# Influenza Weekly Report

2014 Week 13 (March 23 - 29) through 2015 Week 13 (March 29 - April 4)

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.

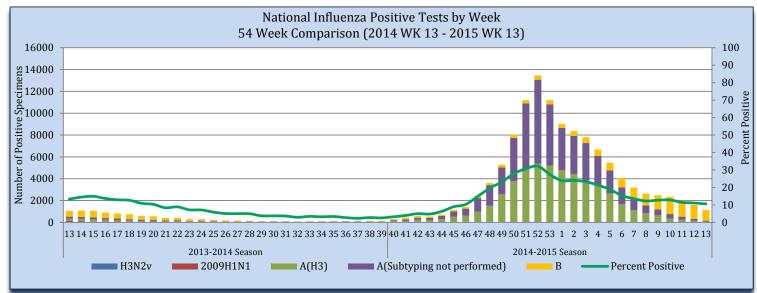
## **Purpose**

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 13, there were 10,684 specimens collected and tested for influenza, of those 1,138 were positive (10.7%).

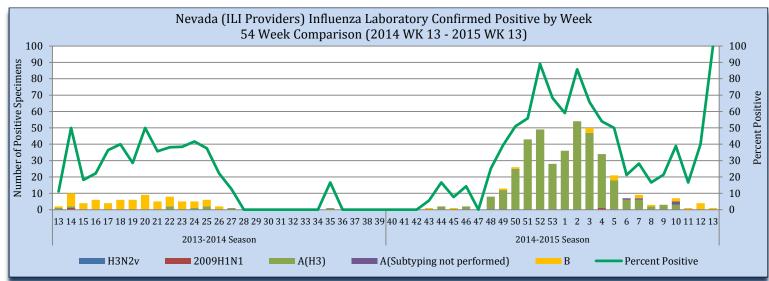




Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 13, there was 1 specimen collected and tested for influenza of which was positive (100.0%).

#### Figure 2



Source of Data: CDC: ILINet.

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Nevada State Public Health Laboratory (NSPHL) has tested 394 specimens for influenza from sentinel providers, of which 275 have been positive (69.8%). Southern Nevada Public Health Laboratory (SNPHL) has test 429 specimens this season of which 104 were positive. Nationally, there have been 603,182 specimens sent to the WHO and NERVSS laboratories of which 117,093 were positive or 19.4%. 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.

