Influenza Weekly Report

2014 Week 49 (November 30 - December 6) through 2015 Week 49 (December 6 - 12)

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.

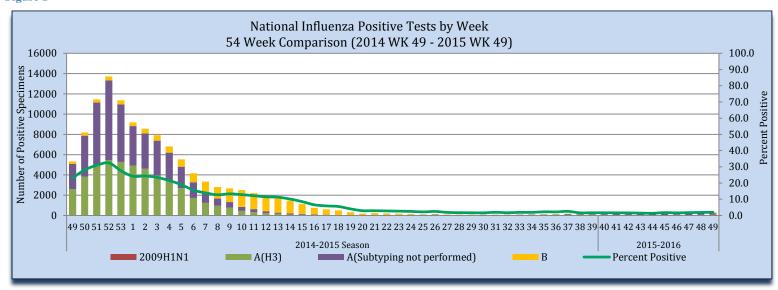
Purpose

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 49, there were 16,237 specimens collected and tested for influenza, of those 315 were positive (1.8%).

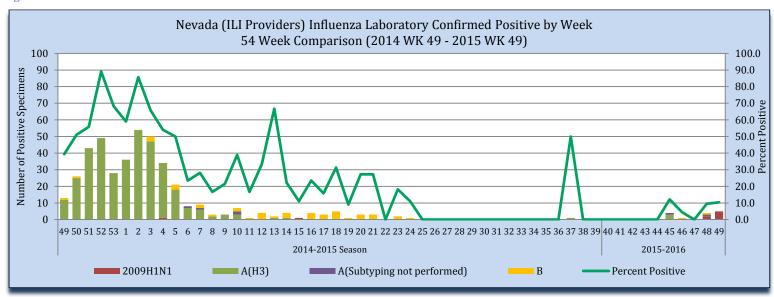
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 49, there were 48 specimen collected and tested for influenza of which 5 were positive (10.4%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 29 specimens for influenza from sentinel providers, of which there have been 4 positive (13.8%). Southern Nevada Public Health Laboratory (SNPHL) has tested 101 specimens this season of which there have been 3 positive (3.0%). Nationally, there have been 149,165 specimens sent to the WHO and NERVSS laboratories of which 2,465 have been positive or 1.7%. 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.

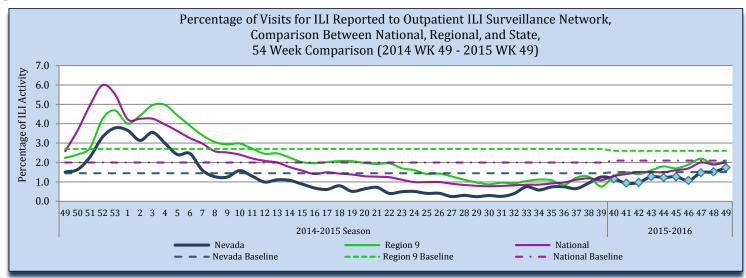
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 49)		State of Nevada (Season)		National (Week 49)		National (Season)	
			#	%	#	%	#	%	#	%
Specimens Tested	29	101	48		276		16,237		149,165	
Positives to Influenza	4	3	5	10.4	14	5.1	315	1.9	2,465	1.7
<u>Influenza A:</u>	1	1	5	100	12	85.7	198	62.9	1,610	65.3
A (2009 H1N1)	0	1	5	100	7	58.3	37	18.7	132	8.2
A (H3)	1	0	0	0.0	3	25.0	32	16.2	374	23.2
A (Sub-typing not performed)	0	0	0	0.0	2	16.7	129	65.2	1,104	68.6
<u>Influenza B:</u>	1	0	0	0.0	2	14.3	117	37.1	855	34.7
B (Victoria Linage)	1	0	0	0.0	1	50.0	1	0.9	18	2.1
B (Yamagata Linage)	0	0	0	0.0	0	0.0	6	5.1	38	4.4
B (Sub-typing not performed)	0	0	0	0.0	1	50.0	110	94.0	799	93.5

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 49 is 1.7% and is above the state baseline 1.5%. Region 9 ILI percentage for week 49 is 2.1% and is below the region baseline 2.6%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 49 is 2.0% and is below the national baseline 2.1%.

