

Influenza Weekly Report

2015 Week 7 (February 15 – 21) through 2016 Week 7 (February 14 – 20)

Department of Health and Human Services
Division of Public and Behavioral Health
Office of Public Health Informatics and Epidemiology



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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.

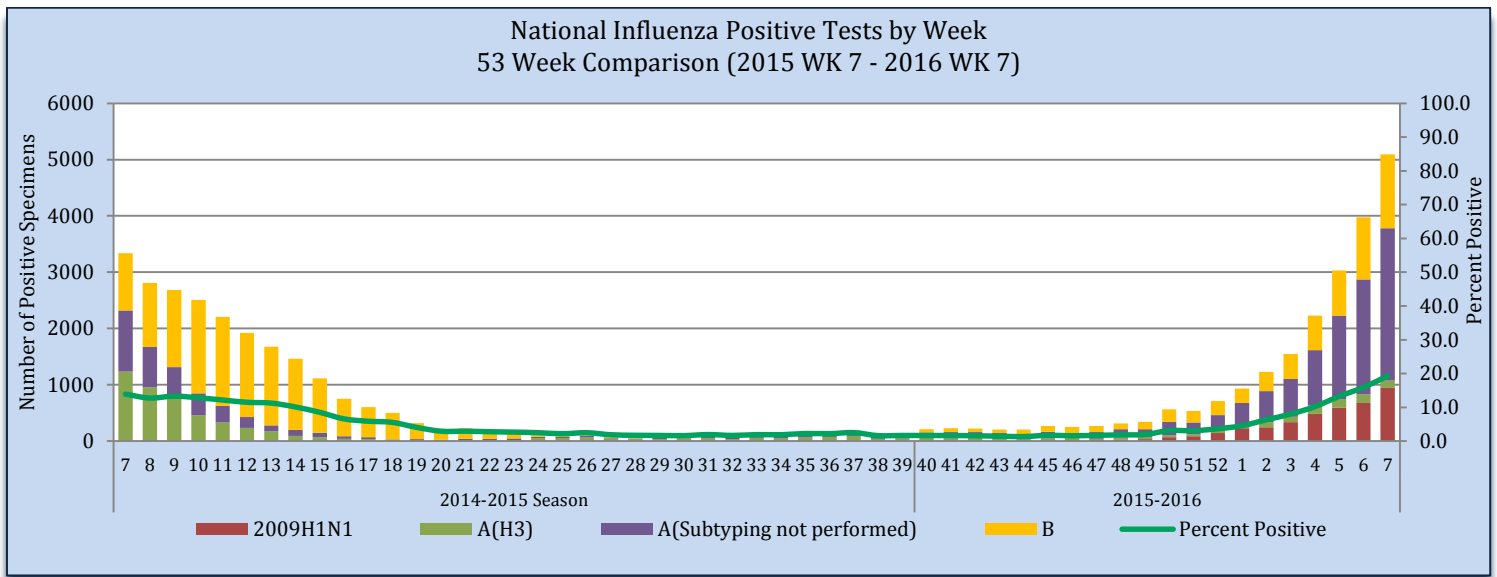
Purpose

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.

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 7, there were 26,381 specimens collected and tested for influenza, of those 5,094 were positive (19.3%).

