Infectious Disease Epidemiology Report

Haemophilus influenzae, Maine 2010

Background
The Infectious Disease Epidemiology Program of the Maine Center for Disease Control and Prevention (Maine CDC) monitors the incidence of invasive Haemophilus influenzae (H. influenzae) through mandatory reporting by healthcare providers, clinical laboratories and other public health partners. This report summarizes surveillance data on cases of invasive H. influenzae from 2010.

Methods
Cases of invasive H. influenzae were defined as persons with isolation of H. influenzae from a normally sterile site (e.g., blood or cerebrospinal fluid [CSF] or, less commonly, joint, pleural, or pericardial fluid). Standardized case report forms were completed for each case in 2010. Serotyping was performed on H. influenzae isolates at the Maine’s Health and Environmental Testing Laboratory (HETL). Rates were calculated using 2010 U.S. census population.

Results
A total of 13 cases of invasive H. influenzae were reported in 2010. Two cases were serotype b (Table 1). The 2010 rate of H. influenzae in Maine was 1.0 cases per 100,000 population (Figure 1). All cases of non-serotype b were in adults over 45 years.

Table 1: Invasive H. influenzae by age and serotype – Maine, 2010

<table>
<thead>
<tr>
<th>Age</th>
<th>B No.</th>
<th>B %</th>
<th>Serotype</th>
<th>Non-B No.</th>
<th>Non-B %</th>
<th>Non-Type No.</th>
<th>Non-Type %</th>
<th>Unknown No.</th>
<th>Unknown %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>0</td>
<td>0</td>
<td>B</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5-17</td>
<td>0</td>
<td>0</td>
<td>Non-B</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-34</td>
<td>0</td>
<td>0</td>
<td>Non-Type</td>
<td>1</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35-44</td>
<td>1</td>
<td>50</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>45-64</td>
<td>0</td>
<td>0</td>
<td></td>
<td>1</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;65</td>
<td>1</td>
<td>50</td>
<td>Unknown</td>
<td>4</td>
<td>80</td>
<td>4</td>
<td>80</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

Total 2 100 5 100 5 100 1 100

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

Invasive H. influenzae disease was identified among residents in 11 of 16 Maine counties (Figure 2).

Figure 1: Rate of H. influenzae by year - Maine 2005-10
Discussion
In 2010, there were no Hib cases identified in infants or young children in Maine. Unvaccinated household and day care contacts of a known Hib case are at higher risk for the disease because the bacteria is spread from person to person by airborne droplets through coughing or sneezing.

Prophylaxis with antibiotics is recommended for all household members and close contacts of someone diagnosed with Hib disease only if there is at least one unvaccinated child under 4 years of age or a child or adult with a weak immune system lives in the home.

A vaccine against Hib is available in the United States and recommended for the following individuals:
- All infants beginning at 2 months of age.
- Persons older than 59 months of age who have high-risk conditions including sickle cell disease, HIV/AIDS, asplenia, bone marrow transplant or are profoundly immunocompromised.

Maintaining high vaccination rates, particularly among children in child-care settings, is important to prevent Hib. There are no vaccines for use against non-serotype b disease.

_H. influenza_ disease should be reported to Maine CDC by calling 1-800-821-5821 or faxing to 1-800-293-7534. For more information contact your healthcare provider or local health center.

Additional information about H. influenzae can be found at: