MEDIA ALERT: SYPHILIS OUTBREAK IN HOUSTON HARRIS COUNTY

July 8, 2023

Subject: Call to respond: Syphilis Outbreak

Dear Colleague,

The Houston Health Department through the Bureau of HIV/STI and Viral Hepatitis Prevention requests your assistance in responding to an alarming increase in syphilis cases in Houston/Harris County. The number of early syphilis cases (primary, secondary, and early latent stages) has continued to rise in Houston/Harris County since 2020. Over the past (4) years, the percentage of cases among women has risen over 128%. This increase has contributed to the rise in congenital syphilis, with the number of cases in 2021 being nine (9) times higher than that in 2016. Medical evidence has demonstrated that vertical transmission can seriously affect multiple organs and systems in the unborn fetus leading to major consequences including fetal demise.

Houstonians, especially high-burden populations, unborn babies, and infants can be protected by testing and receiving proper treatment for syphilis infections.

Syphilis can be reduced with timely testing and treatment. Houston Health Department (HHD) requests your assistance to screen, diagnose and adequately treat vulnerable population and their sexual partners. Identification and treatment of this infection decrease morbidity and mortality.

Syphilis should be treated with the recommended penicillin regimen for their stage of infection as soon as possible. Other treatment regimens should be carefully given to certain population, excluding vulnerable population due to the lack of treatment adherence. To unify efforts, syphilis cases must be carefully handled at emergency departments; urgent care clinics; jails; mental health, drug treatment, homeless outreach programs with documented lab results or by providing opt-out syphilis testing.

The City of Houston, the Houston Health Department through the Bureau of HIV/STI & Viral Hepatitis Prevention, is promoting provider guidelines according to the CDC (below is the link) to work against this outbreak and keep our communities safe and healthy. We want and need your assistance to ensure that we test and treat our most vulnerable populations.

[What Healthcare Providers Can Do About Syphilis | Syphilis | CDC]

Sincerely,

David E. Persse, M.D., Chief Medical Officer
Houston Health Department

[Council Members: Amy Peck, Tanisha Jackson, Abbie Kamir, Carolyn Evans-Shabazz, Dave Martin, Tiffany Thomas, Mary Nan Huffman, Karla Cisneros, Robert Gallegos, Edward Polard, Martha Castor Tatum, Mike Knox, David Robinson, Michael Kubosh, Letitia Plummer, Sally Alcorn, Controller: Chris Brown]
### Screening Recommendations and Considerations Referenced in Treatment Guidelines and Original Sources

<table>
<thead>
<tr>
<th>Category</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>Women</td>
<td>• Screen asymptomatic women at increased risk (history of incarceration or transactional sex work, geography, race/ethnicity) for syphilis infection</td>
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<tr>
<td>Pregnant Women</td>
<td>• Screen asymptomatic women at increased risk (history of incarceration or transactional sex work, geography, race/ethnicity) for syphilis infection</td>
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<tr>
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<td>• All pregnant women at the first prenatal visit</td>
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<td>• Retest at 28 weeks gestation and at delivery if at high risk (lives in a community with high syphilis morbidity or is at risk for syphilis acquisition during pregnancy [drug misuse, STIs during pregnancy, multiple partners, a new partner, partner with STIs])²</td>
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<tr>
<td>Men Who Have Sex With Women</td>
<td>• Screen asymptomatic adults at increased risk (history of incarceration or transactional sex work, geography, race/ethnicity, and being a male younger than 29 years) for syphilis infection²</td>
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<tr>
<td>Men Who Have Sex With Men</td>
<td>• At least annually for sexually active MSM²</td>
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<td></td>
<td>• Every 3 to 6 months if at increased risk²</td>
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<td></td>
<td>• Screen asymptomatic adults at increased risk (history of incarceration or transactional sex work, geography, race/ethnicity, and being a male younger than 29 years) for syphilis infection²⁷</td>
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<tr>
<td>Transgender and Gender Diverse People</td>
<td>• Consider screening at least annually based on reported sexual behaviors and exposure²</td>
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<tr>
<td>Persons with HIV</td>
<td>• For sexually active individuals, screen at first HIV evaluation, and at least annually thereafter²⁶</td>
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<td>• More frequent screening might be appropriate depending on individual risk behaviors and the local epidemiology²</td>
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STI AND HIV INFECTION RISK ASSESSMENT: THE 4 P’S

1. **Partners**
   - “Are you currently having sex of any kind?”
   - “What is the gender(s) of your partner(s)?”

