Weekly Report

2016 Week 9 (February 28 – March 05, 2016) through 2017 Week 9 (February 26 – March 04)

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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.

**Sentinel Provider Data: 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 09, there were 36,545 specimens collected and tested for influenza, of those 7,954 were positive (21.8%).

Figure 1

![National Influenza Positive Tests by Week](chart1.png)


The Nevada total includes laboratory tests for all Nevada residents tested by sentinel providers including out of state laboratories. During week 09, there were 26 specimens collected and 6 were positive (23.1%). There is a two week delay for laboratory surveillance. Data are subject to change as we receive additional reports.

Figure 2

![Nevada (ILI Providers) Influenza Laboratory Confirmed Positive by Week](chart2.png)

*Source of Data: CDC: ILINet.*
Nevada State Public Health Laboratory (NSPHL) has tested 284 specimens for influenza from sentinel providers, of which there have been 246 positive (86.6%). Southern Nevada Public Health Laboratory (SNPHL) has tested 61 specimens this season of which there have been 5 positives. Nationally, there have been 641,449 specimens sent to the WHO and NERVSS laboratories of which 109,201 have been positive (17%). 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 tested by sentinel providers, including out of state laboratories.

Table 1

<table>
<thead>
<tr>
<th>Influenza Specimens Tested State and Nationally through Sentinel Providers</th>
<th>NSPHL</th>
<th>SNPHL</th>
<th>All Other Laboratories</th>
<th>State of Nevada (Week 09)</th>
<th>State of Nevada (Season)</th>
<th>National (Week 09)</th>
<th>National (Season)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Specimens Tested</td>
<td>284</td>
<td>61</td>
<td>460</td>
<td>26</td>
<td>805</td>
<td>36,545</td>
<td>641,449</td>
</tr>
<tr>
<td>Influenza Positives</td>
<td>246</td>
<td>5</td>
<td>73</td>
<td>6</td>
<td>23.1</td>
<td>324</td>
<td>40.2</td>
</tr>
<tr>
<td>Influenza A:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (2009 H1N1)</td>
<td>242</td>
<td>5</td>
<td>67</td>
<td>5</td>
<td>83.3</td>
<td>314</td>
<td>96.9</td>
</tr>
<tr>
<td>A (H3)</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>A (Sub-typing not performed)</td>
<td>233</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>60.0</td>
<td>244</td>
<td>77.7</td>
</tr>
<tr>
<td>Influenza B:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B (Victoria Lineage)</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>16.7</td>
<td>10</td>
<td>3.1</td>
</tr>
<tr>
<td>B (Yamagata Lineage)</td>
<td>0</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>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>50.0</td>
</tr>
</tbody>
</table>

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

Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The “percentage of visits for ILI” is the number of ILI patients divided by the total number of patients visit per week. Nevada’s percentage of ILI visits for week 09 is 1.8% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 09 is 2.3% which is the below the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 09 is 3.7% which is above the national baseline 2.2%.

Figure 3

Source of Data: CDC: Flu View Report and CDC: ILINet.
During week 09, 1.8% of visits to sentinel providers were due to ILI; this is lower than the 2015-2016 influenza season (2.9%). There were 11,580 patients seen by sentinel providers during week 09, of which 207 patients presented with ILI; week 09 of 2016, there were 556 patients seen with ILI (19,201 total patients seen).

**Figure 4**

Nevada Percentage of Visits for Influenza-like Illness, Weekly Summary
53 Week Comparison (2011-2017)

Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 09, patients age 0-4 were the greatest number of patients seen with ILI, at 73 patients seen. The rate for week 09 is 7.1 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 2017 is 2,935,490.

**Figure 5**

ILNet: Influenza-like Illness by Age Group and MMWR Week and Incidence Rate
53 Week Comparison (2016 WK 09 - 2017 WK 09)

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 09, there were 194 influenza cases reported to the state, 142 influenza A, 42 influenza B and 10 unknown subtyping.

**Table 2**

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Reported Influenza Cases by County Jurisdiction and Influenza Type</th>
<th>Reported Influenza Cases by County Jurisdiction and Influenza Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td>Current Week (Week 09) A: 18 B: 2 Unknown: 0 Total: 20</td>
<td>Cumulative Influenza Season A: 789 B: 8 Unknown: 2 Total: 799</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>8 3 3 14</td>
<td>588 27 37 622</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>86 32 6 124</td>
<td>2,955 320 190 3,465</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>30 5 1 36</td>
<td>1,906 62 134 2,102</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>142 42 10 194</td>
<td>6,208 417 363 6,988</td>
</tr>
</tbody>
</table>

Source: OPHIE: NBS and SNHD: NETSS.
Hospitalizations

There were 7 hospitalization associated with influenza reported to the state health authority for week 09.

Table 3

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Current Week (Week 09)</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>2</td>
<td>160</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>5</td>
<td>268</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>7</td>
<td>473</td>
</tr>
</tbody>
</table>

Pneumonia and Influenza (P&I) Mortality Surveillance

The Pneumonia and Influenza (P&I) mortality percentage is all 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 March 27th, there were 29 P&I deaths and 393 total deaths for week 09 in Nevada. National baseline is 7.7% for week 09.
Technical Notes

- Data are subject to changes, additionally, there is a lag in reporting.
- Influenza surveillance procedures vary by jurisdiction.
- 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 transmitted 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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