State of Alaska Epidemiology Bulletin

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Syphilis Update – Alaska, 2019 and Recommendations for Care

Background

Alaska is still experiencing a syphilis outbreak that was first declared in early 2018.[1] In April 2020, the Centers for Disease Prevention and Control (CDC) provided a Dear Colleague letter offering guidance on STD services during the COVID-19 pandemic.[2] This *Bulletin* provides an update on the syphilis outbreak and guidance for alternative STD services during the pandemic.

Methods

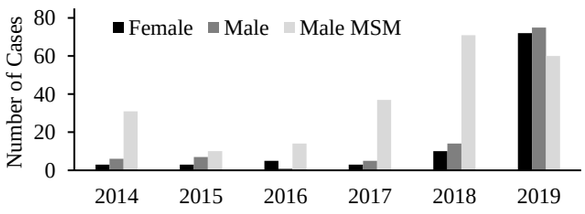
Data were obtained from the SOE Patient Reporting Investigation Surveillance Manager (PRISM) and the National Electronic Disease Surveillance System (NEDSS) Base System (NBS), and individual syphilis case management records. Persons reported with syphilis are interviewed to determine the stage of infection and to identify people who may need follow-up for testing and treatment.

Results

During 2019, 242 cases of syphilis were reported to SOE, representing a 112% increase over 2018 (n=114). Of these, 207 (86%) cases were in the primary, secondary, or early latent stages; 35 (14%) cases were in the late latent stage; and there were no congenital syphilis cases reported. Of the 207 primary, secondary, or early latent cases:

- 135 (65%) were in males, 60 (44%) of whom self-identified as men who have sex with men (MSM), and 70 (52%) self-identified as men who have sex with women (MSW);
- 72 (35%) were in females, 70 (97%) of whom were of childbearing age, 65 (90%) self-identified as heterosexual, and 3 (4%) self-identified as bisexual (Figure);

Figure. Primary, Secondary, and Early Latent Syphilis by Transmission Category — Alaska, 2014–2019 (N=427)*



**Male MSM: men who self-identified as having sex with men; Male: men who did not self-identify as having sex with men*

- 74 (36%) were in American Indian/Alaska Native people, 63 (30%) were in White persons, 21 (10%) were in Black persons, 18 (9%) were in Hispanic/Latino persons, 15 (7%) were in Native Hawaiian/Pacific Islander persons;
- 195 (94%) were living in urban communities (i.e., Anchorage/Mat-Su, Juneau, or Fairbanks);
- the age range was 15–85 years (61% were age 34 or younger);
- 73 (35%) were diagnosed with at least one other STD or had known HIV infection: 63 (30%) were in persons co-infected with chlamydia (CT) or gonorrhea (GC), 10 (5%) were co-infected with human immunodeficiency virus (HIV), and three (1%) were co-infected with HIV and CT or GC;
- 69 (33%) presented with a primary chancre; 47 (23%) with a body, genital, or palmar/plantar rash; 16 (7%) with condylomata lata; and 5 (2%) with oral mucous patches; and
- 9 (4%) reported symptoms consistent with ocular, otic, or neurologic involvement.

Many factors contribute to syphilis transmission. The following factors were identified among the 222 patients interviewed: 79 (33%) reported either methamphetamine and/or heroin use; 67 (28%) had a history of incarceration within 12 months prior to the interview; and 58 (24%) were experiencing homelessness.

Discussion

Alaska's syphilis outbreak more than doubled in magnitude from 2018 to 2019. The primary drivers of this increase were cases in heterosexual men and women. The increase in women raises the risk of congenital syphilis in Alaska and underscores the importance of STD screening at the initial prenatal visit, during the third trimester, and at the time of delivery for those at-risk. Historical data show that up to 40% of pregnancies with untreated syphilis will result in miscarriage, stillbirth, or early infant death.[3]

While syndromic management and Expedited Partner Therapy (EPT) are options for triaging STD patients and their partners through telehealth, there are currently no data on the use of EPT for sex partners of persons diagnosed with syphilis. The standard of care remains simultaneous testing and treatment.[2]

Recommendations

1. Perform non-treponemal (RPR) and treponemal (FTA, TP-PA, or equivalent) tests on persons with suspected syphilis.
2. Promptly treat patients with primary, secondary, or early latent syphilis with *Bicillin L-A (benzathine penicillin G) 2.4 million units* in a single intramuscular dose.[3]
3. Perform a neurologic exam and a cerebrospinal fluid evaluation via lumbar puncture on all patients with syphilis *and* neurologic, ophthalmologic, or audiologic symptoms.[3]
4. Perform repeat serologic testing 3 months post-treatment on all patients receiving regimens other than Benzathine penicillin for syphilis treatment.[2,3]
5. Offer gonorrhea, chlamydia, and HIV testing to all patients with suspected syphilis infection.[3,4]
6. Strongly encourage infected patients to participate in SOE's confidential partner notification services.
7. Screen sexually active MSM *annually* for syphilis, HIV, gonorrhea, chlamydia, and hepatitis C; screen sexually active MSM *every 3–6 months* if they engage in high-risk sexual activities (e.g., multiple or anonymous sex partners).
8. Test for pregnancy in all women of childbearing age who are diagnosed with syphilis.
9. Screen all pregnant women for syphilis during their first prenatal visit. Rescreen early in 3rd trimester, *and* at delivery if at high risk for infection or with lack of prenatal care.[3]
10. Test for syphilis in all women who have a fetal death after 20 weeks gestation.[3]
11. Obtain a complete sexual history on all STD patients, including the number and gender of sexual partners.[3,4]
12. Promptly report all suspected and confirmed cases of syphilis via fax at 907-561-4239 or telephone at 907-269-8000. Contact SOE staff for consultation, staging, and partner management at 907-269-8000.

References

1. Alaska Epidemiology *Alaska Public Health Advisory*. Syphilis in Alaska, March 14, 2018. Available at: http://dhss.alaska.gov/dph/Epi/Documents/phan/AKPHAN_20180314_Syphilis_in_Alaska.pdf
2. CDC. Dear Colleague Letter, April 6, 2020. CDC Available at: https://www.cdc.gov/std/dstdp/DCL-STDTreatment-COVID19-04062020.pdf
3. CDC. 2015 STD Treatment Guidelines. *MMWR Recomm Rep 2015;64(RR-3)*. Available at: https://www.cdc.gov/std/tg2015/syphilis.htm
4. CDC. Syphilis Pocket Guide for Providers. Available at: https://www.cdc.gov/std/syphilis/Syphilis-Pocket-Guide-FINAL-508.pdf

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