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## Gonococcal Infection Update — Alaska, 2015

### Background

In 2014, Alaska had the third highest gonococcal infection (GC) rate in the nation.<sup>1,2</sup> Untreated GC 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. GC also facilitates the transmission and acquisition of human immunodeficiency virus (HIV). The purpose of this *Bulletin* is to provide updated GC information and recommendations.

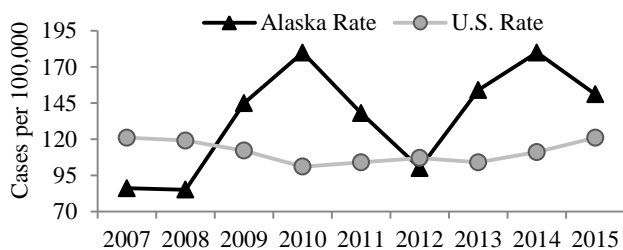
### Methods

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

### Results

In 2015, 1,115 GC cases were reported to SOE; the incidence rate was 151 cases per 100,000 persons, representing a 16% decrease compared to 2014 (Figure 1).

**Figure 1. Gonococcal Infection Rates, by Year — Alaska and the United States, 2007–2015\***

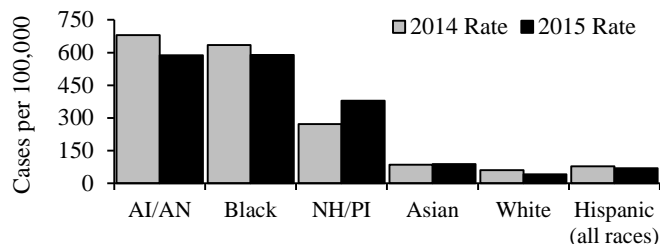


\*Note: the 2015 U.S. rate is preliminary

Of the 1,115 GC cases reported in 2015, 693 (62%) were in persons aged <29 years, and 567 (51%) were in females. Of the 348 cases in males in the Anchorage/Mat-Su region, 182 (52%) were interviewed by public health workers, 40 (22%) of whom self-identified as men who have sex with men (MSM).

The highest GC rates were among non-Hispanic American Indian/Alaska Native persons (AI/AN), Blacks, and Native Hawaiian/Pacific Islanders (NH/PI); a 40% rate increase occurred among NH/PI persons in 2015 (Figure 2).

**Figure 2. Gonococcal Infection Rates, by Race/Ethnicity — Alaska, 2014–2015\***



\* 31 cases in 2014 were of unknown race and are not included

In 2015, the Northern and Southwest regions had the highest GC rates (518 and 271 cases per 100,000, respectively). Compared to 2014 data, the greatest GC rate decreases occurred in the Southwest region (a 29% decrease, from 438 to 271 cases per 100,000), followed by the Anchorage/Mat-Su and Northern regions (a 17% decrease for each region, from 205 to 170 cases per 100,000 and from 627 to 518 cases per 100,000, respectively).

### Discussion

Alaska has seen large fluctuations in GC infection rates over the past 8 years. Despite the recent decline in incidence in

2015, Alaska still preliminarily ranked within the top 10 states in the nation. While demographic and geographic distributions of disease in Alaska remain consistent over time, the 40% rate increase in Native Hawaiian/Pacific Islander persons is notable. In addition to a true increase in the incidence of disease in this population in 2015, more robust surveillance methods and changes in screening/testing rates in this population might account for some of this increase.

In June 2015, the Centers for Disease Control and Prevention (CDC) published an updated version of the STD treatment guidelines, which included the first-line dual therapy standard of intramuscular (IM) ceftriaxone and oral (PO) azithromycin that was first recommended in 2010, as well as two additional regimens for treating GC in patients with a cephalosporin allergy (Box).<sup>3</sup>

#### Box. GC Treatment Options for Cephalosporin Allergy:

Gemifloxacin 320 mg orally in a single dose\*  
PLUS  
Azithromycin 2 g orally in a single dose  
OR  
Gentamicin 240 mg intramuscularly in a single dose  
PLUS  
Azithromycin 2 g orally in a single dose

\*Gemifloxacin is currently unavailable. For more information, visit the FDA Drug Shortage Website at: <http://www.accessdata.fda.gov/scripts/drugshortages/default.cfm#G>

### Recommendations

- Promptly treat GC-infected patients and their sex partner(s) with ceftriaxone 250 mg IM **AND** azithromycin 1 g PO, each in a single dose.<sup>3</sup>
- When ceftriaxone is unavailable, GC-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.<sup>3</sup>
- Consider the use of expedited partner therapy (EPT) for heterosexual partners who are unable or unwilling to present for clinical evaluation.<sup>4</sup>
- Elicit a thorough sexual history from all STD patients to include same-sex and oral/analog activities (resources in taking a complete sexual history are available at: <http://dhss.alaska.gov/dph/Epi/hivstd/Pages/history.aspx>).
- Obtain rectal or pharyngeal specimens, as appropriate.
- Test all persons at risk for GC for other sexually transmitted diseases, including HIV and HCV.<sup>5</sup>
- Encourage patients with GC infection to participate in partner services activities, including the confidential and timely notification of all sex partners.
- Report suspected cephalosporin treatment failure to SOE immediately for case consultation.
- Report GC 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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