

Influenza Weekly Report

2013 Week 52 (December 22 – 28) through 2014 Week 52 (December 21 – 27)

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



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January 2015

Edition 1.0

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

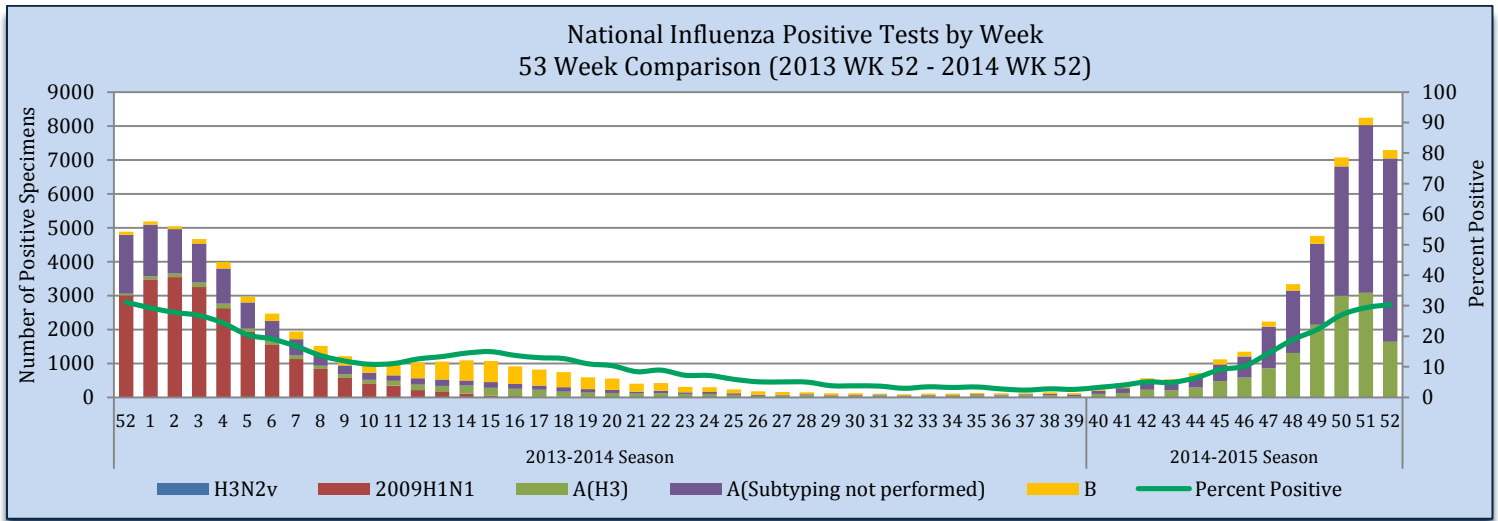
Purpose

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 52, there were 24,001 specimens collected and tested for influenza, of those 7,289 were positive (30.4%).

