

Influenza Weekly Report

2014 Week 3 (January 12 – 18) through 2015 Week 3 (January 18 – 24)

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



Brian Sandoval
Governor
State of Nevada

Romaine Gilliland
Director
Department of Health and Human Services

Richard Whitley, MS
Administrator
Division of Public and Behavioral Health

Tracey D Green, MD
Chief Medical Officer
Division of Public and Behavioral Health

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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.

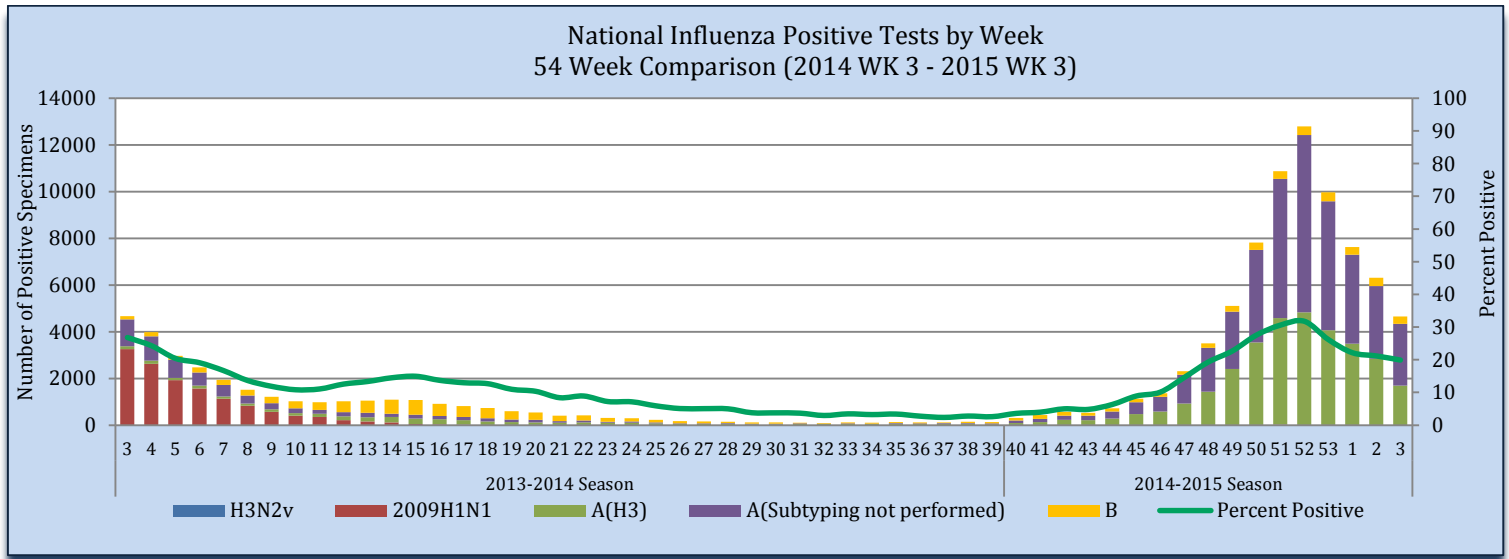
Purpose

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 3, there were 23,339 specimens collected and tested for influenza, of those 4,651 were positive (19.9%).

