Weekly Report

2016 Week 17 (April 24 - April 30, 2016) through 2017 Week 17 (April 23 - April 29)

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

Richard Whitley, MS Director Department of Health and Human Services

Cody L. Phinney, MPH Administrator Division of Public and Behavioral Health

John DiMuro, DO, MBA
Chief Medical Officer
Division of Public and Behavioral Health

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

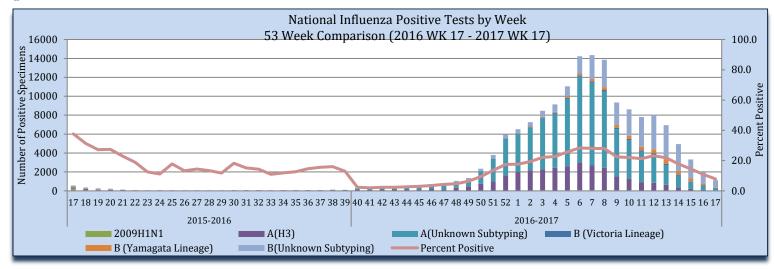
Purpose

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.

Sentinel Provider Data: 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 17, there were 14,264 specimens collected and tested for influenza, of those 1,115 were positive (7.8%).

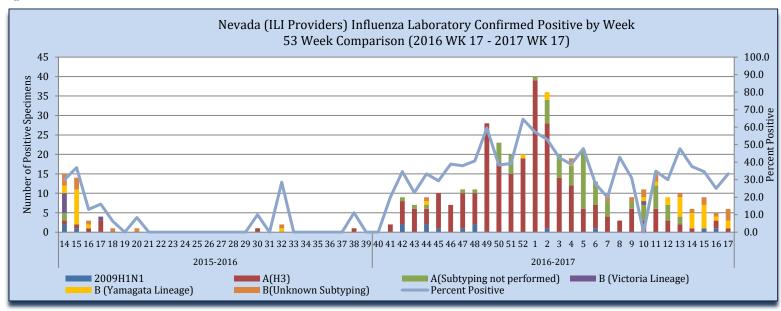
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents tested by sentinel providers including out of state laboratories. Laboratory data is obtained from CDC's ILINet system. During week 17, where there were 18 specimens collected and 6 were positive. There is a two week delay for laboratory surveillance. Data are subject to change as we receive additional reports.

Figure 2



Source of Data: CDC: ILINet.

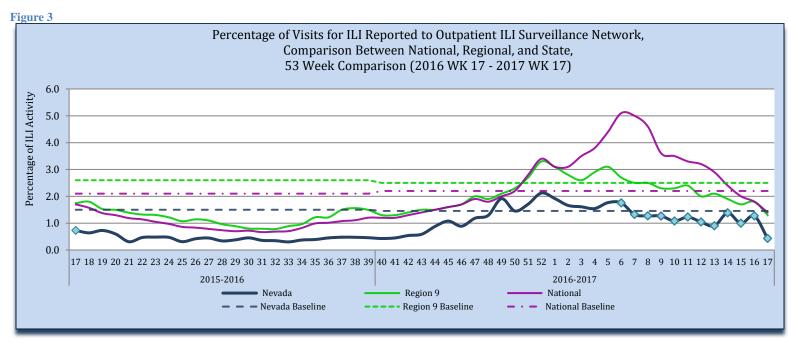
Nevada State Public Health Laboratory (NSPHL) has tested 341 specimens for influenza from sentinel providers, of which there have been 291 positive (85.3%). Southern Nevada Public Health Laboratory (SNPHL) has tested 61 specimens this season of which there have been 5 positives. Nationally, there have been 880,078 specimens sent to the WHO and NERVSS laboratories of which 155,475 have been positive (17.7%). 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 tested by sentinel providers, including out of state laboratories.

Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	SNPHL	All Other Laboratories	State of Nevada (Week 17)		State of Nevada (Season)		National (Week 17)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	341	61	621	18		1023		14,264		880,078	
Influenza Positives	291	5	103	6	33.3	399	39.0	1,115	7.8	155,475	17.7
Influenza A:	264	5	85	1	16.7	354	88.7	309	27.7	114,154	73.4
A (2009 H1N1)	11	0	1	0	0.0	12	3.4	2	0.6	863	0.8
A (H3)	253	5	8	1	100.0	266	75.1	45	15.5	30,058	26.3
A (Sub-typing not performed)	0	0	76	0	0.0	76	21.5	259	83.8	83,233	72.9
<u>Influenza B:</u>	27	0	18	5	83.3	45	11.3	806	72.3	41,321	26.6
B (Victoria Lineage)	1	0	0	0	0.0	1	2.2	15	1.9	1,802	4.4
B (Yamagata Lineage)	26	0	1	2	40.0	27	60.0	74	9.2	4,342	10.5
B (Sub-typing not performed)	0	0	17	3	60.0	17	37.8	717	89.0	35,177	85.1

Source of Data: CDC: FluView Report and CDC: ILINet.

