Weekly Report

2016 Week 16 (April 17 - April 23, 2016) through 2017 Week 16 (April 15 - April 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.

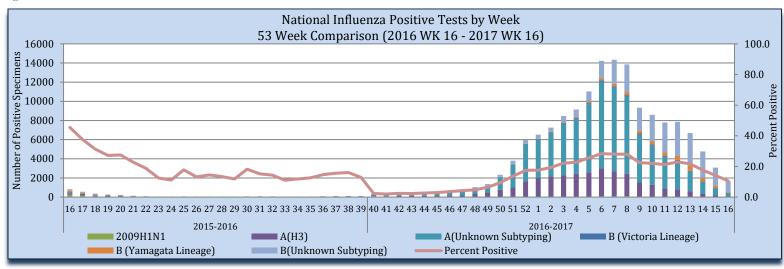
Purpose

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.

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 16, there were 15,486 specimens collected and tested for influenza, of those 1,641 were positive (10.6%).

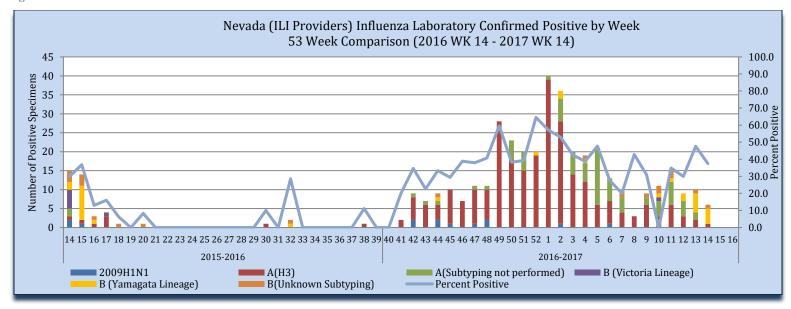
Figure 1



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. **Most up-to-date data available is for week 14**, where there were 16 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.

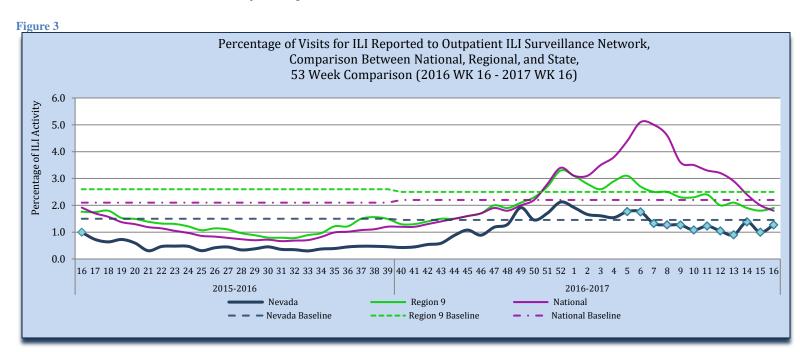
Nevada State Public Health Laboratory (NSPHL) has tested 331 specimens for influenza from sentinel providers, of which there have been 284 positive (85.8%). Southern Nevada Public Health Laboratory (SNPHL) has tested 61 specimens this season of which there have been 5 positives. Nationally, there have been 858,811 specimens sent to the WHO and NERVSS laboratories of which 152,997 have been positive (17.8%). 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 16)		State of Nevada (Season)		National (Week 16)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	331	61	606	14		998		15486		858,811	
Influenza Positives	284	5	100	1	7.1	389	39.0	1,641	10.6	152,997	17.8
Influenza A:	260	5	85	0	0.0	350	90.0	432	26.3	113,348	74.1
A (2009 H1N1)	10	0	1	0	0.0	11	3.1	2	0.5	846	0.7
A (H3)	250	5	8	0	0.0	263	75.1	58	13.4	29,804	26.3
A (Sub-typing not performed)	0	0	76	0	0.0	76	21.7	372	86.1	82,698	73.0
<u>Influenza B:</u>	24	0	15	1	100.0	39	10.0	1,209	73.7	39,649	25.9
B (Victoria Lineage)	1	0	0	0	0.0	1	2.6	21	1.7	1,747	4.4
B (Yamagata Lineage)	23	0	1	0	0.0	24	61.5	84	6.9	4,059	10.2
B (Sub-typing not performed)	0	0	14	1	100.0	14	35.9	1,104	91.3	33,843	85.4