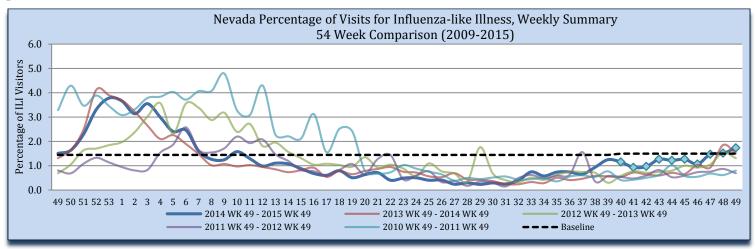
Figure 3



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

During week 49, 1.7% of visits to sentinel providers were due to ILI; this is higher than the 2014-2015 influenza season (1.5%). There were 10,189 patients seen by ILI providers during week 49, of which 177 patients presented with ILI; week 49 of 2014, there were 275 patients seen with ILI (18,200 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.

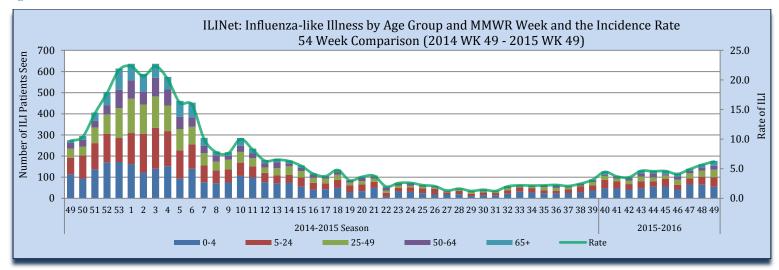
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 49, patients age 0-4 were the greatest number of patients seen with ILI, at 54 patients seen. The rate for week 49 is 6.2 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 2015 is 2,855,061.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

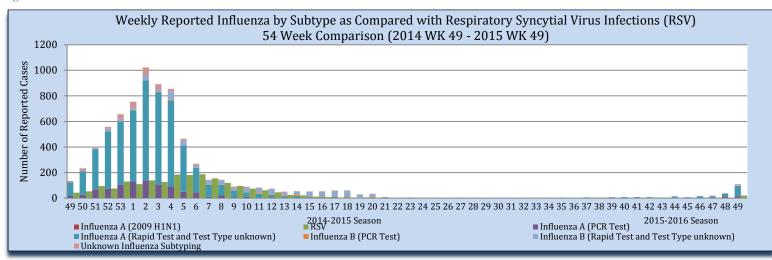
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 49, there were 110 influenza cases reported to the state, 6 H1N1 influenza A, 90 influenza B case and 5 unknown.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 49)					Cumulative Influenza Season				
	H1N1	Α	В	Unknown	Total	H1N1	Α	В	Unknown	Total
Carson City Health and Human Services	0	2	1	0	3	0	8	1	0	9
Rural Community Health Services	0	1	2	0	3	0	2	2	0	4
Southern Nevada Health District	6	85	1	9	101	14	157	12	27	210
Washoe County Health District	0	2	1	0	3	0	15	6	2	23
State of Nevada	6	90	5	9	110	14	182	21	29	246

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There was 14 hospitalization associated with influenza reported to the state health authority for week 49.

Table 3

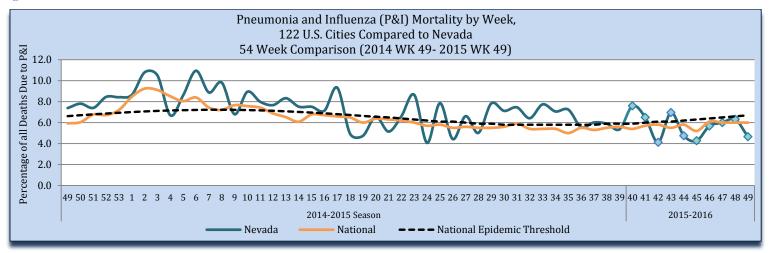
Influenza Hospitalizations								
Donouting Invited ation	Current Week	(Week 49)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	1	7.1	4	11.8				
Rural Community Health Services	0	0.0	1	2.9				
Southern Nevada Health District	13	92.9	29	85.3				
Washoe County Health District	0	0.0	0	0.0				
State of Nevada	14	100	34	100				

 $Source: Reported \ to \ Of fice \ of \ Public \ Health \ Informatics \ and \ Epidemiology \ from \ each \ Jurisdiction.$

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 January 5, there were 22 P&I deaths and 473 total deaths for week 49. The P&I mortality percent is below the threshold at 4.7% (threshold 6.7%). Nationally, the P&I mortality is below the national epidemic threshold at 6.0% for week 49.

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

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