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## Chlamydia Infection Update — Alaska, 2016

### Background

*Chlamydia trachomatis* infection (CT) is the most common reportable infectious disease in the U.S. and in Alaska.<sup>1,2</sup> From 2010–2015, Alaska had the highest CT infection rate in the nation; this will likely be the case for 2016 as well.

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).

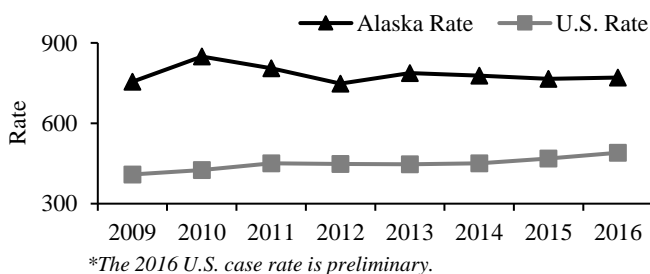
### Methods

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

### Results

In 2016, 5,698 CT cases were reported to SOE, yielding an annual incidence rate of 770 cases per 100,000 persons, which represents a 0.5% increase compared to 2015 (Figure 1).

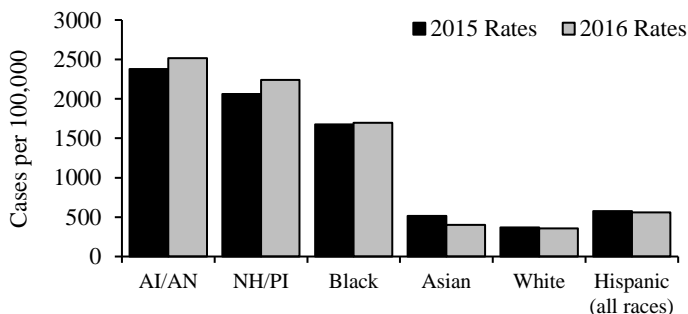
**Figure 1. Chlamydia Infection Rate per 100,000 Population, by Year — Alaska and the US, 2009–2016\***



Of the 5,698 CT cases reported in 2016,

- 4,508 (79%) were in persons aged  $\leq 29$  years, with the highest rate occurring in persons aged 20–24 years at 3,822 cases per 100,000 persons;
- 3,807 (67%) were in females, of whom, 57 (1.5%) developed PID;
- non-Hispanic American Indian/Alaska Natives (AI/AN), Native Hawaiian/Pacific Islanders (NH/PI), and Blacks accounted for the highest CT incidence rates (Figure 2).

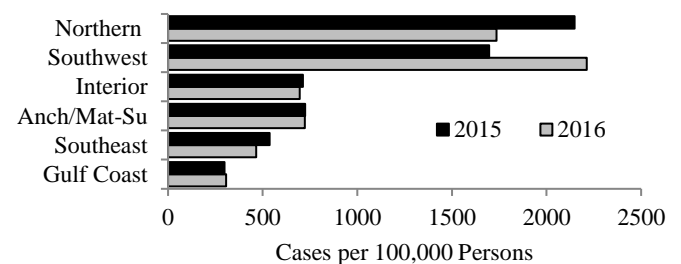
**Figure 2. Chlamydia Infection Rate per 100,000 Persons, by Race and Ethnicity — Alaska, 2015 and 2016\***



\*Note: 25 cases in 2015 and 8 cases in 2016 were of unknown race and are not included in this figure.

In 2016, the Southwest and Northern regions had the highest CT rates (Figure 3). Compared to 2015 data, the greatest CT rate increase occurred in the Southwest region (30%), and the greatest rate decrease was seen in the Northern Region (19%; Figure 3); case counts in these two regions went from 726 and 599 in 2015 to 932 and 483 in 2016, respectively.

**Figure 3. Chlamydia Infection Rates, by Region — Alaska, 2015 and 2016**



### Discussion

Alaska has consistently ranked first or second nationally in CT incidence rates since 2000. While the statewide incidence rates have remained relatively consistent since 2012, some regional differences have been noted. For example, in 2016 there was a 30% increase in incidence in the Southwest region and the 19% decrease in incidence in the Northern region. These differences may be due to a combination of factors, including changing testing patterns, decreased partner services activity, and year-to-year variation in case counts.

Changing the tide in CT incidence in Alaska is possible through increased public awareness about how to prevent sexually transmitted infections (particularly among adolescents and young adults) and the importance of obtaining prompt treatment; ready availability of condoms; increased screening, testing, and treatment of patients and their partners (e.g., by offering expedited partner therapy [EPT]); and increased partner notification and screening services.

### Recommendations

1. 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.<sup>3</sup>
2. Consider the use of EPT for sexual partners who are unable to present for clinical evaluation.<sup>4</sup>
3. Elicit a thorough sexual history from all STD patients to include same-sex and oral/anal activities (resources in taking a complete sexual history are available at: <http://dhss.alaska.gov/dph/Epi/hivstd/Pages/history.aspx>).
4. Obtain rectal or pharyngeal specimens, as appropriate.<sup>5</sup>
5. Test all persons who are at risk for CT for other sexually transmitted diseases, including gonorrhea, HIV, and HCV.
6. Develop a partner management plan with CT-infected patients that include the timely notification of sex partners.
7. Screen pregnant women for STDs at the first prenatal visit; repeat testing in the third trimester for those at high risk.
8. Annually screen all sexually active females aged  $< 25$  years and women aged  $\geq 25$  years with new or multiple partners.<sup>3</sup>
9. Counsel patients at risk for STDs on risk-reduction strategies, including correct and consistent condom use.
10. 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/firmSTD.pdf>

### References

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2. SOE Epidemiology Bulletin. 2015 Annual (January–December) Infectious Disease Report. No. 17, June 28, 2016. Available at: [http://www.epi.alaska.gov/bulletins/docs/b2016\\_17.pdf](http://www.epi.alaska.gov/bulletins/docs/b2016_17.pdf)
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5. SOE Epidemiology Bulletin. Extragenital Testing for Sexually Transmitted Disease. No. 19, August 26, 2015. Available at: [http://www.epi.alaska.gov/bulletins/docs/b2015\\_19.pdf](http://www.epi.alaska.gov/bulletins/docs/b2015_19.pdf)