State of Alaska Epidemiology **Bulletin**

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# Chlamydia Infection Update — Alaska, 2017

## Background

*Chlamydia trachomatis* infection (CT) is the most common reportable infectious disease in the United States.[1,2] From 2010–2016, Alaska had the highest CT infection rate in the nation, and CDC estimates the same will be true for 2017 as well.

While often asymptomatic, untreated CT infection can cause miscarriage, pre-term labor, low birth weight; conjunctivitis and pneumonia in neonates; pelvic inflammatory disease (PID), ectopic pregnancy, chronic pelvic pain, and infertility in women; and epididymitis and Reiter's syndrome in men. Moreover, CT can facilitate the transmission and acquisition of human immunodeficiency virus (HIV).

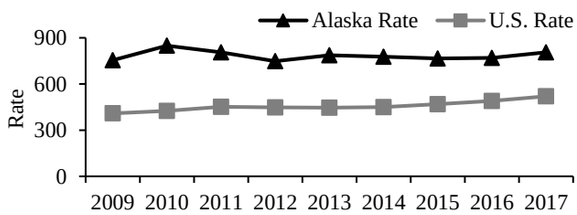
## Methods

Case data were obtained from the Section of Epidemiology (SOE) Patient Reporting Investigation Surveillance Manager (PRISM). Population data were obtained from the Alaska Department of Labor and Workforce Development.

## Results

In 2017, 5,938 CT cases were reported to SOE, yielding an annual incidence rate of 806 cases per 100,000 persons, which represents a 5% increase from 2016 (Figure 1). Of 2,496 specimens that tested positive for CT at the State Public Health Laboratory and the Alaska Native Medical Center Laboratory in 2017, 362 (15%) also tested positive for *Neisseria gonorrhea*.

**Figure 1. Chlamydia Infection Rate per 100,000 Population, by Year — Alaska and the US, 2009–2017***

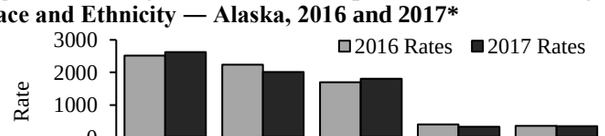



**The 2017 U.S. case rate is preliminary.*

Of the 5,938 CT cases reported in 2017,

- 4,589 (78%) were in persons aged ≤29 years, with the highest rate occurring in persons aged 20–24 years at 4,166 cases per 100,000 persons;
- 3,943 (66%) were in females, of whom, 71 (1.8%) were diagnosed with PID; and
- rates by race were highest in non-Hispanic American Indian/Alaska Native people (AI/AN), Native Hawaiian/Pacific Islanders (NH/PI), and Black persons, respectively (Figure 2).

**Figure 2. Chlamydia Infection Rate per 100,000 Persons, by Race and Ethnicity — Alaska, 2016 and 2017***

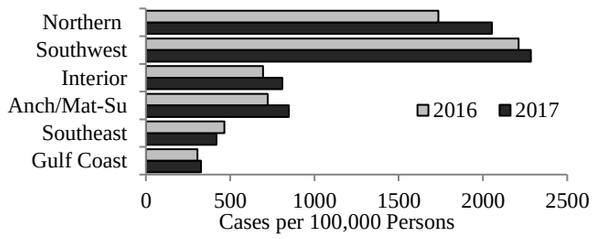



| | AI/AN | NH/PI | Black | Asian | White |
|---|---|---|---|---|---|
| 2016 Rates | 2516 | 2240 | 1695 | 402 | 358 |
| 2017 Rates | 2629 | 2014 | 1804 | 332 | 346 |

**Note: 430 cases in 2017and 8 cases in 2016 were of unknown race and are not included in this figure.*

In 2017, the Southwest and Northern regions had the highest CT rates (2,284 and 2,054 cases per 100,000 persons, respectively). Compared to 2016 data, the greatest increase in CT rate occurred in the Northern Region (18% increase, from 1,736 to 2,054 cases per 100,000 persons; Figure 3).

**Figure 3. Chlamydia Infection Rates, by Region — Alaska, 2016 and 2017**




## Discussion

Alaska CT incidence rates are consistently among the highest in the nation, and Alaska women, adolescents and young adults, and racial minority groups are disproportionally impacted. Controlling the transmission of CT infection in Alaska is possible through raising public awareness about how to prevent STDs (e.g., abstinence, mutual monogamy, reducing the number of sex partners, and using male latex condoms correctly every time a person has sex with someone who might be infected); assuring timely screening, testing, and treatment for patients;[3] and notifying partners of their exposure risk and offering testing and treatment, including expedited partner therapy.[4] Lastly, coinfection with *N. gonorrhea* is common and coinfected patients require a different antibiotic regimen than patients who are infected only with CT.[3]

## Recommendations for Providers

1. Elicit a thorough sexual history from patients to include same-sex and oral/anal activities (more information is available at: http://dhss.alaska.gov/dph/Epi/hivstd/Pages/history.aspx).
2. Test all persons at risk for CT for other STDs, including gonorrhea, HIV, and HCV.[3] Make sure to test genital, anal, and oral sites, as appropriate.[5]
3. Annually screen all sexually active females aged <25 years, and women aged ≥25 years with new or multiple partners.[3]
4. Screen pregnant women for STDs at the first prenatal visit; repeat testing in the third trimester for those at high risk.[3]
5. Retest pregnant women with CT infection 3–4 weeks after completion of therapy, and repeat screening again during the 3rd trimester.[3]
6. Promptly treat CT-infected patients and their sex partner(s) with azithromycin 1 g PO in a single dose, OR doxycycline 100 mg PO twice daily for 7 days.[3]
7. Assure that people who are co-infected with *N. gonorrhea* obtain appropriate gonorrhea treatment.[3]
8. Persons treated for CT should abstain from sex for 7 days after their treatment and after all sexual partners have been treated.
9. Consider the use of expedited partner therapy for sexual partners who are unable to present for clinical evaluation.[4]
10. Develop a partner management plan with CT-infected patients that include the timely notification of sex partners.
11. Counsel patients at risk for STDs on risk-reduction strategies, including correct and consistent condom use.
12. Report CT cases and treatment to SOE within 5 working days by fax to 561-4239. Report forms are available at: http://dhss.alaska.gov/dph/Epi/Documents/pubs/conditions/frmSTD.pdf

## References

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3. CDC. STD Treatment Guidelines, 2015. *MMWR Recomm Rep* 2015; 64(RR-3). Available at: http://www.cdc.gov/std/tg2015/default.htm
4. SOE Epidemiology *Bulletin.* "Expedited Partner Therapy Recommendations for Alaska Providers." No. 1, January 12, 2011. Available at: http://www.epi.alaska.gov/bulletins/docs/b2011_01.pdf
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(Contributed by: Susan A. Jones RN MN, and Tracy Smith, Section of Epidemiology.)