Health Alert Network

November 16, 2017

HEALTH ADVISORY

Increasing Syphilis Infections and Anonymous Contacts in North Dakota

The North Dakota Department of Health (NDDoH) is alerting all healthcare providers in North Dakota about the rise of syphilis infections. Many recent cases are reporting the use of websites and online applications, or “apps” that are designed to meet sex partners, often anonymously. Traditionally, NDDoH field epidemiologists are able to follow up with individuals who test positive for syphilis, or other STDs, to identify their recent sex partners and alert the contacts of their exposure. However, this is no longer adequate, as many cases are unaware of their sex partners and are unable to provide any contact information.

Action Items:

**Local and Tribal Health Departments:** Please forward this health advisory to all healthcare providers in your jurisdiction.

**Hospitals and Clinics:** Please forward this health advisory to all infectious disease, primary care, OB/GYN, and emergency/urgent care providers.

**Health Care Providers:**
- Obtain a complete sexual risk history of all patients.
- Test for STDs (chlamydia, gonorrhea and syphilis) and HIV for all persons with high-risk sexual behaviors including have sexual contact with anonymous partners.
- Chlamydia and gonorrhea tests should be site specific (genital, oral, and/or rectal) depending on the type of sexual behavior. Multiple specimens for the same patient may be needed.
- Screen all pregnant women for syphilis in the first trimester. If at high risk or not tested previously, testing is also recommended during the third trimester.
- Provide pre-exposure prophylaxis for HIV (HIV PrEP) for all high-risk patients who test HIV negative.

Since the start of 2017, there have been 58 reported syphilis cases, with over 70 percent being in an infectious stage. Partner services from the cases have led to 58 contacts being notified of their exposure and referred for testing and treatment. Many of these contacts have a history of previous sexually transmitted infections. However, there have been 136 reported anonymous or unnamed syphilis contacts that the NDDoH has been unable to notify due to limited or no contact information.

Figure 1. 2017 (as of November 8, 2017) syphilis cases by county
The NDDoH is asking all healthcare providers in North Dakota to obtain a complete sexual history of their patients to identify individuals that may be at high-risk for syphilis and other STDs, including HIV. A complete sexual risk assessment includes the discussion of risk factors such as anonymous sex, drug use, number of sex partners, type of sexual activity, history of or current infections with other STDs or HIV. Individuals that are tested for syphilis should also be tested for other STDs and HIV as many cases have had multiple infections. Chlamydia and gonorrhea testing should be site specific (genital, oral and/or rectal), depending on the type of sexual activity. If a patient is HIV negative, pre-exposure prophylaxis (HIV PrEP) should be provided if the patient is at high risk for HIV infection.

Treatment for syphilis varies depending on the stage of the infection. If a patient reports having had sexual contact with a person who was diagnosed with syphilis within 90 days preceding the diagnosis, the patient should be tested and treated presumptively for early syphilis.

### Table 1. Recommended syphilis treatment by stage

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<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
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<tr>
<td>Primary (Presence of one or more ulcerative lesions, e.g. chancre)</td>
<td>Benzathine penicillin G 2.4 million units IM</td>
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<tr>
<td>Secondary (Localized or diffuse mucocutaneous lesions, e.g. rash, palmar or plantar rash, alopecia)</td>
<td>Benzathine penicillin G 2.4 million units IM</td>
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<tr>
<td>Early latent (No symptoms, initial infection occurred within the previous 12 months)</td>
<td>Benzathine penicillin G 2.4 million units IM</td>
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<tr>
<td>Late Latent (No symptoms, initial infection occurred greater than 12 months previously)</td>
<td>Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals</td>
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Clinical and serologic evaluation of treated syphilis infections is recommended to occur at 6 and 12 months post treatment. With appropriate treatment, serologic titers (nontreponemal test) should decrease fourfold within the 6-12 month timeframe (e.g., 1:32 to 1:8). The treponemal antibody tests will remain positive for life after being infected. If there is no change or an increase in the titer after treatment, treatment failure or re-infection should be considered. Refer to the most recent treatment guidelines, [https://www.cdc.gov/std/tg2015/default.htm](https://www.cdc.gov/std/tg2015/default.htm), with questions about syphilis clinical management and refer to [https://www.cdc.gov/std/treatment/sexualhistory.pdf](https://www.cdc.gov/std/treatment/sexualhistory.pdf) for more information regarding taking a sexual risk history.
For any questions, please contact the NDDoH STD program at 701.328.2378 or 800.472.2180.