Influenza Weekly Report

2015 Week 2 (January 11 - 17) through 2016 Week 2 (January 10 - 16)

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.

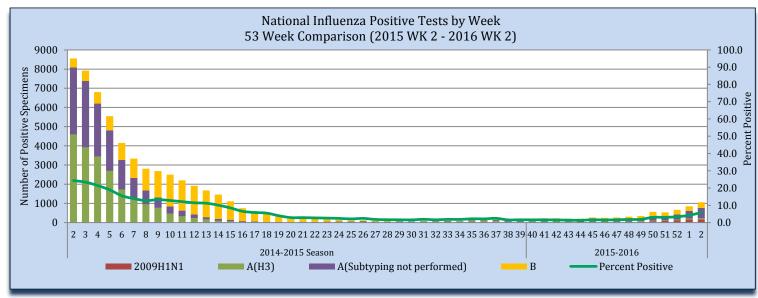
Purpose

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 2, there were 18,024 specimens collected and tested for influenza, of those 1,058 were positive (5.9%).

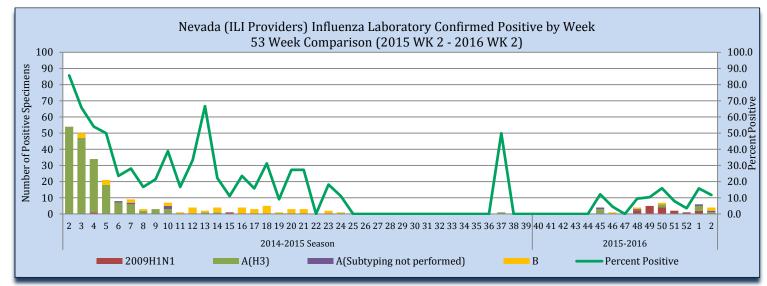




Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 2, there were 34 specimen collected and tested for influenza of which 4 were positive (11.8%).

Figure 2



Source of Data: CDC: ILINet.

Influenza Weekly Report

Nevada State Public Health Laboratory (NSPHL) has tested 44 specimens for influenza from sentinel providers, of which there have been 12 positive (27.3%). Southern Nevada Public Health Laboratory (SNPHL) has tested 125 specimens this season of which there have been 4 positive (3.2%). Nationally, there have been 246,065 specimens sent to the WHO and NERVSS laboratories of which 6,187 have been positive or 2.5%. 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.

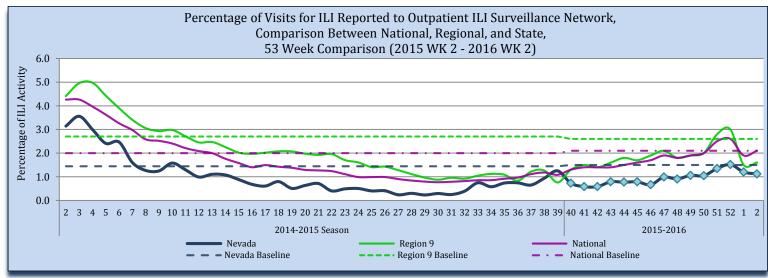
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 2)		State of Nevada (Season)		National (Week 2)		National (Season)	
			#	%	#	%	#	%	#	%
Specimens Tested	44	125	34		445		18,024		246,065	
Positives to Influenza	12	4	4	11.8	34	7.6	1,058	5.9	6,187	2.5
	-		- -					-		
Influenza A:	9	4	2	50.0	29	85.3	772	73.0	4,123	66.6
A (2009 H1N1)	2	4	0	0.0	16	55.2	162	21.0	710	17.2
A (H3)	7	0	1	50.0	9	31.0	63	8.2	619	15.0
A (Sub-typing not performed)	0	0	1	50.0	4	13.8	547	70.9	2,794	67.8
<u>Influenza B:</u>	3	0	2	50.0	5	14.7	286	27.0	2,064	33.4
B (Victoria Linage)	2	0	1	50.0	2	40.0	11	3.8	55	2.7
B (Yamagata Linage)	1	0	1	50.0	2	40.0	36	12.6	193	9.4
B (Sub-typing not performed)	0	0	0	0.0	1	20.0	239	83.6	1,816	88.0

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 2 is 1.1% and is below the state baseline. Region 9 ILI percentage for week 2 is 1.6% 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 2 is 2.1% and is at the national baseline.

