# Influenza Weekly Report

2015 Week 5 (February 1 - 7) through 2016 Week 5 (January 31 - February 6)

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.

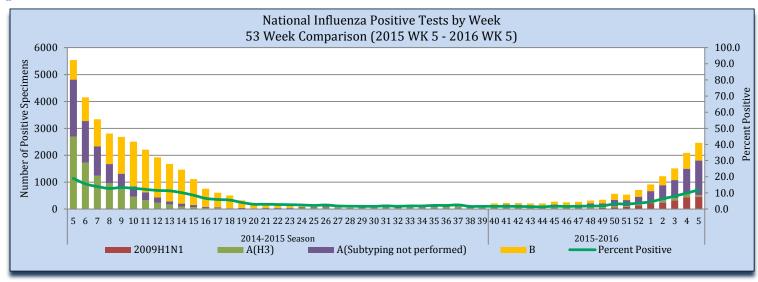
#### **Purpose**

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 5, there were 20,803 specimens collected and tested for influenza, of those 2,461 were positive (11.8%).

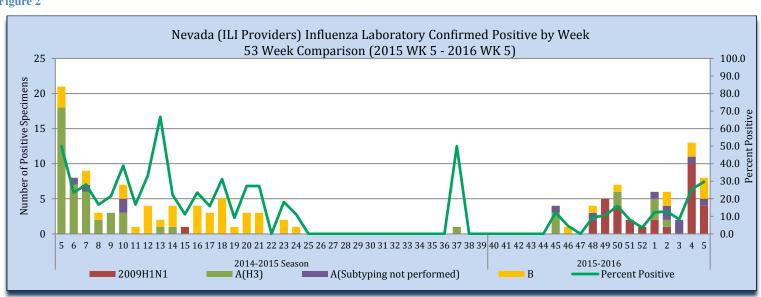
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 5, there were 27 specimen collected and tested for influenza of which 8 was positive (29.6%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 65 specimens for influenza from sentinel providers, of which there have been 38 positive (58.5%). Southern Nevada Public Health Laboratory (SNPHL) has tested 172 specimens this season of which there have been 8 positive (4.7%). Nationally, there have been 309,716 specimens sent to the WHO and NERVSS laboratories of which 12,519 have been positive or 4.0%. 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 including out of state laboratories.

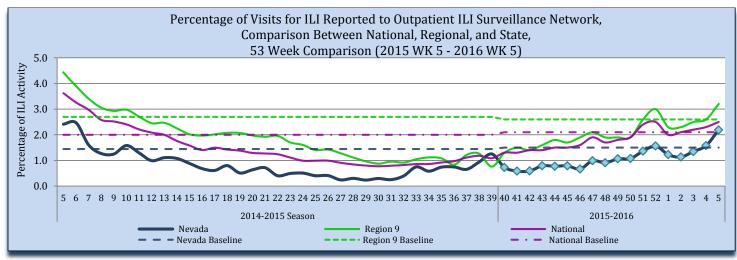
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 5)		State of Nevada (Season)		National (Week 5)		National (Season)	
				%	#	%	#	%	#	%
Specimens Tested	65	172	27	-	571	-	20,803	-	309,716	-
Positives to Influenza	38	8	13	29.6	59	10.3	2,461	11.8	12,519	4.0
<u>Influenza A:</u>	19	8	5	62.5	49	83.1	1,803	73.3	8,709	69.6
A (2009 H1N1)	12	8	4	80.0	31	63.3	457	25.3	2,098	24.1
A (H3)	7	0	0	0.0	9	18.4	66	3.7	929	10.7
A (Sub-typing not performed)	0	0	1	20.0	9	18.4	1,280	71.0	5,682	65.2
<u>Influenza B:</u>	5	0	3	37.5	10	16.9	658	26.7	3,810	30.4
B (Victoria Linage)	4	0	1	33.3	4	40.0	35	5.3	151	4.0
B (Yamagata Linage)	4	0	2	66.7	5	50.0	88	13.4	468	12.3
B (Sub-typing not performed)	0	0	0	0.0	1	10.0	535	81.3	3,191	83.8

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 5 is 2.2% and is above the state baseline 1.5% the second consecutive week. Region 9 ILI percentage for week 5 is 3.2% and is above the region baseline 2.6%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 5 is 2.5% and is above the national baseline 2.1% for the 3<sup>rd</sup> consecutive week.

