State of Alaska Epidemiology Bulletin

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**Bulletin No. 1**
January 30, 2024

# Congenital Syphilis Update — Alaska, 2023

## Background

The incidence of syphilis has increased dramatically in Alaska and the United States in recent years.[1-4] In Alaska, syphilis epidemiology has shifted. In 2018, 88% of cases were reported in men, predominately men who have sex with men.[2] In 2022, 47% of cases were in women; 89% were of reproductive age.[5] As Alaska's epidemic has involved more women, the incidence of congenital syphilis (CS) has increased from zero cases in 2019 to 12 cases in 2022. In 2021, CS incidence in Alaska was 53 cases per 100,000 births, rising to 128 per 100,000 births in 2022. U.S. incidence in 2021 was 78 cases per 100,000 births.[4] CS is caused by inadequately treated syphilis during pregnancy and can lead to fetal death or disabilities. Rapid identification, treatment, and partner testing and treatment can prevent onward transmission of syphilis and CS. This *Bulletin* provides preliminary 2023 epidemiology of CS in Alaska; updates may be reported in the future.

## Methods

Preliminary data for 2023 were obtained from the Section of Epidemiology's (SOE) National Electronic Disease Surveillance System Base System and medical records. Prenatal care was defined as a scheduled or unscheduled clinician visit in any setting that included pregnancy-specific healthcare beyond a pregnancy test or prenatal care referral.

## Results

As of January 16, 2024, 10 suspected or probable CS cases were reported during 2023, for an estimated annual incidence of 105 cases per 100,000 births.

Among mothers of the 10 infants with CS reported in 2023:

- None had adequate prenatal care (defined as ≥4 visits), and 7 (70%) had no prenatal care during pregnancy prior to delivery admission. Of these, several had other healthcare visits during pregnancy (e.g., emergency department visits).
- At least 7 (70%) were experiencing homelessness.
- 9 (90%) tested positive for or reported use of methamphetamine or amphetamine.
- 8 (80%) had had another reported sexually transmitted infection (STI) prior to pregnancy and 5 (50%) had had ≥1 diagnosis of syphilis before pregnancy.
- Their ages ranged from 23–38 years (median 28 years).
- 9 (90%) were living in the Anchorage/Mat-Su area.
- 9 (90%) had older children not living with them (e.g., in Office of Children's Services (OCS) custody) at the time of delivery. At least one medical record reported fear of OCS as a barrier to engagement in prenatal care.
- Other barriers to prenatal care or syphilis treatment and partner services explicitly reported during interviews or documented by clinicians included lack of reliable transportation, lack of phone, fearing loss of custody because of interaction with the healthcare system while using substances, involvement with the justice system during pregnancy, sexual assault or intimate partner violence, and lack of or delay in health insurance.
- As of January 2024, <50% had completed treatment for syphilis. Few partners completed treatment.

## Discussion

In 2023, all CS cases in Alaska were reported in infants born to women who experienced complex and substantial barriers to prenatal care. Expanding access to housing and medication-assisted treatment (MAT) during pregnancy might improve prenatal care attendance among pregnant women experiencing homelessness and using substances, reduce CS, and help support them in demonstrating their ability to be a safe parent. Expanding availability and accessibility of low-barrier housing, MAT, and effective birth control options such as long-acting reversible contraceptives for non-pregnant women of reproductive age could increase the likelihood of good health, including during a future pregnancy.

Findings that several women had had syphilis before pregnancy and were either inadequately treated or experienced reinfection highlights barriers to treatment and the importance of treating women and their partners for syphilis. Most women and their partners were not adequately treated even after CS was diagnosed in their infants. Women and their partners were not reached by public health by phone calls, in-person visits, and other attempts or did not attend follow-up appointments.

DPH is partnering with healthcare providers and community organizations across Alaska to increase testing and treatment for syphilis, including efforts to make rapid testing more available in emergency departments, urgent cares, clinics, other healthcare facilities, shelters, and at community events. DPH has also partnered with the Alaska Department of Corrections to expand syphilis testing in correctional facilities.

## Recommendations

1. Consider rapid syphilis testing, presumptive treatment with bicillin, and confirmatory test collection during the same visit for all patients who might have difficulty following up or being reached with test results.
2. Test for syphilis in asymptomatic, sexually active women of reproductive age and their partners, once now and again with each new partner. Test more often (e.g., every 3–6 months) if the patient has multiple partners, had an STI in the last year, or experiences homelessness, substance use, transactional sex, or incarceration.
3. Test for syphilis in pregnant women with late/no prenatal care, unstable housing/homelessness, or substance abuse at each healthcare visit (e.g., emergency department, clinic, hospital, urgent care, and substance abuse treatment visits).
4. Test all pregnant women at least three times, including first prenatal visit, third trimester, and delivery.
5. Test for pregnancy in women of reproductive age who are diagnosed with syphilis.
6. Many (>40%) pregnancies are unintended.[6] Sexually active women of reproductive age should be offered birth control options as appropriate if they do not want to become pregnant within the next year.
7. Ask patients with syphilis about their sexual partners in the past year. Arrange prompt partner testing and treatment. Treat partners regardless of test result if <90 days since last sexual contact with someone with primary, secondary, or early latent syphilis.
8. Promptly report all suspected and confirmed cases of syphilis via fax to 907-561-4239 or by telephone at 907-269-8000. Clinicians should ascertain and include pregnancy status for any woman of childbearing age. Contact SOE staff for consultation and STI history; please provide available partner contact or identifying information to SOE. Notify patients that they may be contacted by SOE staff for partner services.

**References**

1. SOE *Bulletin*. "Syphilis Update – Alaska, 2021 and Recommendations for Care." No. 16, November 30, 2022.
2. SOE *Bulletin*. "Syphilis Update – Alaska, 2018." No. 10, May 14, 2019.
3. SOE *Bulletin*. "Congenital Syphilis on the Rise – Alaska, 2018-2022." No. 9, August 2, 2023.
4. CDC. Sexually Transmitted Disease Surveillance 2021. National Overview of STDs, 2021. Last reviewed May 16, 2023.
5. SOE *Bulletin*. "Syphilis Update – Alaska, 2022." No. 18, October 12, 2023.
6. Rossen L, et al. Updated Methodology to Estimate Overall and Unintended Pregnancy Rates in the United States. p. 15. CDC. April 12, 2023.

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