



Department of Health and Social Services

Adam Crum, MSPH, Commissioner
Lily J. Lou, MD, FAAP, Chief Medical Officer3601 C Street, Suite 540
Anchorage, Alaska 99503 <http://dhss.alaska.gov/dph/Epi>

Division of Public Health

Merry Carlson, Director

Local (907) 269-8000
24 Hour Emergency (800) 478-0084

Editors:

Joe McLaughlin, MD, MPH
Louisa Castrodale, DVM, MPH

Bulletin No. 12 June 4, 2019

Gonorrhea Update — Alaska, 2018

Background

Gonorrhea (GC) is a sexually transmitted infection caused by the *Neisseria gonorrhoeae* bacterium, which can infect the mucous membranes of the reproductive tract, mouth, throat, rectum, and eyes. Common symptoms of GC include a burning sensation when urinating and urogenital discharge; however, infected patients are often asymptomatic. More serious consequences include pelvic inflammatory disease, ectopic pregnancy, infertility, and facilitation of human immunodeficiency virus (HIV) transmission/acquisition. The rate of reported GC cases has increased by 75% nationally since 2009.¹ Alaska has been experiencing a GC outbreak since October 2017.² In 2017, Alaska's GC rate was the second highest in the nation.

It is imperative for clinicians to routinely obtain a comprehensive sexual history on patients and test both extragenital and urogenital sites for infection, as indicated. Extragenital testing is critical in detecting infections that would otherwise be missed by urogenital testing alone.

Nationally, 30% of new GC infections each year are resistant to at least one drug.³ As such, the Centers for Disease Prevention and Control (CDC) recommends dual therapy with ceftriaxone and azithromycin. CDC is monitoring antibiotic resistance through the Gonococcal Isolate Surveillance Project (GISP).³

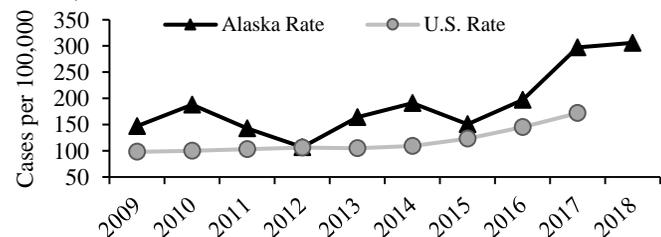
Methods

Case data were reviewed from the Section of Epidemiology's (SOE) Patient Reporting Investigation Surveillance Manager (PRISM) and from the Alaska State Public Health Laboratory (ASPHL). Population data were obtained from the Alaska Department of Labor and Workforce Development. Rates for race and ethnic minorities are calculated differently in the 2018 data due to changes in the recording of the individuals with more than one race.

Results

In 2018, 2,254 GC cases were reported to SOE, yielding a statewide rate of 306 cases per 100,000 population (a 3% increase from the 2017 rate) (Figure). Of these, 1,253 (56%) were in persons aged ≤ 29 years and 1,062 (47%) cases were in females; 39/1,062 (4%) women were also diagnosed with PID.

Figure. Gonorrhea Rate by Year — Alaska and the United States, 2009–2018*



*Note: the 2018 U.S. rate is not yet available.

Of the 489 (22%) confirmed cases that were tested at the Alaska State Public Health Laboratory (ASPHL), 226 (46%) involved ≥ 1 extragenital infection site. Of these 226 cases, 88 (40%) had negative urogenital and positive extragenital tests.

Rates by race were highest in Blacks, followed by American Indian/Alaska Native people, Native Hawaiian/Pacific Islanders, Hispanics, Whites, and Asians (984, 952, 514, 220, 106, and 57 cases per 100,000 population, respectively). Rates by region were highest in the Northern, Anchorage/Mat-Su, and Southwest regions (599, 391, 369 cases per 100,000 population, respectively).

Discussion

Alaska's GC outbreak is ongoing and is disproportionately impacting teens, young adults, and ethnic minorities.

