

Weekly Report

2017 Week 1 (January 1 – January 7, 2017) through 2018 Week 1 (December 31 – January 6, 2018)

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

Amy Roukie, MBA
Administrator
Division of Public and Behavioral Health

*January, 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.

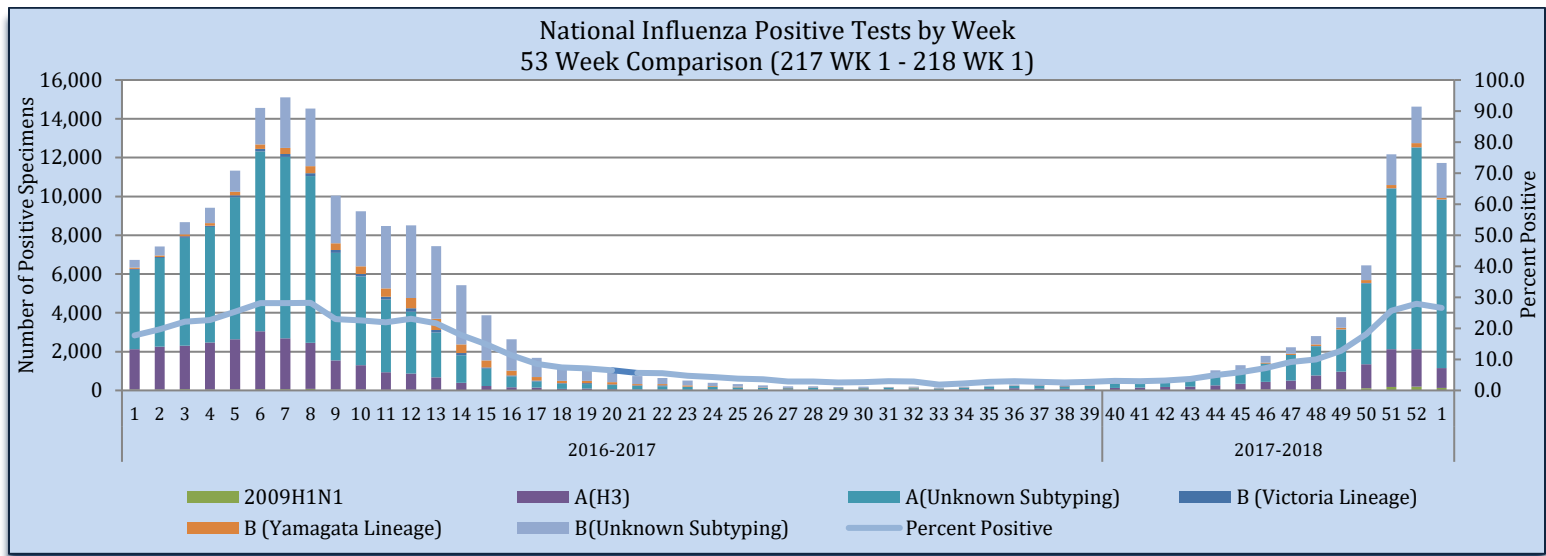
Purpose

The purpose of this report is to provide an overview of 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 1, there were 44,113 specimens collected and tested for influenza, of those 11,718 were positive (26.6%).

