Gonorrhea Update — Alaska, 2017

Background
In October 2017, the Alaska Section of Epidemiology (SOE) alerted the public of a statewide gonorrhea outbreak. Preliminary data indicate that Alaska’s 2017 gonorrhea rate was the second highest in the nation. Untreated gonorrhea can result in pelvic inflammatory disease (PID), pre-term labor, ectopic pregnancy, and infertility in women; epididymitis and infertility in men; and conjunctivitis in neonates. Gonorrhea also facilitates the transmission and acquisition of human immunodeficiency virus (HIV).

Nationally, the rate of reported gonorrhea cases increased 18.5% during 2015–2016. In 2016, 468,514 cases of gonorrhea infection were reported to the Centers of Disease Control and Prevention (CDC), yielding a rate of 145.8 cases per 100,000 population. This Bulletin provides an overview of the epidemiology of gonorrhea cases in Alaska during 2017.

Methods
Case data were reviewed 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 2017, 2,190 gonorrhea cases were reported to SOE; the incidence rate was 297 cases per 100,000 persons, representing a 51% increase compared to 2016 (Figure 1).

Figure 1. Gonorrhea Rate, by Year — Alaska and the United States, 2008–2017

![Gonorrhea Rate Graph](image)

*Note: the 2017 U.S. rate is preliminary.

Of the 2,190 gonorrhea cases reported in 2017, 1,266 (58%) were in persons aged ≥29 years; 1,090 (50%) were in females, 65 (6%) of whom were diagnosed with PID.

Rates by race were highest in Blacks, followed by American Indian/Alaska Native people, Native Hawaiian/Pacific Islanders, Whites, and Asians (1126, 1024, 519, 117, and 98 cases per 100,000 population, respectively). Rates by region were highest in the Southwest, followed by the Northern and Anchorage/Mat-Su regions (Figure 2).

Figure 2. Gonococcal Infection Rates, by Region — Alaska, 2012–2017

![Gonococcal Infection Rates Graph](image)

Discussion
Alaska’s ongoing gonorrhea outbreak is occurring concurrently with a national trend of increasing sexually transmitted disease rates. This increase may be attributed to one or more of the following factors: a) providers doing a better job of screening for infection, including extra-genital testing at oropharyngeal and rectal sites; b) a true increase in incidence, especially among men due to changes in sexual networks and behaviors; c) a decrease in access to health care; and d) a decline in public health resources that support disease control efforts.

To assist the outbreak response, the Alaska Section of Public Health Nursing has temporarily expanded services to include partner investigation for all positive gonorrhea cases in communities served by public health nurses, including expedited partner therapy (EPT), to clients of all ages. Finally, it is vital to educate people on how to prevent infection and recidivism. The most effective education for sexually active persons involves discussing gonorrhea risk-reduction techniques such as reducing the number of sex partners, using latex condoms correctly during every sexual encounter with partners with unknown STD status, and talking to partners about STD prevention. Gonorrhea patients should be informed about the high risk of re-infection rates through engaging in sexual contact with untreated partners. Patients are critical in helping to notify sex partners of their exposure risk, getting partners treated, and delaying sexual activity with partners for 7 days after their treatment and resolution of symptoms.

Recommendations
1. Promptly treat gonorrhea-infected patients and their sex partner(s) with ceftriaxone 250 mg IM AND azithromycin 1 g PO, each in a single dose.
2. When ceftriaxone is unavailable, gonorrhea-infected patients and their sex partner(s) who are not at risk for pharyngeal infection may be treated with cefixime 400 mg PO AND azithromycin 1 g PO, each in a single dose.
3. Treat patients with established allergy to cephalosporins with gentamicin 240 mg IM AND azithromycin 2 g PO, each in a single dose.
4. Offer EPT for heterosexual partners who are not willing or able to present for clinical evaluation.
5. Elicit a thorough sexual history on all STD patients to include genital, oral, and anal sexual activity, and obtain genital, pharyngeal, and anal specimens, as appropriate.
7. When testing for gonorrhea, concurrently test for other sexually transmitted diseases, including chlamydia, syphilis, HIV, and HCV.
8. Encourage patients with gonorrhea infection to participate in partner services activities, including the confidential and timely notification of all sex partners.
9. Re-test patients for re-infection 3 months after treatment.
10. Report gonorrhea cases and treatment to SOE within 5 working days by fax to 561-4239. See report forms at: http://dhss.alaska.gov/dphp/Epi/Documents/pub/conditions/stdSTD.pdf

References
3. 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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