Influenza Weekly Report

2015 Week 4 (January 25 - 31) through 2016 Week 4 (January 24 - 30)

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.

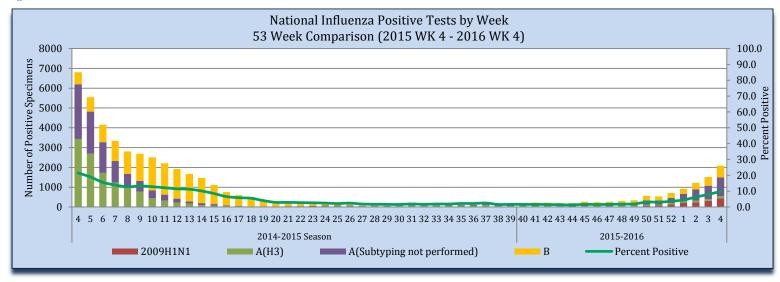
Purpose

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 4, there were 21,199 specimens collected and tested for influenza, of those 2,089 were positive (9.9%).

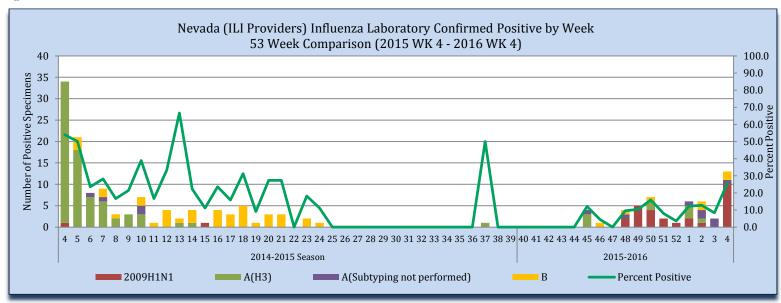
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 4, there were 51 specimen collected and tested for influenza of which 13 was positive (25.5%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 57 specimens for influenza from sentinel providers, of which there have been 38 positive (66.7%). 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 288,913 specimens sent to the WHO and NERVSS laboratories of which 10,058 have been positive or 3.5%. 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.

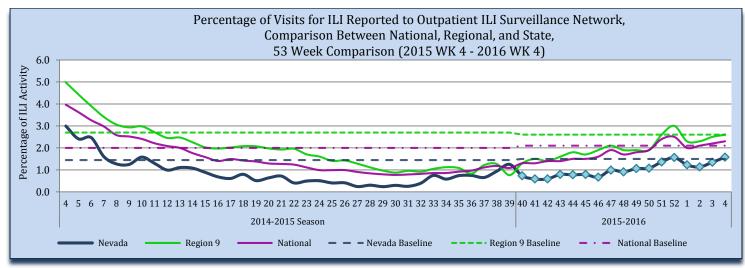
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 4)		State of Nevada (Season)		National (Week 4)		National (Season)	
			#	%	#	%	#	%	#	%
Specimens Tested	57	172	51	-	544	-	21,199	-	288,913	-
Positives to Influenza	38	8	13	25.5	51	9.4	2,089	9.9	10,058	3.5
<u>Influenza A:</u>	15	8	11	84.6	44	86.3	1,501	71.9	6,906	68.7
A (2009 H1N1)	8	8	10	90.9	27	61.4	437	29.1	1,641	23.8
A (H3)	7	0	0	0.0	9	20.5	118	7.9	863	12.5
A (Sub-typing not performed)	0	0	1	9.1	8	18.2	946	63.0	4,402	63.7
<u>Influenza B:</u>	5	0	2	15.4	7	13.7	588	28.1	3,152	31.3
B (Victoria Linage)	3	0	1	50.0	3	42.9	25	4.3	116	3.7
B (Yamagata Linage)	2	0	1	50.0	3	42.9	79	13.4	380	12.1
B (Sub-typing not performed)	0	0	0	0.0	1	14.3	484	82.3	2,656	84.3

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 4 is 1.6% and is above the state baseline 1.5%. Region 9 ILI percentage for week 4 is 2.6% and is at the region baseline. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 4 is 2.3% and is above the national baseline 2.1%.