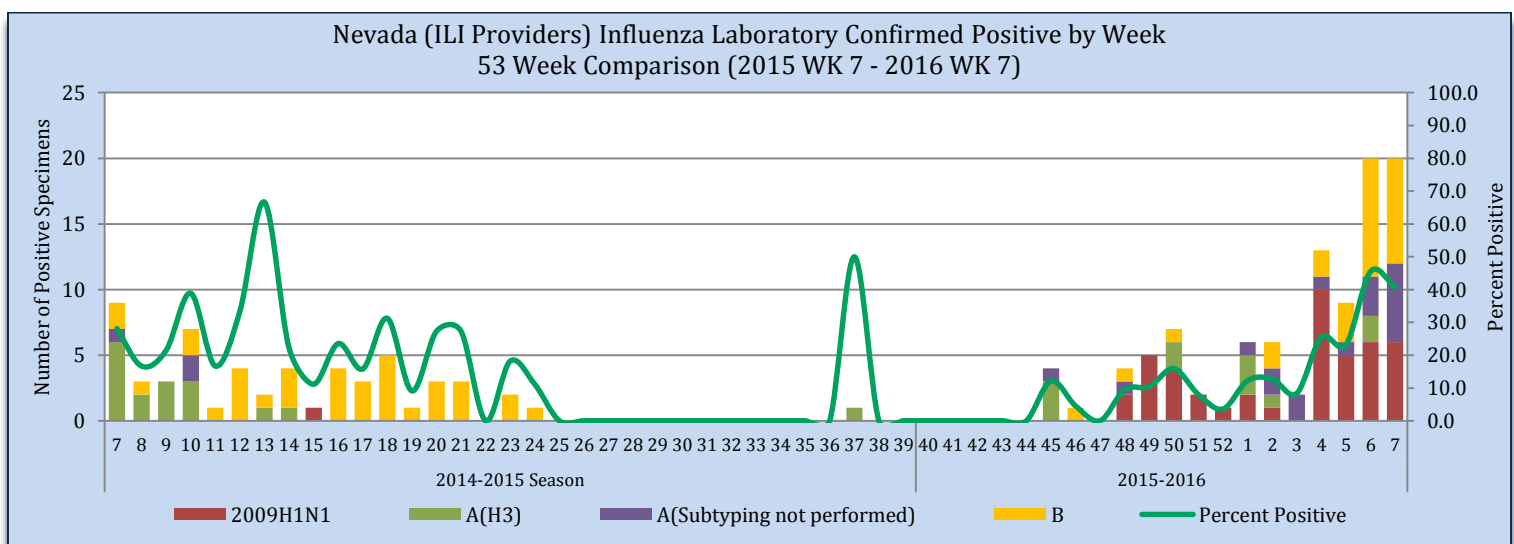
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 7, there were 49 specimen collected and tested for influenza of which 20 was positive (40.8%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 93 specimens for influenza from sentinel providers, of which there have been 67 positive (72.0%). Southern Nevada Public Health Laboratory (SNPHL) has tested 184 specimens this season of which there have been 9 positive (4.9%). Nationally, there have been 364,067 specimens sent to the WHO and NERVSS laboratories of which 22,363 have been positive or 6.1%. 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.

