Influenza Weekly Report

2017 Week 14 (April 2 – April 8, 2017) through 2018 Week 14 (April 1 – April 7, 2018)

Department of Health and Human Services
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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 14, there were 20,397 specimens collected and tested for influenza, of those 2,811 were positive (13.8%).

Figure 1

National Influenza Positive Tests by Week
53 Week Comparison (2017 WK 14 - 2018 WK 14)

Source of Data: CDC FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents tested by sentinel providers including out of state laboratories. Laboratory data is obtained from CDC’s ILINet system. During week 14, where there were 40 specimens collected, in which 4 were positive. 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
53 Week Comparison (2017 WK 14 - 2018 WK 14)

Source of Data: CDC: ILINet.
Nevada State Public Health Laboratory (NSPHL) has tested 618 specimens for influenza from sentinel providers, of which there have been 532 positive (86.1%). Southern Nevada Public Health Laboratory (SNPHL) has tested 104 specimens this season of which there have been 7 positive. Nationally, there have been 1,188,456 specimens sent to the WHO and NERVSS laboratories of which 264,470 have been positive (22.3%). 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></th>
<th>NSPHL</th>
<th>SNPHL</th>
<th>All Other Laboratories</th>
<th>State of Nevada (Week 14)</th>
<th>State of Nevada (Season)</th>
<th>National (Week 14)</th>
<th>National (Season)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens Tested</td>
<td>618</td>
<td>104</td>
<td>1,221</td>
<td>40 - 7%</td>
<td>20,397</td>
<td>1,188,456</td>
<td></td>
</tr>
<tr>
<td>Influenza Positives</td>
<td>532</td>
<td>7</td>
<td>291</td>
<td>4 - 10.0%</td>
<td>830 - 42.7%</td>
<td>2,811 - 13.8%</td>
<td>264,470 - 22.3%</td>
</tr>
</tbody>
</table>

Influenza A:
- 2009 H1N1: 321, 4, 220, 0, 0, 545, 65.7, 970, 34.5, 184,679, 69.8
- H3: 301, 3, 8, 0, 0, 312, 57.2, 65, 6.7, 30,760, 16.7
- Sub-typing not performed: 0, 0, 211, 0, 0, 211, 38.7, 863, 89.0, 148,799, 80.6

Influenza B:
- Victoria Lineage: 1, 0, 0, 0, 0, 1, 0.4, 21, 1, 1, 1,050, 1
- Yamagata Lineage: 210, 0, 4, 3, 75.0, 214, 75.1, 125, 6.8, 8,898, 11.2
- Sub-typing not performed: 0, 3, 67, 1, 25.0, 70, 24.6, 1,695, 92.1, 69,843, 87.5

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 14 is 1.3% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 14 is 2.4% which is equal to the regional baseline of 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 14 is 2.1% which is below the national baseline of 2.2%.

Figure 3

Percentage of Visits for ILI Reported to Outpatient ILI Surveillance Network, Comparison Between National, Regional, and State, 53 Week Comparison (2017 WK 14 - 2018 WK 14)

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

During week 14, 1.3% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (0.9%). There were 8,185 patients seen by sentinel providers during week 14, of which 107 patients presented with ILI; week 14 of 2017, there were 165 patients seen with ILI (18,044 total patients seen). Data availability depends on sentinel provider reporting.
Influenza Positive Surveillance (NBS and NETSS)

Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 7 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 14, there were 171 influenza cases reported to the state, 46 influenza A, 110 influenza B and 15 unknown subtyping.

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 14)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B</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>4</td>
<td>7</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>31</td>
<td>66</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>46</td>
<td>110</td>
</tr>
</tbody>
</table>

Source: Office of Analytics: NBS and SNHD: NETSS.
Hospitalizations

There were 12 hospitalizations associated with influenza reported to the state health authority for week 14.

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Current Week (Week 14)</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>149</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>7</td>
<td>931</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>5</td>
<td>517</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>12</td>
<td>1,641</td>
</tr>
</tbody>
</table>

Source: Reported to Office of Analytics from each Jurisdiction.

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 April 16th, there were 37 P&I deaths and 374 total deaths for week 14 in Nevada. Please note that the CDC does not have updated P&I counts for week 13 or week 14.

Source: OVR: WEVRRS and CDC: FluView.
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 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


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