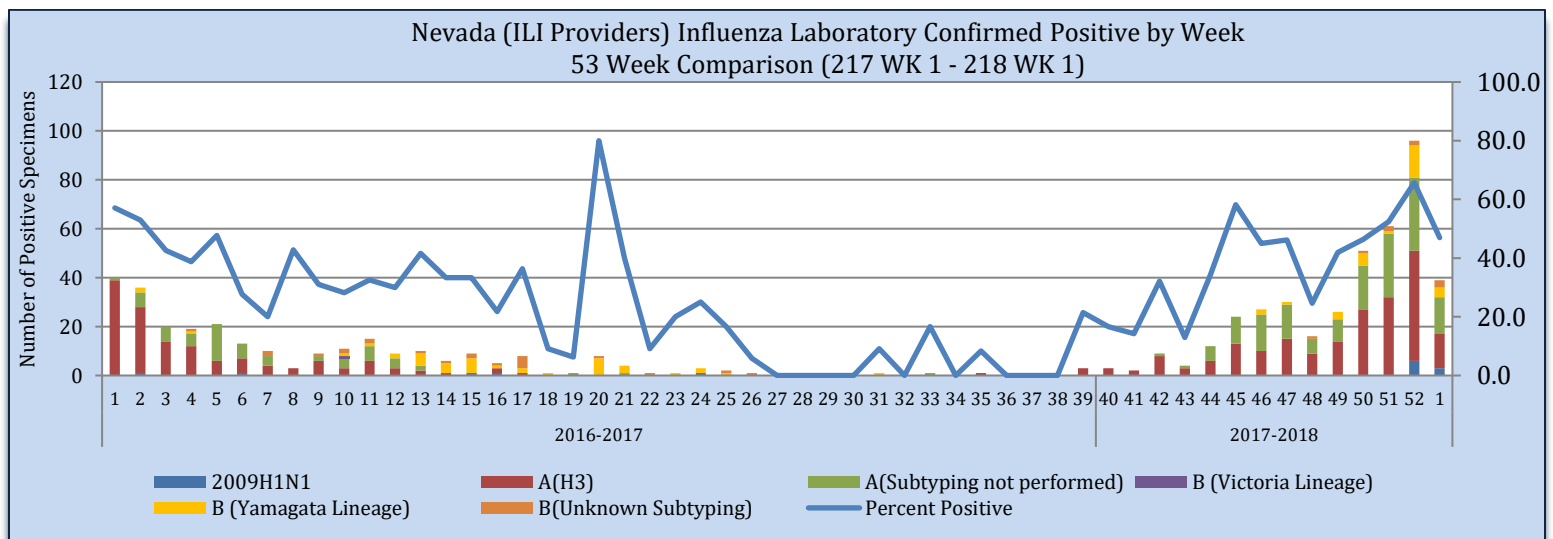
Figure 1



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 1, where there were 83 specimens collected, in which 39 were positive. There is a two-week delay for laboratory surveillance. Data are subject to change as we receive additional reports.

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 261 specimens for influenza from sentinel providers, of which there have been 234 positive (89.7%). Southern Nevada Public Health Laboratory (SNPHL) has tested 37 specimens this season of which there have been 4 positive. Nationally, there have been 400,127 specimens sent to the WHO and NERVSS laboratories of which 60,161 have been positive (15.0%). 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.

