

Influenza Weekly Report

2013 Week 45 (November 3 – 9) through 2014 Week 45 (November 2 - 8)

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



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*December 2014
Edition 1.0*

Data for the graphs and tables on the following pages are provisional and may be updated as additional information becomes available.

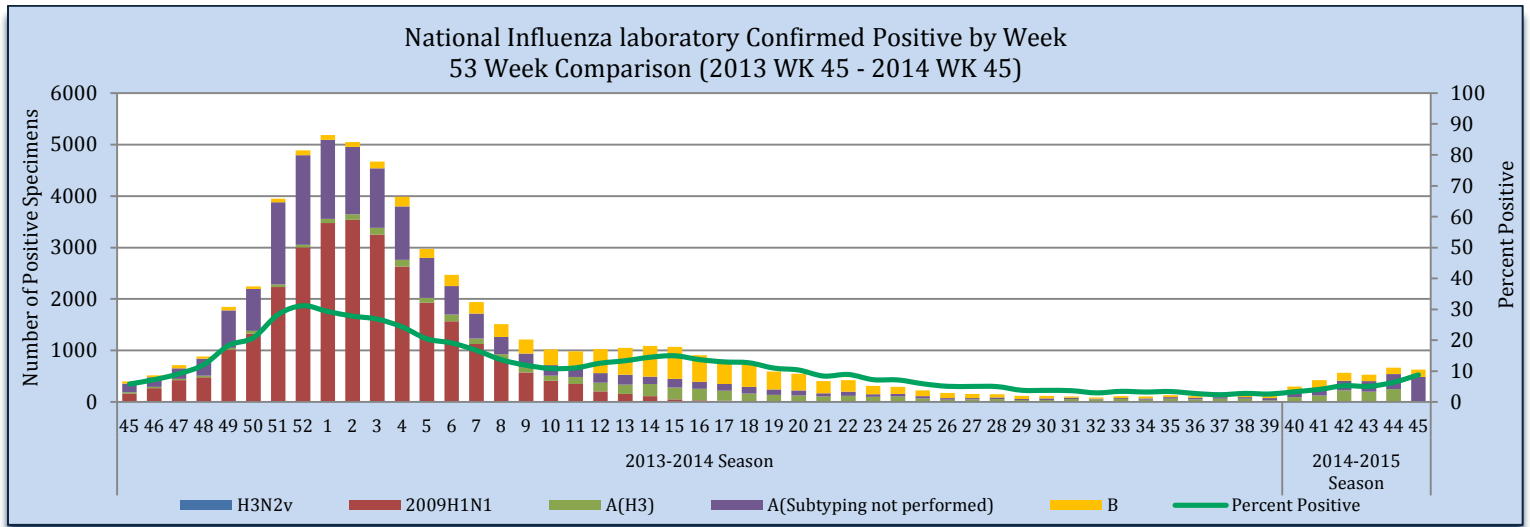
Purpose

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 45, there were 11,486 specimens collected and tested for influenza, of those 1,009 were positive (8.8%).

