Summary

- During Week 5 (02/01/15 – 02/07/15) influenza activity in Clark County remained elevated, but was decreasing compared to previous weeks.
- Influenza activity is geographically widespread in Washington State.
- During Week 5, the proportion of outpatient visits for influenza-like illness (ILI) in Washington State was 2.5%, surpassing the state baseline of 1.1% for the tenth consecutive week.
- Nationally, 48 states report regional or widespread influenza activity.

Laboratory Data from Reporting Laboratories

The positivity rate is the percent of influenza tests done by reporting laboratories for this influenza season that are positive. Historically, the CDC has used ≥10% positivity to define flu seasons for modeling studies and for calculating influenza-like-illness baselines.

<table>
<thead>
<tr>
<th>CDC Week</th>
<th>Flu Week</th>
<th>Date Range</th>
<th>A (H1)</th>
<th>A (2009 H1N1)</th>
<th>A (H3)</th>
<th>A (not sub-typed)</th>
<th>Type B</th>
<th>Total influenza</th>
<th>No. Tested</th>
<th>Positivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>01/04-01/10</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>82</td>
<td>3</td>
<td>89</td>
<td>236</td>
<td>37.7%</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>01/11-01/17</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>72</td>
<td>1</td>
<td>76</td>
<td>253</td>
<td>30.0%</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>01/18-01/24</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>65</td>
<td>1</td>
<td>69</td>
<td>276</td>
<td>25.0%</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>01/25-01/31</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>51</td>
<td>1</td>
<td>56</td>
<td>204</td>
<td>27.5%</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>02/01-02/07</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>40</td>
<td>1</td>
<td>41</td>
<td>219</td>
<td>18.7%</td>
</tr>
</tbody>
</table>
Reporting laboratories also report what strain of influenza came back positive. The colored bars represent how much of each strain of influenza is being reported while the black line is the percent of reported lab tests being positive. During Week 5, CDC reported 14.87% of influenza tests as positive, Washington State reported 10.5% positive, and Clark County reported 18.72% positive.
During the 2014-2015 influenza season there have been a higher than usual number of outbreaks in LTCFs. Year to date, there have been 7 confirmed outbreaks. For comparison, there were 2 influenza outbreaks in LTCFs during the 2013-2014 season. Currently, there is only 1 active outbreak, and all evidence indicates that it is largely controlled.
2014-2015 influenza vaccines include either 3 or 4 strains of influenza. The trivalent vaccines have three strains: influenza A (H1N1), influenza A (H3N2), and influenza B (Yamagata lineage) strain. The quadrivalent vaccines have four strains which are the same as the trivalent vaccine strains except they have an additional influenza B (Victoria lineage) strain.

CDC recently released an interim estimate of seasonal vaccine match, noting that overall vaccine effectiveness against laboratory confirmed influenza associated with medically attended acute respiratory illness was 23% (95% confidence interval = 8% - 36%). The full report can be found HERE.

As influenza season continues, CDC antigenically characterizes influenza viruses it receives to see how well they match the vaccine strains. Since October 1, CDC has characterized 809 influenza viruses [21 A(H1N1)pdm09, 634 A(H3N2), and 154 influenza B viruses].

**Influenza A (2009 H1N1) [vaccine strain: A/California/7/2009]**
- 21 (100%) 2009 H1N1 virus tested was characterized as A/California/7/2009-like, the influenza A (H1N1) component of the 2014-2015 Northern Hemisphere influenza vaccine.

**Influenza A (H3N2) [vaccine strain: A/Texas/50/2012]**
- 199 (31.4%) of the 634 H3N2 viruses tested have been characterized as A/Texas/50/2012-like, the influenza A (H3N2) component of the 2014-2015 Northern Hemisphere influenza vaccine.

**Influenza A (H3N2) [A/Switzerland/9715293/2013]** (Not a component of the current seasonal vaccine)
- 435 (68.6%) of the 634 H3N2 viruses tested showed either reduced titers with antiserum produced against A/Texas/50/2012 or belonged to a genetic group that typically shows reduced titers to A/Texas/50/2012. Among viruses that showed reduced titers with antiserum raised against A/Texas/50/2012, most were antigenically similar to A/Switzerland/9715293/2013. A/Switzerland/9715293/2013 is related, but antigenically and genetically distinguishable, from the A/Texas/50/2012 vaccine virus.

**Influenza B [vaccine strain: B/Massachusetts/2/2012 (Yamagata lineage)]**
- 100 (93.4%) of the 107 B/Yamagata-lineage viruses were characterized as B/Massachusetts/2/2012-like, which is included as an influenza B component of the 2014-2015 Northern Hemisphere trivalent and quadrivalent influenza vaccines. Seven (6.6%) of the B/Yamagata-lineage viruses tested showed reduced titers to B/Massachusetts/2/2012.

