

Influenza Weekly Report

2013 Week 47 (November 17 – 23) through 2014 Week 47 (November 16 - 22)

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.

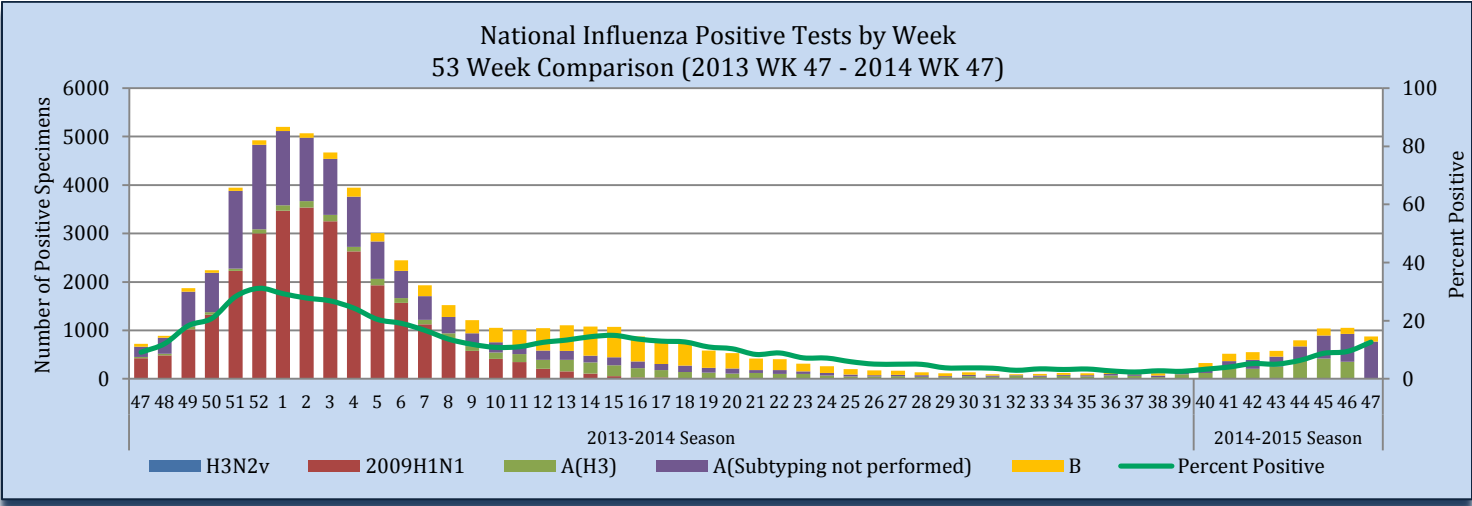
Purpose

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 47, there were 9,710 specimens collected and tested for influenza, of those 1,228 were positive (12.6%).

