

# Arctic Investigations Program (AIP) Alaska Invasive Bacterial Disease Surveillance Report *Haemophilus influenzae* – 2015

## 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 2015 was 737,625; 144,274 (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, 2015

Race	Cases n (%)	Age Adjusted Rate*	% Male	Deaths n (%)
Alaska Native	10 (45)	6.2	70%	0 (0)
Non-Native	12 (55)	1.7	25%	0 (0)
Total	22		45%	0 (0)

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

## Invasive *Haemophilus influenzae*, Cases & Rates by Age Group & Race – Alaska, 2015

Age (years)	Alaska Native		Non-Native	
	No. Cases	Rate*	No. Cases	Rate*
<2	4	71.9	0	0
2-4	3	32.6	0	0
5-18	0	0	1	0.9
19-54	2	3	3	1
55-64	1	7.3	2	2.4
65+	0	0	6	9.3
Total	10	6.9	12	2

\*Cases per 100,000 population

## Invasive *Haemophilus influenzae*, Clinical Presentations – Alaska, 2015

	No.	%*
Pneumonia with bacteremia	12	55
Bacteremia	2	9
Meningitis	2	9
Septic arthritis	2	9
Other	4	20

\*Percent of cases

## Serotypes of Invasive *Haemophilus influenzae* Cases by Race & Age Group – Alaska, 2015

Race	Age (yrs)				
		a	b	f	NT*
AK Native	<2	3	0	0	1
	2-18	2	1	0	0
	19-64	1	0	0	2
	65+	0	0	0	0
Non-Native	<2	0	0	0	0
	2-18	0	0	0	1
	19-64	0	0	0	4
	65+	0	0	0	5

\*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 was one case of Hib in a child less than 5 years old in 2015; the child was fully vaccinated.