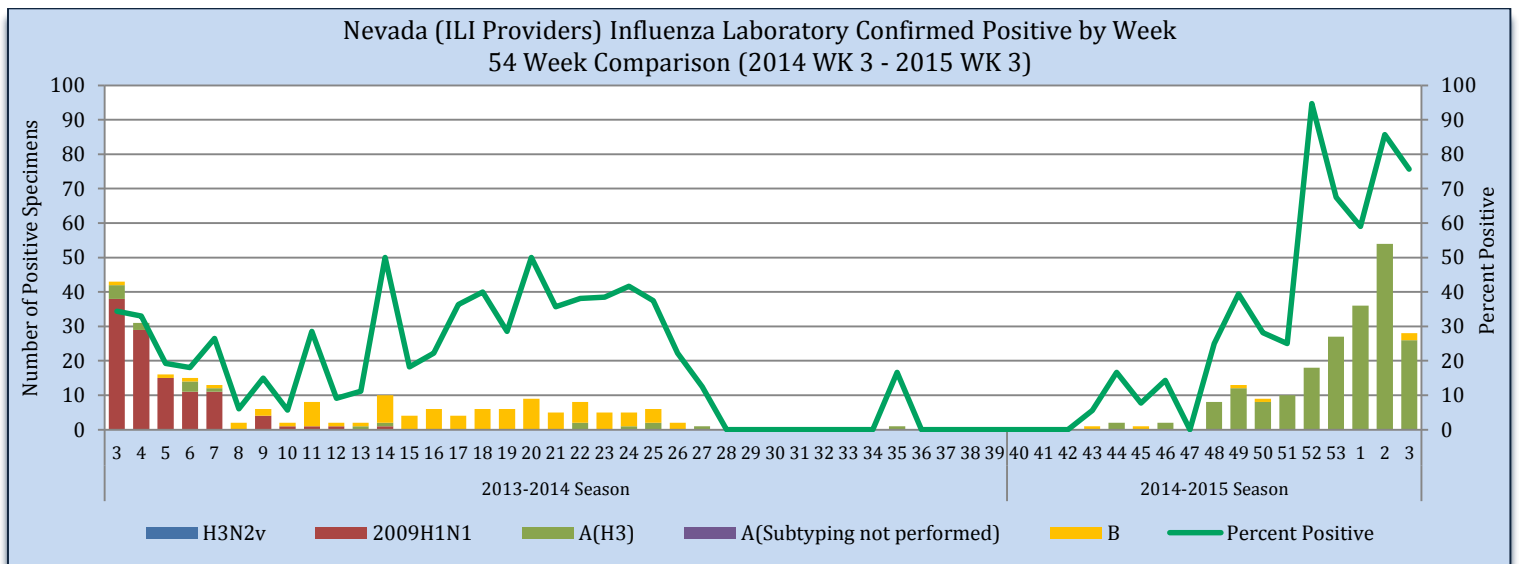
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 3, there were 37 specimens collected and tested for influenza of which 28 were positive (75.7%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 277 specimens for influenza from sentinel providers, of which 209 have been positive (75.5%). Southern Nevada Public Health Laboratory (SNPHL) has test 299 specimens this season of which 69 were positive. Nationally, there have been 365,891 specimens sent to the WHO and NERVSS laboratories of which 76,042 were positive or 20.8%. 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