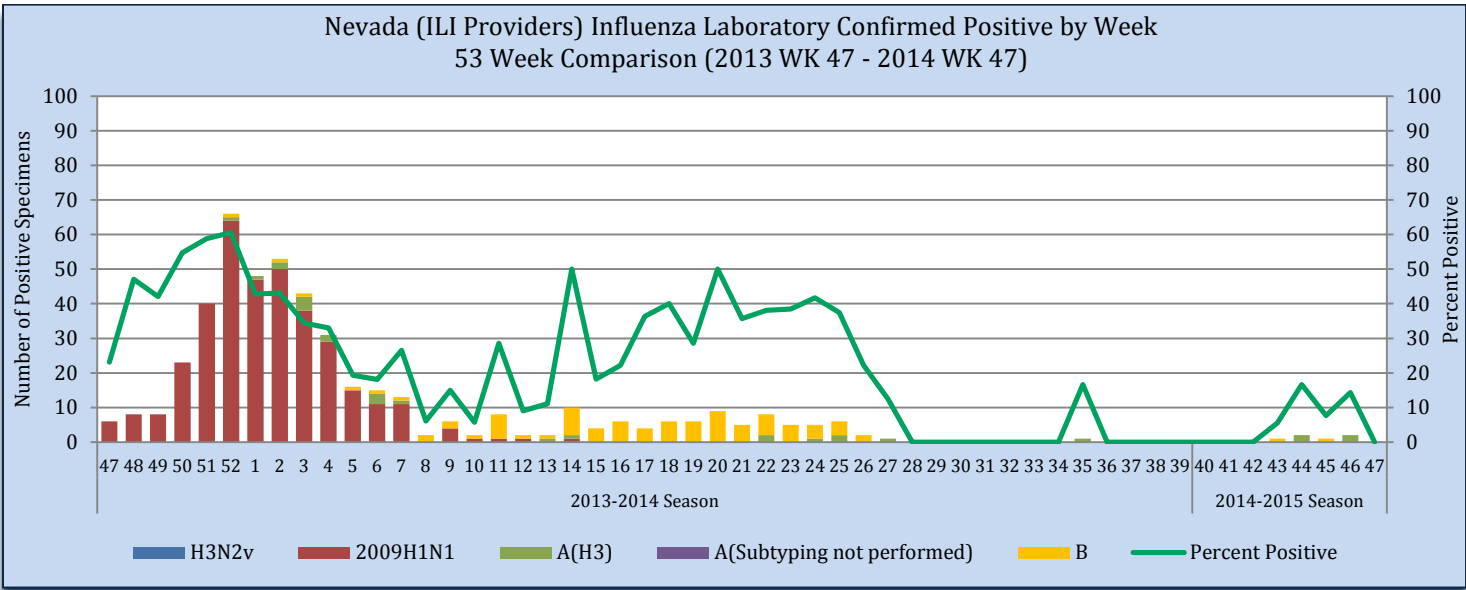
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 47, there were 23 specimens collected and for influenza all of which were negative.

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 20 specimens for influenza from sentinel providers, 3 of which have been positive (15.0%). Southern Nevada Public Health Laboratory (SNPHL) has test 125 specimens this season of which 3 were positive. Nationally, there have been 84,172 specimens sent to the WHO and NERVS laboratories of which 5,841 were positive or 6.9%. 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.

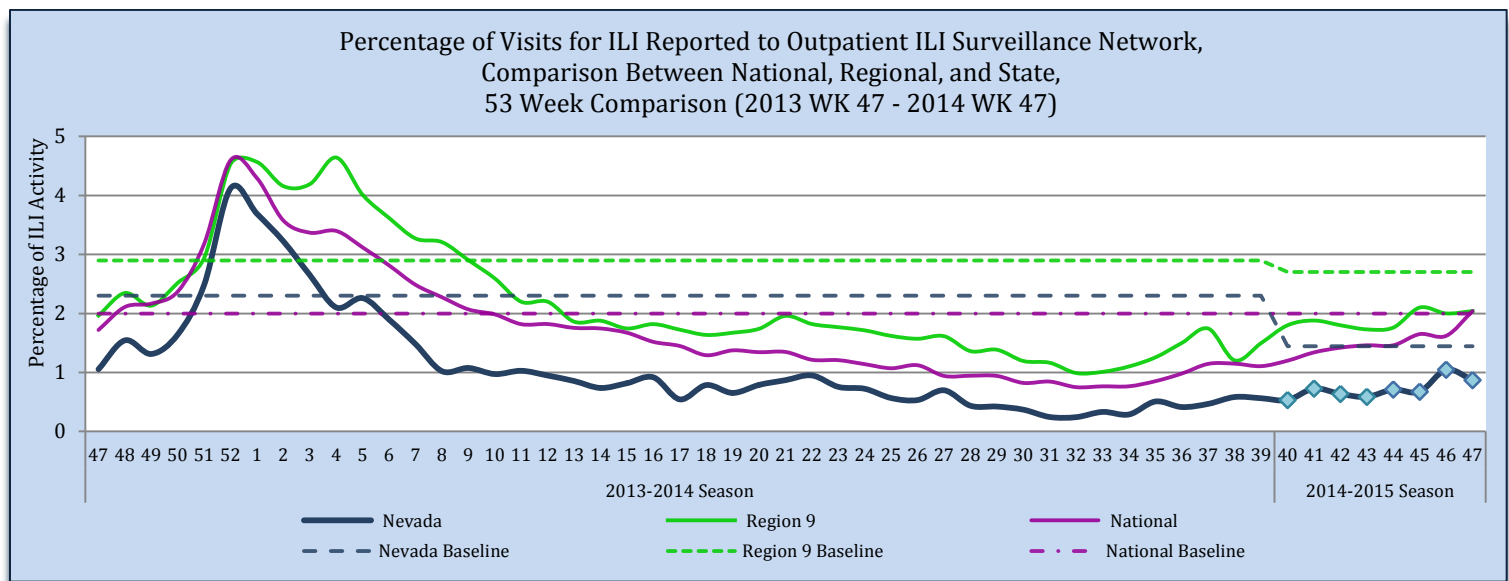
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 47)		State of Nevada (Season)		National (Week 47)		National (Season)	
			#	%	#	%	#	%	#	%
Specimens Tested	20	125	23		148		9,710		84,172	
Positives to Influenza	3	3	0	0.0	6	3.0	1,228	12.6	5,841	6.9
Influenza A:	2	2	0	0.0	4	66.7	1,123	91.4	4,495	82.1
A(2009 H1N1)	0	0	0	0.0	0	0.0	1	0.1	27	0.6
A(H3)	2	2	0	0.0	4	100	353	31.4	2,737	57.1
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	769	68.5	2,031	42.4
Influenza B:	1	1	0	0.0	2	33.3	105	8.6	1,046	17.9