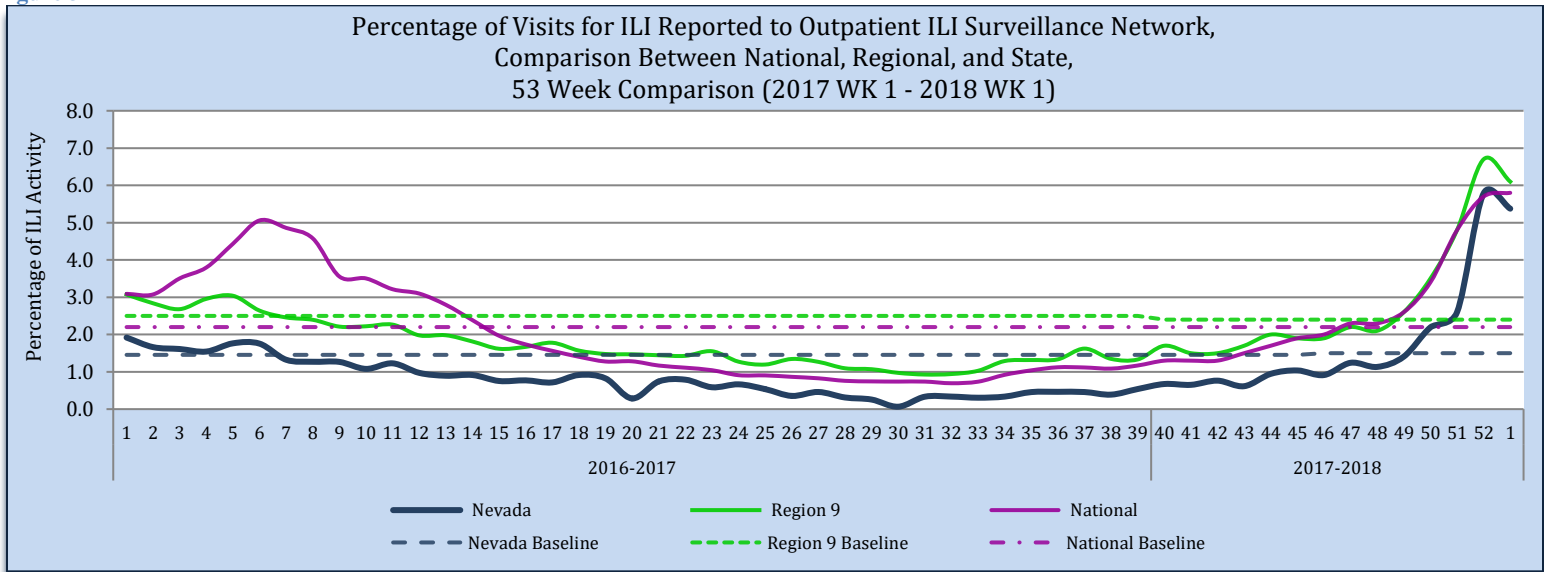
Table 1

| Influenza Specimens Tested State and Nationally through Sentinel Providers | | | | | | | | | | | |
|--|-------|-------|------------------------|--------------------------|------|--------------------------|------|-------------------|------|-------------------|------|
| | NSPHL | SNPHL | All Other Laboratories | State of Nevada (Week 1) | | State of Nevada (Season) | | National (Week 1) | | National (Season) | |
| | | | | # | % | # | % | # | % | # | % |
| Specimens Tested | 261 | 37 | 584 | 83 | - | 882 | - | 44,113 | | 400,127 | |
| Influenza Positives | 234 | 4 | 166 | 39 | 47.0 | 404 | 45.8 | 11,718 | 26.6 | 60,161 | 15.0 |
| Influenza A: | 206 | 3 | 157 | 32 | 82.1 | 366 | 90.6 | 9,830 | 83.9 | 50,401 | 83.8 |
| A (2009 H1N1) | 13 | 0 | 0 | 3 | 9.4 | 13 | 3.6 | 132 | 1.3 | 957 | 1.9 |
| A (H3) | 193 | 3 | 5 | 14 | 43.8 | 201 | 54.9 | 1,021 | 10.4 | 9,773 | 19.4 |
| A (Sub-typing not performed) | 0 | 0 | 152 | 15 | 46.9 | 152 | 41.5 | 8,677 | 88.3 | 39,671 | 78.7 |
| Influenza B: | 28 | 1 | 9 | 7 | 17.9 | 38 | 9.4 | 1,888 | 16.1 | 9,760 | 16.2 |
| B (Victoria Lineage) | 0 | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.4 | 102 | 1.0 |
| B (Yamagata Lineage) | 28 | 0 | 1 | 4 | 57.1 | 29 | 76.3 | 95 | 5.0 | 1,036 | 10.6 |
| B (Sub-typing not performed) | 0 | 1 | 8 | 3 | 42.9 | 9 | 23.7 | 1,785 | 94.5 | 8,622 | 88.3 |

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 1 is 5.4% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 1 is 6.1% which is the above the region baseline of 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 1 is 5.8% which is above the national baseline 2.2%.