**Influenza B [quadrivalent vaccine strain: B/Brisbane/60/2008-like virus (Victoria lineage)]**
- 43 (91.5%) of the 47 B/Victoria-lineage viruses were characterized as B/Brisbane/60/2008-like, the virus that is included as an influenza B component of the 2014-2015 Northern Hemisphere quadrivalent influenza vaccine. Four (8.5%) of the 7 B/Victoria-lineage viruses tested showed reduced titers to B/Brisbane/60/2008.

**Influenza-like-Illness (ILI)**

Sentinel Provider Data are the percent of patient visits to a clinic that meet the case definition for influenza-like illness (ILI). ILI is defined as fever ≥ 100° F or 37.8° C (oral or equivalent) AND cough and/or sore throat (in the absence of a known cause other than influenza). National ILI patient visits during Week 5 were 3.76%. Washington influenza-like-illness measures were 2.5% in Week 5, above the baseline of 1.1%. The Week 41 spike in the Washington ILI data below is attributable to a high incidence of ILI visits at one facility.
Google Flu Trends uses aggregate Google search data to estimate current flu activity. According to this measure, flu activity this year is similar to activity in previous years at this time. Below are the current estimates for Washington and Oregon compared to the past 7 years. [http://www.google.org/flutrends/](http://www.google.org/flutrends/)

**Other Respiratory Diseases of Interest**

**Avian Influenza in Canada and Western United States**

Since early December avian influenza has been detected in wild and domestic birds across a number of states in the western US and Canada. The CDC released an [MMWR summarizing outbreaks of avian influenza](http://www.cdc.gov/mmwr/preview/mmwrarchives/mmwr38w06.pdf) in the US through January 2015. Of reported avian influenza detections and outbreaks, 24 people reported exposure to infected birds. Of those people, none have developed lab-confirmed avian influenza.

**MERS-CoV:**

Middle East Respiratory Syndrome (MERS-CoV) is a novel coronavirus being reported out of the Arabian Peninsula, primarily Saudi Arabia. Most cases have been in the elderly and those with chronic medical conditions. As of February 2015, 978 laboratory confirmed cases, and at least 358 related deaths have been reported to the WHO. There is some evidence linking this virus to camels, although this is not definitive.

**Avian Flu (H7N9) in China:**

Two Canadian travelers, who reported visiting China, were recently diagnosed with avian influenza A (H7N9) in North America. Additionally, more than 500 cases have been reported globally since March 2013. On February 6, 2015 [CDC released an advisory](http://www.cdc.gov/flu/avian/index.htm) that people travelling to China should avoid contact with poultry, birds, and bird droppings.
Cowlitz and Clark Counties are sister local health jurisdictions in Washington State. Although separate entities, both share a common goal of preventing disease and promoting public health. To that end, Cowlitz and Clark County often partner in disease response efforts. This year, Cowlitz and Clark counties are working together to provide reliable influenza surveillance; and subsequent reports through the 2014-2015 influenza season will include a section dedicated Cowlitz County data.

All data are preliminary and may change as more reports are received

Laboratory Data from Reporting Laboratories

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<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>01/04-01/10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>18</td>
<td>117</td>
<td>15.4%</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>01/11-01/17</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>28</td>
<td>0</td>
<td>28</td>
<td>159</td>
<td>17.6%</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>01/18-01/24</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>34</td>
<td>1</td>
<td>37</td>
<td>174</td>
<td>21.2%</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>01/25-01/31</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>119</td>
<td>8.4%</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>02/01-02/07</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>9</td>
<td>76</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

*Includes Influenza A/B Rapid Antigen Tests
Influenza in Local News

Flu hospitalizations of elderly hit record high, CDC says  

New Detection of Bird Flu in Okanogan County  

Flu vaccine not working well; only 23 percent effective  

Flu now widespread in Oregon, state health data show  

Resources on Influenza Activity in Washington and Nationwide

National influenza surveillance data are available at:  
http://www.cdc.gov/flu/weekly/

Washington influenza surveillance data are available at:  
http://www.doh.wa.gov/Portals/1/Documents/5100/420-100-FluUpdate.pdf

Oregon influenza surveillance data available at:  

Recommendations of the Advisory Committee on Immunization Practices – ACIP – Influenza 2014-2015:  
http://www.cdc.gov/flu/professionals/acip/index.htm

Disease outbreak news from the World Health Organization (WHO):  
http://www.who.int/csr/don/en/

CDC Seasonal Influenza doses distributed:  
http://www.cdc.gov/flu/professionals/vaccination/vaccinesupply.htm

Contact Information

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