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 47 is 0.9% and is below the state baseline 1.4. Region 9 ILI percentage for week 47 is 2.0% and includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 47 is 2.0% and is at the national baseline 2.0.

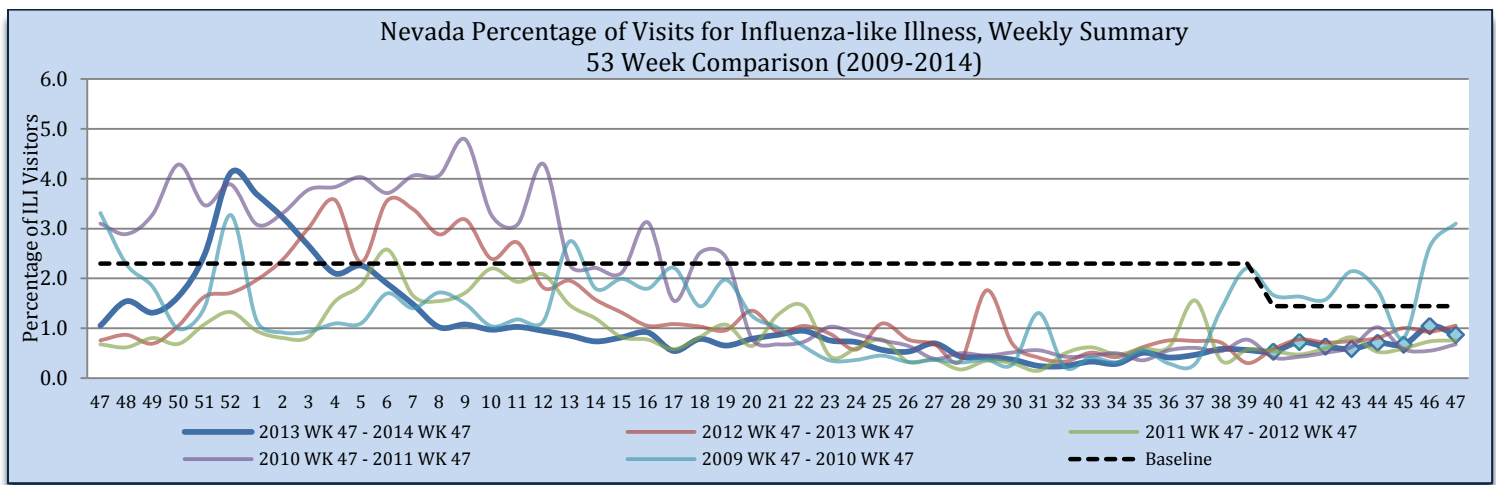
Figure 3



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

During week 47, 0.9% of visits to sentinel providers were due to ILI; this is a decrease of 0.2% from the 2013-2014 influenza season.

