



Department of Health and Social Services
Valerie J. Davidson, Commissioner

3601 C Street, Suite 540
Anchorage, AK 99503

<http://dhss.alaska.gov/dph/Epi>

Division of Public Health
Jay C. Butler, MD, Chief Medical Officer and
Director

Local (907) 269-8000
24 Hour Emergency 1-800-478-0084

Editors:
Joe McLaughlin, MD, MPH
Louisa Castrodale, DVM, MPH

Bulletin No. 4 May 10, 2018

Syphilis Update

Background

On March 4, 2018, the Alaska Section of Epidemiology (SOE) alerted health care providers of an outbreak of syphilis during the first quarter of 2018 that was primarily involving men who have sex with men (MSM) residing in the Anchorage area.¹ Additional laboratory-confirmed cases have continued to be reported to SOE following this initial announcement. The purpose of this *Bulletin* is to provide an update on syphilis cases diagnosed during 2017 and the first quarter of 2018.

Methods

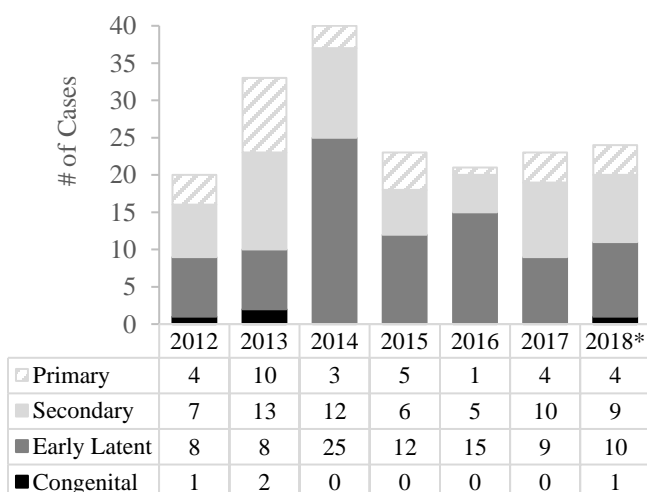
Syphilis case and interview data were obtained from the SOE Patient Reporting Investigation Surveillance Manager (PRISM) database and individual case management records. Persons reported with syphilis are interviewed to determine the stage of infection and to identify additional people who may need public health follow-up for testing and treatment.

Results

During 2017 through the first quarter of 2018, 57 cases of syphilis were reported to SOE. Of these, 46 (81%) cases were in the primary, secondary, or early latent stages; 10 (18%) cases were in the late latent stage; and one (2%) case was probable congenital syphilis in an infant whose mother had been inadequately treated for syphilis. Of the 46 primary, secondary, or early latent cases,

- 23 (50%) were reported in the first 3 months of 2018;
- 42 (91%) were in males, 88% (37/42) of whom self-identified as MSM; three (7%) were in females, all of whom self-identified as being heterosexual; and one (2%) was in a transgender person;
- 24 (52%) were in Whites, eight (17%) were in Alaska Native people, five (11%) were in Blacks, two (4%) were in Native Hawaiian/Pacific Islander, one each (2%) was in Hispanic and Asian persons, and five (11%) were unknown/other race;
- 44 (96%) were living in urban communities (i.e., Anchorage/Mat-Su, Juneau, or Fairbanks);
- the age range was 18–62 years (median: 26 years); and
- 22 (48%) were in persons who were co-infected with human immunodeficiency virus (HIV; n=12, 26%), gonorrhea or chlamydia (n=8, 17%), or HIV and chlamydia or gonorrhea (n=2, 4%) either at the time of the syphilis diagnosis or within 1 month afterward; two of the HIV coinfections were newly diagnosed at the time of the syphilis diagnosis.

Figure. Primary, Secondary, Early Latent, and Congenital Syphilis — Alaska, 2012–2018* (N=184)



*2018 cases only includes those diagnosed January–March

Of the 57 syphilis cases, 3 refused to be interviewed for public health follow-up, one was unable to be located, and 17 were

interviewed but refused to provide partner information. Some investigations are still ongoing. Sixty sexual contacts were identified; some individuals were named more than once. From these partner services investigations, five new cases of syphilis were identified and 22 people were prophylactically treated.

Discussion

The ongoing syphilis outbreak is primarily affecting MSM living in Alaska's urban communities; however, 20% (9/46) of the persons diagnosed with infectious syphilis self-identified as having been infected through heterosexual contact and two cases have been reported in persons living in more rural communities. The one case of probable congenital syphilis in 2018 involved an infant who had no signs or symptoms of infection, but who met the congenital syphilis case definition because the mother had been inadequately treated for syphilis.

The high proportion (48%) of infectious syphilis cases that involved co-infection with HIV, gonorrhea, or chlamydia during this outbreak underscores the importance of testing patients suspected of having syphilis for additional sexually transmitted diseases (STDs) and testing patients with other STDs for syphilis. Furthermore, syphilis may promote HIV acquisition and transmission, and HIV infections may alter the response to syphilis treatment. Finally, persons co-infected with syphilis and HIV may be at increased risk for early neurologic complications.³

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. Offer gonorrhea, chlamydia, and HIV testing to all patients with suspected syphilis infection.³
5. Strongly encourage infected patients to participate in SOE's confidential partner notification services.
6. 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 activity (e.g., multiple or anonymous sex partners).
7. Test for pregnancy in all women of childbearing age who are diagnosed with syphilis.
8. Screen all pregnant women for syphilis during their first prenatal visit, and rescreen early in their 3rd trimester and at delivery if at high risk.
9. Obtain a complete sexual history on all STD patients, including the number and gender of sexual partners.
10. 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 2016 STD Surveillance. Atlanta: U.S. DHHS; 2017. Available at: <https://www.cdc.gov/std/stats16/default.htm>
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>