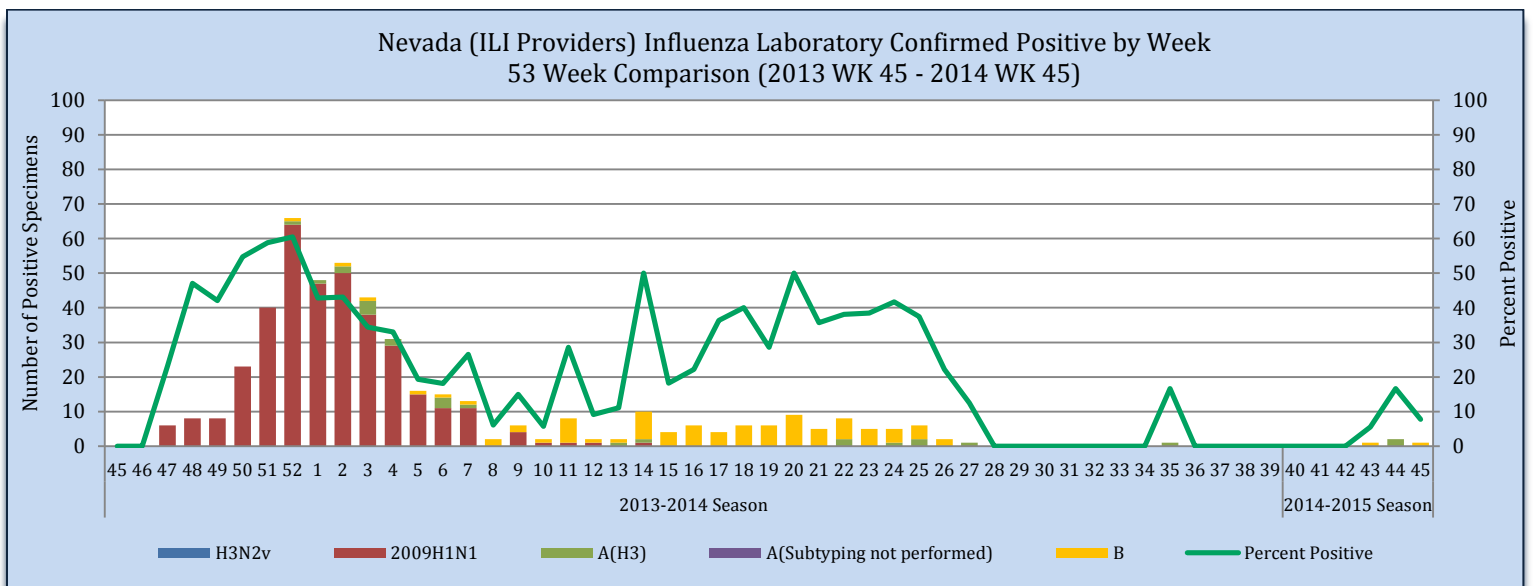
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 45, there were 13 specimens collected and tested for influenza, all of which 1 was positive for influenza (7.7%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 16 specimens for influenza from sentinel providers, 3 of which have been positive (17.6%). Southern Nevada Public Health Laboratory (SNPHL) has test 91 specimens this season of which 1 was positive. Nationally, there have been 62,639 specimens sent to the WHO and NERVSS laboratories with 3,499 positive or 5.6%. 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

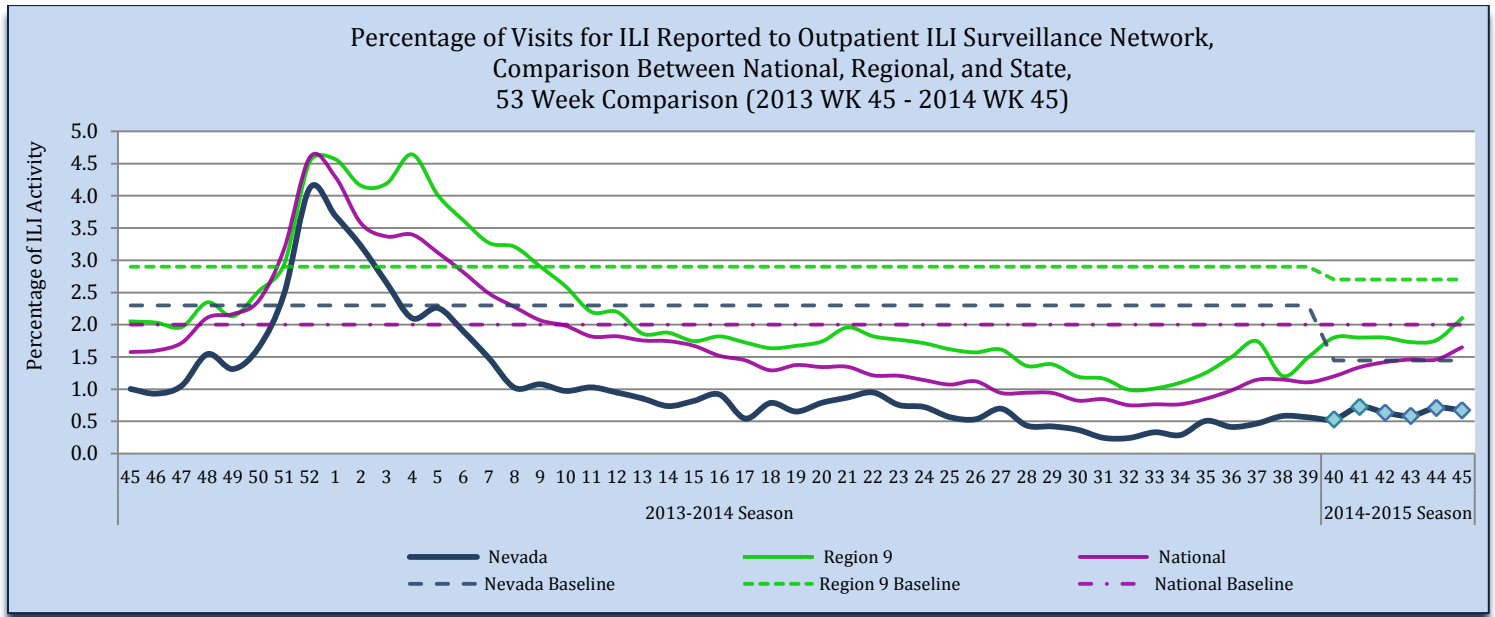
ILINet Surveillance: Influenza Specimens Tested State and Nationally