In 2018, nearly half of all GC-positive specimens analyzed at ASPHL involved extragenital infections, and 40% of these patients were negative for genital GC. Because GC is frequently asymptomatic, the infection may go undiagnosed if extragenital specimens are not collected from patients for screening.⁴ Routinely obtaining a comprehensive sexual history is critical to identify patients in need of genital and extragenital testing. Making patients feel comfortable disclosing sexual activities they may perceive as taboo or socially unacceptable (e.g., oral/anal sex) is essential when obtaining a sexual history.

Alaska re-instated GISP participation in August 2018 to identify drug-resistant strains of GC. Specimens are being collected by two participating Anchorage clinics from men diagnosed with symptomatic urethral gonorrhea. To date, none of the specimens were resistant to the CDC-recommended antimicrobials for GC.

Recommendations

1. Routinely elicit a thorough sexual history on all sexually-active patients that includes questions about genital, oral, and anal sexual activity (see resources on taking a sexual history at: <http://dhss.alaska.gov/dph/Epi/hivstd/Pages/history.aspx>).
2. Test genital, pharyngeal, and anal specimens, as appropriate.⁵
3. When testing for GC, concurrently test for other sexually transmitted diseases, including chlamydia, syphilis, human immunodeficiency virus (HIV).
4. Follow the CDC guidelines for hepatitis C screening.⁶
5. Promptly treat GC patients and their sex partner(s) with ceftriaxone 250 mg IM **AND** azithromycin 1 g PO, each in a single dose on the same day.⁶
6. When ceftriaxone is unavailable, GC 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 on the same day.⁶
7. Treat patients with established allergy to cephalosporins with gentamicin 240 mg IM **AND** azithromycin 2 g PO, each in a single dose on the same day.⁴
8. Inform GC patients to notify their sexual partners of their exposure risk and encourage them to get tested and treated.
9. Consider offering EPT for all heterosexual sex partners.⁷
10. Inform patients about the high risk of re-infection through engaging in sexual contact with untreated partners.
11. Re-test patients for re-infection 3 months after treatment.
12. Educate patients about risk-reduction techniques, such as reducing their number of sex partners; using latex condoms correctly during every sexual encounter; and talking to their partners about the importance of testing and treatment.
13. **Report GC cases and treatment** to SOE within 2 working days by fax to 561-4239. Report forms are available at: <http://dhss.alaska.gov/dph/Epi/Documents/pubs/conditions/fmSTD.pdf>

References

1. CDC. STD Surveillance 2017. Atlanta: U.S. DHHS; 2018. Available at: <https://www.cdc.gov/std/stats17/natoverview.htm>
2. Alaska Epidemiology *Alaska Public Health Advisory*. Gonorrhea Outbreak in Alaska. October 3, 2017. Available at: http://dhss.alaska.gov/dph/Epi/Documents/phan/AKPHAN_20171003_gonorrhea.pdf
3. CDC. Combating the threat of antibiotic-resistant GC. Available at: <https://www.cdc.gov/std/gonorrhea/arg/carb.htm>
4. Johnson Jones ML, et al. Extragenital chlamydia and gonorrhea among community venue-attending men who have sex with men — Five Cities, United States, 2017. *MMWR Morb Mortal Wkly Rep* 2019;68:321–25. DOI: <http://dx.doi.org/10.15585/mmwr.mm6814a1>
5. Alaska Epidemiology *Bulletin*. "Extragenital Testing for Sexually Transmitted Diseases". No. 19, August 26, 2015. Available at: http://www.epi.alaska.gov/bulletins/docs/b2015_19.pdf
6. CDC. STD Treatment Guidelines, 2015. *MMWR Recomm Rep* 2015;64(RR-3). Available at: <http://www.cdc.gov/std/tg2015/default.htm>
7. Alaska Epidemiology *Bulletin*. EPT Recommendations for Alaska Providers. No. 1, January 12, 2011. Available at: http://www.epi.alaska.gov/bulletins/docs/b2011_01.pdf