# State of Alaska Epidemiology



# Bulletin

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> Bulletin No. 16 November 30, 2022

# Syphilis Update — Alaska, 2021

## Background

Syphilis rates in Alaska have continued to escalate since 2018 (Figure). <sup>1,2</sup> A similar trend is being seen nationally. <sup>4,5</sup> This *Bulletin* provides an update on the changing epidemiology of syphilis in Alaska.

#### Methods

Data were obtained from the Section of Epidemiology's (SOE) National Electronic Disease Surveillance System Base System and syphilis case management records.

#### Results

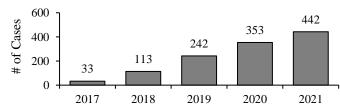
During 2021, 447 cases of syphilis including congenital were reported, representing a 24% increase over 2020 (n=361). Of these, 326 (73%) cases were in the primary, secondary, or early latent stages, and 116 (26%) cases were of unknown or late latent staging. The remaining 5 (1%) were classified as congenital syphilis cases. Of the 442 syphilis cases (noncongenital):

- 235 (53%) were male, 162 (69%) of whom self-identified as heterosexual, 52 (22%) self-identified as gay, and 7 (3%) self-identified as bisexual;
- 207 (47%) were female, 185 (89%) of whom were of reproductive age (15–44 years), 180 (87%) self-identified as heterosexual, 12 (6%) self-identified as bisexual, and 1 (1%) self-identified as lesbian or gay;
- 434 identified as cisgender, 4 identified as transgender and 4 were of unknown gender identity;
- 187 (42%) were in Alaska Native/American Indian people, 111 (25%) were White persons, 57 (13%) were Black persons, 55 (12%) were multiracial persons, 31 (7%) were Hispanic/Latino persons (of all races), 14 (3%) were Native Hawaiian/Pacific Islander persons, 10 (2%), were Asian persons, and 8 (2%) identified as other or unknown race;
- 394 (89%) were residents of urban communities (i.e., Anchorage, Mat-Su, Juneau, and Fairbanks);
- the age range was 16–70 years (52% were aged <35 years);
- 128 (29%) were diagnosed with at least one other sexually transmitted infection (STI) or had a known human immunodeficiency virus (HIV) infection; of these, 109 (85%) were in persons co-infected with chlamydia (CT) or gonorrhea (GC), 17 (13%) were co-infected with HIV, and 2 (2%) were co-infected with HIV and CT or GC; and
- 126 (29%) were identified as experiencing homelessness or unstably housed.

All five of the infants identified with congenital syphilis were delivered to pregnant persons who reported inconsistent or no prenatal care and most reported a history of substance misuse.

SOE staff interviewed 382 (86%) of the 442 non-congenital infected cases. Of these, 109 (25%) reported methamphetamine use and 57 (13%) reported heroin use.

Figure. Non-congenital Syphilis Cases per Year – Alaska, 2017-2021



### Discussion

Alaska syphilis cases continued to increase during 2021. Most occurred in people who self-identify as heterosexual and those

living in urban environments (29% of whom were experiencing homelessness or unstably housed). Also notable is that roughly half of the 2021 cases were in women, and nearly 90% of them were of reproductive age (5 cases of congenital syphilis were reported in 2021). Racial/ethnic disparities persist in this epidemic. Lastly, coinfection with other STIs and heroin/methamphetamine use are commonly identified co-factors.

Syphilis cases are also continuing to rise nationally.<sup>4,5</sup> Factors contributing to the national epidemic are multifold, including substance use, poverty, stigma, and unstable housing, which can reduce access to STI prevention and care.<sup>4</sup> Moreover, the ongoing COVID-19 pandemic has also likely contributed for many reasons, including reduced field services and decreased access to in-person clinical services.<sup>5</sup>

#### Recommendations

- Perform non-treponemal (RPR) and treponemal (FTA, TP-PA, or equivalent) tests on all persons with suspected syphilis.
- Perform physical examinations on all suspected and positive syphilis cases to aid in staging, diagnosis, and proper treatment.
- 3. 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.<sup>3</sup>
- 4. Perform a neurologic exam and, if applicable, a cerebrospinal fluid evaluation via lumbar puncture on all patients with syphilis *AND* neurologic or cranial nerve dysfunction.<sup>3</sup>
- 5. Perform an ocular and cranial nerve evaluation on all patients with ocular symptoms and reactive syphilis serology.<sup>3</sup>
- Perform repeat serologic testing 3-6 months post-treatment on all patients with positive syphilis serology.<sup>3</sup>
- 7. Conduct comprehensive STI screening on all patients with suspected syphilis infection (i.e., gonorrhea, chlamydia, HIV testing, and multi-site extragenital testing, if applicable)<sup>1,3</sup>
- 8. Comprehensively screen sexually active men who have sex with men *annually* or *every 3–6 months* for those who engage in sexual activities with multiple or anonymous sex partners.<sup>3</sup>
- Screen asymptomatic people with increased risk (e.g., reproductive age, younger than 29 in males, history of incarceration or transactional sex work).
- Test for pregnancy in all persons of reproductive age who are diagnosed with syphilis.
- 11. Screen all pregnant persons for syphilis during their first prenatal visit. Rescreen early in 3<sup>rd</sup> trimester *and* again at time of delivery if at increased risk for infection (e.g., substance misuse, STIs during pregnancy, multiple or new partners, transactional sex, late or no prenatal care, methamphetamine or heroin use, incarceration of person or partner, and unstable housing or homelessness).<sup>3</sup>
- 12. Test for syphilis in all persons who experienced a fetal death after 20 weeks gestation.<sup>3</sup>
- 13. Obtain a complete sexual history on all STI patients, including the number and gender of all sexual partners.<sup>3</sup>
- Notify infected patients they will be contacted by SOE staff and encourage them to participate in confidential partner notification services.
- 15. Promptly report all suspected and confirmed cases of syphilis via fax to 907-561-4239 or by telephone at 907-269-8000. Contact SOE staff for consultation, staging, STI history, and partner management.

### References

- 1. SOE *Bulletin*. "Syphilis Update Alaska, 2019 and Recommendations for Care." No. 20, July 30, 2020.
- Alaska Public Health Advisory. Increase in Syphilis Among Women and Non-Gay-Identified Men. September 5, 2019.
- CDC. 2021 Sexually Transmitted Infections Treatment Guidelines, 2021. MMWR Recomm Report 2021;RR-70(4).
- CDC. New CDC Report: STDs Continue to Rise in the U.S. October 8, 2019.
- CDC. Sexually Transmitted Disease Surveillance 2020. Impact of COVID-19 on STDs. Last reviewed August 22, 2022.