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 tested for influenza by the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NRVESS) collaborating laboratories by sub-type. There were 6,887 specimens collected nationally during week 7 that were tested for influenza; of these 958 tested positive or the percent positive was 23.7%.

**Figure 1**

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


Of the 41 specimens tested for influenza at both the Nevada State Public Health Laboratory and Southern Nevada Public Health Laboratory for sentinel providers, 9 were positive for influenza during week 7 or 22.0%.

**Figure 2**

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

Source of Data: CDC: ILINet.
Nevada State Public Health Laboratory (NSPHL) has tested 694 specimens this season with 308 positive from sentinel providers (44.4% positive). Southern Nevada Public Health Laboratory (SNPHL) has reported 45 positive influenza specimens through the Pediatric Early Warning Sentinel Surveillance (PEWSS). Nationally, there have been 200,768 specimens sent to the WHO and NERVSS laboratories with 38,600 positive or 19.2%. The national numbers in table 1 are reflected in figure 1. The state of Nevada data in table 1 is reflected in figure 2.

Table 1

<table>
<thead>
<tr>
<th>ILINet Surveillance: Influenza Specimens Tested State and Nationally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens Tested</td>
</tr>
<tr>
<td>NSPHL</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>694</td>
</tr>
<tr>
<td>Positives to Influenza</td>
</tr>
<tr>
<td>NSPHL</td>
</tr>
<tr>
<td>308</td>
</tr>
</tbody>
</table>

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

For week 7, Nevada reported local activity to the CDC, along with 10 states/territories/districts (District of Columbia, Georgia, Guam, Kansas, Mississippi, New Mexico, Oregon, South Dakota, West Virginia, and Wyoming). Activity level1 is derived from data analyzed from Influenza-like Illness (ILI) surveillance (laboratory and sentinel data), and data reported to the state through NBS/NETSS.

**Figure 3**

Influenza-like Illness (ILI) Network Surveillance has each sentinel providers report the number of patients that meet the ILI case definition2 and number of patients that visit the provider weekly, which increased from 17,500 (week 6) to 17,587 (week 7). The “percentage of visits” is the number of ILI patients divided by the total number of patient visit per week. Nevada’s ILI percentage of visits to providers decreased to 1.4% during week 7, and is below the state baseline of 2.3%. Region 9 decreased in ILI to 3.4% from 3.9%, and includes the following states/territories: Arizona, California, Guam, Hawaii, and Nevada. The nation decreased to 2.5% from 2.9% during week 7.

1: Activity level: Appendix Table 4.
During week 7, 1.4% of visits to sentinel providers were due to ILI. This is a 1.9% point decrease from week 7 of the 2012-2013 influenza season.

The number of ILI patients and rate decreased from week 6 to week 7, from 347 to 253, and 12.3 to 9.0 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 2014 is 2,819,321.
Providers for the sentinel surveillance are grouped by county, then the percent is calculated by ILI visits and total patient visits. During week 7, Douglas, Elko, and White Pine counties had high activity; Washoe County has moderate activity. Humboldt and Lincoln counties did not report (Figure 7). Overall, Nevada had minimal activity monitored through ILINet (Figure 8).

Figure 7

![ILI Activity Level (MMWR Week 7)](image)

Source of Data: CDC: ILINet.

Figure 8

![Influenza-Behaviour Level (MMWR Week 7)](image)

Influenza Positive Surveillance (NBS and NETSS)

Positive cases of influenza are reported to the state health division for surveillance purposes. Figure 10 and 11 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 7, there were 14 H1N1 cases and 81 Influenza A cases. There were 20 positive Influenza B cases. Overall, there were 120 influenza positive tests in Nevada, whereas during the previous season for week 7, there were 310 cases.

Clark County experienced a decrease in influenza from 112 to 77 influenza cases during week 7. Washoe County experienced a decrease in influenza from week 6, from 21 to 12 influenza cases. Carson City, Churchill, Douglas, Elko, Lyon and Nye counties all had influenza activity during week 7.

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

There have been 332 hospitalizations associated with influenza this season.

<table>
<thead>
<tr>
<th>Reporting Jurisdiction</th>
<th>Influenza Hospitalizations Current Week (Week 7)</th>
<th>Cumulative Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City Health and Human Services</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Rural Health Services</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Southern Nevada Health District</td>
<td>7</td>
<td>227</td>
</tr>
<tr>
<td>Washoe County Health District</td>
<td>0</td>
<td>76</td>
</tr>
<tr>
<td>State of Nevada</td>
<td>7</td>
<td>332</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 the deaths, where Pneumonia and Influenza is listed as a cause of death, divided by the total deaths in Nevada for each week. There were 23 P&I deaths and 312 total deaths for week 7, as of February 25. The P&I mortality percentage is at the national epidemic threshold at 7.4%, (threshold at 7.4%). Nationally, the P&I mortality has surpassed the national epidemic threshold at 8.2%.

*Figure 11*

*Source: OVR: WEVRRS and CDC: FluView.*
Appendix

Activity level in figure 3 is based on the following information.

<table>
<thead>
<tr>
<th>Activity Level</th>
<th>ILI Activity*/Outbreaks</th>
<th>Laboratory Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td>Low</td>
<td>And</td>
</tr>
<tr>
<td>Sporadic</td>
<td>Not Increased</td>
<td>Isolated lab-confirmed cases †</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>Lab confirmed outbreak in one institution ‡</td>
</tr>
<tr>
<td>Local</td>
<td>Increased ILI in 1 region**, ILI activity in other regions is not increased</td>
<td>Recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>Recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions</td>
</tr>
<tr>
<td>Regional</td>
<td>Recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions</td>
<td>Recent (within the past 3 weeks) lab confirmed influenza in the affected regions</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>Recent (within the past 3 weeks) lab confirmed influenza in the affected regions</td>
</tr>
<tr>
<td>Widespread</td>
<td>Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions</td>
<td>Recent (within the past 3 weeks) lab confirmed influenza in the state</td>
</tr>
</tbody>
</table>

*ILI activity can be assessed using a variety of data sources including ILINet providers, school/workplace absenteeism and other syndromic surveillance systems that monitor influenza-like illness.
† Lab confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.
‡ Institution includes nursing home, hospital, prison, school, etc.
**Region: population under surveillance in a defined geographical subdivision of a state. Nevada has 5 regions.

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.
- NEDDS 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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