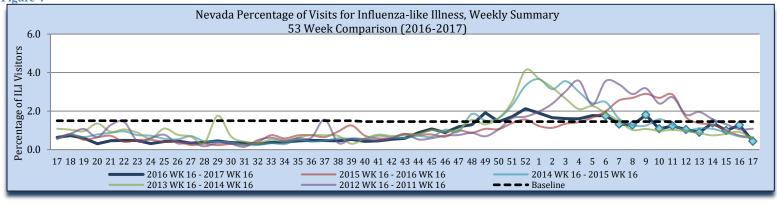
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 17 is 0.4% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 17 is 1.3% which is the below the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 17 is 1.4% which is below the national baseline 2.2%.



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

During week 17, 0.4% of visits to sentinel providers were due to ILI; this is slightly lower than the 2015-2016 influenza season (0.7%). There were 927 patients seen by sentinel providers during week 17, of which 4 patients presented with ILI; week 17 of 2016, there were 122 patients seen with ILI (16,764 total patients seen).

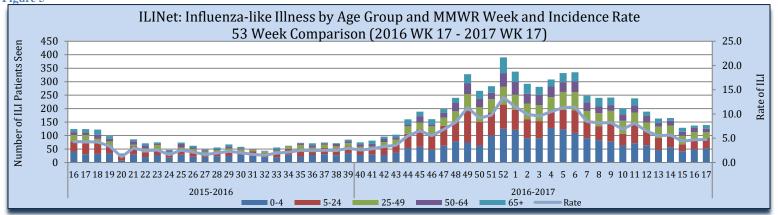
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 17, patients age 0-4 were the greatest number of patients seen with ILI, at 52 patients seen. The rate for week 17 is 4.7 per 100,000 population. 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 2017 is 2,935,490.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

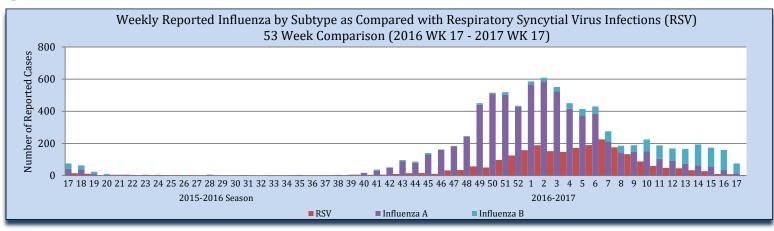
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 16, there were 165 influenza cases reported to the state, 34 influenza A, 124 influenza B and 7 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current We	eek (Week 16)		Cumulative Influenza Season					
	Α	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	5	2	0	7	830	87	3	920		
Rural Community Health Services	0	7	0	7	582	58	37	677		
Southern Nevada Health District	4	18	0	22	3,397	843	228	4,468		
Washoe County Health District	4	35	2	41	1,985	199	151	2,335		
State of Nevada	13	62	2	77	6,794	1,187	419	8,400		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 2 hospitalization associated with influenza reported to the state health authority for week 17.

Table 3

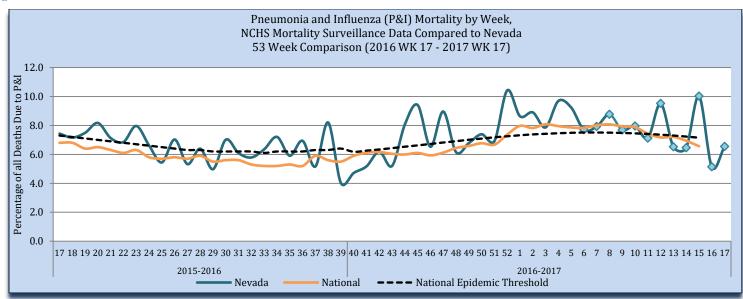
Influenza Hospitalizations								
Donoutina Inviadiation	Current Weel	k (Week 17)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	35	6.7				
Rural Community Health Services	0	0.0	19	3.7				
Southern Nevada Health District	0	0.0	178	34.3				
Washoe County Health District	2	100	287	55.3				
State of Nevada	2	100	519	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 all 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 May 9th, there were 25 P&I deaths and 382 total deaths for week 17 in Nevada. The CDC's most up-to-date National and National Epidemic Threshold data was for week 15.

Figure 7



Source: OVR: WEVRRS and CDC: FluView.

Technical Notes

- Data are subject to changes, additionally, there is a lag in reporting.
- Influenza surveillance procedures vary by jurisdiction.
- 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. 2003-2020 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2015.
- 3. OPHIE. DPBH. NBS. 2015-2017. Accessed May 2017.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2015-2017. Accessed May 2017.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2015-2017. Accessed May 2017.

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

Nevada Influenza Surveillance Program
Office of Public Health Informatics and Epidemiology
500 Damonte Ranch pkwy, ste 657
Reno, NV 89521
Tel: (775) 684-5289

Fax: (775) 684-5999

Compiled and Written by:

Liliana E. Wilbert, MPH

Reviewed by:

Jennifer Thompson Melissa Peek-Bullock

Recommended Citation:

Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. Influenza Weekly Report, 2016 Week 16 (April 17, 2016) through 2017 Week 16 (April 22), Nevada. May 2017 i 10 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.