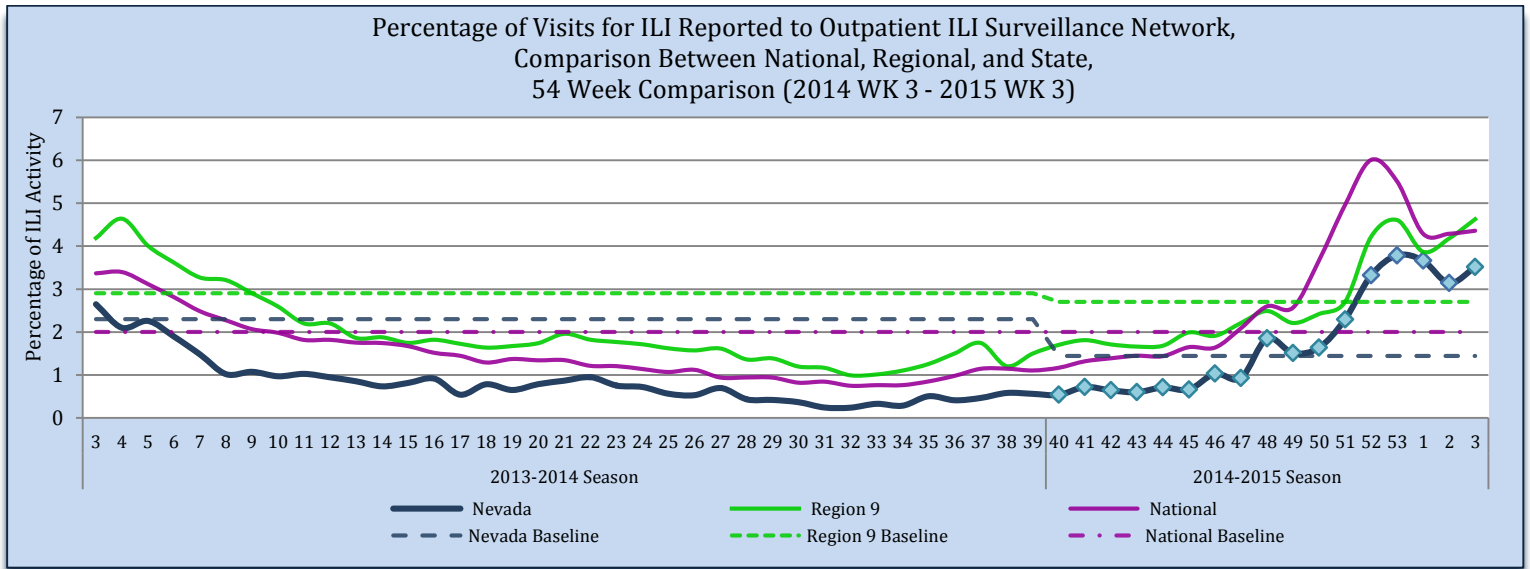
ILINet Surveillance: Influenza Specimens Tested State and Nationally

	NSPHL	SNPHL	State of Nevada (Week 3)		State of Nevada (Season)		National (Week 3)		National (Season)	
			#	%	#	%	#	%	#	%
			Specimens Tested	277	299	37		597		23,339
Positives to Influenza	209	69	28	75.7	290	48.6	4,651	19.9	76,042	20.8
Influenza A:	206	67	26	92.9	287	97.9	4,343	93.4	72,052	94.8
A(2009 H1N1)	0	0	0	0.0	0	0.0	2	0.0	130	0.2
A(H3)	206	67	26	100	284	100	1,698	39.1	40,211	55.8
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	2,643	60.9	31,711	44.0
Influenza B:	3	2	2	7.1	6	2.1	308	6.6	3,989	5.2

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 3 is 3.5% and is above the state baseline 1.4, the 9th consecutive week. Region 9 ILI percentage for week 3 is 4.6% and is above the region baseline 2.7% for the 5th consecutive week. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 3 is 4.4% and is above the national baseline 2.0, for the 10th consecutive week.