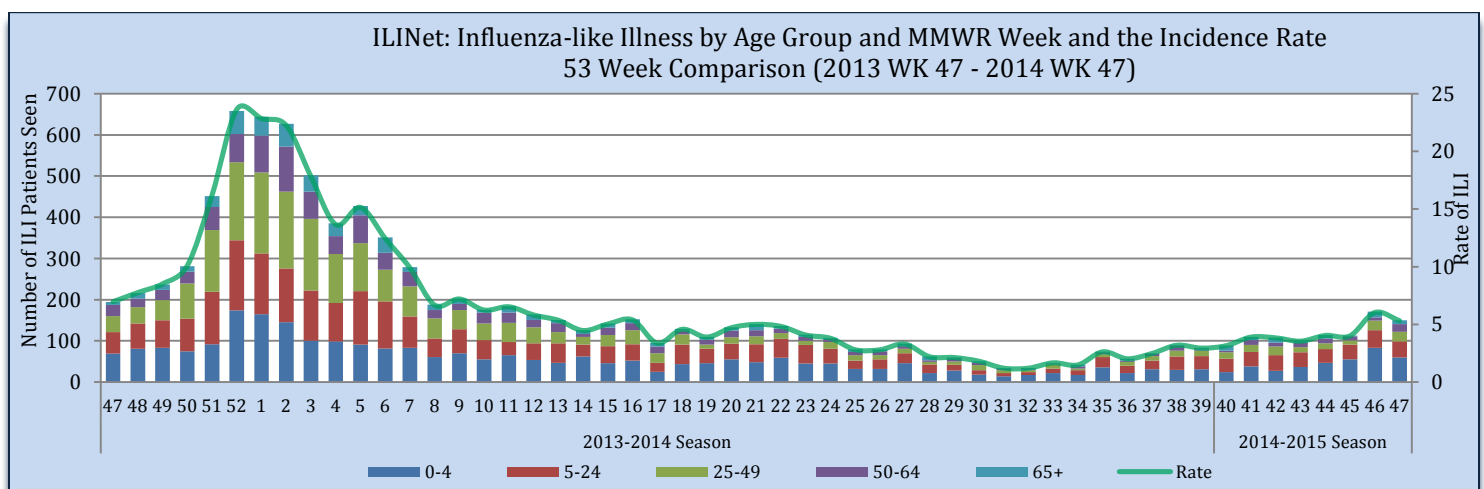
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 47, patients age 0-4 were the greatest number of patients seen with ILI. The rate for week 47 is 5.3 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 2014 is 2,819,321.

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. During week 47, 39 patients were seen with ILI through BioSense, 0.3% of the total patients seen.

