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Syphilis Outbreak Update — Alaska, 2020

Background

Alaska's syphilis outbreak was first declared in early 2018, and case counts have increased annually ever since.^{1,2} During the COVID-19 pandemic, interviews were conducted remotely, and risk assessments were not completed on every case report. This *Bulletin* provides an update on the changing epidemiology of syphilis in Alaska, including the impact of the pandemic on the outbreak.

Methods

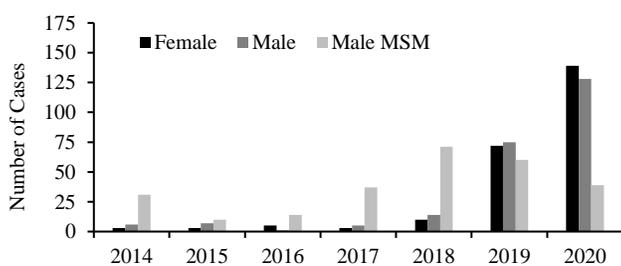
Data were obtained from the Section of Epidemiology's (SOE) National Electronic Disease Surveillance System (NEDSS) Base System (NBS), and individual syphilis case management records. Persons reported with syphilis are offered an interview by State Disease Intervention Specialists (DIS) to determine the stage of infection and to identify people who may need follow-up for testing and treatment. The Centers for Disease Control and Prevention (CDC) defines congenital syphilis as: 1) a condition affecting stillbirths and infants born to mothers with untreated or inadequately treated syphilis, regardless of signs in the infant, and 2) any clinical manifestations in the infant or a laboratory confirmation of *Treponema pallidum*.³

Results

During 2020, 361 cases of syphilis were reported, representing a 49% increase over 2019 (n=242). Of these, 306 (85%) cases were in the primary, secondary, or early latent stages, and 47 (13%) cases were in the late latent stage or of unknown duration. The remaining 8 (2%) were classified as congenital syphilis cases. Of the 306 primary, secondary, or early latent cases:

- 167 (55%) were in males, 39 (23%) of whom self-identified as men who have sex with men (MSM), and 103 (62%) self-identified as men who have sex with women (MSW);
- 139 (45%) were in females, 90 (65%) of whom were of childbearing age, 107 (77%) self-identified as heterosexual, and 7 (5%) self-identified as bisexual (Figure);

Figure. Primary, Secondary, and Early Latent Syphilis by Transmission Category — Alaska, 2014–2020 (N=733)*



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

- 150 (49%) were in American Indian/Alaska Native people, 90 (29%) were in White persons, 23 (8%) were in Black persons, 26 (8%) were in Hispanic/Latino persons, 11 (4%) and 12 (4%), respectively, were in Native Hawaiian/Pacific Islander and Asian persons;
- 285 (93%) were in residents of urban communities (i.e., Anchorage/Mat-Su, Juneau, and Fairbanks);
- the age range was 15–85 years (56% were aged <35 years); and
- 104 (34%) were diagnosed with at least one other STD or had known HIV infection. Of these, 72 (69%) were in persons co-infected with chlamydia (CT) or gonorrhea (GC), 4 (4%) were co-infected with human immunodeficiency virus (HIV), and 17 (16%) were co-infected with HIV and CT or GC.

All eight of the infants identified with congenital syphilis were delivered to mothers who reported inconsistent or no prenatal care and were treated for syphilis <30 days prior to their infant's delivery. Six (75%) of the infants demonstrated two or more indicators/symptoms consistent with syphilis infection.

DIS were able to interview 234 (66%) of the 353 (non-congenital) infected persons: 102 (44%) reported methamphetamine and/or heroin use (four of whom were mothers of infants who were classified with congenital syphilis), and 52 (22%) reported experiencing homelessness.

Discussion

Alaska's syphilis outbreak continues to grow, and congenital syphilis cases are at a record high. The primary drivers of this increase were more cases in heterosexual men and women,² more cases in persons reporting illicit drug use (a risk factor for syphilis acquisition),^{2,4} and a lack of consistent prenatal care. The decrease in syphilis cases among MSM is encouraging and might be due to changes in sexual behavior in this population. The COVID-19 pandemic impeded disease investigation activities because face-to-face field services were paused and many DIS were diverted to contact tracing, resulting in fewer interviews in 2020 (66%) compared with 2019 (92%).

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* intramuscular in a single 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.^{2,3}
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 experienced a fetal death after 20 weeks gestation and in all at-risk women of child-bearing age.³
11. Obtain a complete sexual history on all STD patients, including the number and gender of all sexual partners.³
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 Public Health Advisory. *Increase in Syphilis Among Women and Non-Gay-Identified Men*, Sept. 5, 2019. (not currently available on State website)
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