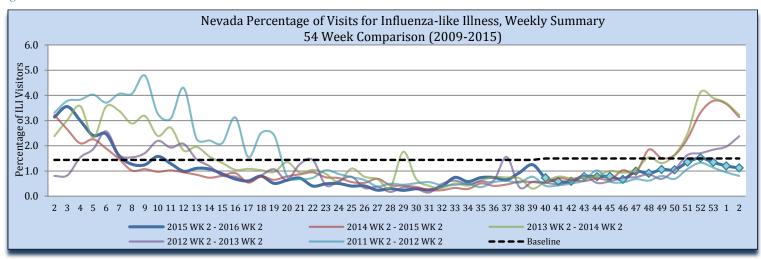
Figure 3



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

During week 2, 1.1% of visits to sentinel providers were due to ILI; this is lower than the 2014-2015 influenza season (3.1%). There were 17,667 patients seen by ILI providers during week 2, of which 198 patients presented with ILI; week 2 of 2015, there were 589 patients seen with ILI (17,395 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.

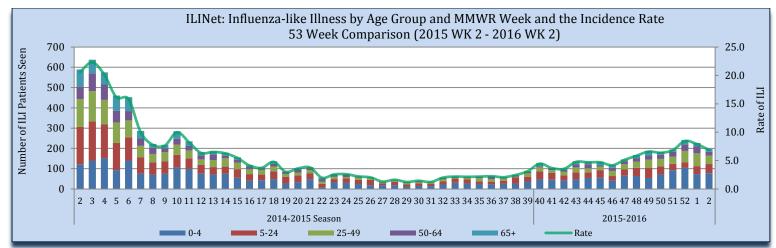
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 2, patients age 0-4 were the greatest number of patients seen with ILI, at 78 patients seen. The rate for week 2 is 6.9 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)

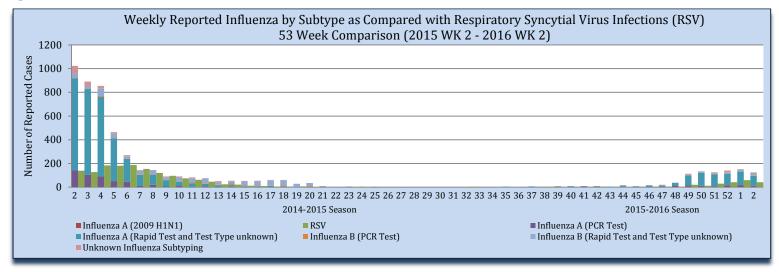
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 2, there were 126 influenza cases reported to the state, 4 H1N1 influenza A, 93 influenza A (H3 or unknown subtyping) and 25 influenza B case.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 2)				Cumulative Influenza Season					
	H1N1	А	В	Unknown	Total	H1N1	А	В	Unknown	Total
Carson City Health and Human Services	0	8	5	0	13	0	31	10	0	41
Rural Community Health Services	0	3	2	0	5	0	9	14	0	23
Southern Nevada Health District	3	77	12	4	96	33	654	48	60	795
Washoe County Health District	1	5	6	0	12	1	44	18	4	67
State of Nevada	4	93	25	4	126	34	738	90	64	926

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There was 18 hospitalization associated with influenza reported to the state health authority for week 2.

Table 3

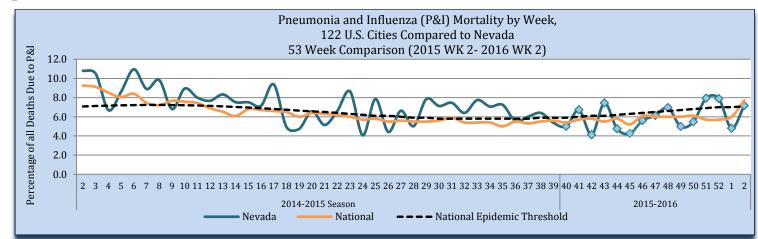
Influenza Hospitalizations								
Deporting Jurisdiction	Current Wee	k (Week 2)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	4	22.2	8	9.1				
Rural Community Health Services	0	0.0	5	5.7				
Southern Nevada Health District	13	72.2	70	79.5				
Washoe County Health District	1	5.6	5	5.7				
State of Nevada	18	100	88	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 1, there were 30 P&I deaths and 419 total deaths for week 2. The P&I mortality percent is above the threshold at 7.2% (threshold 7.1%). Nationally, the P&I mortality is above the national epidemic threshold at 7.7% for week 2.

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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