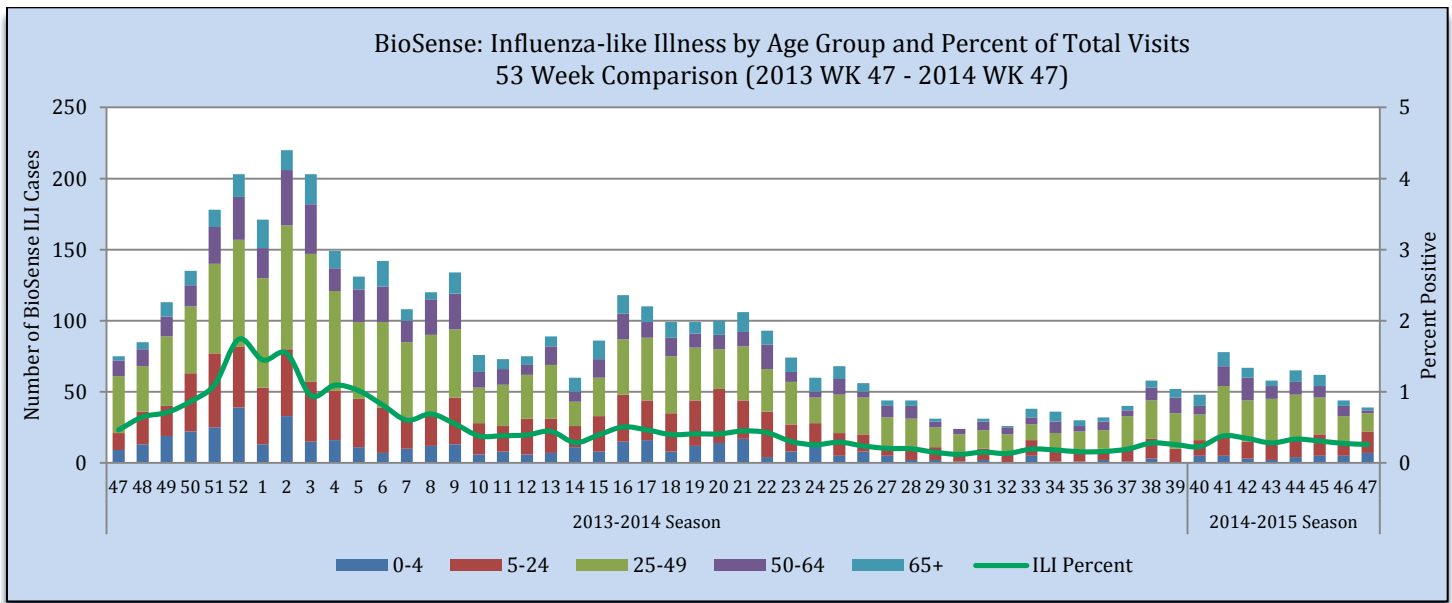
Table 2

BioSense: Influenza-like Illness Monitoring by County Jurisdiction				
Reporting Jurisdiction	Current Week (Week 47)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	17	43.6	95	20.6
Community Health Nursing	0	0.0	3	0.7
Southern Nevada Health District	1	2.6	228	49.5
Washoe County Health District	21	53.8	135	29.3
State of Nevada	39	100.0	422	100

Source of Data: BioSense.

Influenza-like Illness monitored through BioSense had the highest patient visits with ILI in the 5-24 age groups, which is different from the ILINet surveillance (age group 0-4). The total patient seen with ILI decreased from week 46, from 44 patients to 39 patients during week 47.

