Chlamydial Infection — Alaska, 2013

Background
Alaska has consistently had the first or second highest Chlamydia trachomatis (CT) infection rate since 2000, and the Centers for Disease Control and Prevention has preliminarily ranked Alaska first in the nation for CT incidence in 2013. Untreated CT infection can cause miscarriage, pre-term labor, pelvic inflammatory disease (PID), ectopic pregnancy, and infertility in women; epididymitis and Reiter’s syndrome in men; and conjunctivitis and pneumonia in neonates. Moreover, CT infection 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; population data were obtained from the Alaska Department of Labor and Workforce Development.

Results
In 2013, 5,792 CT cases were reported to SOE; the CT annual incidence rate was 787 cases per 100,000 persons, representing a 5% increase compared to 2012. Alaska’s 2013 CT infection rate was 80% higher than the national rate of 437 per 100,000 persons (Figure 1).

Figure 1. Chlamydia Rates, by Year — Alaska and the United States, 2003–2013*

*Note: the 2013 U.S. case rate is preliminary.

Of the 5,792 CT cases reported in 2013,

- 3,910 (68%) were in females, of whom 66 (2%) developed PID; and
- 4,654 (80%) cases were in persons aged 20 to 35 years; rates were highest among persons aged 20–24 years for both sexes (Figure 2).

Figure 2. Chlamydia Rates, by Sex and Age Group — Alaska, 2013

Compared to 2012, the 2013 CT rates increased by 38% in blacks (from 1,124 to 1,547 cases per 100,000 persons) and by 7% in whites (from 400 to 429 cases per 100,000 persons), and decreased by 21% in Asian/Pacific Islanders (from 699 to 554 cases per 100,000 persons). Rates remained highest in Alaska Native persons (2,136 cases per 100,000), though were relatively unchanged from 2012 (2,049 cases per 100,000). Rates were highest in the Northern and Southwest regions (2,210 and 1,590 cases per 100,000 persons, respectively). The highest CT rates by race and sex occurred in Alaska Native females, black males, and Alaska Native males (3,247, 1,648, and 1,426 cases per 100,000 persons, respectively; Figure 3).

Figure 3. Chlamydia Rates, by Sex and Race — Alaska, 2013

Discussion
After 2 years of declining CT infection incidence rates, Alaska experienced an uptick in cases in 2013; demographic groups that were disproportionately impacted include women, young adults, Alaska Native persons, and blacks. Unfortunately, this increase in CT cases has coincided with increases in gonorrhea, syphilis, and HIV cases in Alaska. As such, SOE’s partner notification services have been stretched thin, making chlamydia control more difficult.

Recommendations
1. Health care providers should promptly treat CT-infected patients and their sex partners with the following:
   - Azithromycin 1 g PO in a single dose, OR Doxycycline 100 mg PO twice daily for 7 days.
2. Test all persons who are infected with CT for other sexually transmitted diseases, including HIV.
3. Elicit information regarding same-sex and oral/anal sexual activities when taking sexual histories from STD patients, and obtain rectal and/or pharyngeal specimens, as appropriate, for GC and CT detection.
4. Strongly encourage patients with CT infection to participate in partner services activities, including the confidential and timely notification of all sex partners.
5. Consider expedited partner therapy (EPT) for heterosexual partners who are unable or unwilling to present for clinical evaluation, particularly when other management strategies are unavailable, impractical, or unlikely to be successful.
6. Perform annual CT screening on all sexually active females aged ≤25 years and women aged >25 years with new or multiple sex partners.
7. Counsel patients at risk for STDs to use condoms correctly and consistently.

References

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