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 (NRVSS) collaborating laboratories by sub-type. During week 04, there were 35,361 specimens collected and tested for influenza, of those 7,955 were positive (22.5%).

**Figure 1**

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

**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. During week 04, there were 49 specimens collected and 19 were positive (38.8%). There is a two week delay for laboratory surveillance.

**Figure 2**

![Nevada (ILI Providers) Influenza Laboratory Confirmed Positive by Week](image)

**Source of Data:** CDC: ILINet.
Nevada State Public Health Laboratory (NSPHL) has tested 260 specimens for influenza from sentinel providers, of which there have been 226 positive (87%). Southern Nevada Public Health Laboratory (SNPHL) has tested 49 specimens this season of which there have been 5 positives. Nationally, there have been 401,164 specimens sent to the WHO and NERVSS laboratories of which 46,906 have been positive (11.7%). 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 04)</th>
<th>#</th>
<th>%</th>
<th>State of Nevada (Season)</th>
<th>#</th>
<th>%</th>
<th>National (Week 04)</th>
<th>#</th>
<th>%</th>
<th>National (Season)</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens Tested</td>
<td>260</td>
<td>49</td>
<td>324</td>
<td>49</td>
<td>633</td>
<td>35,361</td>
<td>401,164</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza Positives</td>
<td>226</td>
<td>5</td>
<td>41</td>
<td>19</td>
<td>38.8</td>
<td>272</td>
<td>43.0</td>
<td>7,955</td>
<td>22.5</td>
<td>46,906</td>
<td>11.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Influenza A:
- 222 specimens tested, 17 positives
- 265 State of Nevada positives
- 7,146 National positives

A (2009 H1N1):
- 8 specimens tested, 0 positives
- 9 State of Nevada positives
- 36 National positives

A (H3):
- 214 specimens tested, 12 positives
- 223 State of Nevada positives
- 2,015 National positives

A (Sub-typing not performed):
- 0 specimens tested, 5 positives
- 33 State of Nevada positives
- 5,095 National positives

Influenza B:
- 4 specimens tested, 2 positives
- 10.5 State of Nevada positives
- 809 National positives

B (Victoria Lineage):
- 0 specimens tested, 0 positives
- 0 State of Nevada positives
- 45 National positives

B (Yamagata Lineage):
- 4 specimens tested, 1 positive
- 50.0 State of Nevada positives
- 80 National positives

B (Sub-typing not performed):
- 0 specimens tested, 2 positives
- 50.0 State of Nevada positives
- 684 National positives

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 04 is 1.6% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 04 is 3.1% which is above the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 04 is 3.9% which is above the national baseline 2.2%.

Figure 3

Source of Data: CDC: FluView Report and CDC: ILINet.
During week 04, 1.6% of visits to sentinel providers were due to ILI; this is higher than the 2015-2016 influenza season (1.4%). There were 18,783 patients seen by sentinel providers during week 04, of which 305 patients presented with ILI; week 04 of 2016, there were 287 patients seen with ILI (20,054 total patients seen).

**Figure 4**

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

*Source of Data: CDC: ILINet.*

Influenza-like Illness is reported by age groups. During week 04, patients age 0-4 were the greatest number of patients seen with ILI, at 128 patients seen. The rate for week 04 is 10.4 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**

![ILINet: Influenza-like Illness by Age Group and MMWR Week and Incidence Rate 53 Week Comparison (2016 WK 04 - 2017 WK 04)](image)

*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 04, there were 471 influenza cases reported to the state, 415 influenza A, 33 influenza B and 23 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 04) A</td>
<td>B</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>69</td>
<td>3</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>275</td>
<td>25</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>415</td>
<td>33</td>
</tr>
</tbody>
</table>

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

There were 25 hospitalization associated with influenza reported to the state health authority for week 04.

Table 3

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Influenza Hospitalizations</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Week (Week 04)</td>
<td></td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>16</td>
<td>129</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>5</td>
<td>241</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>25</td>
<td>405</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>4.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>12.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>64.0</td>
<td>31.9</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>20.0</td>
<td>59.5</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>100</td>
<td>100</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 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 February 23rd, there were 37 P&I deaths and 421 total deaths for week 04 in Nevada.

Figure 7

Source: OVR: WEVRSS 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 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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