	NSPHL	SNPHL	State of Nevada (Week 45)		State of Nevada (Season)		National (Week 45)		National (Season)	
			#	%	#	%	#	%	#	%
			Specimens Tested	17	91	13		111		11,486
Positives to Influenza	3	1	1	7.7	4	3.0	1,009	8.8	3,499	5.6
Influenza A:	2	0	0	0.0	2	50.00	867	85.9	2,684	76.7
A(2009 H1N1)	0	0	0	0.0	0	0.0	4	0.5	26	1.0
A(H3)	2	0	0	0.0	2	100	382	44.1	1,391	51.8
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	481	55.5	1,266	47.2
Influenza B:	1	1	1	100	2	50.0	142	14.1	815	23.3

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 45 is 0.7% and is below the state baseline 1.4. Region 9 ILI percentage for week 45 is 2.1% and includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 45 is 1.7% and is below the national baseline 2.0.

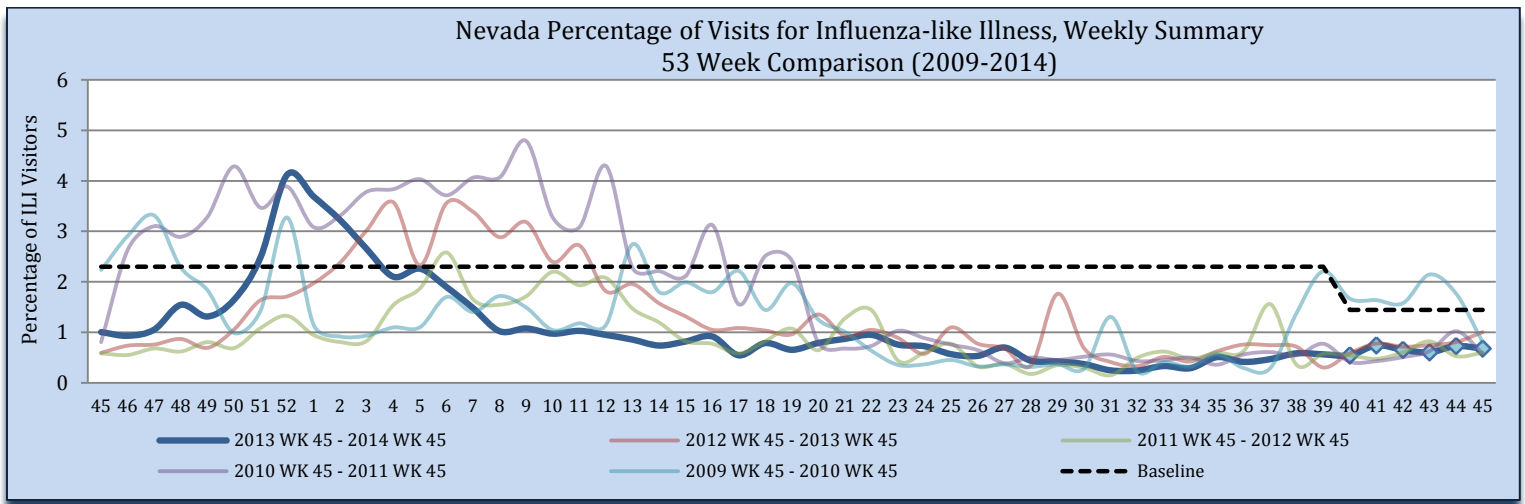
Figure 3



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

During week 45, 0.7% of visits to sentinel providers were due to ILI; this is a decrease of 0.3% from the 2013-2014 influenza season.

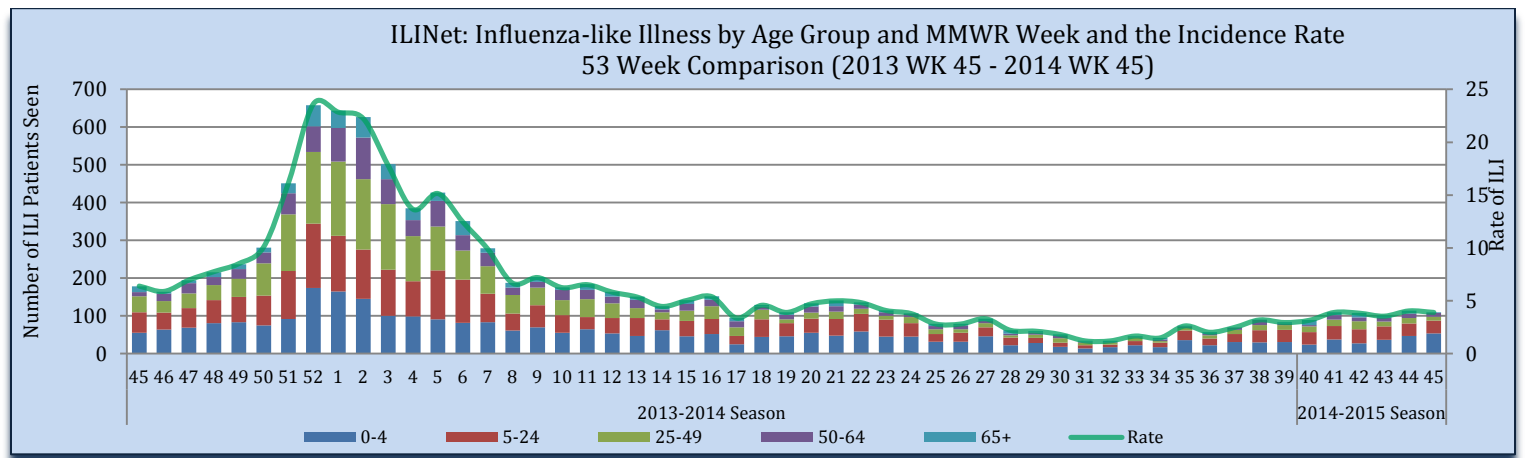
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 45, patients age 0-4 were the greatest number of patients seen with ILI. The rate for week 45 is 3.9 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 45, 62 patients were seen with ILI through BioSense, 0.3% of the total patients seen.

