

Influenza Weekly Report

2013 Week 50 (December 8 – 14) through 2014 Week 50 (December 7 – 13)

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.

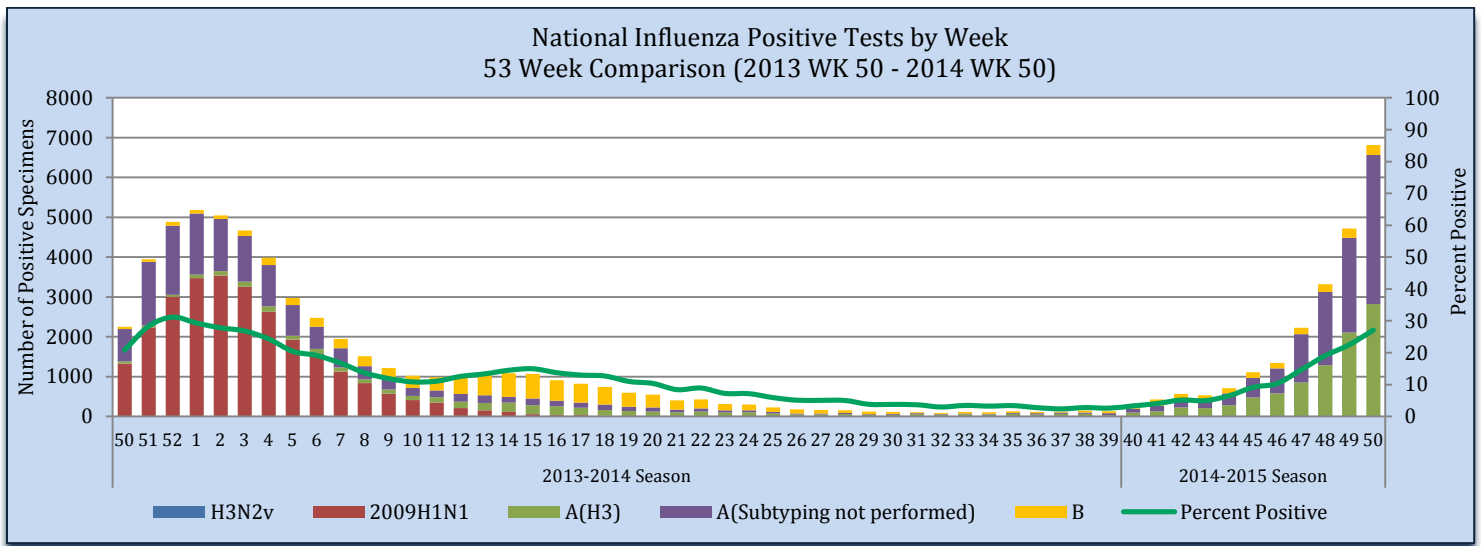
Purpose

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 50, there were 25,159 specimens collected and tested for influenza, of those 6,816 were positive (27.1%).