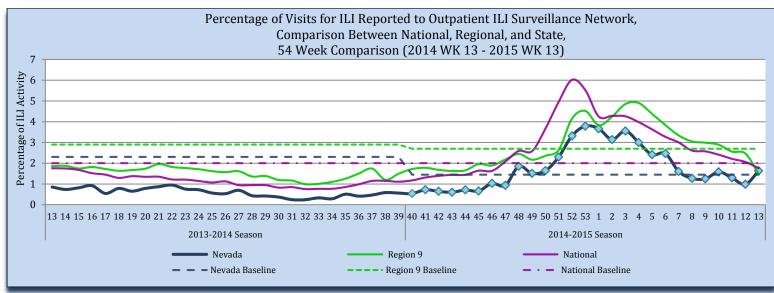
#### Table 1

| ILINet Surveillance: Influenza Specimens Tested State and Nationally |       |       |                                |       |                             |      |                       |      |                      |      |  |
|--|-------|-------|--------------------------------|-------|-----------------------------|------|-----------------------|------|----------------------|------|--|
|  | NSPHL | SNPHL | State of Nevada<br>L (Week 13) |       | State of Nevada<br>(Season) |      | National<br>(Week 13) |      | National<br>(Season) |      |  |
|  |       |       | #                              | %     | #                           | %    | #                     | %    | #                    | %    |  |
| Specimens Tested   | 394   | 429   | 1                              |       | 874                         |      | 10,684                |      | 603,182              |      |  |
| Positives to Influenza   | 275   | 104   | 1                              | 100.0 | 403                         | 46.1 | 1,138                 | 10.7 | 117,093              | 19.4 |  |
|  |       |       |                                |       |                             |      |                       |      |                      |      |  |
| Influenza A:   | 255   | 101   | 0                              | 0.0   | 378                         | 93.8 | 162                   | 14.2 | 101,956              | 87.1 |  |
| A(2009 H1N1)   | 1     | 0     | 0                              | 0.0   | 1                           | 0.3  | 2                     | 1.2  | 207                  | 0.2  |  |
| A(H3)  | 254   | 101   | 0                              | 0.0   | 377                         | 99.7 | 66                    | 40.7 | 51,301               | 50.3 |  |
| A(Sub-typing not performed)  | 0     | 0     | 0                              | 0.0   | 0                           | 0.0  | 94                    | 58.0 | 50,448               | 49.5 |  |
| <u>Influenza B:</u>  | 16    | 3     | 1                              | 100   | 21                          | 5.2  | 976                   | 85.8 | 15,136               | 12.9 |  |

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 13 is 1.6% and is above the state baseline 1.4%. Region 9 ILI percentage for week 13 is 1.5% and is below the region baseline of 2.7%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 13 is 1.8% and is below the national baseline 2.0% for the first time in 19 weeks.

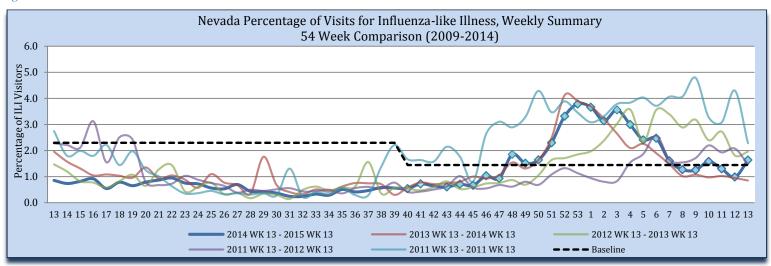
Figure 3



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

During week 13, 1.6% of visits to sentinel providers were due to ILI; this is higher than the 2013-2014 influenza season (0.8%). There were 8,756 patients seen by ILI providers during week 13, of which 143 patients presented with ILI; week 13 of 2014, there were 164 patients seen with ILI. There was no week 53 in the previous influenza season displayed below; therefore the week 53 data point for those seasons is an average of week 52 and 1.

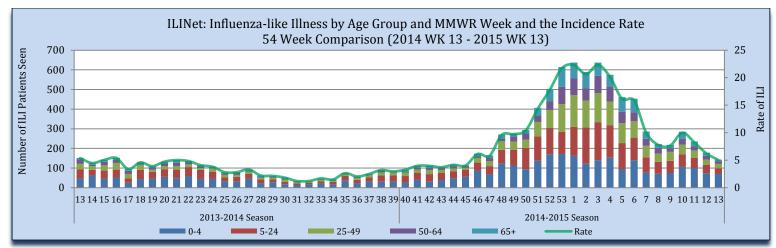
#### Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 13, patients age 0-4 were the greatest number of patients seen with ILI, at 70 patients seen. The rate for week 13 is 5.0 per 100,000. 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 2015 is 2,855,061.

#### 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 13, there were 49 influenza cases reported to the state, 13 influenza A cases, 26 influenza B cases and 10 unknown subtyping.