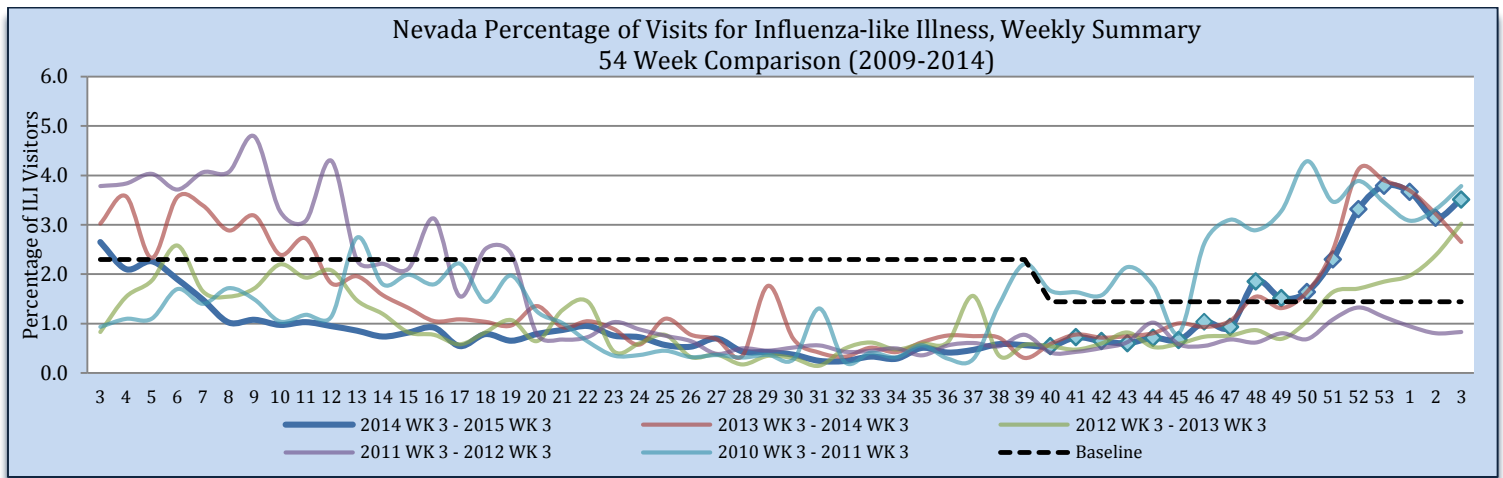
Figure 3



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

During week 3, 3.5% of visits to sentinel providers were due to ILI; this is 0.9% greater than the 2013-2014 influenza season. There were 16,776 patients seen by ILI providers during week 3, of which 589 patients presented with ILI, more than week 3 of 2014, of which there were 502 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.

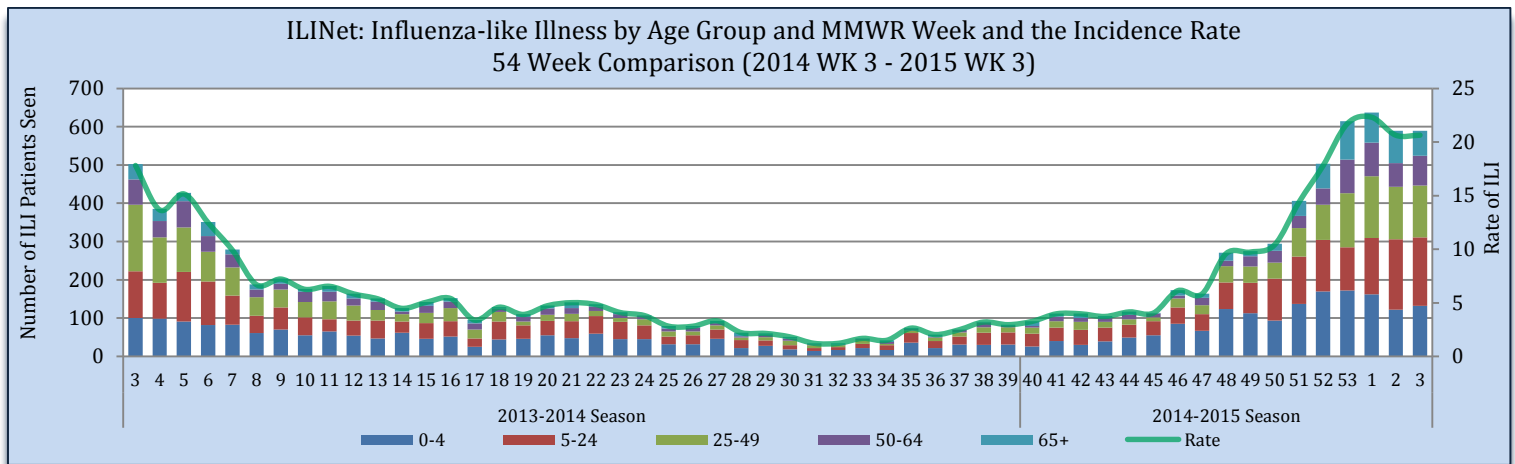
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 3, patients age 5-24 were the greatest number of patients seen with ILI, at 179 patients seen. The rate for week 3 is 20.0 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.

