oropharynx, vagina, and anus.

Test all women at risk for syphilis, including women who: have sex with MSM; have sex with transgender women; are sex and/or needle-sharing partners of persons with syphilis; are commercial sex workers; exchange sex for drugs or services; reside in correctional facilities.

Offer HIV pre-exposure prophylaxis (PrEP) to women diagnosed with syphilis, as discussed below

Screen for HIV any women diagnosed with syphilis

HIV pre-exposure prophylaxis to prevent HIV infection among women

Women with syphilis infection may be at continued risk for HIV infection. Providers diagnosing syphilis in an HIV-uninfected woman should discuss and offer HIV pre-exposure prophylaxis (PrEP), especially to women with male partners who are HIV-positive or who are at substantial risk of HIV infection (e.g., men who inject drugs, men with male partners).

HIV-negative women who are seeking to conceive with an HIV-positive partner or are pregnant and at continued risk for HIV infection can take HIV PrEP. The medications used as PrEP are considered pregnancy class B; they are often used in pregnancy if the risk of ongoing HIV transmission is sufficiently high. Per US Centers for Disease Control (CDC) guidelines, if pregnancy is intended with an HIV-positive partner, PrEP can also be used peri-conception by the uninfected woman to reduce the risk of sexual HIV acquisition. In all cases, suppressive antiretroviral therapy should be provided to the HIV-positive male partner in parallel. Expert consultation is recommended for these couples (http://www1.nyc.gov/assets/doh/downloads/pdf/csi/csi-prep-hcp-faq.pdf).

Report all cases of syphilis to the Department of Health and Mental Hygiene

Notify the Health Department of syphilis (any stage) at the time of diagnosis (see Resources). The Department may contact providers and their patients to verify or facilitate treatment of patients and their partners.

Provider Resources

NYC Syphilis and Reactor Registry Data: Call 347-396-7201, Monday-Friday (8:30 AM-5:00 PM) and ask for a syphilis registry check. Providers should be prepared with their own medical license number, and: patient name, date of birth, and address. For more information: http://www1.nyc.gov/assets/doh/downloads/pdf/std/syphilis-registry-check.pdf

Other provider services are available from the NYC Bureau of STD: (Call 347-396-7200 8:30 AM-5:00 PM)

- Medical consultation on diagnosis and management of syphilis infection
- Referrals for penicillin desensitization
- Confidential notification & referral of sex partners for syphilis testing and treatment
- Referrals for lumbar puncture

Clinical manifestations of syphilis (photos): http://www.cdc.gov/std/training/clinicalslides/

NYC STD clinics: 8 NYC DOHMH STD clinics across the city provide STD and HIV services for anyone age 12 and older, regardless of immigration status or ability to pay: http://www1.nyc.gov/site/doh/services/clinics.page

Sincerely,

Susan Blank, MD, MPH
Bureau of STD Control

Julia Schillinger, MD, MPH
Bureau of STD Control

References:
1NYS Law, Article 23, §2308
2N.Y. Comp Codes R. and Regs. Tit 10, § 69-2.2
32015 CDC Treatment Guidelines. MMWR Recomm Rep 2015;64(3):[34-51].