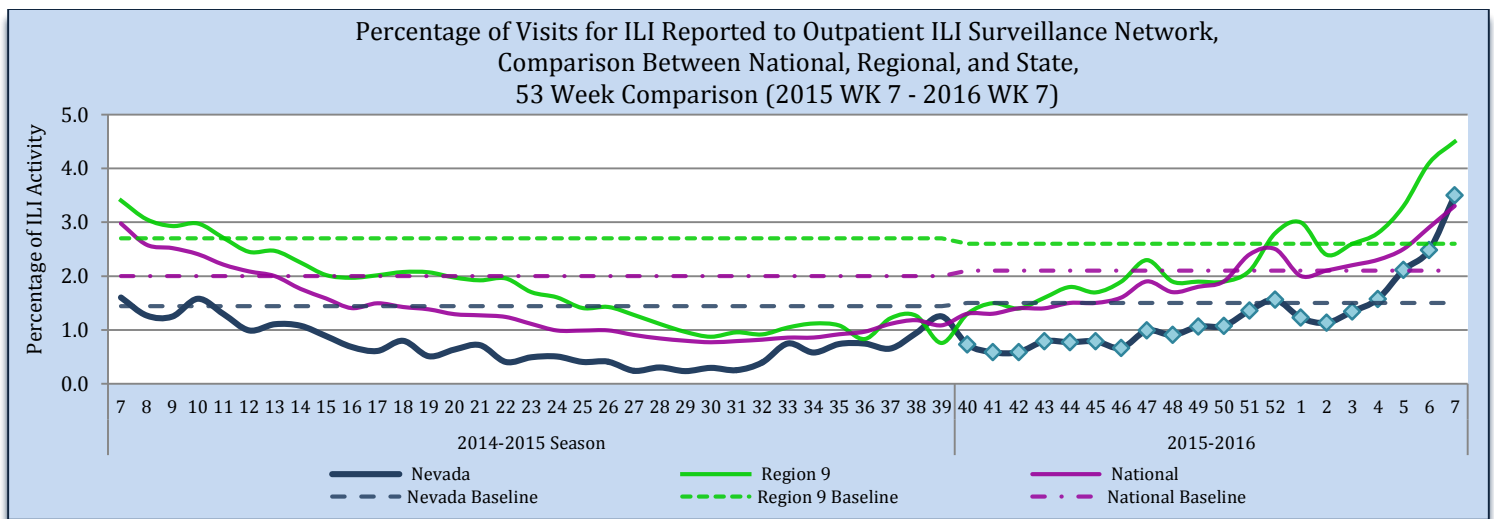
Table 1

| ILINet Surveillance: Influenza Specimens Tested State and Nationally | | | | | | | | | | |
|--|-------|-------|--------------------------|------|--------------------------|------|-------------------|------|-------------------|------|
| | NSPHL | SNPHL | State of Nevada (Week 7) | | State of Nevada (Season) | | National (Week 7) | | National (Season) | |
| | | | # | % | # | % | # | % | # | % |
| Specimens Tested | 93 | 184 | 49 | - | 676 | - | 26,381 | - | 364,067 | - |
| Positives to Influenza | 67 | 9 | 20 | 40.8 | 100 | 14.8 | 5,094 | 19.3 | 22,363 | 6.1 |
| Influenza A: | 29 | 9 | 12 | 60.0 | 73 | 73.0 | 3,779 | 74.2 | 15,943 | 71.3 |
| A (2009 H1N1) | 21 | 9 | 6 | 50.0 | 44 | 60.3 | 942 | 24.9 | 3,954 | 24.8 |
| A (H3) | 8 | 0 | 0 | 0.0 | 11 | 15.1 | 136 | 3.6 | 1,333 | 8.4 |
| A (Sub-typing not performed) | 0 | 0 | 6 | 50.0 | 18 | 24.7 | 2,701 | 71.5 | 10,656 | 66.8 |
| Influenza B: | 22 | 0 | 8 | 40.0 | 27 | 27.0 | 1,315 | 25.8 | 6,420 | 28.7 |
| B (Victoria Linage) | 10 | 0 | 3 | 37.5 | 10 | 37.0 | 37 | 2.8 | 247 | 3.8 |
| B (Yamagata Linage) | 12 | 0 | 4 | 50.0 | 13 | 48.1 | 116 | 8.8 | 780 | 12.1 |
| B (Sub-typing not performed) | 0 | 0 | 1 | 12.5 | 4 | 14.8 | 1,162 | 88.4 | 5,393 | 84.0 |

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

Influenza-like illness (ILI) Surveillance Network has each sentinel providers report the number of patients that meet the ILI case definition and number of patients that visit the provider weekly. The “percentage of visits” is the number of ILI patients divided by the total number of patients visit per week. Nevada’s ILI percentage of visits to providers for week 7 is 3.5% and is above the state baseline 1.5% the 4th consecutive week. Region 9 ILI percentage for week 7 is 4.5% and is above the region baseline 2.6% for the 3rd consecutive week. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 7 is 3.3% and is above the national baseline 2.1% for the 5th consecutive week.

