



Department of Health and Social Services
William H. Hogan, MSW, Commissioner
Jay C. Butler, MD, Chief Medical Officer
3601 C Street, Suite 540
Anchorage, Alaska 99503

<http://www.epi.Alaska.gov>

Division of Public Health
Beverly K. Wooley, Director
Local telephone number 907-269-8000
24 Hour Emergency 1-800-478-0084

Editor:
Joe McLaughlin, MD, MPH

Bulletin No. 12 April 3, 2009

Gonococcal Infection — Alaska, 2008

Background

Neisseria gonorrhoeae infection is an important cause of pelvic inflammatory disease (PID), ectopic pregnancy, and infertility among women, and conjunctivitis among neonates. Septicemia occurs in up to 1% of all gonococcal (GC) infections, and can result in many complications, including arthritis, endocarditis, and meningitis.¹ Gonococcal infection can also facilitate the transmission of human immunodeficiency virus (HIV).

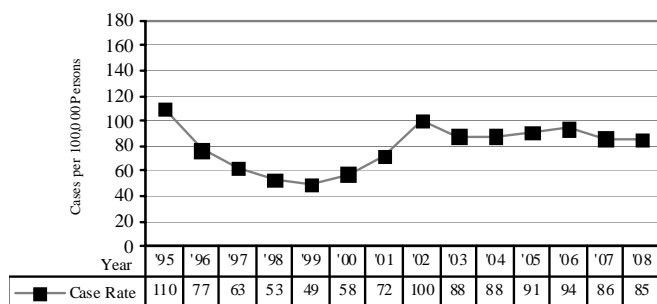
Methods

Case data were obtained from the Alaska Section of Epidemiology's reportable conditions database and annual population data were obtained from the Alaska Department of Labor and Workforce Development. The 2008 rates were calculated using 2007 Alaska population estimates and are to be considered preliminary until the 2008 population estimates are available late in 2009.

Summary Results

A total of 578 cases of gonorrhea were reported in Alaska in 2008 (85 cases per 100,000 persons). This represents a 1% decrease from the 2007 gonorrhea incidence (Figure 1).

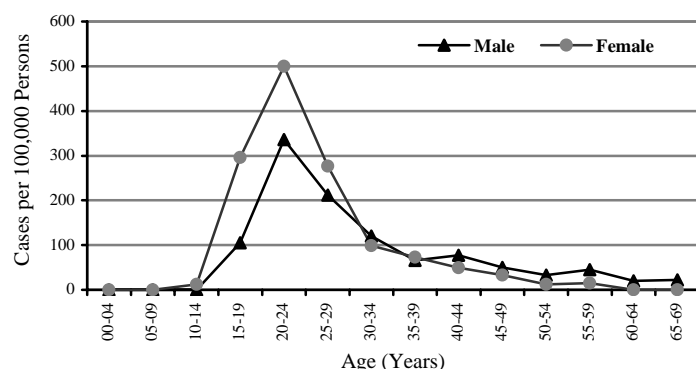
Figure 1. Gonorrhea Infection Rates — Alaska, 1995–2008



Of the 578 GC cases reported in 2008,

- 321 (56%) occurred in females;
- 16 (5% of females) were associated with PID; and
- the highest documented GC infection rates were among females aged 15–19 and 20–24 years (296 and 500 cases per 100,000 females, respectively) and males aged 20–24 years (336 cases per 100,000 males; Figure 2).

Figure 2. Gonorrhea Infection Rates, by Age and Sex — Alaska, 2008 (N=578)



In 2008, the highest GC infection rates were among:

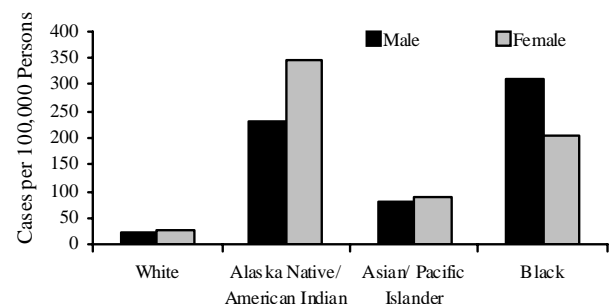
- Alaska Native/American Indians at 229 cases per 100,000 males and 347 cases per 100,000 females, and
- blacks at 310 cases per 100,000 males and 205 cases per 100,000 females (Figure 3).

Compared with 2007, GC infection rates for 2008:

- decreased in black males by 40%, from 515 to 310 cases per 100,000 males;
- decreased in black females by 21%, from 260 to 205 cases per 100,000 females;

- decreased in white males by 22%, from 27 to 21 cases per 100,000 males;
- decreased in white females by 33%, from 39 to 26 cases per 100,000 females;
- increased in Alaska Native/American Indians by 53%, from 150 to 229 cases per 100,000 males;
- increased in Alaska Native/American Indian females by 19%, from 292 to 347 cases per 100,000 females;
- increased in Asian/Pacific Islander males by 27%, from 63 to 80 cases per 100,000 males; and
- decreased in Asian/Pacific Islander females by 5%, from 93 to 88 cases per 100,000 females.

Figure 3. Gonorrhea Infection Rates, by Race and Sex — Alaska, 2008 (N=578)*



* Cases of unknown race for 2 males and 3 females are not included in the figure.

Discussion

Although Alaska's GC infection rates have been relatively stable since 2003, and the 2008 rate is below the 2007 national average of 118.9 cases per 100,000 persons, Alaska is still well above the federal Healthy Persons 2010 target rate of 19 cases per 100,000 persons per year.

The HIV/STD Program staff conduct and provide technical assistance for partner services work statewide. Partner services work involves trained public health workers or health care providers who elicit information from GC-infected patients about their sexual partners. Once this information is obtained, partner services workers confidentially notify contacts of their potential exposure to GC and assist them in obtaining appropriate testing and treatment.

Recommendations

1. Follow CDC's Updated Sexually Transmitted Diseases Treatment Guidelines, 2006 Recommendations and Reports in treating GC infection and PID.²
2. Health care providers should not use quinolones to treat GC infection due to increasing rates of resistance.³
3. Report confirmed or suspected cases of GC infection to the Alaska Section of Epidemiology within 5 working days via fax (561-4239) or telephone (907-561-4234 or 800-478-1700).⁴
4. Encourage patients with GC infection to participate in partner services activities, including the confidential and timely notification of all partners at risk.
5. Screen all pregnant females who are at risk for GC infection at their first prenatal visit.

References

1. Heymann D. Control of Communicable Diseases Manual, 19th edition. American Public Health Association. Washington, DC. 2008.
2. CDC's Updated STD Treatment Guidelines, 2006. Epi Bulletin RnR. Available at: http://www.epi.hss.state.ak.us/bulletins/docs/tr2007_03.pdf
3. Centers of Disease Control and Prevention. Update to CDC's Sexually Transmitted Diseases Treatment Guidelines, 2006: Fluoroquinolones no longer recommended for treatment of Gonococcal infections. MMWR Morbidity Mortality Weekly Rep 2007/56(14): 332-336.
4. Conditions Reportable to Public Health in Alaska. Available at: <http://www.epi.hss.state.ak.us/pubs/conditions/default.stm>