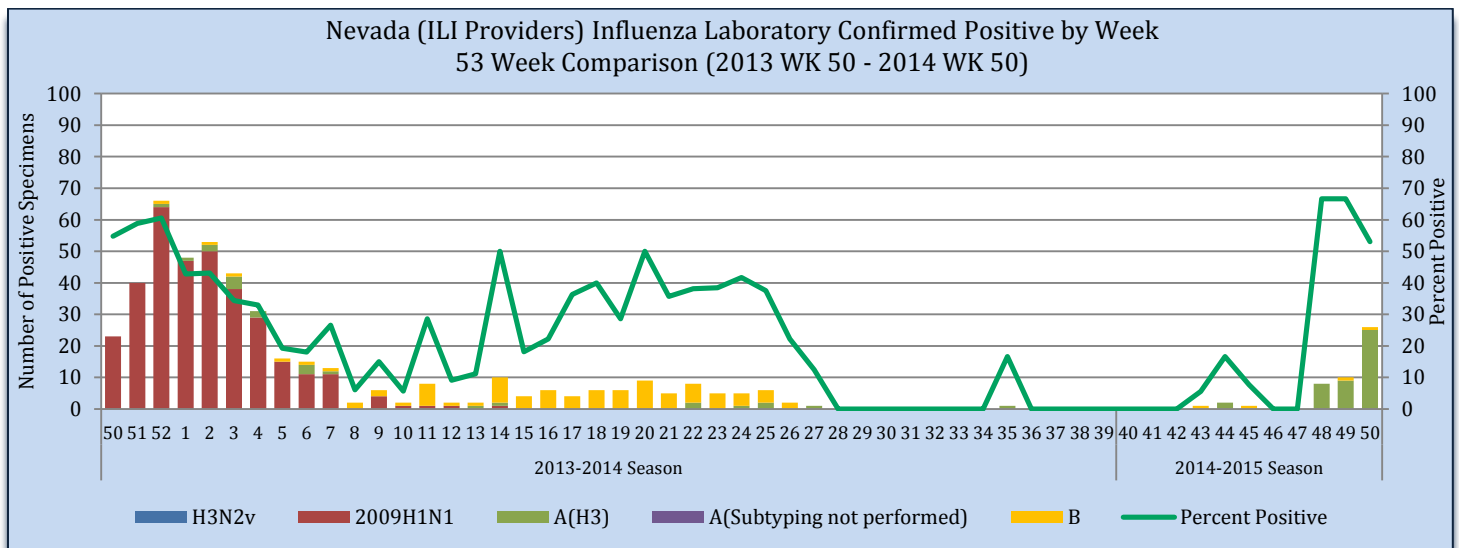
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 50, there were 49 specimens collected and tested for influenza of which 26 were positive (53.1%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 66 specimens for influenza from sentinel providers, of which 38 have been positive (57.6%). Southern Nevada Public Health Laboratory (SNPHL) has test 191 specimens this season of which 14 were positive. Nationally, there have been 156,146 specimens sent to the WHO and NERVSS laboratories of which 22,066 were positive or 14.1%. 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.