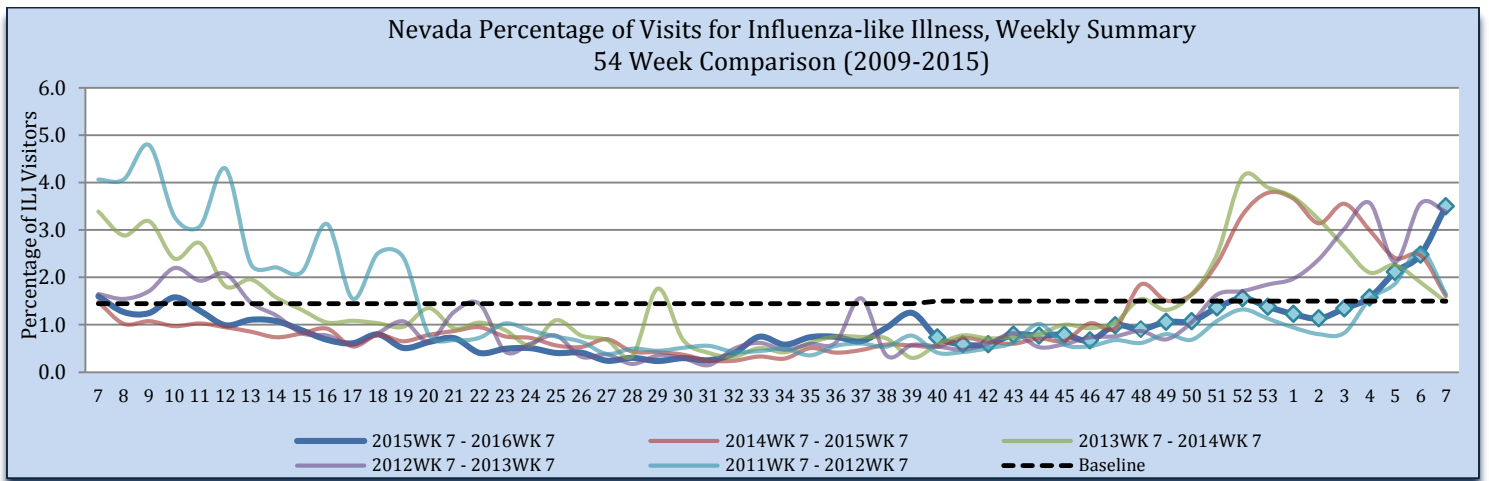
Figure 3



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

During week 7, 3.5% of visits to sentinel providers were due to ILI; this is above the 2014-2015 influenza season 1.6%. There were 11,142 patients seen by ILI providers during week 7, of which 390 patients presented with ILI; week 7 of 2015, there were 286 patients seen with ILI (18,359 total patients seen). There was no week 53 in the previous influenza seasons displayed below; therefore the week 53 data point for those seasons is an average of week 52 and 1.

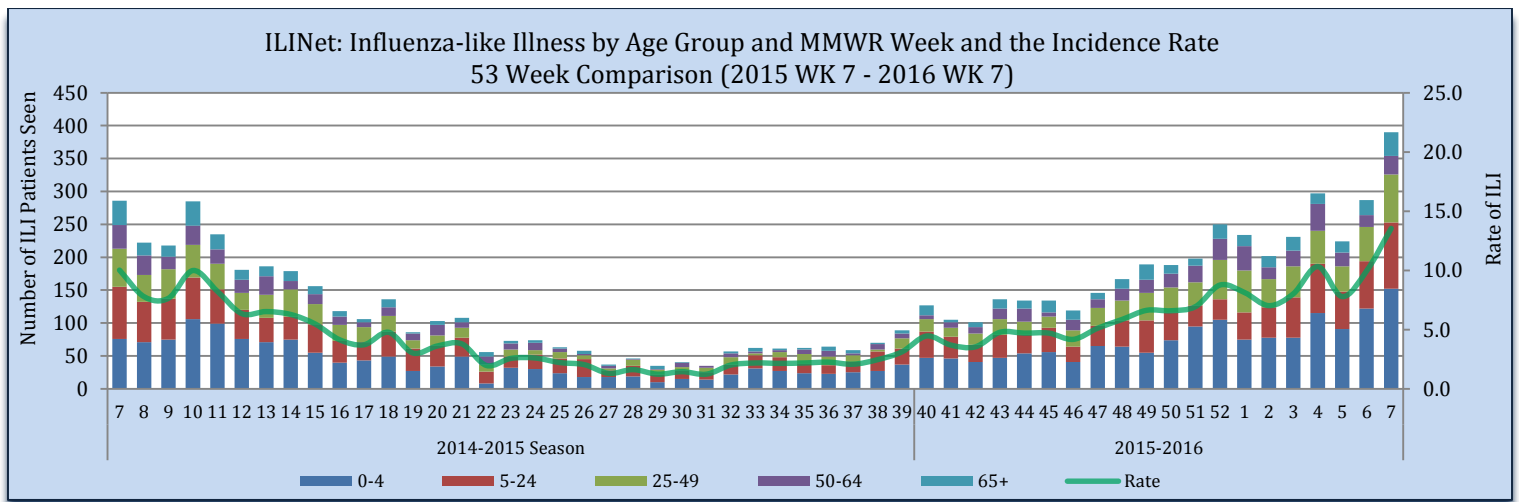
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 7, patients age 0-4 were the greatest number of patients seen with ILI, at 152 patients seen. The rate for week 7 is 13.5 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 2016 is 2,880,169.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