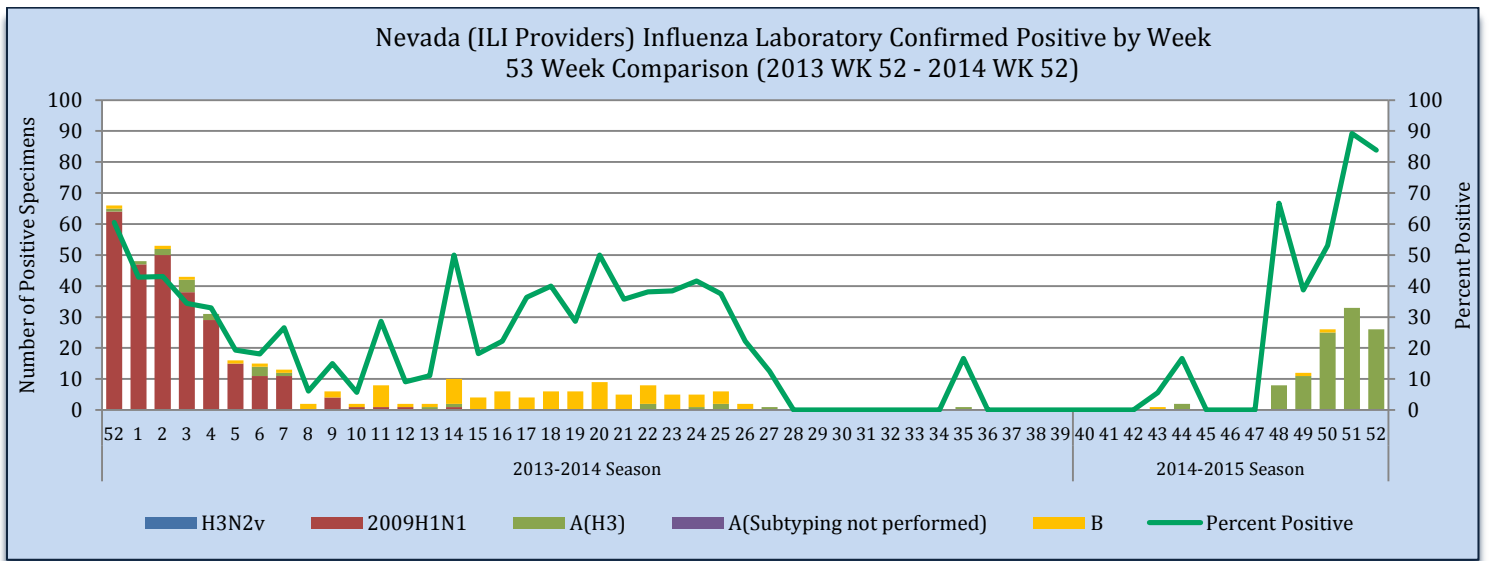
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents including out of state laboratories. During week 52, there were 31 specimens collected and tested for influenza of which 26 were positive (83.9%).

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 134 specimens for influenza from sentinel providers, of which 97 have been positive (72.4%). Southern Nevada Public Health Laboratory (SNPHL) has test 191 specimens this season of which 14 were positive. Nationally, there have been 211,359 specimens sent to the WHO and NERVSS laboratories of which 37,938 were positive or 17.9%. 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

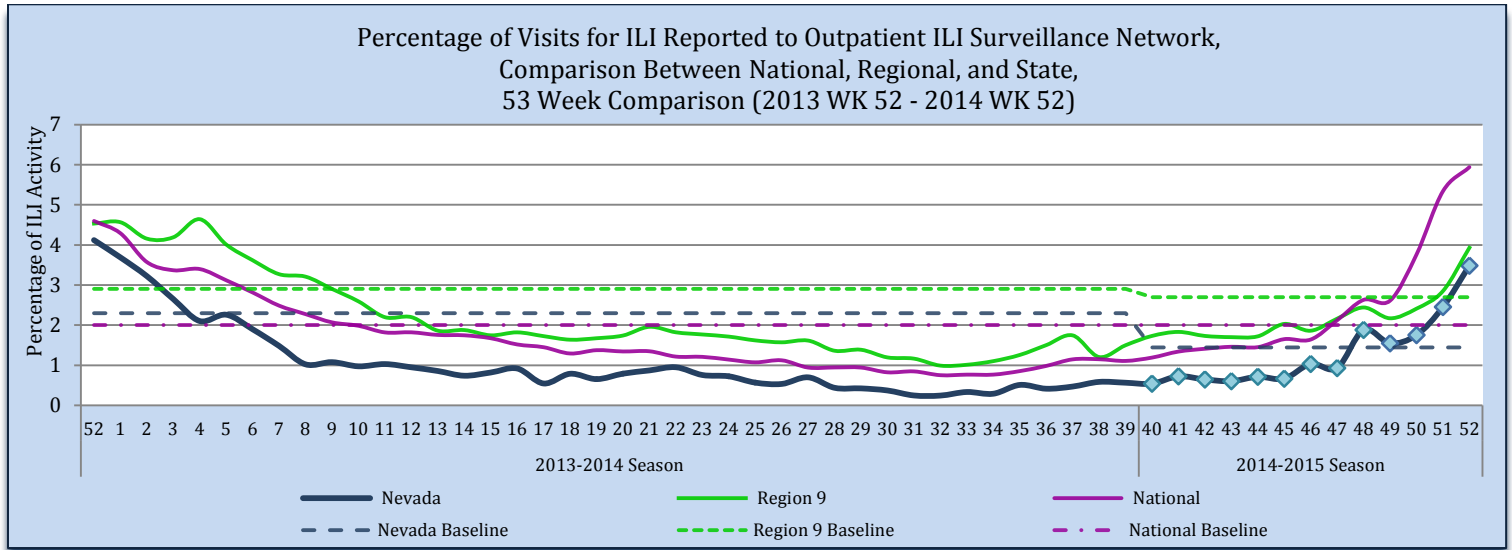
ILINet Surveillance: Influenza Specimens Tested State and Nationally