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

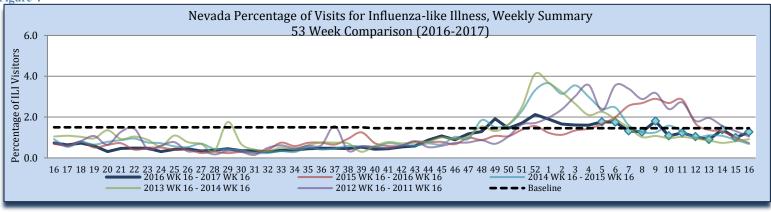
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 16 is 1.3% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 16 is 1.9% 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 16 is 1.8% which is below the national baseline 2.2%.



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

During week 16, 1.3% of visits to sentinel providers were due to ILI; this is slightly higher as the 2015-2016 influenza season (0.7%). There were 9,538 patients seen by sentinel providers during week 16, of which 121 patients presented with ILI; week 16 of 2016, there were 124 patients seen with ILI (19,401 total patients seen).

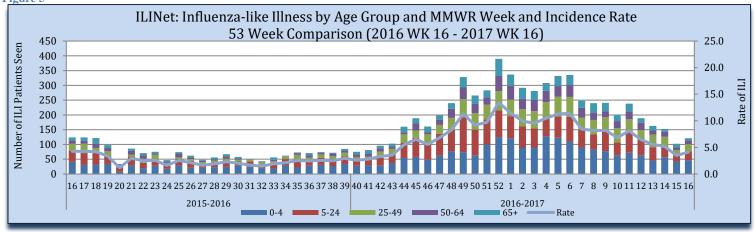
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 16, patients age 0-4 were the greatest number of patients seen with ILI, at 47 patients seen. The rate for week 16 is 4.1 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)

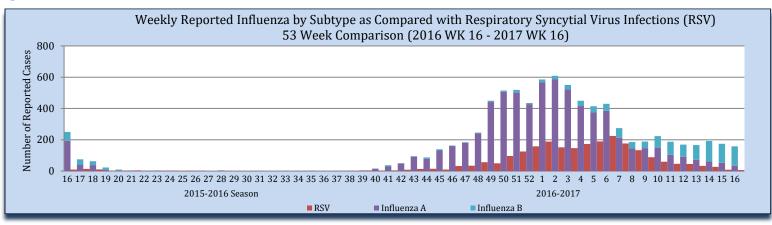
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, 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 W	eek (Week 16))	Cumulative Influenza Season					
	A	В	Unknown	Total	Α	В	Unknown	Total		
Carson City Health and Human Services	4	16	0	20	825	85	3	913		
Rural Community Health Services	0	6	0	6	582	51	37	670		
Southern Nevada Health District	26	77	3	106	3392	823	228	4443		
Washoe County Health District	4	25	4	33	1981	164	149	2294		
State of Nevada	34	124	7	165	6780	1123	417	8320		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 6 hospitalization associated with influenza reported to the state health authority for week 16.

Table 3

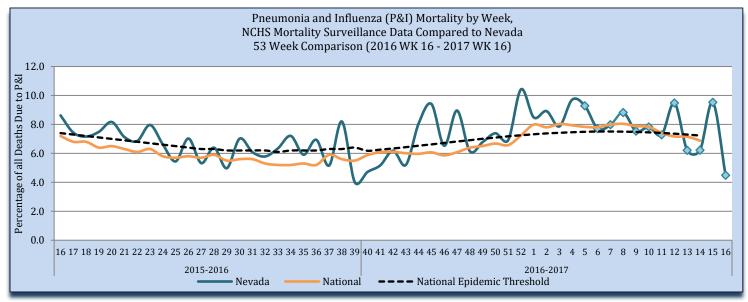
Influenza Hospitalizations								
Donouting Inviedigtion	Current Weel	k (Week 16)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	3	50.0	35	6.8				
Rural Community Health Services	1	16.7	19	3.7				
Southern Nevada Health District	0	0.0	178	34.4				
Washoe County Health District	2	30.3	285	55.1				
State of Nevada	6	100	517	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 3rd, there were 13 P&I deaths and 290 total deaths for week 16 in Nevada. The CDC's most up-to-date National and National Epidemic Threshold data was for week 14.

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.

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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.