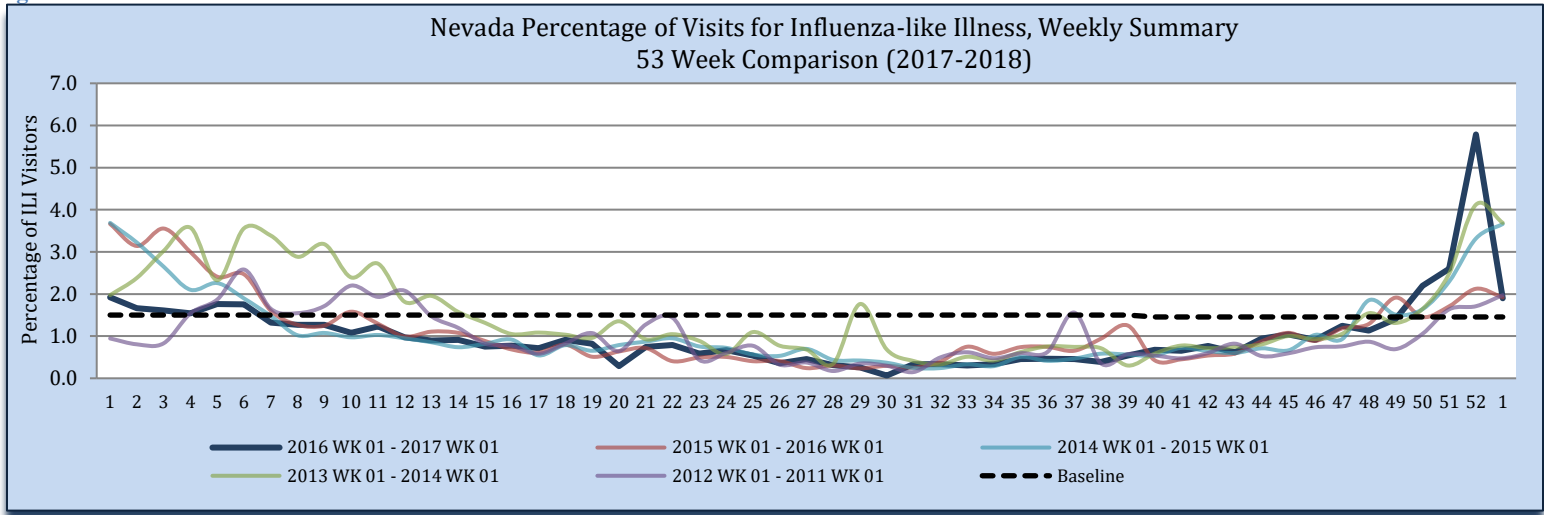
Figure 3



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

During week 1, 5.4% of visits to sentinel providers were due to ILI; this greater than the 2016-2017 influenza season (1.9%). There were 11,739 patients seen by sentinel providers during week 1, of which 631 patients presented with ILI; week 1 of 2017, there were 337 patients seen with ILI (17,559 total patients seen). Data availability depends on sentinel provider reporting.

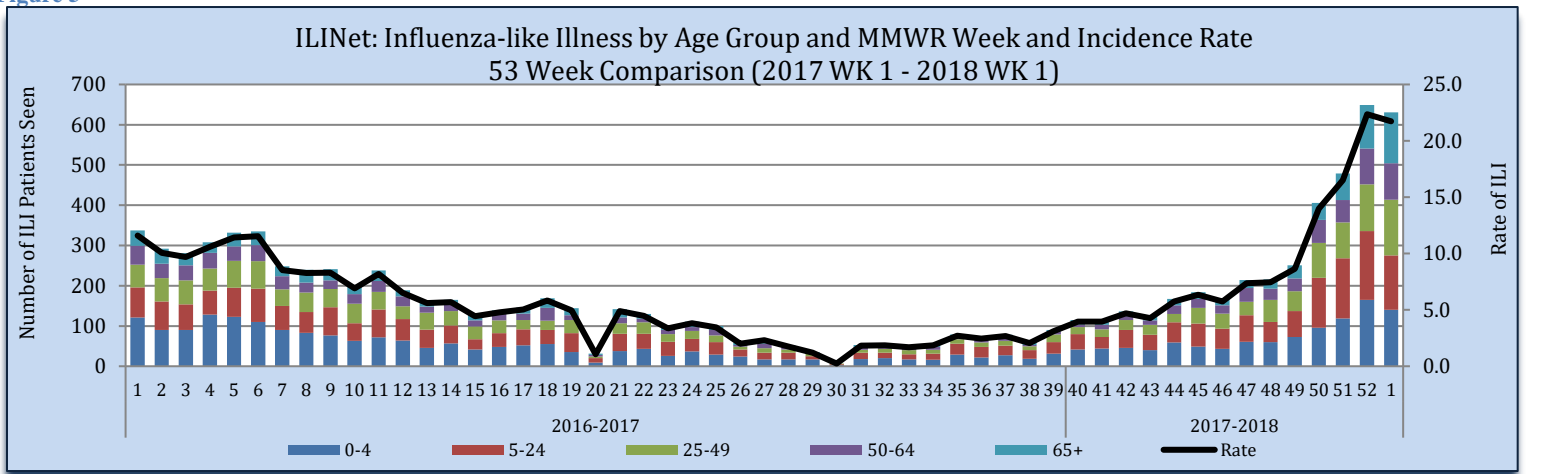
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 1, patients ages 0-4 were the greatest number of patients seen with ILI, at 140 patients seen. The rate for week 1 is 21.2 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.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