BioSense

The BioSense application is a monitoring system of the CDC’s National Syndromic Surveillance Program that aims to increase the ability of state health authorities to track and respond to harmful health efforts of exposure to disease or hazardous conditions. The information extracted from BioSense for this report is only reflective of data where the patient’s age was provided. Therefore, the numbers don’t reflect all patients seen through BioSense for ILI, as data with missing age value is not included. During week 3, 560 patients were seen with ILI through BioSense, 3.2% of the total patients seen.

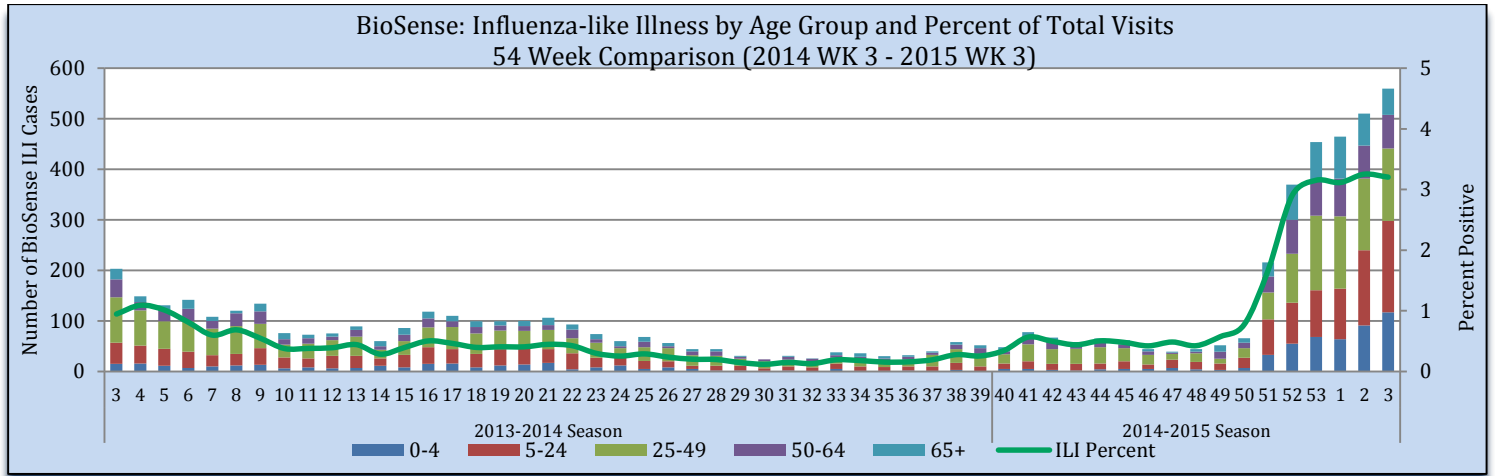
Table 2

BioSense: Influenza-like Illness Monitoring by County Jurisdiction					
Reporting Jurisdiction	Current Week (Week 3)			Cumulative Influenza Season	
	#	%	% of Facilities Reporting	#	%
Carson City Health and Human Services	85	15.2	66.7	672	21.0
Rural Community Health Services	10	1.8	10.0	111	3.5
Southern Nevada Health District	374	66.8	68.8	1,609	50.3
Washoe County Health District	91	16.3	40.0	806	25.2
State of Nevada	560	100	47.1	3,198	100

Source of Data: BioSense.

Influenza-like Illness monitored through BioSense had the highest patient visits with ILI in the 25-49 age groups at 181 patients, which is the same age group as the ILINet surveillance. The total patient seen with ILI increased from week 2 to week 3, from 510 patients to 560 patients.