Figure 6

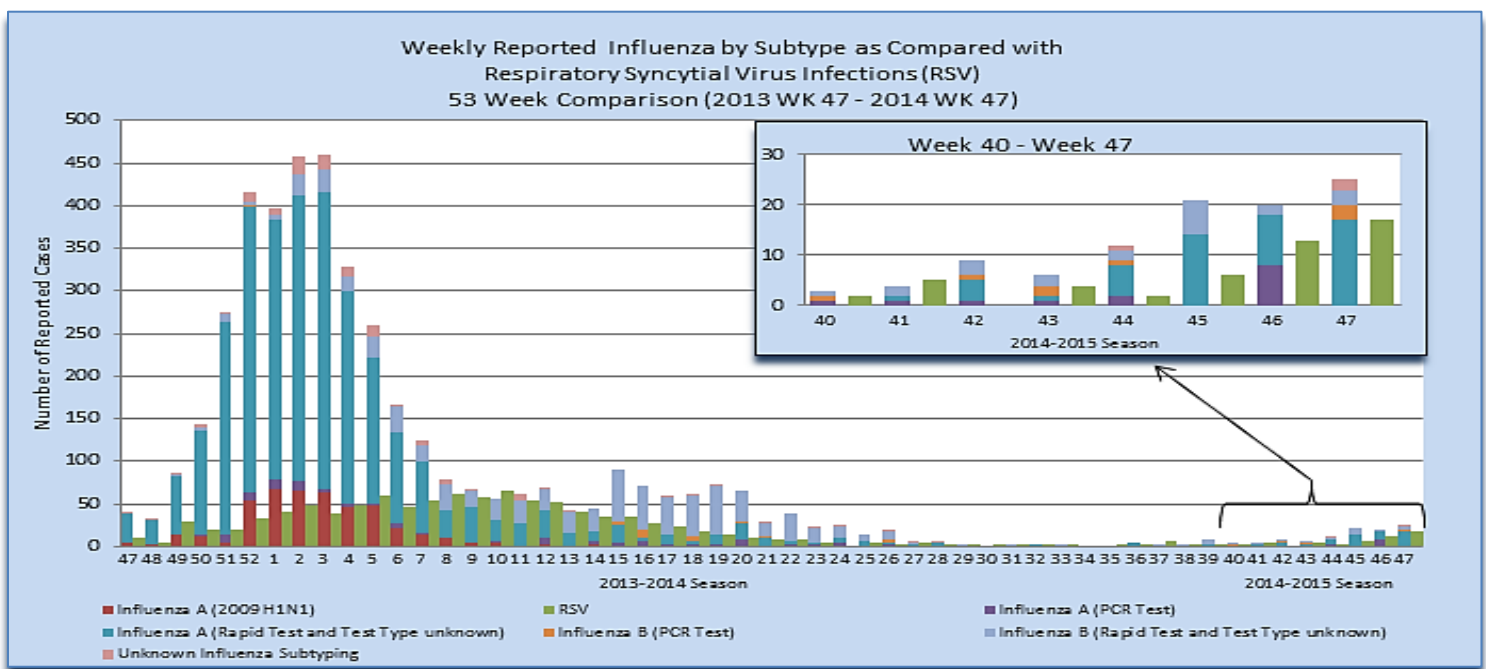


Source of Data: BioSense.

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 47, there were 27 influenza cases reported to the state, 17 influenza A cases, 8 influenza B cases and 2 unknown subtyping.

Figure 7



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

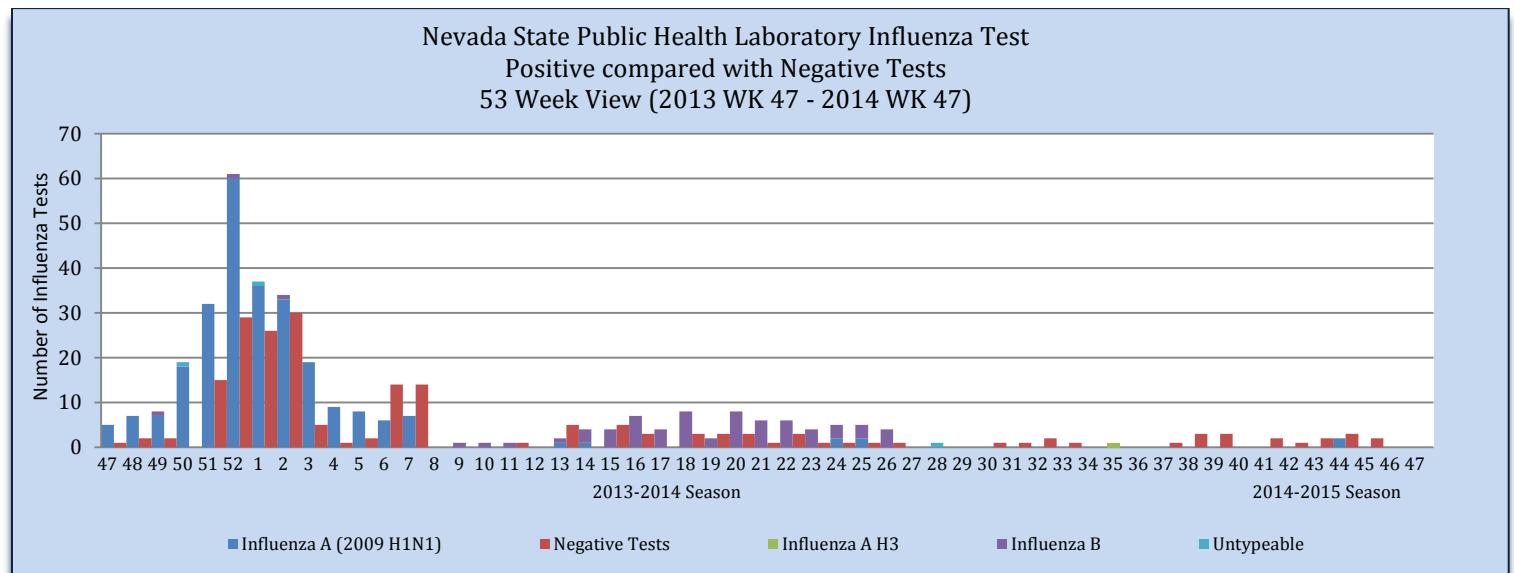
Table 3

Reporting Jurisdiction	Reported Influenza Cases by County Jurisdiction and Influenza Type									
	Current Week (Week 47)					Cumulative Influenza Season				
	H1N1	A	B	Unknown	Total	H1N1	A	B	Unknown	Total
Carson City Health and Human Services	0	1	0	0	1	0	3	1	0	4
Community Health Nursing	0	3	1	0	4	0	4	3	0	7
Southern Nevada Health District	0	11	4	2	17	0	52	12	3	67
Washoe County Health District	0	2	1	0	3	0	8	14	0	22
State of Nevada	0	17	6	2	25	0	67	30	3	100

Source: OPHIE: NBS and SNHD: NETSS.