	NSPHL	SNPHL	State of Nevada (Week 52)		State of Nevada (Season)		National (Week 52)		National (Season)	
			#	%	#	%	#	%	#	%
			Specimens Tested	134	191	31		328		24,001
Positives to Influenza	97	14	26	83.9	111	33.8	7,289	30.4	37,938	17.9
Influenza A:	95	12	26	100	107	96.4	7,041	96.6	35,653	94.0
A(2009 H1N1)	0	0	0	0.0	0	0.0	6	0.1	72	0.2
A(H3)	95	12	26	100	107	100	1,635	23.2	21,647	60.7
A(Sub-typing not performed)	0	0	0	0.0	0	0.0	5,400	76.7	13,934	39.1
Influenza B:	2	2	0	0.0	4	3.6	248	3.4	2,284	6.0

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 52 is 3.5% and is above the state baseline 1.4, the 3rd consecutive week. Region 9 ILI percentage for week 52 is 3.9% and is above the region baseline 2.7. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 52 is 5.9% and is above the national baseline 2.0, for the 6th consecutive week.

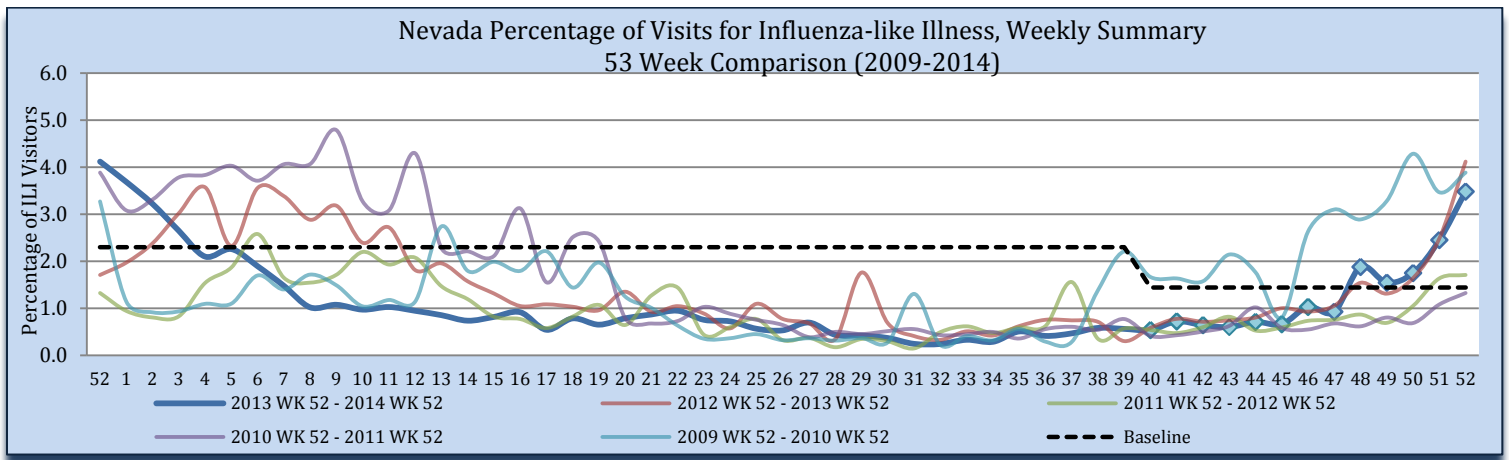
Figure 3



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

During week 52, 3.5% of visits to sentinel providers were due to ILI; this is the below the 2013-2014 influenza season ILI percent by 0.6%. There were 14,126 patients seen by ILI providers during week 52, of these patients, 492 were presented with ILI.