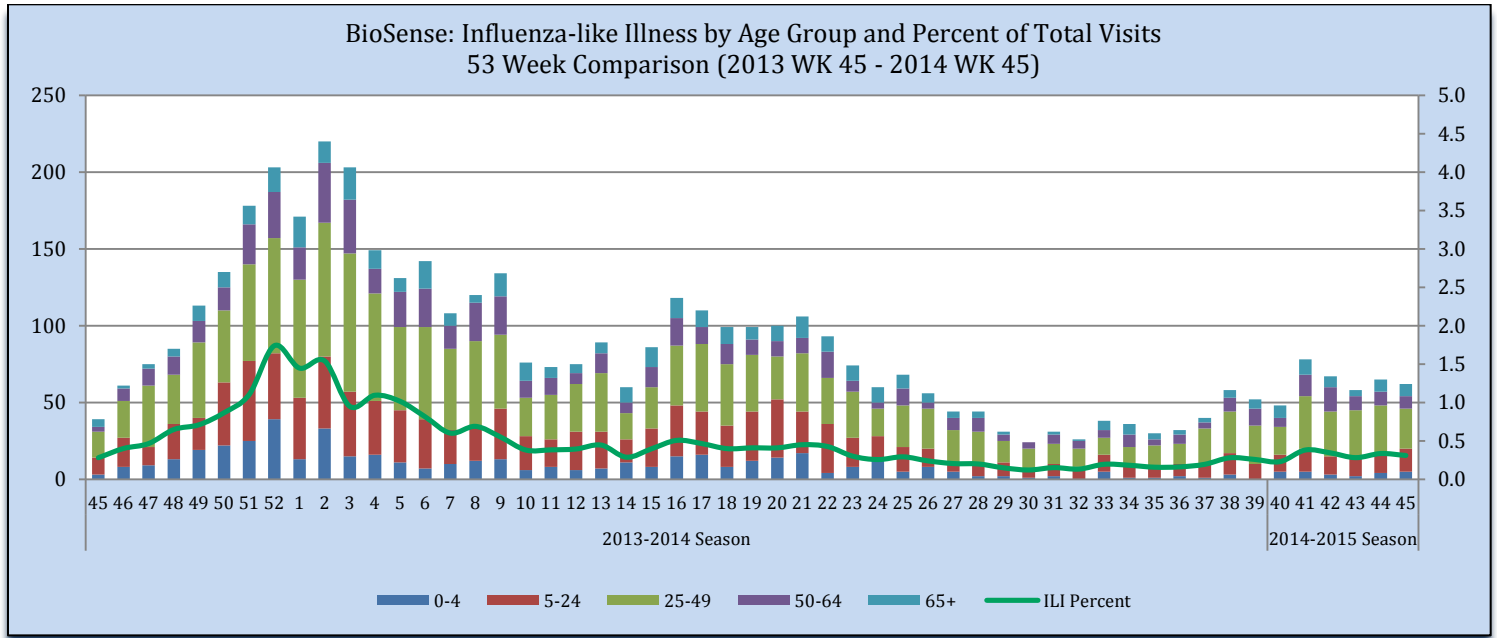
Table 2

BioSense: Influenza-like Illness Monitoring by County Jurisdiction				
Reporting Jurisdiction	Current Week (Week 45)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	15	24.2	62	16.4
Community Health Nursing	1	1.6	3	0.8
Southern Nevada Health District	27	43.5	215	56.9
Washoe County Health District	19	30.6	98	25.9
State of Nevada	62	100	378	100

Source of Data: BioSense.

Influenza-like Illness monitored through BioSense had the highest patient visits with ILI in the 25-49 age groups, which is different from the ILINet surveillance (age group 0-4). The total patient seen with ILI decreased slightly from week 44, with 65 patients to 62 patients during week 45.