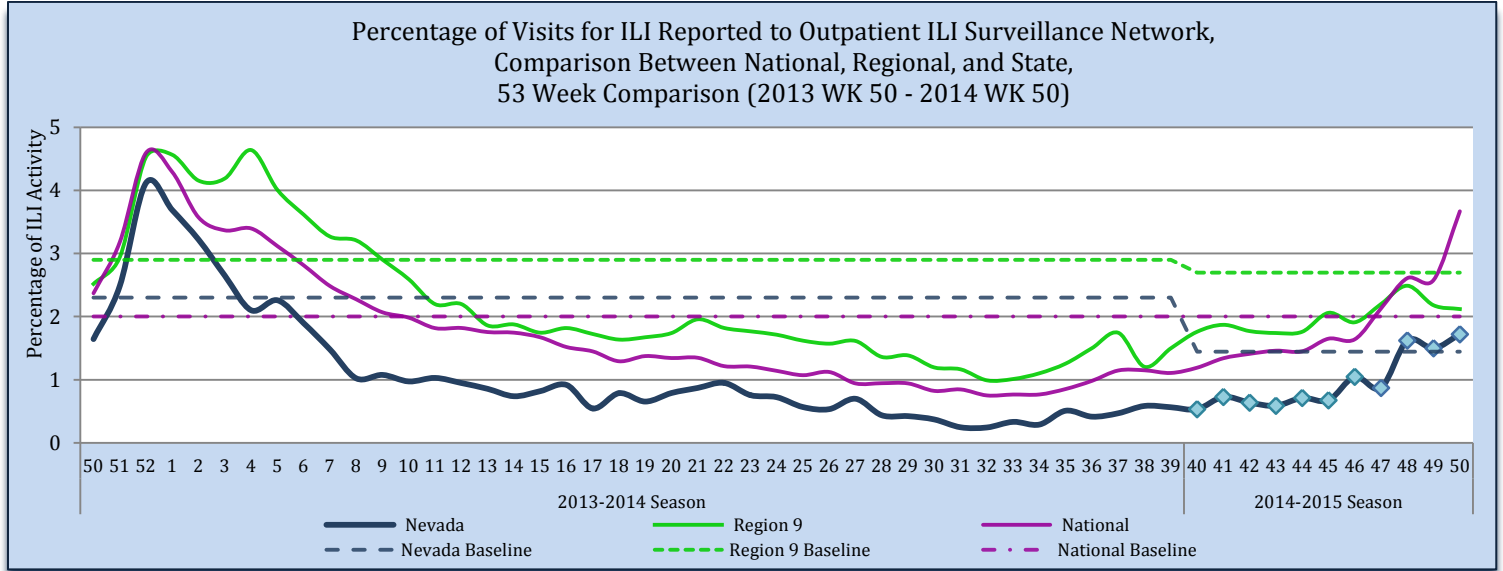
Table 1

ILINet Surveillance: Influenza Specimens Tested State and Nationally										
	NSPHL	SNPHL	State of Nevada (Week 50)		State of Nevada (Season)		National (Week 50)		National (Season)	
			#	%	#	%	#	%	#	%
Specimens Tested	66	191	49		260		25,159		156,146	
Positives to Influenza	38	14	26	53.1	52	20.0	6,816	27.1	22,066	14.1
Influenza A:	36	12	25	96.2	48	92.3	6,567	96.3	20,268	91.9
A(2009 H1N1)	0	0	0	0.0	0	0.0	8	0.1	63	0.3
A(H3)	36	12	25	100	48	100	2,811	42.8	11,221	55.4
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	3,748	57.1	8,984	44.3
Influenza B:	2	2	1	3.8	4	7.7	249	3.7	1,797	8.1

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 50 is 1.7% and is above the state baseline 1.4. Region 9 ILI percentage for week 50 is 2.4% and is below the region baseline 2.7. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 50 is 3.7% and is above the national baseline 2.0.

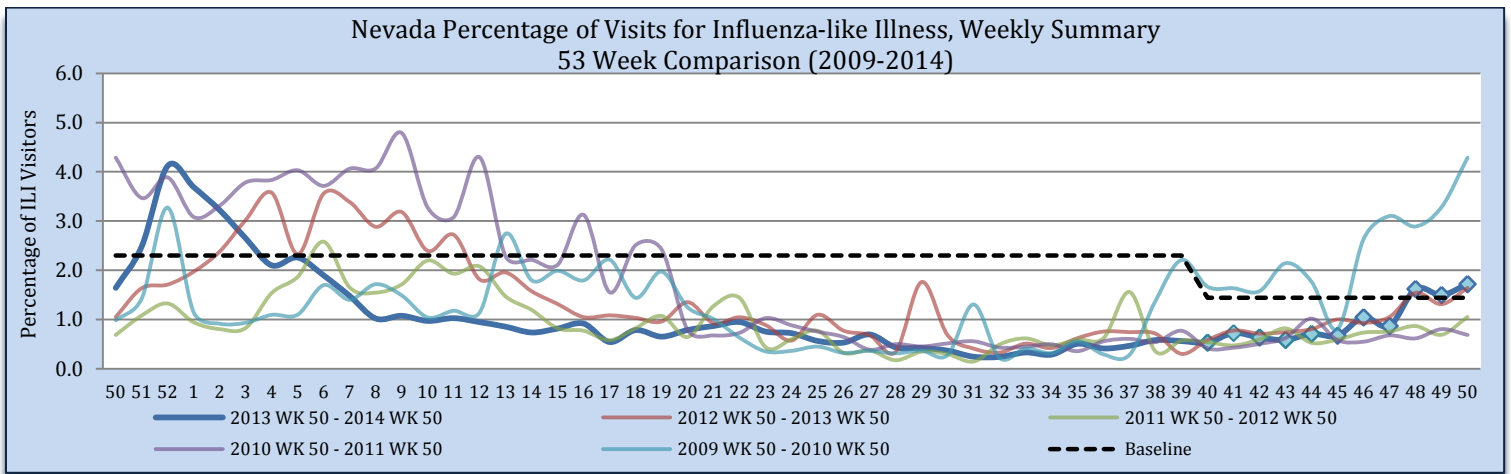
Figure 3



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

During week 50, 1.7% of visits to sentinel providers were due to ILI; this is a decrease of .1% from the 2013-2014 influenza season.