Figure 6

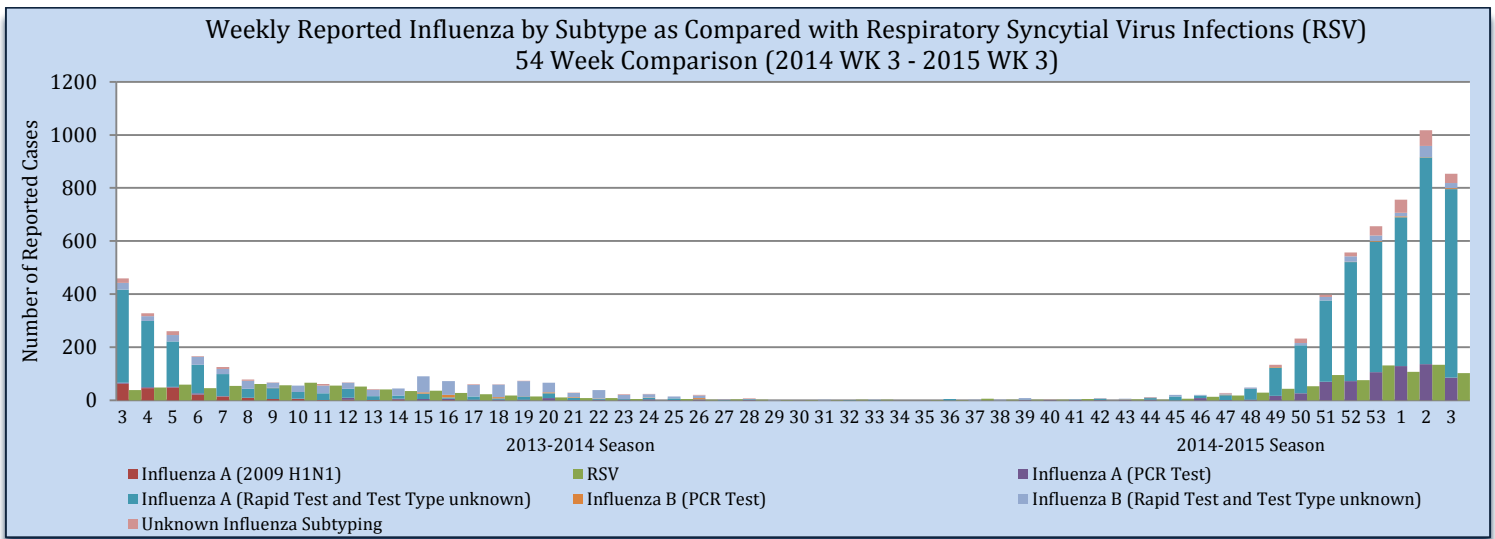


Source of Data: BioSense.

Influenza Positive Surveillance (NBS and NETSS)

Positive cases of influenza are reported to the state health authority for surveillance purposes. Figure 6 and Table 2 reflects 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 3, there were 854 influenza cases reported to the state, 796 influenza A cases, 23 influenza B cases and 35 unknown subtyping.

Figure 7



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

Table 3

Reporting Jurisdiction	Reported Influenza Cases by County Jurisdiction and Influenza Type									
	Current Week (Week 3)					Cumulative Influenza Season				
	H1N1	A	B	Unknown	Total	H1N1	A	B	Unknown	Total
Carson City Health and Human Services	0	200	7	0	207	0	675	34	2	711
Rural Community Health Services	0	68	2	1	71	0	449	13	37	499
Southern Nevada Health District	0	378	8	22	408	0	2,296	87	163	2,546
Washoe County Health District	0	150	6	12	168	0	918	53	30	1,001
State of Nevada	0	796	23	35	854	0	4,338	187	232	4,757

Source: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There have been 62 hospitalizations associated with influenza reported to the state health authority during week 3.

