State of Alaska Epidemiology **Bulletin**

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Statewide Increase in Gonococcal Infection – Alaska, 2009

Background

Neisseria gonorrhoeae (GC) infection is a common sexually transmitted disease and a major cause of pelvic inflammatory disease (PID), ectopic pregnancy and infertility in women, and conjunctivitis in neonates. On August 7, 2009, we reported an increased incidence of GC infection in Southwestern Alaska that began in 2008.[1] The purpose of the current *Bulletin* is to notify providers that the reported GC infection rate rose almost statewide in 2009, to describe the epidemiology of the epidemic, and to provide disease control recommendations.

Methods

Case data were obtained from the Alaska Section of Epidemiology's (SOE) reportable conditions database; population data were obtained from the Alaska Department of Labor and Workforce Development. Laboratory testing data were obtained from the Alaska State Public Health Laboratory's (ASPHL) Laboratory Information Management System.

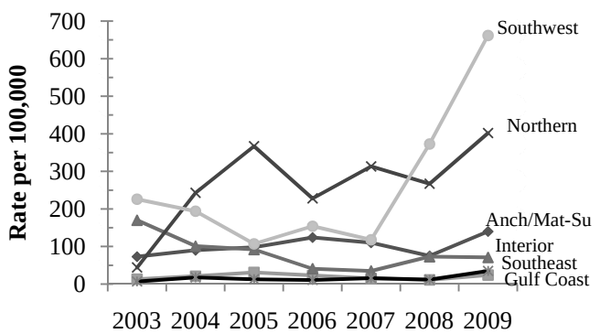
Summary Results

A total of 997 GC cases were reported in Alaska in 2009, yielding an incidence rate of 144 cases per 100,000 persons; this represents a 69% increase from the 2008 rate of 85/100,000 and the greatest single-year increase in reported GC infection in Alaska since the 1970s. The rate increased in both sexes, among all races, in all age groups, and in all regions except the Interior (Figure 1).

Of the 997 GC cases reported in 2009, 526 (53%) occurred in females; 11 (2%) of infected females developed PID. Most reported cases (670, 67%) occurred in Alaska Native persons. The highest rates by age and sex were in females and males aged 20–24 years (793/100,000 and 509/100,000, respectively). The highest rates by race and sex were in Alaska Native females (656/100,000) and black males (358/100,000).

Between January 2008 and June 2009, the number of clinical specimens submitted to ASPHL by providers remained stable; however, the proportion of specimens that tested positive for GC increased by an average of 1.3% per month (P<0.001). Fifty-five percent of laboratory-confirmed GC cases reported to SOE during this time period were reported by ASPHL.

Figure 1. Gonococcal Infection Rates by Region — Alaska, 2003–2009



Discussion

During 2009, Alaska experienced a 69% increase in the incidence of reported GC infection; the rate increased in both sexes, among all races, in all age groups, and in nearly all regions of the state. Alaska Native persons and persons living in the Southwest were disproportionately affected, accounting for 68% and 26% of all 2009 cases, respectively. Testing data from ASPHL demonstrate that the statewide increase in GC incidence is not due to increased provider testing.

The Alaska HIV/STD Program is working collaboratively with federal, state and local health partners to help control the epidemic. Health care providers also play a critical role in GC control, and should maintain a high index of suspicion for GC infection in patients presenting with vaginal or urethral discharge, burning with urination, or reporting sexual contact with a GC-infected partner. Recent provider reports describe many patients presenting with milder than usual symptoms, which could result in patients delaying or ignoring the need to seek medical services; this underscores the importance of partner service activities. All sex partners should be promptly identified, offered testing and treated.

Co-infection with *Chlamydia trachomatis* (CT) is common; in 2009, 296 (30%) reported GC cases in Alaska occurred in persons who were co-infected with CT. Therefore, unless CT infection is ruled out, patients treated for GC infection should also be treated for CT infection. Similarly, if sexual contacts to GC-infected patients are not tested, or are tested with a non-nucleic acid amplification test which was negative for CT, they should be co-treated for both GC and CT.[2]

Recommendations

1. Promptly treat patients with uncomplicated GC infection with the following:
   - Ceftriaxone 125 mg IM in a single dose, OR
   - Cefixime 400 mg orally in a single dose, AND
   - If CT infection is not ruled out, presumptively treat with azithromycin 1 g orally in a single dose.
   - Providers should not use quinolones or tetracyclines to treat GC infection due to drug resistance issues.[3]
2. Strongly encourage patients with GC infection to participate in partner services activities, including the confidential and timely notification of all partners at risk.
3. Test and empirically treat all partners of confirmed GC-infected patients for GC and CT infection.
4. Screen all pregnant women for GC and CT infection at their first prenatal visit.
5. Annually screen all sexually active females aged ≤25 years and women aged >25 years with risk factors (i.e., those who have a new sex partner or multiple sexual partners) for GC and CT infection.
6. Offer HIV screening for all persons who seek evaluation and treatment for a sexually transmitted disease.
7. Discuss STD risk reduction strategies with patients at risk for GC infection.[4]
8. Report confirmed or suspected cases of GC infection and treatment to the Alaska Section of Epidemiology within 5 working days via fax (907-561-4239) or telephone (907-561-4234 or 800-478-1700).

References

1. Increased Incidence of *Neisseria Gonorrhoeae* Infection in Southwestern Alaska. *Bulletin* No. 18, August 7, 2009. Available at: http://www.epi.hss.state.ak.us/bulletins/docs/b2009_18.pdf
2. CDC's Updated STD Treatment Guidelines, 2006. *Bulletin* Recommendations and Reports No 3, 2007. Available at: http://www.epi.hss.state.ak.us/bulletins/docs/rr2007_03.pdf
3. Update to CDC's Sexually Transmitted Diseases Treatment Guidelines, 2006: Fluoroquinolones no longer recommended for treatment of Gonococcal infections. *MMWR.* 2007/56(14); 332-336.
4. HIV/STD Risk Reduction reference guide available at: http://www.mpaetc.org/downloads/Risk%20Assessment%20Risk%20Reduction.pdf (or call 800-269-8065 to request a copy).

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