2. **Practices**
   - “To understand any risks for sexually transmitted infections (STIs), I need to ask more specific questions about the kind of sex you have had recently.”
   - “What kind of sexual contact do you have, or have you had?”
     - “Do you have vaginal sex, meaning ‘penis in vagina’ sex?”
     - “Do you have anal sex, meaning ‘penis in rectum/anus’ sex?”
     - “Do you have oral sex, meaning ‘mouth on penis/vagina’?”

3. **Protection from STIs**
   - “Do you and your partner(s) discuss prevention of STIs and human immunodeficiency virus (HIV)?”
   - “Do you and your partner(s) discuss getting tested?”
   - For condoms:
     - “What protection methods do you use? In what situations do you use condoms?”

4. **Past history of STIs**
   - “Have you ever been tested for STIs and HIV?”
   - “Have you ever been diagnosed with an STI in the past?”
   - “Have any of your partners had an STI?”
SYMPHILIS: YOUR PATIENT IS POSITIVE, NOW WHAT?

- Treating sexual partners is essential to avoid reinfections.
- Conduct thorough physical examination looking for lesions, body rash, rash on palms and soles, lymphadenopathy, alopecia, mucous patches, and other symptoms to stage properly.
- Stage syphilis. Treatment will depend on this.
- Treat with Penicillin G Benzathine (Bicillin) pregnant women. If allergic, desensitize.
- Ask for symptoms even if you don’t find them in the physical examination. Ask the onset and duration.
- Test RPR and TPPA simultaneously. Do not use FTA-ABS, gives false positives.
- If patient is diagnosed with an STI, it increases the risk to become infected with another STIs.
- Sexual abstinence until 20 days after adequate treatment completion.
- Follow up in 6 months from treatment completion. In patients with HIV follow up monthly.
- Test pregnant women at gestation.
- Do not share sex toys with sexual partners.
- If patient tested positive for syphilis, test for HIV, Chlamydia, Gonorrhea, etc.
- Educate the patient in condom use.

For more information visit: [Website]

HOUSTONHEALTH.ORG
Houston Health Department
8000 North Stadium Drive, Houston, TX 77054  832-393-5169
Primary, Secondary and Early Latent Syphilis
Recommended Regimen for Primary and Secondary Syphilis* Among Adults

**Benzathine penicillin G 2.4** million units IM in a single dose.

Available data demonstrate that use of additional doses of benzathine penicillin G, amoxicillin, or other antibiotics do not enhance efficacy of this recommended regimen when used to treat primary and secondary syphilis, regardless of HIV status.

**Follow-Up**
Clinical and serologic evaluation should be performed at 6 and 12 months after treatment.

**Penicillin Allergy**
Multiple therapies might be effective for nonpregnant persons with penicillin allergy who have primary, secondary or early latent syphilis. Doxycycline (100 mg orally 2 times/day for 14 days).

Late Latent, Latent and Tertiary Syphilis
Recommended Regimen for Late Latent and Tertiary Syphilis

**Benzathine penicillin G 7.2** million units IM administered as 3 doses of 2.4 million units IM each at 1-week intervals.

**Late Latent Syphilis: Benzathine penicillin G 7.2** million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals.

The only acceptable alternatives for treating late latent syphilis or syphilis of unknown duration are doxycycline (100 mg orally 2 times/day) or tetracycline (500 mg orally 4 times/day), each for 28 days.
Latent Syphilis
Latent syphilis is defined as syphilis characterized by seroreactivity without other evidence of primary, secondary, or tertiary disease. Patients can receive a diagnosis of early latent syphilis if, during the year preceding the diagnosis, they had a documented seroconversion or a sustained (>2 weeks) fourfold or greater increase in nontreponemal test titers in a previously treated person.

In the absence of these conditions associated with latent syphilis, an asymptomatic person should be considered to have latent syphilis of unknown duration or late latent syphilis (>1 year’s duration).

Tertiary Syphilis
Tertiary syphilis refers to gummas, cardiovascular syphilis, psychiatric manifestations (e.g., memory loss or personality changes), or late latent syphilis.

7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals.
Doxycycline (100 mg orally 2 times/day for 28 days) in case of nonpregnant allergic patients.

