



# Infectious Disease Epidemiology Report

## Haemophilus influenzae, Maine 2013



### Background

*Haemophilus influenzae* (*H. influenzae*) is a bacterium that can cause a severe infection, occurring mostly in infants and children younger than five years of age. It can be spread from person to person through droplets in the air when a person who is infected sneezes or coughs. The bacteria can cause meningitis and infections in joints, lungs, and blood.

There are six identifiable types of *H. influenzae*, and other non-identifiable types (called nontypeable). The one that most people are familiar with is *H. influenzae* type b or Hib. There is a vaccine that can prevent disease caused by Hib, but not the other types.

### Methods

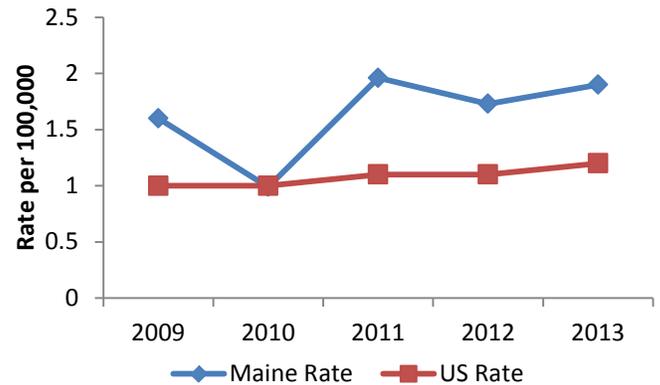
Invasive *H. influenzae* is a reportable condition in Maine. Maine CDC investigates all reports of invasive disease and completes standardized case report forms. Cultures or clinical specimens are required to be forwarded to Maine's Health and Environmental Testing Laboratory (HETL) for serotyping.

Cases of invasive *H. influenzae* are defined as persons with isolation of *H. influenzae* from a normally sterile site (e.g. blood or cerebrospinal fluid or, less commonly, joint, pleural, or pericardial fluid).

### Results

A total of 25 cases of invasive *H. influenzae* were reported in Maine in 2013, for a rate of 1.9 cases per 100,000 population (Figure 1). Rates were calculated using 2013 US census population estimates. This is an increase from 23 cases in 2012 and remains slightly higher than the national rate.

Figure 1: Rate of invasive *H. influenzae* by year – Maine, 2009-2013



The age range of cases was 5 months to 97 years, and the median age was 71 years. Two cases in children were serotype b (Hib) (Table 1). Both children were vaccinated but had not received the full series because they were underage.

Table 1: Number of invasive *H. influenzae* cases by age and serotype – Maine, 2013

Age (years)	Serotype				Total
	b	Non-b	Non-Typeable	Unknown*	
<5	2	0	1	0	3
5-17	0	0	0	0	0
18-44	0	0	0	0	0
45-64	0	2	2	0	4
≥65	0	6	9	3	18
<b>Total</b>	<b>2</b>	<b>8</b>	<b>12</b>	<b>3</b>	<b>25</b>

\*Unknown due to sample not being sent to HETL for testing.

Of the 25 invasive *H. influenzae* cases reported in 2013, 23 had pneumonia, 3 had sepsis, 2 had bacteremia, and 1 had cellulitis (cases could have multiple manifestations). Eighteen cases (72%) required hospitalization; and two deaths (8%) were associated with invasive *H. influenzae* disease in 2013.

Invasive *H. influenzae* disease was identified among residents in 6 of 16 Maine counties (Figure 2).