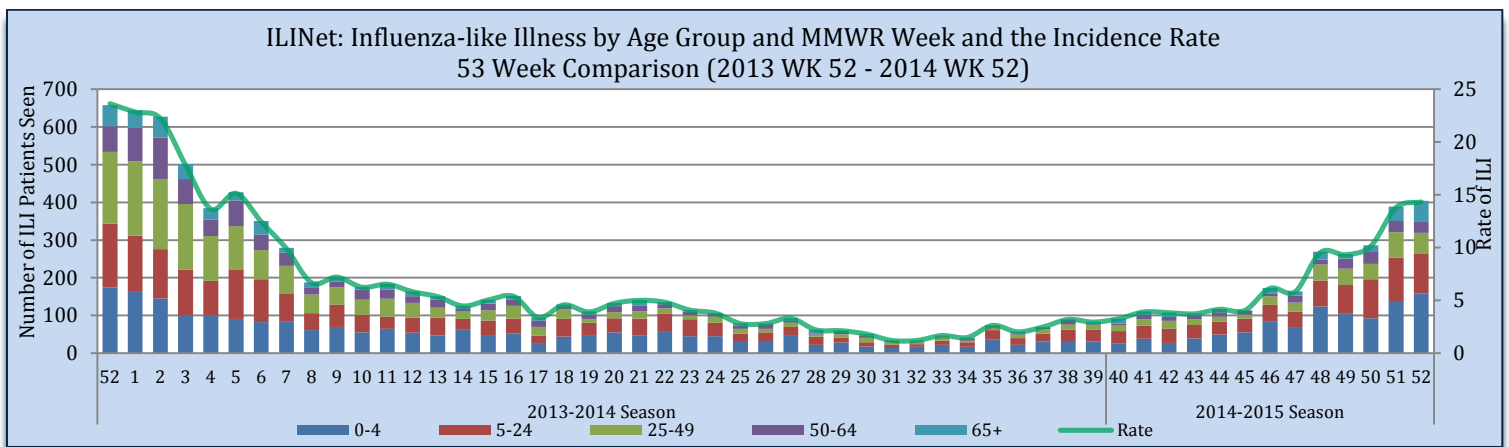
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups, during week 52, patients age 0-4 were the greatest number of patients seen with ILI, at 167 patients seen. The rate for week 52 is 17.5 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. 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 52, 366 patients were seen with ILI through BioSense, 2.9% of the total patients seen.

