Influenza Weekly Report

2014 Week 45 (November 2 – 8) through 2015 Week 45 (November 8 – 14)

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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 45, there were 15,063 specimens collected and tested for influenza, of those 256 were positive (1.7%).

![National Influenza Positive Tests by Week](source)

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 45, there were 33 specimen collected and tested for influenza of which 4 were positive (12.1%).

![Nevada (ILI Providers) Influenza Laboratory Confirmed Positive by Week](source)
Nevada State Public Health Laboratory (NSPHL) has tested 21 specimens for influenza from sentinel providers, of which there have been 2 positive (9.5%). Southern Nevada Public Health Laboratory (SNPHL) has tested 58 specimens this season of which there have been no positives. Nationally, there have been 85,853 specimens sent to the WHO and NERVS laboratories of which 1,330 have been positive or 1.5%. 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>NSPHL</th>
<th>SNPHL</th>
<th>State of Nevada (Week 45)</th>
<th>State of Nevada (Season)</th>
<th>National (Week 45)</th>
<th>National (Season)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Specimens Tested</td>
<td>21</td>
<td>58</td>
<td>33</td>
<td>141</td>
<td>15,063</td>
<td>85,853</td>
</tr>
<tr>
<td>Positives to Influenza</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>12.1</td>
<td>4</td>
<td>2.8</td>
</tr>
<tr>
<td>A (2009H1N1)</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>100</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>A (H3)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>A (Sub-typing not performed)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>100</td>
<td>1</td>
<td>25.0</td>
</tr>
<tr>
<td>B (Victoria Linage)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>B (Yamagata Linage)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>B (Sub-typing not performed)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</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 45 is 1.3% and is below the state baseline 1.5%. Region 9 ILI percentage for week 45 is 1.8% 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 45 is 1.7% and is below the national baseline 2.1%.

Figure 3

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

During week 45, 1.3% of visits to sentinel providers were due to ILI; this is higher than the 2014-2015 influenza season (0.7%). There were 9,717 patients seen by ILI providers during week 45, of which 123 patients presented with ILI; week 45 of 2014, there were 114 patients seen with ILI (17,180 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 Weekly Report

v 2015 i 45 (November 8 – 14, 2015)

Figure 4

Nevada Percentage of Visits for Influenza-like Illness, Weekly Summary
54 Week Comparison (2009-2015)

Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 45, patients age 0-4 were the greatest number of patients seen with ILI, at 50 patients seen. The rate for week 45 is 4.3 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 2015 is 2,855,061.

Figure 5

ILINet: Influenza-like Illness by Age Group and MMWR Week and the Incidence Rate
54 Week Comparison (2014 WK 45 - 2015 WK 45)

Source of Data: CDC: ILINet.

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 45, there were 8 influenza cases reported to the state, 5 influenza A, 1 influenza B case and 2 unknown sub-typing.

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>Current Week (Week 45)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H1N1</td>
<td>A</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: OPHIE: NBS and SNHD: NETSS.
There was 1 hospitalization associated with influenza reported to the state health authority for week 45.

Table 3

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Current Week (Week 45)</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>1</td>
<td>11</td>
</tr>
</tbody>
</table>

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 December 11, there were 17 P&I deaths and 419 total deaths for week 45. The P&I mortality percent is below the threshold at 3.9% (threshold 6.3%). Nationally, the P&I mortality is below the national epidemic threshold at 6.3% for week 45.
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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