Background

*Chlamydia trachomatis* infection (CT) is the most common reportable infectious disease in the U.S. and in Alaska.\cite{Note} From 2010–2014, Alaska had the highest CT infection rate in the nation.

Often asymptomatic, untreated CT infection can cause miscarriage, pre-term labor, low birth weight,\cite{Note} 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) reportable conditions database and the Patient Reporting Investigating Surveillance Manager (PRISM). Population data were obtained from the Alaska Department of Labor and Workforce Development.

Results

In 2015, 5,653 CT cases were reported to SOE, yielding an annual incidence rate of 766 cases per 100,000 persons, which is a 1.5% decrease compared to 2014 (Figure 1).

Figure 1. Chlamydia Infection Rates, by Year — Alaska and the United States, 2009–2015*

Of the 5,653 CT cases reported in 2015, 3,781 (67%) were in females; 4,578 (81%) were in persons aged <29 years; the highest rate occurred in persons aged 20–24 years at 3,822 cases per 100,000 persons; and American Indian/Alaska Natives (AI/AN), Native Hawaiian/Pacific Islanders (NH/PI), and Blacks accounted for the highest CT incidence rates, by race (Figure 2).

Figure 2. Chlamydia Infection Rates (Cases per 100,000 Persons), by Race and Ethnicity — Alaska, 2014 and 2015*

*Note: 229 cases in 2014 and 147 cases in 2015 were of unknown or multiple races and are not included in this figure.

In 2015, the Northern and Southwest regions had the highest CT rates (2,151 and 2,060 cases per 100,000 persons, respectively). Compared to 2014 data, the greatest CT rate decrease occurred in the Southwest region (14% decrease, from 1,965 to 1,702 cases per 100,000 persons), while the greatest rate increase was seen in the Northern Region (4% increase, from 2,060 to 2,151 cases per 100,000 persons [Figure 3]).

Discussion

Alaska’s CT infection rate decreased by 2.7% from 2013 to 2015; this coincides with the decreases in Alaska’s gonorrhea and syphilis rates in 2015.\cite{Note} Maintaining an ongoing, comprehensive approach to sexually transmitted disease (STD) control is required to decrease CT rates and to reduce the associated demographic health disparities that persist in Alaska.

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.\cite{Note}

2. Consider the use of expedited partner therapy (EPT) for sexual partners who are unable or unwilling to present for clinical evaluation.

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.\cite{Note}

5. Test all persons who are at risk for CT for other sexually transmitted diseases, including HIV and HCV.

6. Develop a partner management plan with CT-infected patients that includes timely notification of all 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 >25 years with new or multiple partners.

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/frmSTD.pdf

References


6. CDC. STD Treatment Guidelines, 2015. MMWR Recomm Rep 2015;64(RR-3). Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6403a1.htm


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