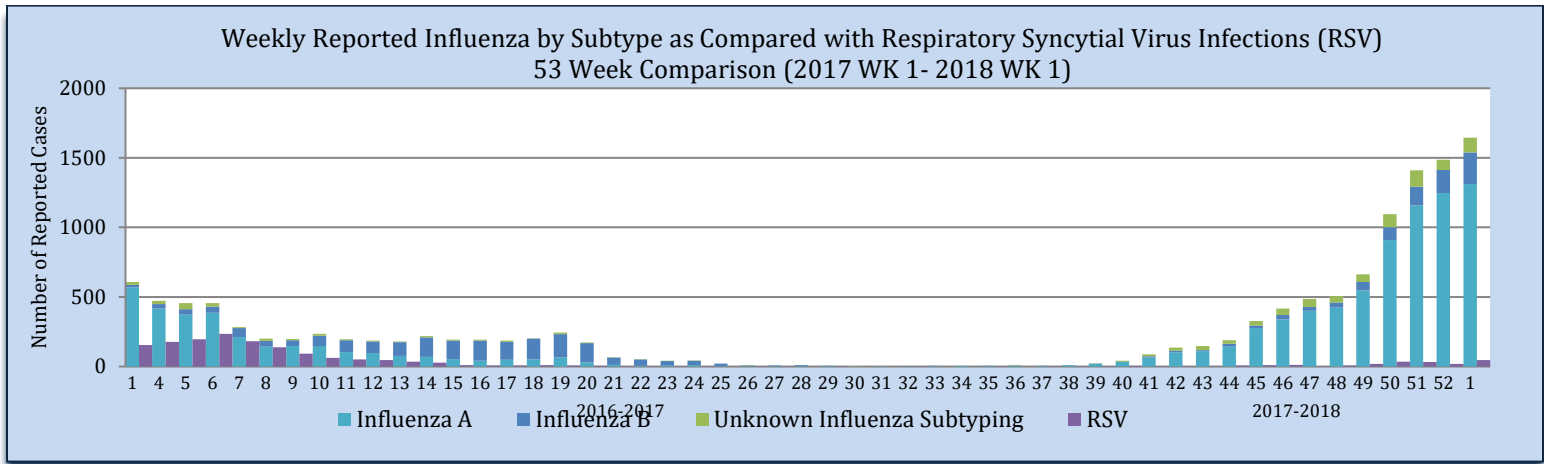
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 1, there were 1,644 influenza cases reported to the state, 1,312 influenza A, 227 influenza B and 105 unknown subtyping.

Table 2

| Reporting Jurisdiction | Reported Influenza Cases by County Jurisdiction and Influenza Type | | | | | | | |
|---------------------------------------|--|-----|---------|-------|-----------------------------|-----|---------|-------|
| | Current Week (Week 1) | | | | Cumulative Influenza Season | | | |
| | A | B | Unknown | Total | A | B | Unknown | Total |
| Carson City Health and Human Services | 114 | 24 | 5 | 143 | 699 | 99 | 14 | 812 |
| Rural Community Health Services | 144 | 17 | 0 | 161 | 571 | 51 | 2 | 624 |
| Southern Nevada Health District | 556 | 63 | 48 | 667 | 3554 | 279 | 474 | 4,307 |
| Washoe County Health District | 498 | 123 | 52 | 673 | 2244 | 418 | 233 | 2,895 |
| State of Nevada | 1,312 | 227 | 105 | 1,644 | 7,068 | 847 | 723 | 8,638 |

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

Figure 6



Source of Data: to Office of Analytics: NBS and SNHD: NETSS.