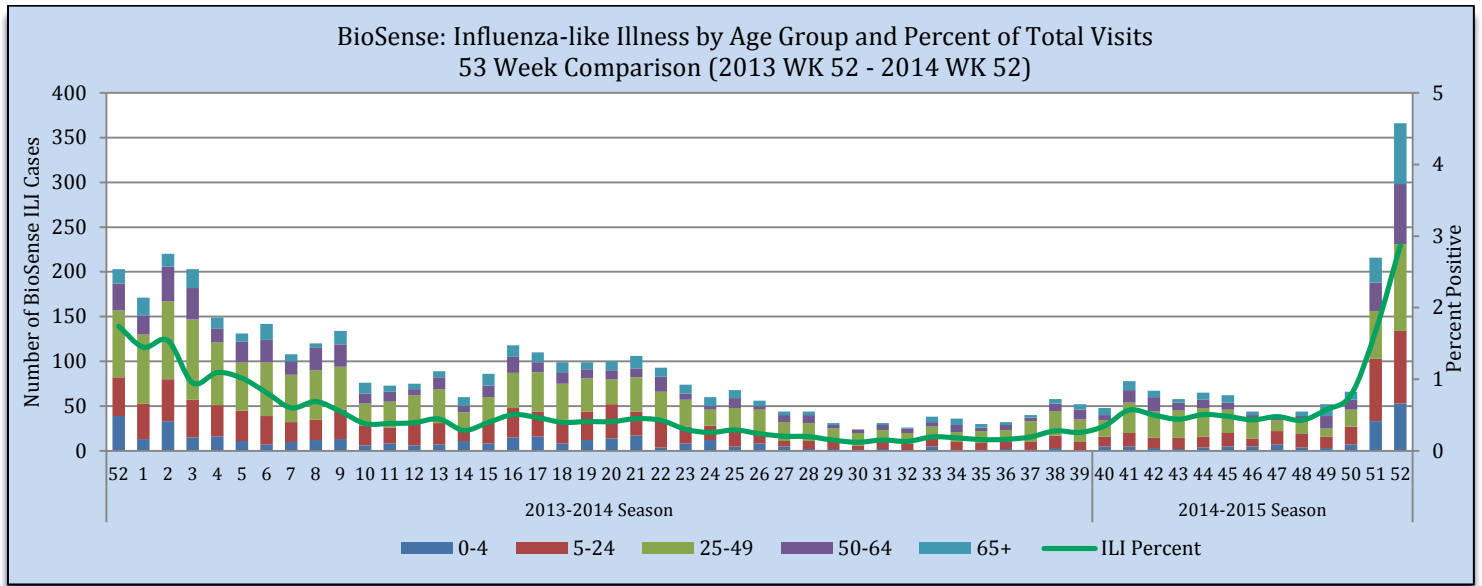
Table 2

BioSense: Influenza-like Illness Monitoring by County Jurisdiction					
Reporting Jurisdiction	Current Week (Week 52)			Cumulative Influenza Season	
	#	%	% of Facilities Reporting	#	%
Carson City Health and Human Services	76	20.8	66.7	269	22.3
Rural Community Health Services	29	7.9	10.0	56	4.7
Southern Nevada Health District	174	47.5	50.0	506	42.0
Washoe County Health District	87	23.8	40.0	373	31.0
State of Nevada	366	100	38.2	1,204	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 97 patients, which is different from the ILINet surveillance (age group 0-4). The total patient seen with ILI increased from week 51 to week 52, from 216 patients to 366 patients.

Figure 6

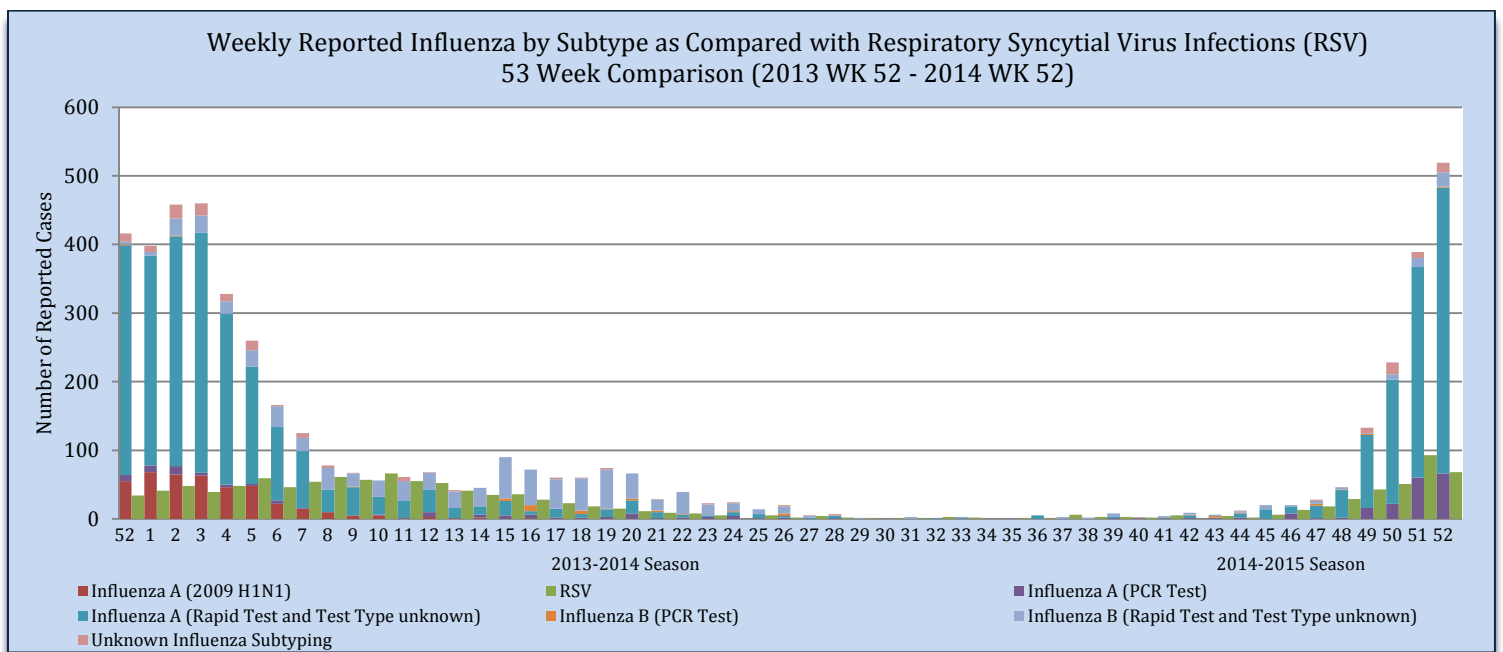


Source of Data: BioSense.