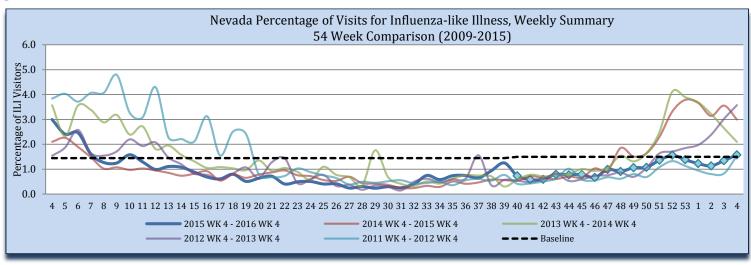
Figure 3



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

During week 4, 1.6% of visits to sentinel providers were due to ILI; this is lower than the 2014-2015 influenza season (3.0%). There were 18,779 patients seen by ILI providers during week 4, of which 296 patients presented with ILI; week 4 of 2015, there were 575 patients seen with ILI (17,924 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.

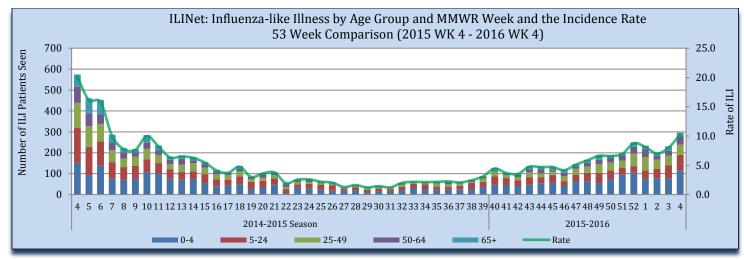
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 4, patients age 0-4 were the greatest number of patients seen with ILI, at 115 patients seen. The rate for week 4 is 10.3 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)

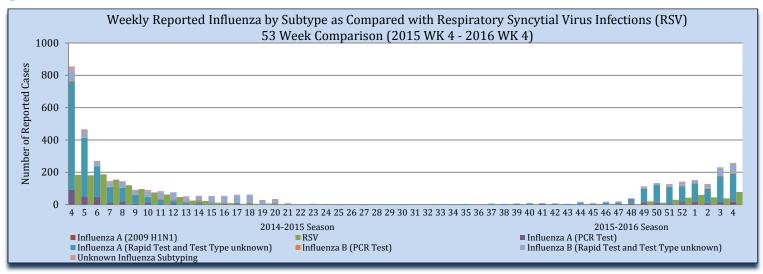
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 4, there were 257 influenza cases reported to the state, 10 H1N1 influenza A, 179 influenza A (H3 or unknown subtyping) and 61 influenza B case.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 4)					Cumulative Influenza Season				
	H1N1	Α	В	Unknown	Total	H1N1	Α	В	Unknown	Total
Carson City Health and Human Services	0	12	8	0	20	0	48	22	0	70
Rural Community Health Services	2	2	0	0	4	3	13	18	1	35
Southern Nevada Health District	6	132	33	6	177	42	935	111	70	1,158
Washoe County Health District	2	33	20	1	56	3	94	52	7	156
State of Nevada	10	179	61	7	257	48	1,090	203	78	1,419

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There was 9 hospitalization associated with influenza reported to the state health authority for week 4.

Table 3

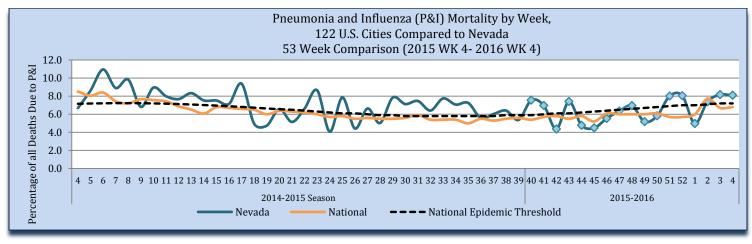
Influenza Hospitalizations								
Donouting Invisdiction	Current Wee	k (Week 4)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	8	7.1				
Rural Community Health Services	0	0.0	6	5.4				
Southern Nevada Health District	8	88.9	91	81.3				
Washoe County Health District	1	11.1	7	6.3				
State of Nevada	9	100	112	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 33 P&I deaths and 408 total deaths for week 4. The P&I mortality percent is above the threshold at 8.1% (threshold 7.2%). Nationally, the P&I mortality is below the national epidemic threshold at 6.8% for week 4.

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.

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