Influenza Activity Update

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Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2012-13 and Selected Previous Seasons

Week
% of Visits for ILI

2012-13 (current season)
2011-12 (mild season)
2010-11
2009-10 (pandemic)
2007-08 (moderately severe season)
2003-04 (moderately severe season)
National Baseline
Data from the Influenza Hospitalization Surveillance Network (FluSurv-NET), a population-based surveillance for influenza related hospitalizations in children and adults in 15 US states. Incidence rates* are calculated using the National Center for Health Statistics’ (NCHS) population estimates for the counties included in the surveillance catchment area.

*Cumulative Incidence Rates

Pneumonia and Influenza Mortality for 122 U.S. Cities
Week Ending May 4, 2013
Pneumonia and Influenza Mortality and Type/Subtype of Virus, 1995-96 to 2012-13 seasons

* 2008-09 season = wk 40, 2008 – wk 34, 2009
** 2009-10 season starts at wk 35, 2009

Number of Influenza-Associated Pediatric Deaths by Week of Death: 2009-10 season to present

<table>
<thead>
<tr>
<th>Date</th>
<th>Influenza A (2009 H1N1)</th>
<th>Influenza A (H3N2)</th>
<th>Influenza A (Subtype Unknown)</th>
<th>Influenza B</th>
<th>Influenza A and B</th>
<th>Type not determined</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># Deaths Reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Week –16</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td># Deaths Since</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 30, 2012</td>
<td>4</td>
<td>28</td>
<td>31</td>
<td>74</td>
<td>1</td>
<td>0</td>
<td>138</td>
</tr>
</tbody>
</table>

2009-10: Number of Deaths Reported = 282
2010-11: Number of Deaths Reported = 123
2011-12: Number of Deaths Reported = 34
2012-13: Number of Deaths Reported = 138
Influenza-Associated Pediatric Deaths 2012-13 Season

- 73 (54%) of children had influenza B infections
- 68% of children were 5 years of age or older
- 56% had a high risk condition
- Typically ~20% of children with known vaccination status are fully vaccinated

Influenza A (H7N9)
Influenza A (H7N9) in China

• First 3 cases were reported by China on March 31
• Virus is different from other H7 viruses that have infected humans
• Better adapted for infecting mammals than H5N1 but not fully adapted
• Poultry believed to be the source of human infections
• Low pathogenicity in poultry

Influenza A (H7N9) Summary — China

<table>
<thead>
<tr>
<th>Cumulative counts since 19 Feb 2013</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of provinces/municipalities/areas with confirmed cases</td>
<td>8 / 2 / 1</td>
</tr>
<tr>
<td>Number of confirmed cases*</td>
<td>131</td>
</tr>
<tr>
<td>Number of fatal confirmed cases</td>
<td>35</td>
</tr>
</tbody>
</table>

* Confirmed cases include persons with laboratory confirmation of H7N9 infection through report from China CDC or Provincial CDC
Epi-Curve of Avian Influenza A (H7N9) Virus Cases by Onset of Illness Date and Province, Municipality, or Area, 18 Feb - 12 May 2013 (N=131)

- Hunan (n=2)
- Fujian (n=5)
- Jiangsu (n=6)
- Taiwan (n=1)
- Shandong (n=2)
- Hainan (n=1)
- Beijing (n=1)
- Zhejiang (n=48)
- Jiangsu (n=27)
- Anhui (n=4)
- Shanghai (n=33)
Age Distribution of H5N1 Compared to Avian (H7N9) cases in China

- H5N1 cases (n=45)
- H7N9 cases (n=128)

Age and Gender Distribution of Avian (H7N9) Cases in China

- Female (n=36)
- Male (n=92)
Domestic Surveillance for H7N9

• Reagents for detection of H7 viruses are available for public health laboratories
• >50 ill returning travelers from China have been tested
  – No unusual viruses identified

Questions?