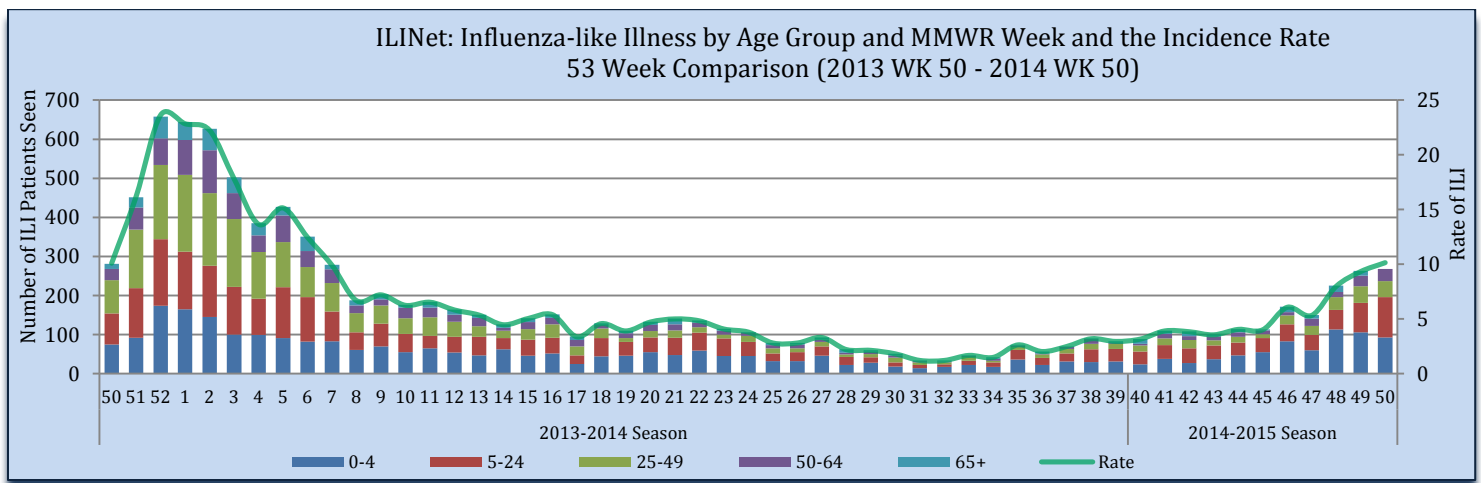
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 50, patients age 5-24 were the greatest number of patients seen with ILI, at 103 patients seen. The rate for week 50 is 10.1 per 100,000 which is the same rate for week 50, 2013. 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 50, 86 patients were seen with ILI through BioSense, 0.6% of the total patients seen.