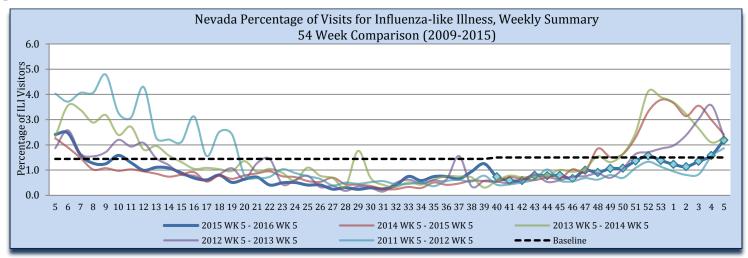
Figure 3



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

During week 5, 2.2% of visits to sentinel providers were due to ILI; this is lower than the 2014-2015 influenza season (2.4%). There were 10,152 patients seen by ILI providers during week 5, of which 222 patients presented with ILI; week 5 of 2015, there were 461 patients seen with ILI (19,193 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.

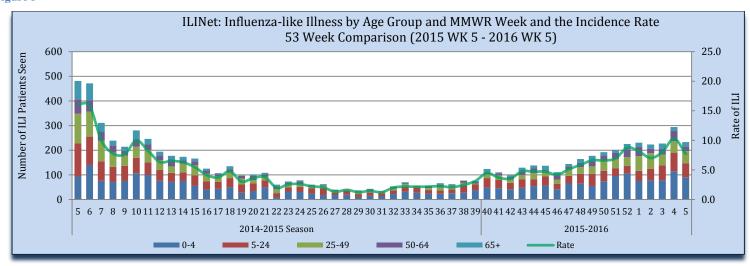
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 5, patients age 0-4 were the greatest number of patients seen with ILI, at 90 patients seen. The rate for week 5 is 7.7 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)

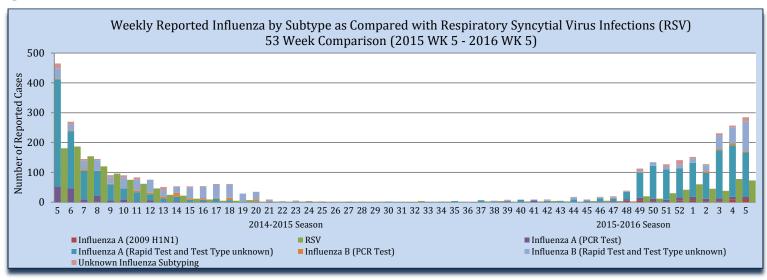
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 5, there were 280 influenza cases reported to the state, 6 H1N1 influenza A, 156 influenza A (H3 or unknown subtyping) and 103 influenza B case.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 5)					Cumulative Influenza Season				
	H1N1	Α	В	Unknown	Total	H1N1	Α	В	Unknown	Total
Carson City Health and Human Services	0	11	17	0	28	0	59	39	0	98
Rural Community Health Services	1	1	9	0	11	4	19	27	1	51
Southern Nevada Health District	5	108	48	12	173	47	1,043	159	82	1,331
Washoe County Health District	0	36	29	3	68	1	132	81	10	224
State of Nevada	6	156	103	15	280	52	1,253	306	93	1,704

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

### Hospitalizations

There was 15 hospitalization associated with influenza reported to the state health authority for week 5.

Table 3

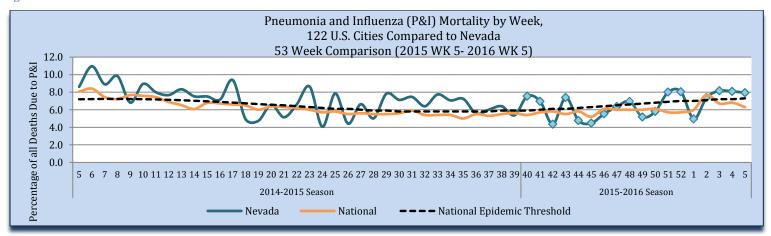
Influenza Hospitalizations								
Donosting Inviediation	Current Weel	k (Week 5)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	8	6.3				
Rural Community Health Services	0	0.0	6	4.7				
Southern Nevada Health District	12	80.0	103	81.1				
Washoe County Health District	3	20.0	10	7.9				
State of Nevada	15	100	127	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 February 19, there were 36 P&I deaths and 453 total deaths for week 5. The P&I mortality percent is above the threshold at 7.9% (threshold 7.3%). Nationally, the P&I mortality is below the national epidemic threshold at 6.9% for week 5.

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. 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 February 2016.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2013-2014. Accessed February 2016.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2013-2014. Accessed February 2016.

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

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