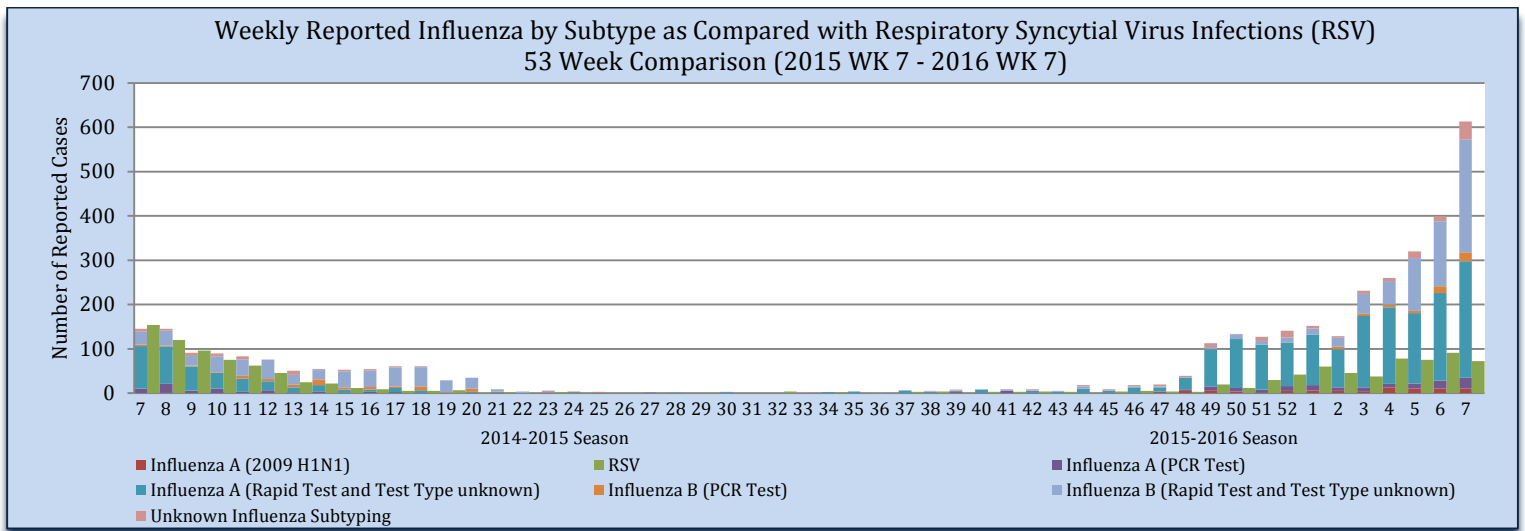
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 7, there were 628 influenza cases reported to the state, 10 H1N1 influenza A, 288 influenza A (H3 or unknown subtyping) and 274 influenza B case.

Table 2

| Reporting Jurisdiction | Reported Influenza Cases by County Jurisdiction and Influenza Type | | | | | | | | | |
|---------------------------------------|--|-----|-----|---------|-------|-----------------------------|-------|-----|---------|-------|
| | Current Week (Week 7) | | | | | Cumulative Influenza Season | | | | |
| | H1N1 | A | B | Unknown | Total | H1N1 | A | B | Unknown | Total |
| Carson City Health and Human Services | 0 | 32 | 95 | 1 | 128 | 0 | 116 | 190 | 1 | 307 |
| Rural Community Health Services | 4 | 16 | 20 | 0 | 40 | 12 | 47 | 58 | 2 | 119 |
| Southern Nevada Health District | 6 | 209 | 97 | 29 | 341 | 63 | 1,413 | 324 | 117 | 1,917 |
| Washoe County Health District | 0 | 31 | 62 | 11 | 104 | 7 | 189 | 191 | 25 | 412 |
| State of Nevada | 10 | 288 | 274 | 41 | 613 | 82 | 1,765 | 763 | 145 | 2,755 |

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



Source of Data: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There was 32 hospitalization associated with influenza reported to the state health authority for week 7.

