Influenza Weekly Report


Department of Health and Human Services
Office of Analytics

Brian Sandoval
Governor
State of Nevada

Richard Whitley, MS
Director
Department of Health and Human Services

Julie Kotchevar, Ph.D.
Administrator
Division of Public and Behavioral Health

Leon Ravin, M.D.
Acting Chief Medical Officer
Division of Public and Behavioral Health

May, 2018
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 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 20, there were 8,605 specimens collected and tested for influenza, of those 204 were positive (2.4%).

**Figure 1**

![National Influenza Positive Tests by Week 53 Week Comparison (2017 WK 20 - 2018 WK 20)](source)


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 20, where there were 2 specimens collected, in which 2 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 20 - 2018 WK 20)](source)

*Source of Data: CDC: ILINet.*
Nevada State Public Health Laboratory (NSPHL) has tested 642 specimens for influenza from sentinel providers, of which there have been 545 positive (84.9%). Southern Nevada Public Health Laboratory (SNPHL) has tested 118 specimens this season of which there have been 7 positive. Nationally, there have been 1,303,108 specimens sent to the WHO and NERVSS laboratories of which 277,068 have been positive (21.3%). 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>Specimens Tested</th>
<th>NSPHL</th>
<th>SNPHL</th>
<th>All Other Laboratories</th>
<th>State of Nevada (Week 20)</th>
<th>State of Nevada (Season)</th>
<th>National (Week 20)</th>
<th>National (Season)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Influenza</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A: 2009 H1N1</strong></td>
<td>325</td>
<td>4</td>
<td>225</td>
<td>554</td>
<td>44.6</td>
<td>189,171</td>
<td>68.3</td>
</tr>
<tr>
<td><strong>A (H3)</strong></td>
<td>303</td>
<td>3</td>
<td>8</td>
<td>24</td>
<td>2.2</td>
<td>31,908</td>
<td>16.9</td>
</tr>
<tr>
<td><strong>A (Sub-typing not performed)</strong></td>
<td>0</td>
<td>0</td>
<td>216</td>
<td>216</td>
<td>93.4</td>
<td>151,593</td>
<td>80.1</td>
</tr>
<tr>
<td><strong>Influenza B:</strong></td>
<td>220</td>
<td>3</td>
<td>73</td>
<td>296</td>
<td>113</td>
<td>87,897</td>
<td>31.7</td>
</tr>
<tr>
<td><strong>B (Victoria Lineage)</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>104</td>
<td>1,326</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>B (Yamagata Lineage)</strong></td>
<td>219</td>
<td>0</td>
<td>4</td>
<td>223</td>
<td>5.3</td>
<td>10,498</td>
<td>11.9</td>
</tr>
<tr>
<td><strong>B (Sub-typing not performed)</strong></td>
<td>0</td>
<td>3</td>
<td>69</td>
<td>72</td>
<td>106</td>
<td>76,073</td>
<td>86.5</td>
</tr>
<tr>
<td>Source of Data: CDC: FluView Report and CDC: ILINet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 20 is 0.9% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 20 is 1.8% which is below 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 20 is 1.2% 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 20 - 2018 WK 20)**

Source of Data: CDC: Flu View Report and CDC: ILINet.

During week 20, 0.9% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (0.3%). There were 8,084 patients seen by sentinel providers during week 20, of which 74 patients presented with ILI; week 20 of 2017, there were 31 patients seen with ILI (10,823 total patients seen). Data availability depends on sentinel provider reporting.
Influenza-like Illness is reported by age groups. During week 20, patients ages 5-24 were the greatest number of patients seen with ILI, at 27 patients seen. The rate for week 20 is 2.5 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 2018 is 2,969,849.

**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 20, there were 50 influenza cases reported to the state, 16 influenza A, 30 influenza B and 4 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 20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Carson City Health and Human Services</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>16</td>
<td>30</td>
</tr>
</tbody>
</table>

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

There were 8 hospitalizations associated with influenza reported to the state health authority for week 20.

Table 3

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Influenza Hospitalizations</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td># 1</td>
<td># 158</td>
</tr>
<tr>
<td>Rural Community Health Services</td>
<td>0 0</td>
<td>45</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>4 50.0</td>
<td>973</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>3 37.5</td>
<td>541</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>8 100</td>
<td>1,717</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 May 30th, there were 20 P&I deaths and 347 total deaths for week 20 in Nevada. Please note that the CDC does not have updated P&I counts for week 19 or week 20.
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


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

NEVADA INFLUENZA SURVEILLANCE PROGRAM

OFFICE OF ANALYTICS
4126 TECHNOLOGY WAY
CARSON CITY, NV 89706
TEL: (775) 684-5997
FAX: (775) 684-5999

Compiled and Written by:
Michelle Khau

Reviewed by:
Helen See, MPH
Melissa Peek-Bullock

Recommended Citation:

This publication was supported by Cooperative Agreement Number TP000534-02 from the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response.