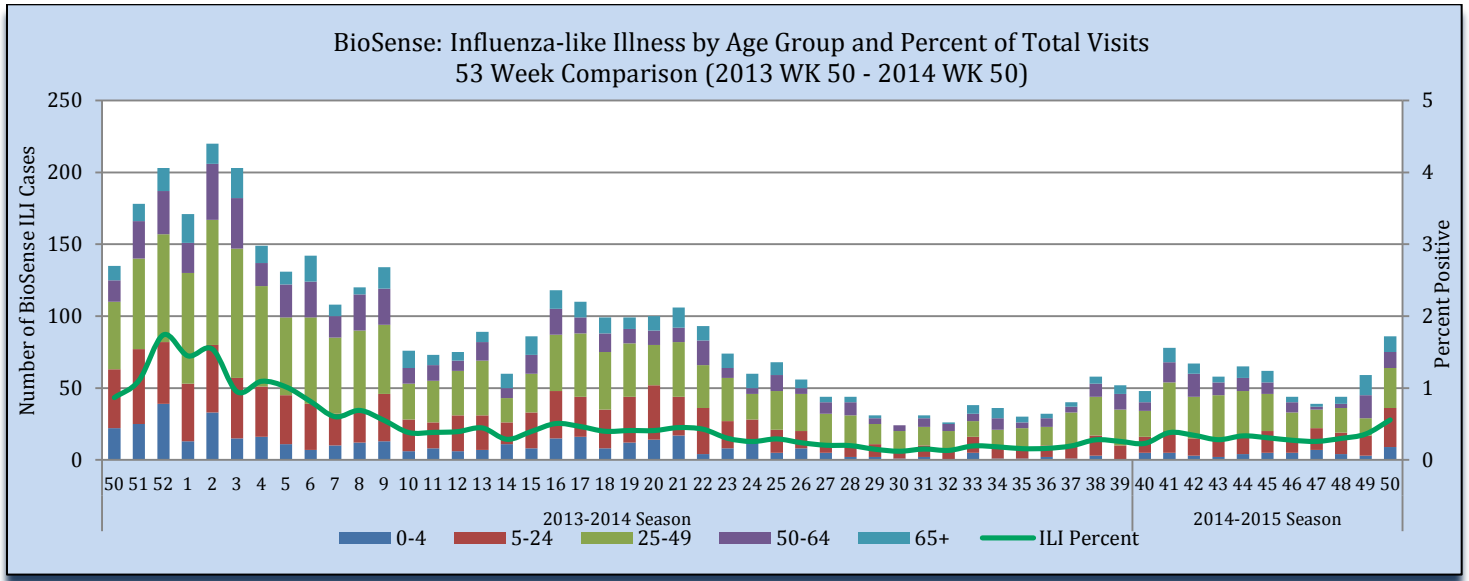
Table 2

BioSense: Influenza-like Illness Monitoring by County Jurisdiction				
Reporting Jurisdiction	Current Week (Week 50)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	22	25.6	144	22.2
Community Health Nursing	2	2.3	19	2.9
Southern Nevada Health District	22	25.6	275	42.3
Washoe County Health District	40	46.5	212	32.6
State of Nevada	86	100	650	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 5-24). The total patient seen with ILI increased from week 49, from 59 patients to 86 patients during week 50.

Figure 6

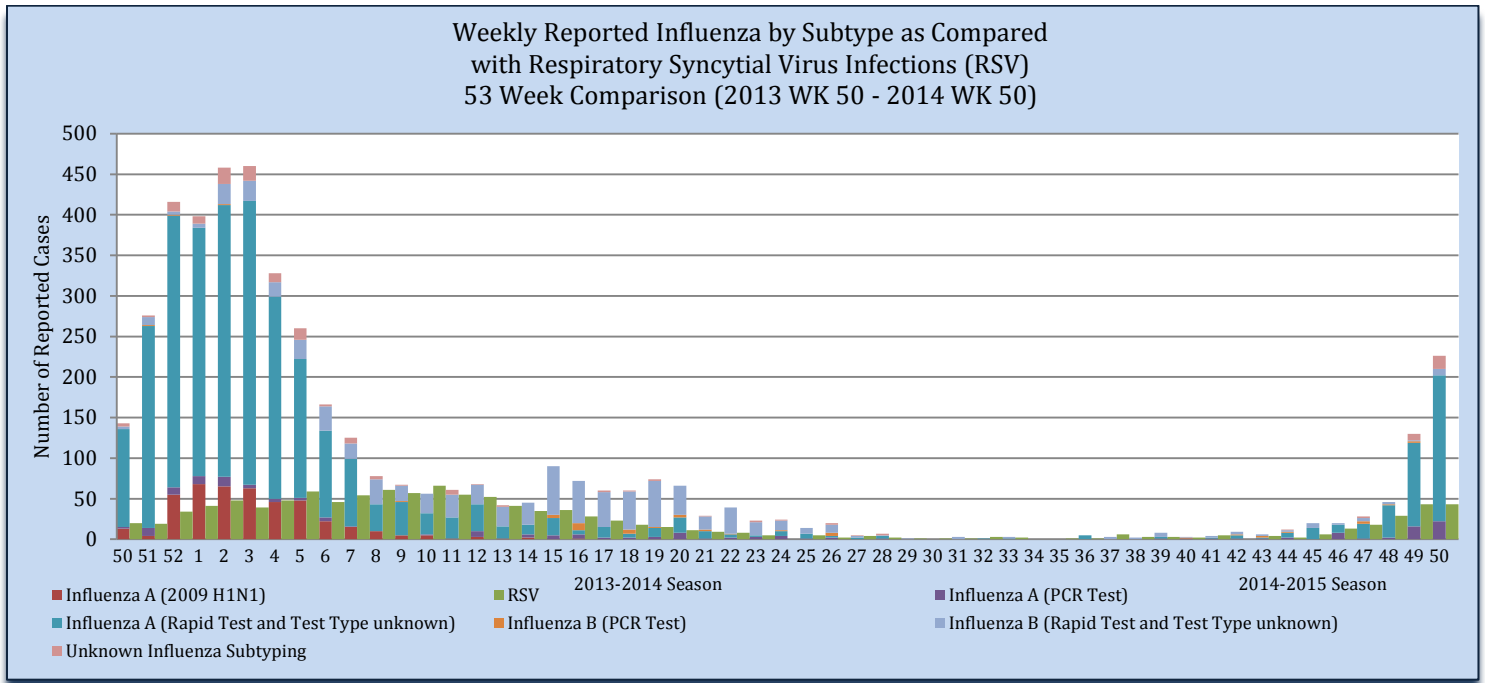


Source of Data: BioSense.

