Communicable Disease Epidemiology Influenza Update

2011 CDC Weeks 30-32 (7/30/11–8/13/11)

Please note that all data are preliminary and may change as more reports are received.

Summary:
This report is updated on a monthly basis during the summer.
• There was almost no influenza activity detected in Washington during weeks 30-32.

Laboratory Data

World Health Organization/National Respiratory and Enteric Virus Surveillance System (WHO/NREVSS)

Three laboratories in Washington, the Washington State Public Health Laboratories, the Seattle & King County Public Health Laboratory, and the University of Washington/Children’s Hospital Laboratory, participate in WHO/NREVSS. WHO/NREVSS laboratory data from Washington are shown in the following table and figure.

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>No. Labs Reporting</th>
<th>A(H1)</th>
<th>A (2009 H1N1)</th>
<th>A (H3)</th>
<th>A (Unable to subtype)</th>
<th>A (Subtyping not performed)</th>
<th>B</th>
<th>Total Influenza</th>
<th>Total # Tested</th>
<th>% Influenza Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-Jul</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>30-Jul</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>6-Aug</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>70</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>13-Aug</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>71</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>


Public Health Reporting of Electronic Data (PHRED)

Five large commercial laboratories in Washington report the number of influenza positive results obtained each week to DOH through PHRED. During CDC week 29-32 (7/17–8/13), these five labs reported 0 positive influenza specimens. No pre-pandemic data from this system are available.

For additional information on respiratory virus testing in Washington, please refer to the following websites:
Influenza-like Illness Data

Syndromic Surveillance Data
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics) WA:
The following graphs show the proportion of emergency department visits, by CDC week, for a syndrome of influenza-like illness (ILI). A syndrome of ILI is derived from the chief complaint and is defined as “influenza” OR fever with cough or sore throat.

Western Washington: For week 32, emergency departments in Western Washington reported 56 ILI visits (0.3%) out of 18078 total patient visits.

![Percentage of ER Visits for ILI by CDC Week, Western Washington, 2007–2011](image)

Eastern Washington: For week 32, emergency departments in Eastern Washington reported 24 ILI visits (0.4%) out of 5771 total patient visits. No data are available prior to 2009.

![Percentage of ER Visits for ILI by CDC Week, Eastern Washington, 2009–2011](image)
Mortality Data

Pneumonia and Influenza (P&I) Mortality
DOH analyzes death records to determine the weekly proportion of deaths due to pneumonia and influenza (P&I). The below graph indicates the weekly proportion of deaths due to P&I during 2005 – present. Data points for the most recent 8–12 weeks do not represent all deaths in the state since there is a delay in submitting death records to DOH.

During week 28, 26 (11%) of 229 deaths reported to DOH were due to P&I.

Laboratory-confirmed Influenza Deaths
Since July 25, 2010, the Department of Health (DOH) has received reports of 36 laboratory-confirmed influenza deaths. Of these deaths, 8 were due to influenza A (H3) virus, 15 were due to influenza A (2009 H1N1), 11 were due to influenza A virus of unknown subtype and 2 were due to influenza B virus. Of 34 patients with data on pre-existing conditions, 28 (82%) had at least one ACIP-defined pre-existing medical condition which put them at high risk for complications from influenza. Of the 6 remaining cases, 3 had either smoking or obesity as a risk factor.

Number and Rate of Fatal Laboratory-Confirmed Influenza Cases by Age Group, Washington, July 25, 2010 – August 13, 2011

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>No. Deaths</th>
<th>Death Rate (per 100,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–4</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>5–24</td>
<td>3</td>
<td>0.16</td>
</tr>
<tr>
<td>25–49</td>
<td>4</td>
<td>0.17</td>
</tr>
<tr>
<td>50–64</td>
<td>16</td>
<td>1.24</td>
</tr>
<tr>
<td>65+</td>
<td>13</td>
<td>1.63</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>0.53</td>
</tr>
</tbody>
</table>
Laboratory-confirmed Influenza Hospitalizations

Spokane Regional Health District requires that their hospitals and providers report patients hospitalized with laboratory-confirmed influenza. Since October 3, 2010, 88 adults and 36 children hospitalized with laboratory-confirmed influenza have been reported among Spokane County residents. Cumulative hospitalization rates by age group and hospitalized cases by week of illness onset are shown on the below graphs.

### Laboratory-Confirmed Cumulative Hospitalization Rates by Age Group (per 100,000), Spokane County, Washington 2010–2011

The graph shows the cumulative hospitalization rates per 100,000 population by age group for the influenza season 2010–2011. The rates are color-coded to indicate different age groups: 0-4 yr, 5-17 yr, 18-49 yr, 50-64 yr, and 65+ yr. The rate for 2010 is indicated by a dotted line.

### Hospitalized Laboratory-Confirmed Influenza Cases by Week of Illness Onset, Spokane County, Washington 2010–2011

The graph displays the number of hospitalized cases by week of illness onset. The cases are color-coded to represent different flu types: Flu Type Unknown, A (2009 H1N1), A (H3), and A (Subtype Unknown).

#### Additional Resources:

**International Influenza Data:**

**National Influenza Data**
National influenza surveillance data are available at: [http://www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)
Distribute: [http://isdsdistribute.org/](http://isdsdistribute.org/)

**Local Influenza Surveillance Reports:**
King County: [http://www.kingcounty.gov/healthservices/health/communicable/immunization/fluactivity.aspx](http://www.kingcounty.gov/healthservices/health/communicable/immunization/fluactivity.aspx)
Whatcom County: [http://www.whatcomcounty.us/health/flu/index.jsp](http://www.whatcomcounty.us/health/flu/index.jsp)
Yakima County: [http://yakimahealthdistrict.org/commhealth/immproviders.htm](http://yakimahealthdistrict.org/commhealth/immproviders.htm)