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 52, there were 519 influenza cases reported to the state, 483 influenza A cases, 22 influenza B cases and 14 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 52)					Cumulative Influenza Season				
	H1N1	A	B	Unknown	Total	H1N1	A	B	Unknown	Total
Carson City Health and Human Services	0	63	10	1	74	0	122	17	2	141
Rural Community Health Services	0	25	1	1	27	0	190	6	25	221
Southern Nevada Health District	0	268	8	4	280	0	721	33	14	768
Washoe County Health District	0	127	3	8	138	0	255	24	10	289
State of Nevada	0	483	22	14	519	0	1,288	80	51	1,419

Source: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There have been 13 hospitalizations associated with influenza reported to the state health authority during week 52.

Table 4

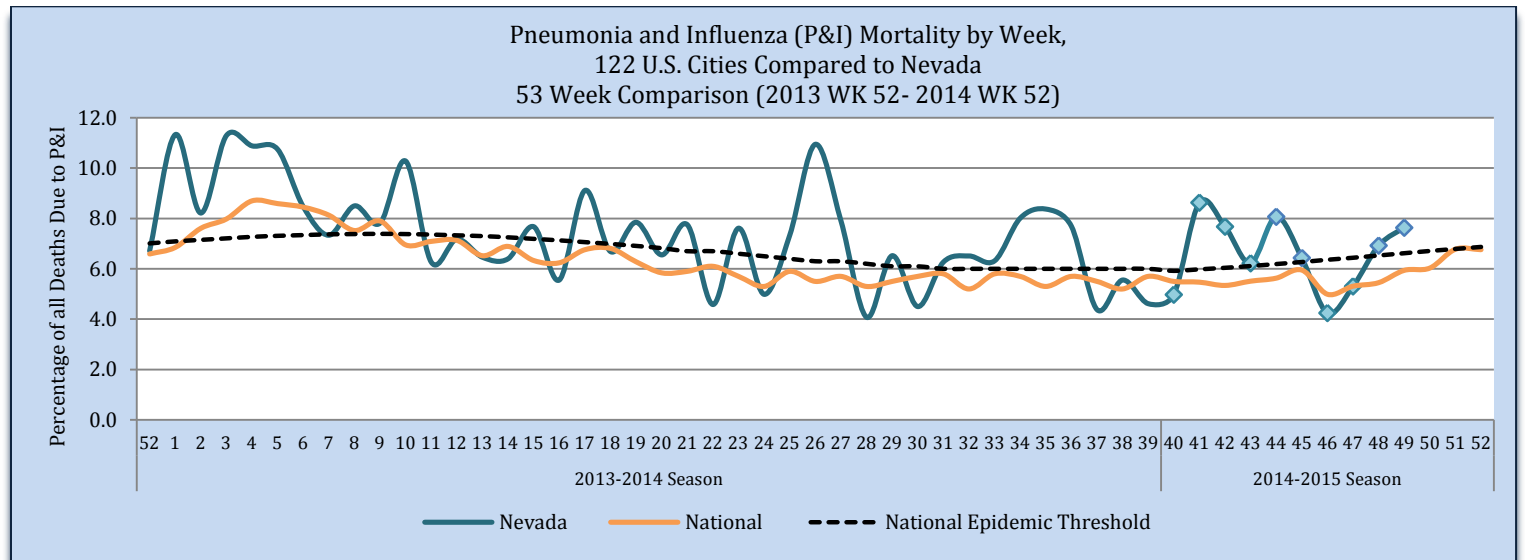
Reporting Jurisdiction	Influenza Hospitalizations			
	Current Week (Week 52)		Cumulative Influenza Season	
	#	%	#	%
Carson City Health and Human Services	0	0.0	0	0.0
Rural Community Health Services	0	0.0	10	13.2
Southern Nevada Health District	5	38.5	41	53.9
Washoe County Health District	8	61.5	25	32.9
State of Nevada	13	100	76	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 below the national epidemic threshold at 6.8% (threshold 6.9%).

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

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Recommended Citation:

Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. Influenza Weekly Report, 2013 Week 52 (December 22) through 2014 Week 52 (December 27), Nevada. January 2015 i 52 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.