Figure 6

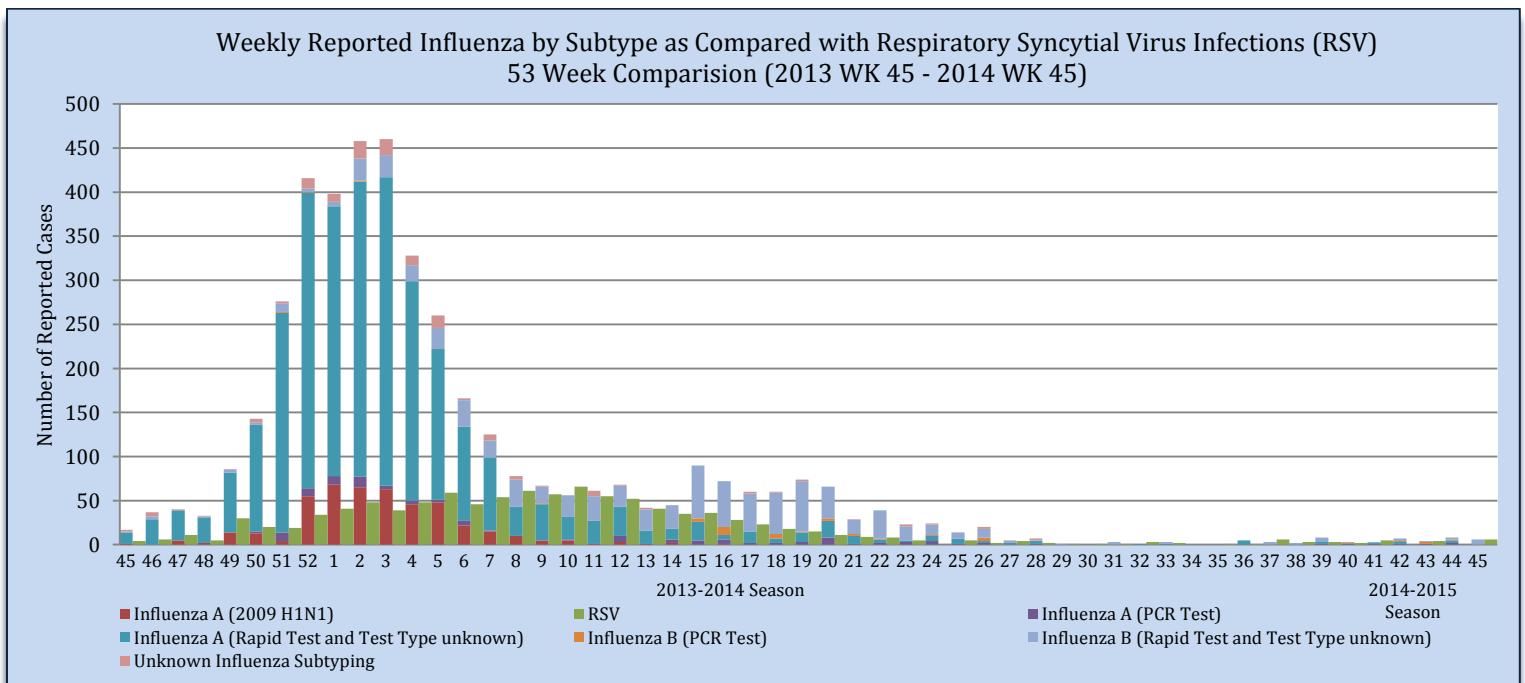


Source of Data: BioSense.

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 45, there were 6 influenza cases reported to the state, all 6 were Influenza B cases.

Figure 7



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

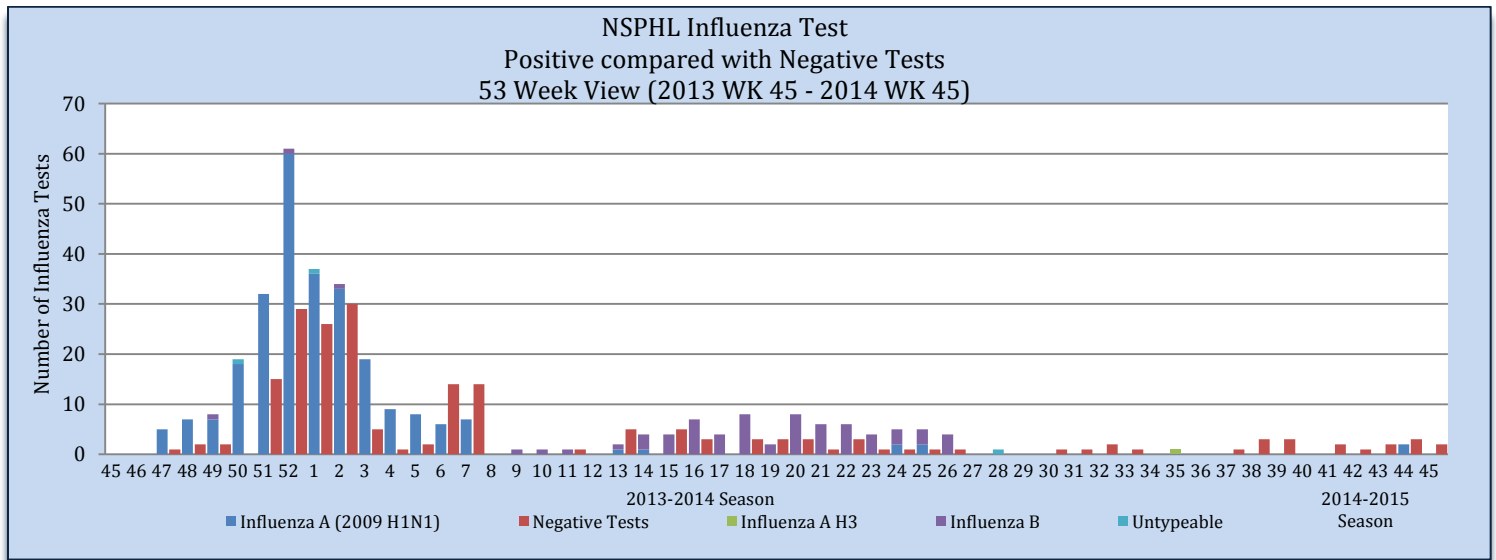
Table 3

Reporting Jurisdiction	Reported Influenza Cases by County Jurisdiction and Influenza Type									
	Current Week (Week 45)					Cumulative Influenza Season				
	H1N1	A	B	Unknown	Total	H1N1	A	B	Unknown	Total
Carson City Health and Human Services	0	0	1	0	1	0	2	1	0	3
Community Health Nursing	0	0	0	0	0	0	1	2	0	3
Southern Nevada Health District	0	0	0	0	0	0	4	4	0	8
Washoe County Health District	0	0	5	0	5	0	4	13	0	17
State of Nevada	0	0	6	0	6	0	11	20	0	31

Source: OPHIE: NBS and SNHD: NETSS.