Combinations of some penicillin preparations are not appropriate replacements for benzathine penicillin. For example, Bicillin C-R, a combination of benzathine penicillin and procaine penicillin.
**SYPHILIS STAGING AND TREATMENT**

Determine the Patients Current Syphilis Stage: Signs and Symptoms You Look For

<table>
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<tr>
<th>Signs and Symptoms</th>
<th>Stage of Syphilis</th>
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<tr>
<td></td>
<td>Primary</td>
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<tr>
<td>One or more lesion at site of exposure (mainly genital area)</td>
<td>X</td>
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<tr>
<td>Rashes that may appear on palms or soles of feet</td>
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<tr>
<td>Rashes that appear on trunk or other areas of the body</td>
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<tr>
<td>Large, raised, gray or white lesions in warm, moist areas of body</td>
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<tr>
<td>No current visible signs or symptoms (patient remembers sign or symptom that occurred within the past 12 months)</td>
<td></td>
</tr>
<tr>
<td>No current visible signs or symptoms (patient remembers sign or symptom that occurred more than 12 months ago)</td>
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**Appropriate Treatment Options for Women During Pregnancy**

<table>
<thead>
<tr>
<th>Stage of Syphilis</th>
<th>Benzathine Penicillin G</th>
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<tr>
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<td>2.4 million units IM in a single dose</td>
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<tr>
<td>Primary Syphilis</td>
<td>X</td>
</tr>
<tr>
<td>Secondary Syphilis</td>
<td>X</td>
</tr>
<tr>
<td>Early Latent Syphilis</td>
<td>X</td>
</tr>
<tr>
<td>Late Latent Syphilis</td>
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NOTE: IM = intramuscular; Please review the CDC’s 2015 Treatment Guidelines for patients who have an allergy to penicillin: https://www.cdc.gov/std/tg2015/default.htm
Sexual transmission of *T. pallidum* is thought to occur only when mucocutaneous syphilitic lesions are present. Such manifestations are uncommon after the first year of infection. Persons exposed through sexual contact with a person who has primary, secondary, or early latent syphilis should be evaluated clinically and serologically and treated according to the following recommendations:

- Persons who have had sexual contact with a person who receives a diagnosis of primary, secondary, or early latent syphilis <90 days before the diagnosis should be treated presumptively for early syphilis, even if serologic test results are negative.

- Persons who have had sexual contact with a person who receives a diagnosis of primary, secondary, or early latent syphilis >90 days before the diagnosis should be treated presumptively for early syphilis if serologic test results are not immediately available and the opportunity for follow-up is uncertain. If serologic tests are negative, no treatment is needed. If serologic tests are positive, treatment should be based on clinical and serologic evaluation and syphilis stage.

- In certain areas or among populations with high syphilis infection rates, health departments recommend notification and presumptive treatment of sex partners of persons with syphilis of unknown duration who have high nontreponemal serologic test titers, high titers might be indicative of early syphilis. These partners should be managed as if the index patient had early syphilis.

- Long-term sex partners of persons who have late latent syphilis should be evaluated clinically and serologically for syphilis and treated based on the evaluation’s findings.

- The following sex partners of persons with syphilis are considered at risk for infection and should be confidentially notified of the exposure and need for evaluation: partners who have had sexual contact within 3 months plus the duration of symptoms for persons who receive a diagnosis of primary syphilis, within 6 months plus duration of symptoms for those with secondary syphilis, and within 1 year for persons with early latent syphilis.
• **Northside Health Center**
  8504 Schuller Rd, Houston, TX, 77093
  832-395-9100

• **Sharpstown Health Center**
  6201 Bonhomme Rd Suite 300,
  Houston, TX, 77036
  832-395-9800

• **Sunnyside Health Center**
  4410 Reed Rd., Houston, TX 77051
  832-395-0206
**What is serofast?**

When RPR titers decreases or seroconvert it is called serofast. It happens not only when patients are adequately treated but also when body’s nature immunity is fighting against the infection.

Healthcare providers should never assume a patient is serofast if not having the evidence to support that the patient was adequately treated. For patients coming outside of the country, it is necessary to consider getting the patient to re-start the treatment if they do not provide written documentation of treatment.

After appropriate treatment, evaluating clinical and serologic response to treatment is necessary. However, even following successful treatment, reinfection can occur. For this reason, it is important to also test and treat all sexual partners for the patient.
Infection with other *T. pallidum* subspecies (i.e., *T. pallidum* subsp. *pertenue*, *T. pallidum* subsp. *endemicum*, and *T. carateum*) is acquired through contact with infected skin. These may result in a simple rash but may progress and cause disfiguring skin lesions. Unlike syphilis, these infections are not considered sexually transmitted.

Infection with any of these subspecies can also cause seroreactivity for treponemal and nontreponemal tests used for diagnosis of syphilis; therefore, it is important to obtain history of sexual and nonsexual exposures and consider *T. pallidum* subspecies in patients from areas where these infections are endemic.

**Treponema species typically associated with nonvenereal disease are transmitted among populations living in tropical, subtropical, or warm arid climates.**

Reactive non-treponemal test with non-reactive treponemal test might suggest immune conditions. **Always order the non-treponemal (RPR) test with the treponemal test (TPPA-Treponema Pallidum Particle Agglutination) to confirm syphilis diagnosis.**