Table 4

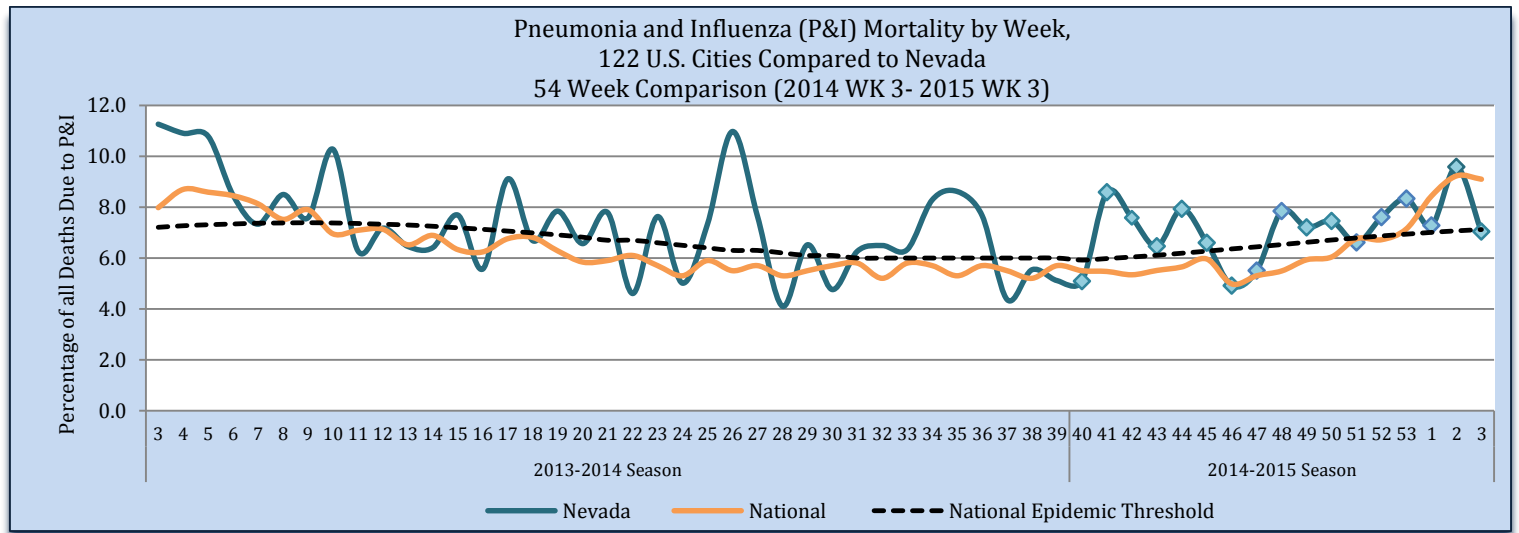
Reporting Jurisdiction	Influenza Hospitalizations		Cumulative Influenza Season	
	Current Week (Week 3)			
	#	%	#	%
Carson City Health and Human Services	5	8.1	39	10.1
Rural Community Health Services	0	0.0	17	4.4
Southern Nevada Health District	23	37.1	195	50.5
Washoe County Health District	34	54.8	135	35.0
State of Nevada	62	100	386	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 2, there were 30 P&I deaths and 426 total deaths for week 3. The P&I mortality percent is below the threshold at 7.0% (threshold 7.1%). Nationally, the P&I mortality is above the national epidemic threshold at 9.1% for week 3.

Figure 8



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

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

NEVADA INFLUENZA SURVEILLANCE PROGRAM
OFFICE OF PUBLIC HEALTH INFORMATICS AND EPIDEMIOLOGY
4126 TECHNOLOGY WAY, STE 200
CARSON CITY NV 89706
TEL: (775) 684-5897
FAX: (775) 684-5999

Compiled and Written by:

JEN THOMPSON

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