Figure 8 below is the influenza laboratory tests provided by the Nevada State Public Health Lab (NSPHL). The percent positive for influenza this season is 20%, which are tests that are positive for influenza by the total influenza laboratory tests completed.

Figure 8



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

Hospitalizations

There has been 1 hospitalizations associated with influenza reported to the state health authority during week 45.

Table 4

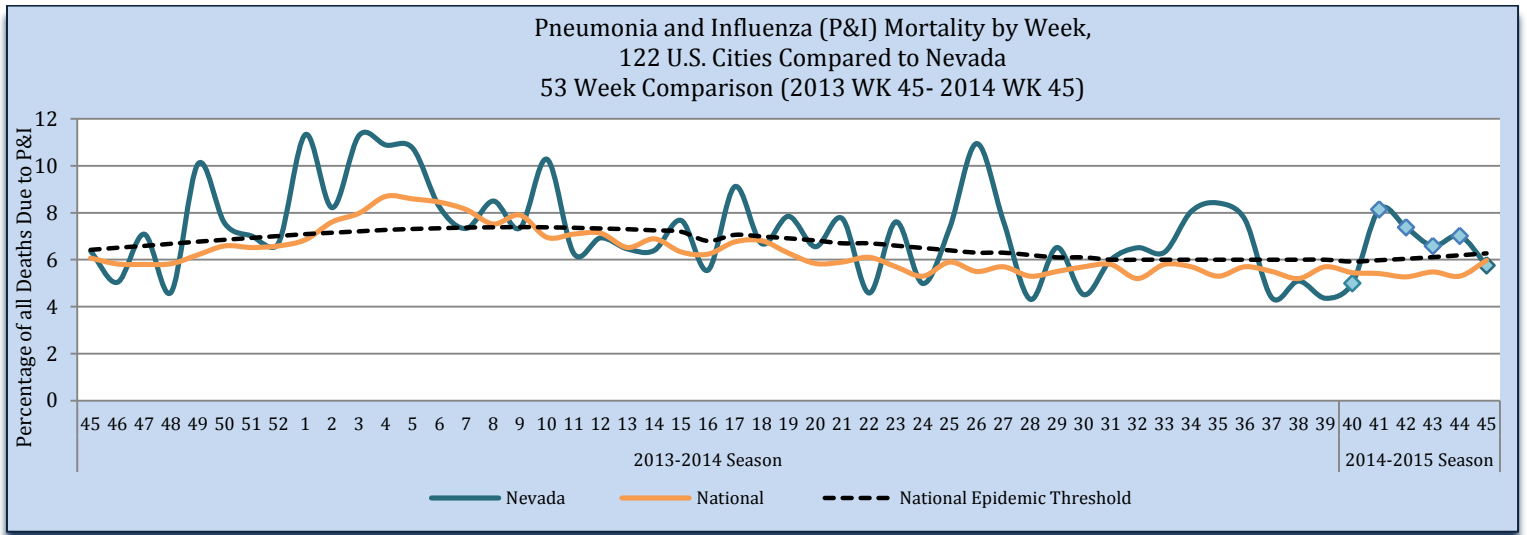
Reporting Jurisdiction	Influenza Hospitalizations			
	Current Week (Week 45)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	0	0.0	0	0.0
Community Health Nursing	0	0.0	0	0.0
Southern Nevada Health District	0	0.0	10	90.9
Washoe County Health District	1	100	1	9.1
State of Nevada	1	100	7	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 45, there are 22 deaths associated with P&I, as of November 17, which is below the national epidemic threshold at 5.8% (threshold at 6.3%). Nationally, the P&I mortality is below the national epidemic threshold at 6.0%.

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

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

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Recommended Citation:

Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. Influenza Weekly Report, 2013 Week 45 (November 4 through 2014 Week 45 (November 8), Nevada. December 2014 i 45 edition 1.0.

This publication was supported by Cooperative Agreement Number TP000534-02 from the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response.

