

Arctic Investigations Program (AIP) Alaska Invasive Bacterial Disease Surveillance Report Group B *Streptococcus* – 2014

Background

AIP has conducted statewide surveillance of invasive group B *Streptococcus* (GBS) since 2000. Beginning in January 2007, invasive GBS became a reportable condition to the State of Alaska Division of Public Health (DPH). Reports of cases of disease caused by this organism are shared between AIP and DPH.

Population

The population of the State of Alaska in 2014 was 737,354; 143,367 (19%) were Alaska Native people. *Source: AK Dept. of Labor & Workforce Development population estimates.*

Case Definition

An isolate of GBS from a normally sterile site that has been taken from a resident of Alaska. Cases are also included when GBS has been isolated from a placenta and/or amniotic fluid with fetal demise. Early-onset cases are <7 days of age and late-onset are 7-89 days of age.

Methods

Participating laboratories send isolates recovered from sterile sites to the AIP laboratory in Anchorage; materials and forms for isolate shipment and data collection are provided to each laboratory by AIP. Demographic and clinical information on the cases are collected from a review of medical records. Annually, AIP asks that each laboratory review their records and provide information on any cases that may have been overlooked.

Invasive group B *Streptococcus*, Early/Late Onset Cases & Rates by Race – Alaska, 2014

| | Alaska Native | | Non-Native | |
|-------------|---------------|-------|------------|-------|
| | No. Cases | Rate* | No. Cases | Rate* |
| Early onset | 0 | 0 | 2 | 0.3 |
| Late onset | 1 | 0.3 | 1 | 0.1 |

*Cases per 1,000 live births

Invasive group B *Streptococcus* Cases by Race – Alaska, 2014

| Race | Cases n (%) | Age | | Deaths n (%) |
|---------------|-------------|----------------|--------|--------------|
| | | Adjusted Rate* | % Male | |
| Alaska Native | 15 (23) | 11.6 | 53% | 0 (0) |
| Non-Native† | 49 (77)† | 7.3 | 49% | 4 (8.2) |
| Total | 64 | | 50% | 4 (6.3) |

*Cases per 100,000 per percent distribution of Alaska 2010 population

†Includes 1 case for which race was unknown

Invasive group B *Streptococcus*, Cases & Rates by Age Group & Race – Alaska, 2014

| Age (years) | Alaska Native | | Non-Native | |
|-------------|---------------|-------|------------|-------|
| | No. Cases | Rate* | No. Cases | Rate* |
| <2 | 1 | 17.5 | 3 | 19.4 |
| 2-4 | 0 | 0 | 0 | 0 |
| 5-18 | 1 | 2.6 | 0 | 0 |
| 19-54 | 5 | 7.5 | 15 | 5 |
| 55-64 | 3 | 22.4 | 14 | 16.6 |
| 65+ | 5 | 50.3 | 17 | 27.7 |
| Total | 15 | 10.5 | 49 | 8.3 |

*Cases per 100,000 population

Invasive group B *Streptococcus*, Clinical Presentations – Alaska, 2014

| | No. | %* |
|---------------------------|-----|-----|
| Bacteremia | 21 | 33 |
| Cellulitis | 17 | 27 |
| Pneumonia with bacteremia | 9 | 14 |
| Osteomyelitis | 4 | 6 |
| Septic arthritis | 4 | 6 |
| Amnionitis | 3 | 5 |
| Endocarditis | 2 | 3 |
| Meningitis | 1 | 1.5 |
| Necrotizing fasciitis | 1 | 1.5 |
| Peritonitis | 1 | 1.5 |
| Other | 1 | 1.5 |

*Percent of cases