Nevada State Public Health Laboratory (NSPHL) submits all influenza laboratory tests to OPHIE regardless of outcome. The percent positive is the total influenza positive influenza tests divided by the total influenza laboratory tests completed. For the current influenza season the percent positive is 20%. Only 12 tests have been submitted to OPHIE with two positive.

Figure 8



Source: Reported to the Office of Public Health Informatics and Epidemiology from Nevada State Public Health Laboratory.

Hospitalizations

There have been 3 hospitalizations associated with influenza reported to the state health authority during week 47.

Table 4

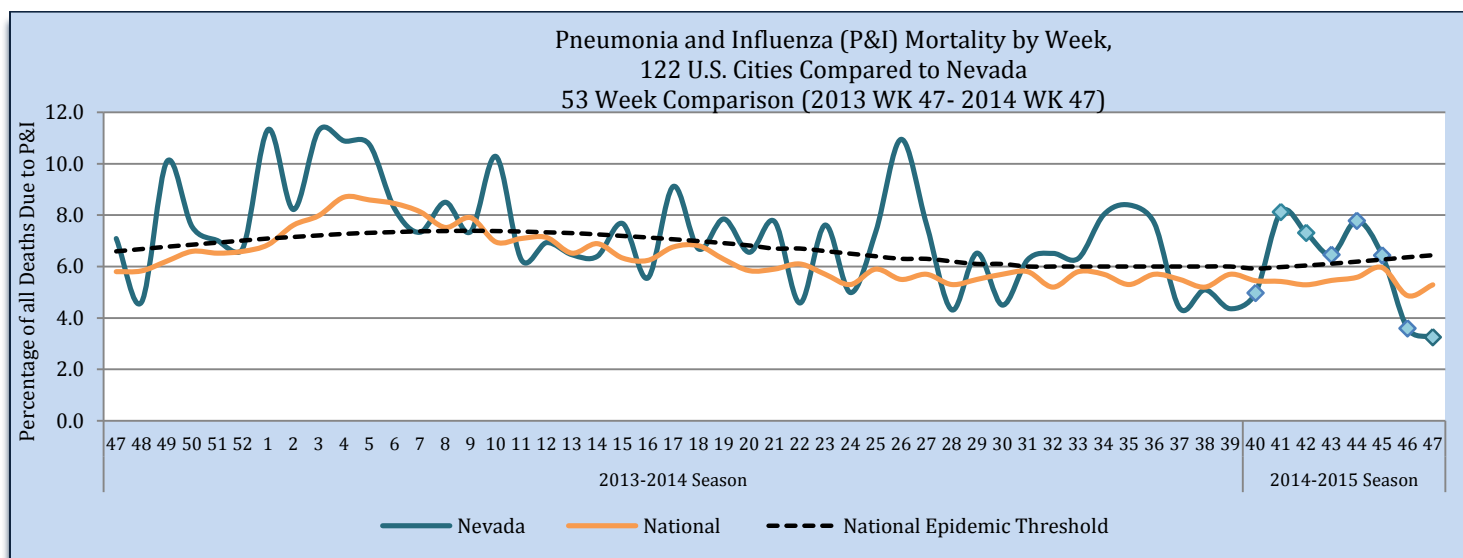
Reporting Jurisdiction	Influenza Hospitalizations			
	Current Week (Week 47)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	0	0.0	0	0.0
Community Health Nursing	0	0.0	0	0.0
Southern Nevada Health District	2	66.7	14	93.3
Washoe County Health District	1	33.3	1	6.7
State of Nevada	3	100	15	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. During week 47, there are 12 deaths associated with P&I, as of December 1, which is below the national epidemic threshold at 3.3% (threshold at 6.4%). Nationally, the P&I mortality is below the national epidemic threshold at 5.3%.

Figure 9



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 2013.
3. OPHIE. DPBS. BioSense. 2013-2014. Accessed December 2014.
4. OPHIE. DPBH. NBS. 2010-2014. Accessed December 2014.
5. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2012-2014. Accessed December 2014.
6. Southern Nevada Health District (SNHD). NETSS/Trisano. 2010-2014. Accessed December 2014.

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

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