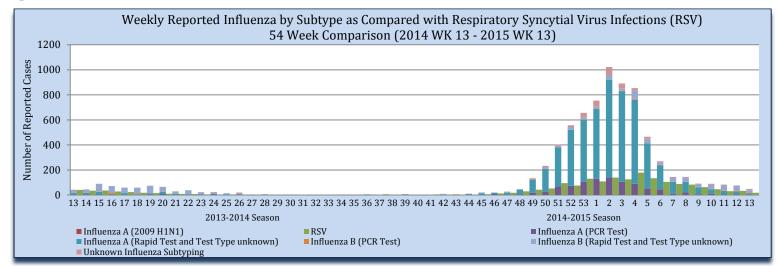
#### Table 2

|                                       | Reported Influenza Cases by County Jurisdiction and Influenza Type |    |    |         |       |                             |       |     |         |       |
|---------------------------------------|--|----|----|---------|-------|-----------------------------|-------|-----|---------|-------|
| Reporting Jurisdiction                | Current Week (Week 13)   |    |    |         |       | Cumulative Influenza Season |       |     |         |       |
|                                       | H1N1   | А  | В  | Unknown | Total | H1N1                        | А     | В   | Unknown | Total |
| Carson City Health and Human Services | 0  | 2  | 4  | 0       | 6     | 0                           | 931   | 101 | 2       | 1,034 |
| Rural Community Health Services       | 0  | 0  | 7  | 3       | 10    | 0                           | 561   | 43  | 48      | 652   |
| Southern Nevada Health District       | 0  | 9  | 14 | 9       | 30    | 1                           | 3,197 | 271 | 221     | 3,690 |
| Washoe County Health District         | 0  | 2  | 1  | 0       | 3     | 1                           | 1,488 | 155 | 51      | 1,695 |
| State of Nevada                       | 0  | 13 | 26 | 10      | 49    | 2                           | 6,177 | 570 | 322     | 7,071 |

Source: OPHIE: NBS and SNHD: NETSS.

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#### Figure 6



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

## **Hospitalizations**

There have been 3 hospitalizations associated with influenza reported to the state health authority during week 13.

#### Table 3

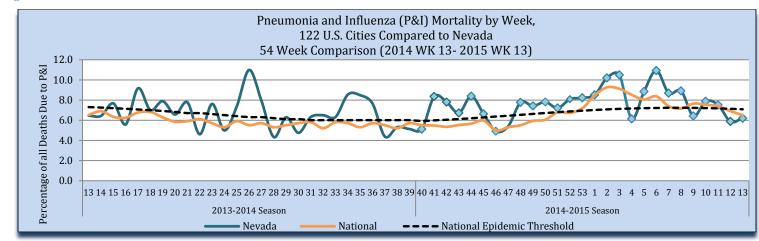
| Influenza Hospitalizations            |              |           |                             |      |  |  |  |  |
|---------------------------------------|--------------|-----------|-----------------------------|------|--|--|--|--|
| Reporting Jurisdiction                | Current Week | (Week 13) | Cumulative Influenza Season |      |  |  |  |  |
|                                       | #            | %         | #                           | %    |  |  |  |  |
| Carson City Health and Human Services | 0            | 0.0       | 43                          | 7.5  |  |  |  |  |
| Rural Community Health Services       | 0            | 0.0       | 29                          | 5.0  |  |  |  |  |
| Southern Nevada Health District       | 1            | 50.0      | 287                         | 49.7 |  |  |  |  |
| Washoe County Health District         | 1            | 50.0      | 218                         | 37.8 |  |  |  |  |
| State of Nevada                       | 2            | 100       | 577                         | 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. As of April 15, there were 25 P&I deaths and 404 total deaths for week 13. The P&I mortality percent is below the threshold at 6.2% (threshold 7.1%). Nationally, the P&I mortality is below the national epidemic threshold at 6.5% for week 13.

#### **Figure 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. <u>http://www.cdc.gov/flu/weekly/pastreports.htm</u>.
- 2. Nevada State Demographer's Office. 2003-2014 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2014.
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- 4. OPHIE. DPBH. NBS. 2013-2014. Accessed April 2015.
- 5. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2013-2014. Accessed April 2015.
- 6. Southern Nevada Health District (SNHD). NETSS/Trisano. 2013-2014. Accessed April 2015.

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

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