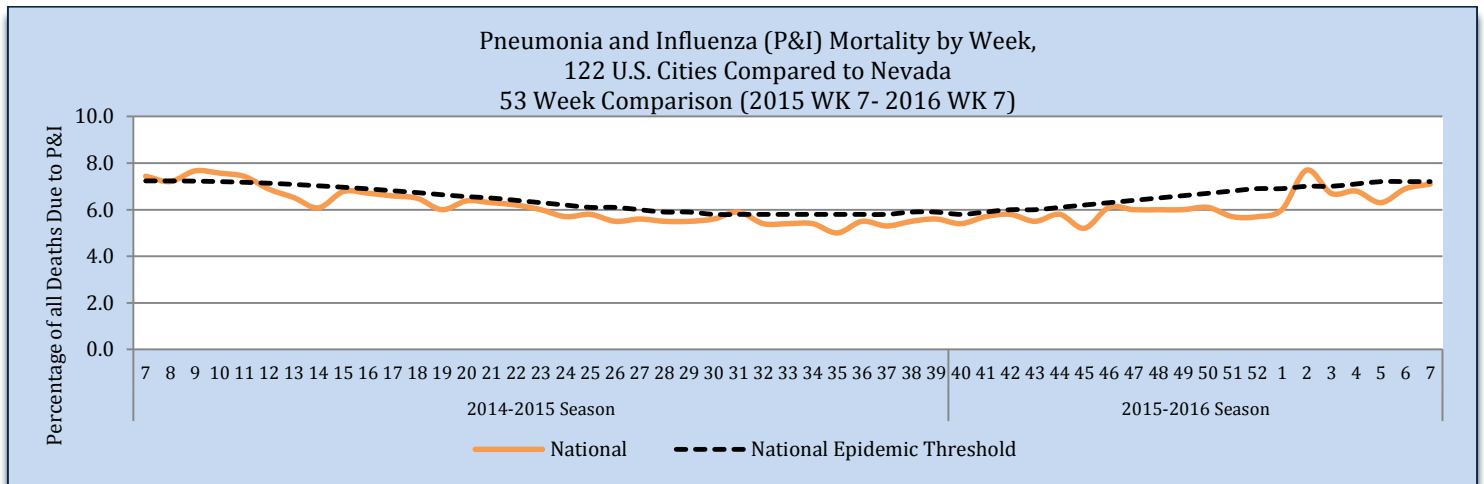
Table 3

| Reporting Jurisdiction | Influenza Hospitalizations | | Cumulative Influenza Season | |
|---------------------------------------|----------------------------|------|-----------------------------|------|
| | Current Week (Week 7) | | # | % |
| Carson City Health and Human Services | 2 | 6.3 | 10 | 5.2 |
| Rural Community Health Services | 0 | 0.0 | 7 | 3.6 |
| Southern Nevada Health District | 23 | 71.9 | 154 | 80.2 |
| Washoe County Health District | 7 | 21.9 | 21 | 10.9 |
| State of Nevada | 32 | 100 | 192 | 100 |

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 or Influenza is listed as the underlying or contributing cause of death, divided by the total deaths in Nevada for each week. The P&I data for Nevada is unavailable at this time due to a technical issue from the Vital Records Office and is currently working to resolve the issue. Nationally, the P&I mortality is below the national epidemic threshold at 7.2% (threshold 7.2%) for week 7.



Source: OVR: WEVRRS and CDC: FluView.

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.
- 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

1. CDC. FluView: A Weekly Influenza Surveillance Report. <http://www.cdc.gov/flu/weekly/pastreports.htm>.
2. Nevada State Demographer's Office. 2003-2014 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2014.
3. OPHIE. DPBH. NBS. 2013-2014. Accessed March 2016.
4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2013-2014. Accessed March 2016.
5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2013-2014. Accessed March 2016.

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

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