Hospitalizations

There were 209 hospitalizations associated with influenza reported to the state health authority for week 1.

Table 3

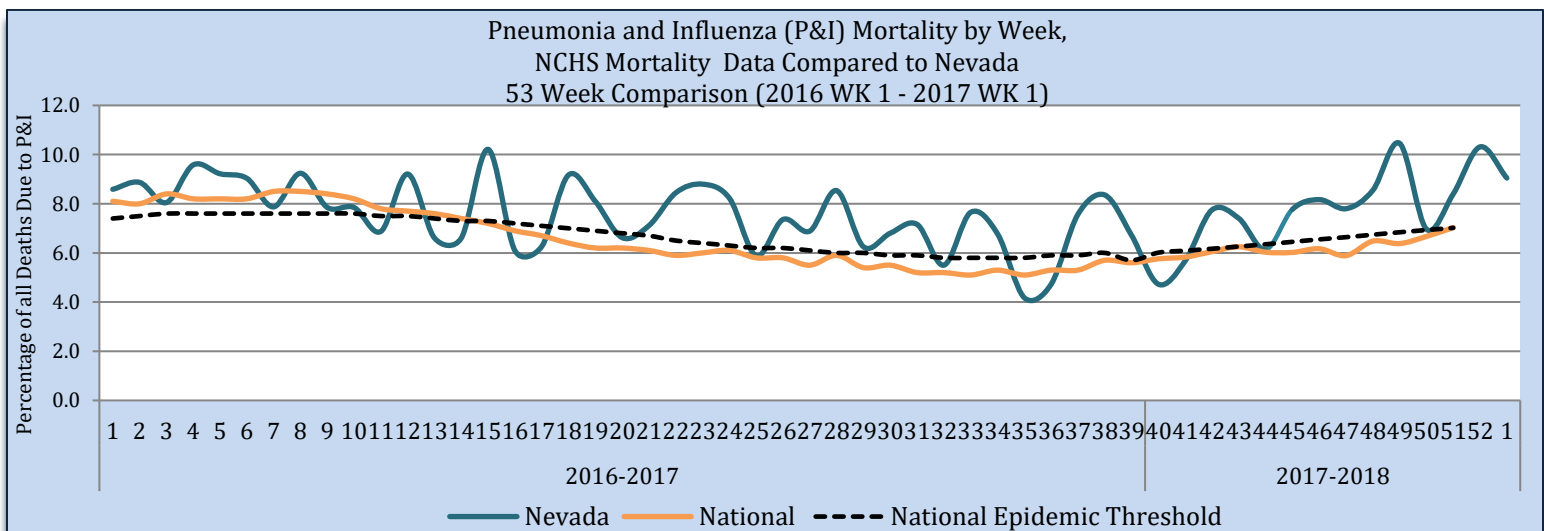
| Reporting Jurisdiction | Influenza Hospitalizations | | Cumulative Influenza Season | |
|---------------------------------------|----------------------------|--------|-----------------------------|--------|
| | # | % | # | % |
| Carson City Health and Human Services | 13 | 6.2% | 80 | 8.8% |
| Rural Community Health Services | 2 | 1.0% | 27 | 3.0% |
| Southern Nevada Health District | 121 | 57.9% | 481 | 53.0% |
| Washoe County Health District | 73 | 34.9% | 319 | 35.2% |
| State of Nevada | 209 | 100.0% | 907 | 100.0% |

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 January 18th, there were 36 P&I deaths and 398 total deaths for week 1 in Nevada. Please note that the CDC does not have updated P&I counts for week 52 or week 1.

Figure 7



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 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. 2003-2020 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2015.
3. Office of Analytics. DHHS. NBS. 2016-2018. Accessed January 2018.
4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2017-2018. Accessed January 2018.
5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2017. Accessed January 2018.

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:

Helen See, MPH

Reviewed by:

Jennifer Thompson
Melissa Peek-Bullock

Recommended Citation:

Department of Health and Human Services. Office of Analytics. Influenza Weekly Report, 2017 Week 1 (January 1, 2017) through 2018 Week 1 (January 6, 2018), Nevada. January 2018 i 1 edition 1.0.

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.

