Influenza Weekly Report

2015 Week 1 (January 4 – 10) through 2016 Week 1 (January 3 – 9)

Department of Health and Human Services
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Office of Public Health Informatics and Epidemiology

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January 2016
Edition 1.0
Data for the graphs and tables on the following pages are provisional and may be updated as additional information becomes available.

**Purpose**

The purpose of this report is to provide an overview of and statistics for the influenza season in Nevada for the local public health authorities, sentinel providers and the public.

**Influenza-Like Illness Network Surveillance (ILINet)**

Respiratory specimens are tested for influenza by the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NRVESS) collaborating laboratories by sub-type. During week 1, there were 15,198 specimens collected and tested for influenza, of those 540 were positive (3.6%).

**Figure 1**

![National Influenza Positive Tests by Week 53 Week Comparison (2015 WK 1 - 2016 WK 1)](image)


The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 1, there were 31 specimen collected and tested for influenza of which 5 were positive (16.1%).

**Figure 2**

![Nevada (ILI Providers) Influenza Laboratory Confirmed Positive by Week 53 Week Comparison (2015 WK 1 - 2016 WK 1)](image)

*Source of Data: CDC: ILINet.*
Nevada State Public Health Laboratory (NSP HL) has tested 39 specimens for influenza from sentinel providers, of which there have been 8 positive (20.5%). Southern Nevada Public Health Laboratory (SNP HL) has tested 125 specimens this season of which there have been 4 positive (3.2%). Nationally, there have been 218,418 specimens sent to the WHO and NERVSS laboratories of which 4,706 have been positive or 2.2%. The national numbers in Table 1 are reflected in Figure 1. The state of Nevada data in Table 1 is reflected in Figure 2. The Nevada total includes laboratory test for all Nevada residents including out of state laboratories.

Table 1

<table>
<thead>
<tr>
<th>ILINet Surveillance: Influenza Specimens Tested State and Nationally</th>
<th>NSP HL</th>
<th>SNP HL</th>
<th>State of Nevada (Week 1)</th>
<th>State of Nevada (Season)</th>
<th>National (Week 1)</th>
<th>National (Season)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens Tested</td>
<td>39</td>
<td>125</td>
<td>31</td>
<td>401</td>
<td>15,198</td>
<td>218,418</td>
</tr>
<tr>
<td>Positives to Influenza</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>28</td>
<td>540</td>
<td>4,706</td>
</tr>
<tr>
<td>Influenza A:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2009 H1N1)</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>25</td>
<td>386</td>
<td>3,047</td>
</tr>
<tr>
<td>(H3)</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>15</td>
<td>58</td>
<td>421</td>
</tr>
<tr>
<td>(Sub-typing not performed)</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>480</td>
</tr>
<tr>
<td>Influenza B:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Victoria Lineage)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>154</td>
<td>1,659</td>
</tr>
<tr>
<td>(Yamagata Lineage)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>(Sub-typing not performed)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>104</td>
</tr>
</tbody>
</table>

Source of Data: CDC: FluView Report and CDC: ILINet.

Influenza-like Illness (ILI) Surveillance Network has each sentinel providers report the number of patients that meet the ILI case definition and number of patients that visit the provider weekly. The “percentage of visits” is the number of ILI patients divided by the total number of patients visit per week. Nevada’s ILI percentage of visits to providers for week 1 is 1.6% and is above the state baseline. Region 9 ILI percentage for week 1 is 1.5% and is below the region baseline 2.6%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 1 is 2.0% and is below the national baseline 2.1%.

Figure 3

Source of Data: CDC: FluView Report and CDC: ILINet.

During week 1, 1.6% of visits to sentinel providers were due to ILI; this is lower than the 2014-2015 influenza season (3.7%). There were 10,733 patients seen by ILI providers during week 1, of which 179 patients presented with ILI; week 1 of 2015, there were 637 patients seen with ILI (16,223 total patients seen). There was no week 53 in the previous influenza seasons displayed below; therefore the week 53 data point for those seasons is an average of week 52 and 1.
Influenza-like Illness is reported by age groups, during week 1, patients age 0-4 were the greatest number of patients seen with ILI, at 69 patients seen. The rate for week 1 is 6.0 per 100,000 population. The rate is calculated by the number of patients presented with ILI, divided by the state population, multiplied by 100,000. The estimated state population for 2016 is 2,880,169.

**Influenza Positive Surveillance (NBS and NETSS)**

Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 1, there were 163 influenza cases reported to the state, 4 H1N1 influenza A, 123 influenza A (H3 or unknown subtyping) and 20 influenza B case.

**Table 2**

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Reported Influenza Cases by County Jurisdiction and Influenza Type</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H1N1 A B Unknown</td>
<td>Total</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>0 12 3 0 15</td>
<td></td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0 1 2 0 3</td>
<td></td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>4 100 10 15 129</td>
<td></td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>0 10 5 1 16</td>
<td></td>
</tr>
<tr>
<td>State of Nevada</td>
<td>4 123 20 16 163</td>
<td></td>
</tr>
</tbody>
</table>

*Source: OPHIE: NBS and SNHD: NETSS.*
Hospitalizations

There was 15 hospitalization associated with influenza reported to the state health authority for week 1.

Table 3

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Current Week (Week 1)</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>12</td>
<td>57</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>15</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Reported to Office of Public Health Informatics and Epidemiology from each Jurisdiction.

Pneumonia and Influenza (P&I) Mortality Surveillance

The Pneumonia and Influenza (P&I) mortality percentage is the deaths, where Pneumonia or Influenza is listed as the underlying or contributing cause of death, divided by the total deaths in Nevada for each week. As of January 19, there were 15 P&I deaths and 427 total deaths for week 1. The P&I mortality percent is below the threshold at 3.5% (threshold 7.0%). Nationally, the P&I mortality is below the national epidemic threshold at 6.4% for week 1.

Figure 7

Source: OVR: WEVRRS and CDC: FluView.
Technical Notes

- Influenza-like illness (ILI): a fever greater than or equal 100°F with cough and/or sore throat
- Percent positive: The number of positive influenza laboratory tests divided by the total number of tests performed.
- Incidence rate is per 100,000 population as estimated by the state demographer.

This report contains information from national and state-level data sources. Influenza surveillance data is collected by a various systems, including:

- Influenza-like Illness Network (ILINet): a sentinel surveillance system in collaboration with the Centers for the Disease Control and Prevention (CDC) where outpatient providers report ILI information weekly.
- National Electronic Telecommunication System for Surveillance (NETSS): a system whereby data is transmits to CDC. Influenza data collected through NETSS does not provide influenza sub-typing information.
- National Electronic Disease Surveillance System (NEDSS): a system for collecting data and monitoring disease trends and outbreaks.
- NEDSS Based System (NBS): an implementation of the NEDSS standards. It provides a secure, accurate, and efficient means of collecting, transmitting, and analyzing public health data.

Citations


Comments, suggestions, and requests for further information may be addressed to:

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Recommended Citation: