Influenza Weekly Report

2014 Week 7 (February 9 - 15) through 2015 Week 7 (February 15 - 21)

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



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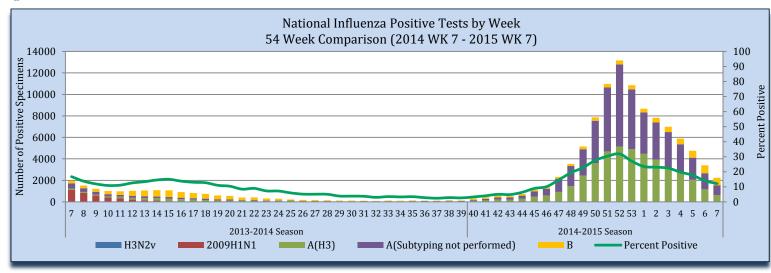
Purpose

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 18,505 specimens collected and tested for influenza, of those 2,236 were positive (12.1%).

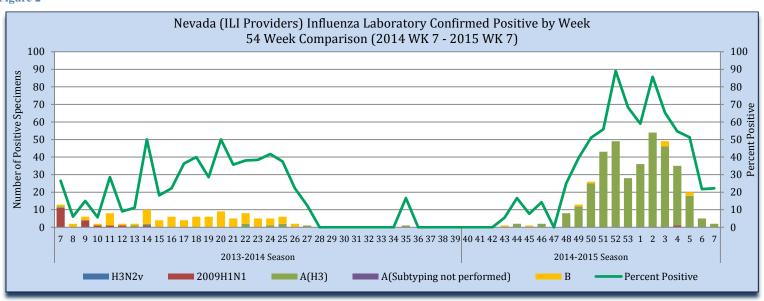
Figure 1



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 9 specimens collected and tested for influenza of which 2 were positive (22.2%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 354 specimens for influenza from sentinel providers, of which 257 have been positive (72.6%). Southern Nevada Public Health Laboratory (SNPHL) has test 377 specimens this season of which 96 were positive. Nationally, there have been 486,004 specimens sent to the WHO and NERVSS laboratories of which 98,680 were positive or 20.3%. 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.

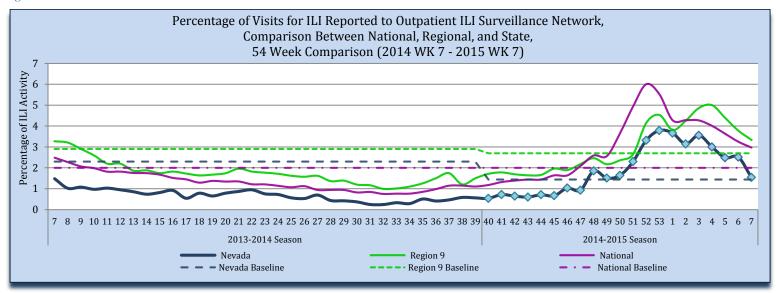
Table 1

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	354	377	9		771		18,505		486,004	
Positives to Influenza	257	96	2	22.2	374	48.5	2,236	12.1	98,680	20.3
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Influenza A:	252	94	2	100	365	97.6	1,545	69.1	91,836	93.1
A(2009 H1N1)	1	0	0	0.0	1	0.3	7	0.5	165	0.2
A(H3)	251	94	2	100	364	99.7	623	40.3	48,548	52.9
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	915	59.2	43,123	47.0
Influenza B:	5	2	0	0.0	9	2.4	691	30.9	6,843	6.9

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 7 is 1.5% and is above the state baseline 1.4%, the 13th consecutive week. Region 9 ILI percentage for week 7 is 3.3% and is above the region baseline 2.7% for the 9th consecutive week. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 7 is 3.0% and is above the national baseline 2.0, for the 14th consecutive week.

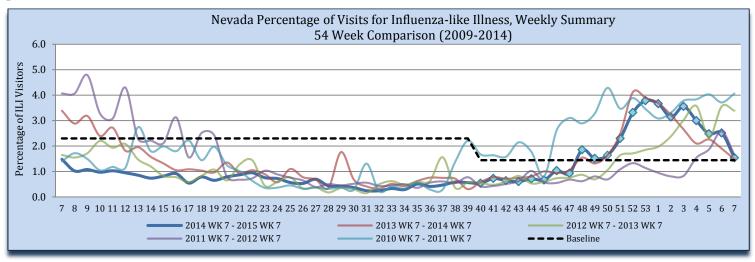
Figure 3



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

During week 7, 1.5% of visits to sentinel providers were due to ILI; this is same as the 2013-2014 influenza season. There were 17,232 patients seen by ILI providers during week 7, of which 265 patients presented with ILI; week 7 of 2014, there were 279 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.

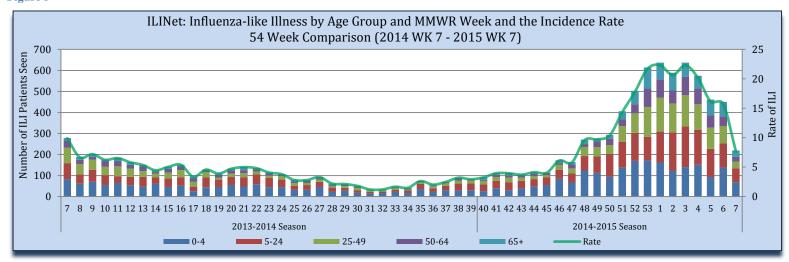
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 7, patients age 0-4 were the greatest number of patients seen with ILI, at 68 patients seen. The rate for week 7 is 7.7 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)

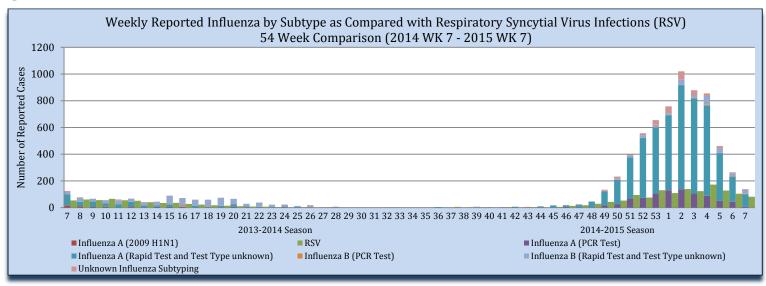
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 7, there were 139 influenza cases reported to the state, 101 influenza A cases, 32 influenza B cases and 6 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type										
Reporting Jurisdiction	Current Week (Week 7)					Cumulative Influenza Season					
	H1N1	A	В	Unknown	Total	H1N1	A	В	Unknown	Total	
Carson City Health and Human Services	0	12	9	0	21	0	911	62	2	975	
Rural Community Health Services	0	9	0	0	9	0	548	17	44	609	
Southern Nevada Health District	0	34	10	3	47	0	3,024	179	200	3,403	
Washoe County Health District	0	46	13	3	62	0	1,388	96	39	1,523	
State of Nevada	0	101	32	6	139	0	5,871	354	285	6,510	

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There have been 9 hospitalizations associated with influenza reported to the state health authority during week 7.

Table 3

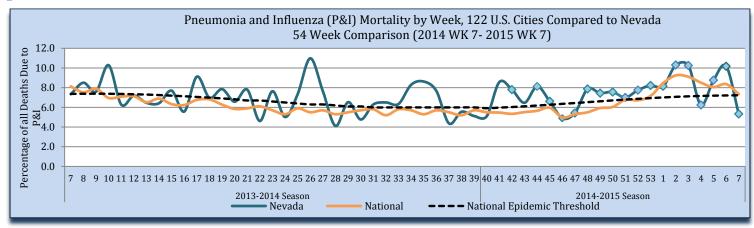
Influenza Hospitalizations								
Donouting Invited total	Current Wee	k (Week 7)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	1	11.1	43	8.8				
Rural Community Health Services	0	0.0	27	5.6				
Southern Nevada Health District	3	33.3	220	45.3				
Washoe County Health District	5	55.6	196	40.3				
State of Nevada	9	100	486	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 28, there were 21 P&I deaths and 395 total deaths for week 7. The P&I mortality percent is below the threshold at 5.3% (threshold 7.2%). Nationally, the P&I mortality is above the national epidemic threshold at 7.4% for week 7.

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 March 2015.
- 4. OPHIE. DPBH. NBS. 2013-2014. Accessed March 2015.
- 5. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2013-2014. Accessed March 2015.
- 6. Southern Nevada Health District (SNHD). NETSS/Trisano. 2013-2014. Accessed March 2015.

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