

# Arctic Investigations Program (AIP) Alaska Invasive Bacterial Disease Surveillance Report *Haemophilus influenzae* – 2014

## Background

AIP has conducted statewide surveillance of invasive *Haemophilus influenzae* since 1980. Invasive *H. influenzae* is 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 *Haemophilus influenzae* from a normally sterile site that has been taken from a resident of Alaska.

## 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 *Haemophilus influenzae* Cases by Race – Alaska, 2014

Race	Cases n (%)	Age Adjusted Rate*	% Male	Deaths n (%)
Alaska Native	12 (52)	7.9	58%	3 (25)
Non-Native	11 (48)	1.7	64%	2 (18)
Total	23		61%	5 (22)

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

## Invasive *Haemophilus influenzae*, Cases & Rates by Age Group & Race – Alaska, 2014

Age (years)	Alaska Native		Non-Native	
	No. Cases	Rate*	No. Cases	Rate*
<2	5	87.7	2	13
2-4	0	0	0	0
5-18	1	2.6	0	0
19-54	4	6	2	0.7
55-64	0	0	2	2.4
65+	2	20.1	5	8.2
Total	12	8.4	11	1.9

\*Cases per 100,000 population

## Invasive *Haemophilus influenzae*, Clinical Presentations – Alaska, 2014

	No.	%*
Pneumonia with bacteremia	12	52
Bacteremia	9	39
Meningitis	1	4
Cellulitis	1	4

\*Percent of cases

## Serotypes of Invasive *Haemophilus influenzae* Cases by Race & Age Group – Alaska, 2014

Race	Age (yrs)	a	b	f	NT*
AK Native	<2	2	0	0	3
	2-18	0	1	0	0
	19-64	0	0	0	3
	65+	0	0	0	2
Non-Native	<2	0	0	1	1
	2-18	0	0	0	0
	19-64	0	0	0	4
	65+	0	0	1	4

\*Non-typeable

## Vaccine Preventable Disease

In recent years, the prevalence of *H. influenzae* type b (Hib) has declined due to use of a childhood vaccine against this serotype. There were no cases of Hib in children less than 5 years old in 2014.