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 50, there were 223 influenza cases reported to the state, 202 influenza A cases, 8 influenza B cases and 16 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 50)					Cumulative Influenza Season				
	H1N1	A	B	Unknown	Total	H1N1	A	B	Unknown	Total
Carson City Health and Human Services	0	16	2	0	18	0	25	3	0	28
Community Health Nursing	0	45	0	14	59	0	119	4	20	143
Southern Nevada Health District	0	117	4	2	123	0	244	20	7	271
Washoe County Health District	0	24	2	0	26	0	44	18	0	62
State of Nevada	0	202	8	16	226	0	432	45	27	504

Source: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There have been 5 hospitalizations associated with influenza reported to the state health authority during week 50.

Table 4

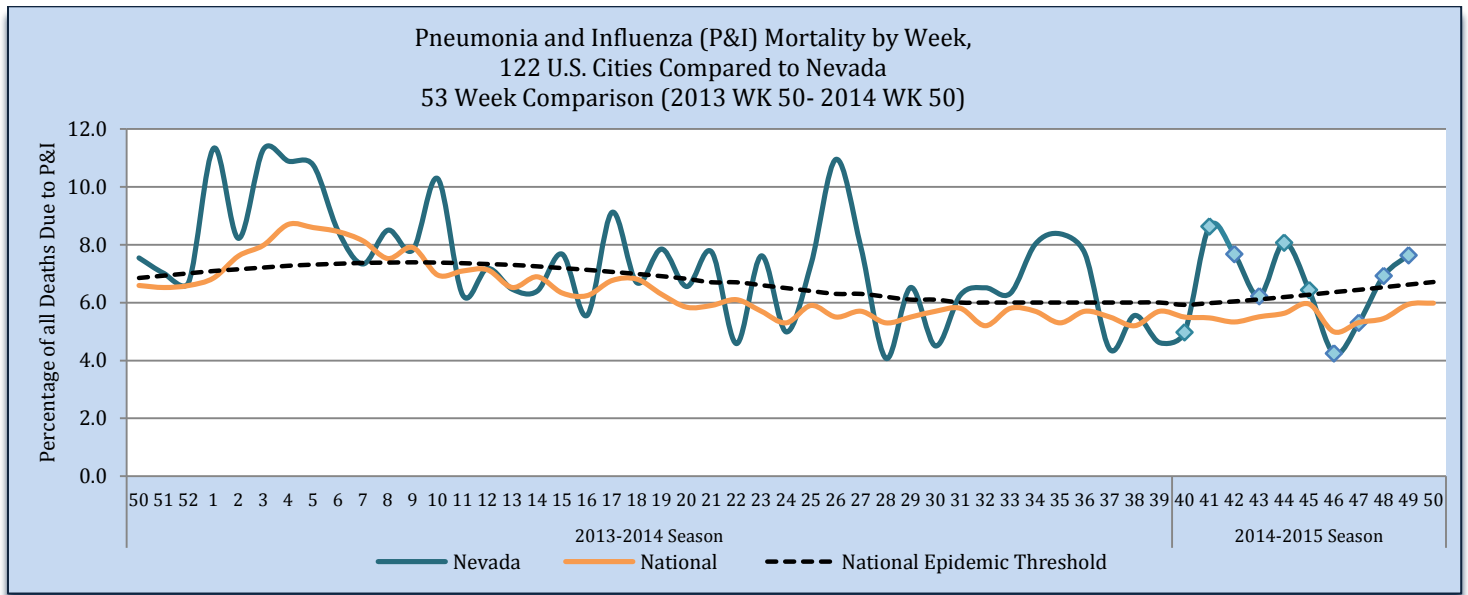
Reporting Jurisdiction	Influenza Hospitalizations			
	Current Week (Week 50)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	0	0.0	0	0.0
Community Health Nursing	0	0.0	0	0.0
Southern Nevada Health District	3	60.0	17	77.3
Washoe County Health District	3	40.0	5	22.7
State of Nevada	5	100	22	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. Mortality data is currently unavailable at the state level. Nationally, the P&I mortality is at the national epidemic threshold at 6.0%.

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 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:

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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