Influenza Weekly Report

2017 Week 16 (April 16 - April 22, 2017) through 2018 Week 16 (April 15 - April 21, 2018)

Department of Health and Human Services Office of Analytics



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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.

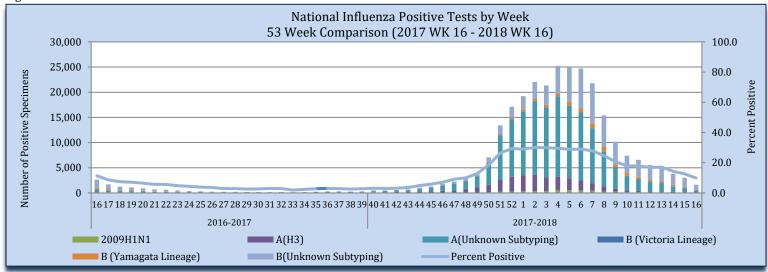
Purpose

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 16,420 specimens collected and tested for influenza, of those 1,619 were positive (9.9%).

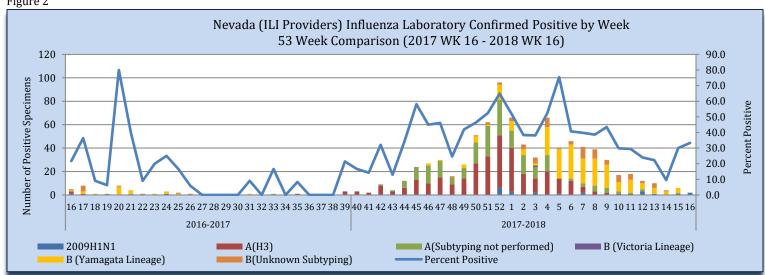




Source of Data: CDC: FluView Weekly Report.

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 16, where there were 6 specimens collected, in which 2 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 629 specimens for influenza from sentinel providers, of which there have been 539 positive (85.7%). Southern Nevada Public Health Laboratory (SNPHL) has tested 111 specimens this season of which there have been 7 positive. Nationally, there have been 1,238,125 specimens sent to the WHO and NERVSS laboratories of which 271,029 have been positive (21.9%). 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 tested by sentinel providers, including out of state laboratories.

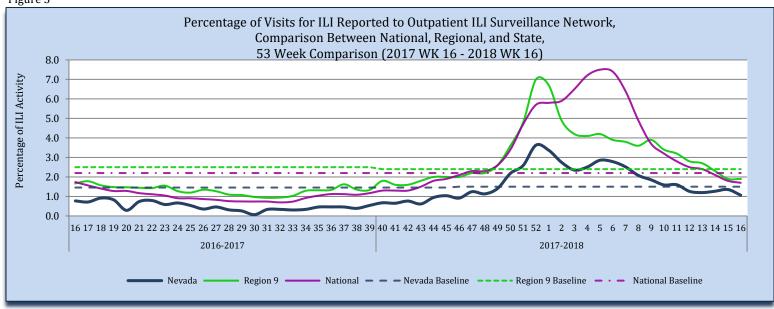
Table 1

	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)	
	-1.02 -1.2	0111112		#	%	#	%	#	%	#	%
Specimens Tested	629	111	1,232	6	-	1,972	-	16,420		1,238,125	
Influenza Positives	539	7	292	2	33.3	838	42.5	1,619	9.9	271,029	21.9
Influenza A:	324	4	221	2	100	549	65.5	493	30.5	186,818	68.9
A (2009 H1N1)	22	1	1	2	100	24	4.4	20	4.1	5,360	2.9
A (H3)	302	3	8	0	0	313	57.0	43	8.7	31,157	16.7
A (Sub-typing not performed)	0	0	212	0	0	212	38.6	430	87.2	150,301	80.5
Influenza B:	215	3	71	0	0	289	34.5	1,126	69.5	84,211	31.1
B (Victoria Lineage)	1	0	0	0	0	1	0.3	21	1.9	1,187	1.4
B (Yamagata Lineage)	214	0	4	0	0	218	75.4	105	9.3	9,718	11.5
B (Sub-typing not performed)	0	3	67	0	0	70	24.2	1,000	88.8	73,306	87.1

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 16 is 1.1% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 16 is 1.9% which is below the regional baseline of 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 16 is 1.7% which is below the national baseline of 2.2%.

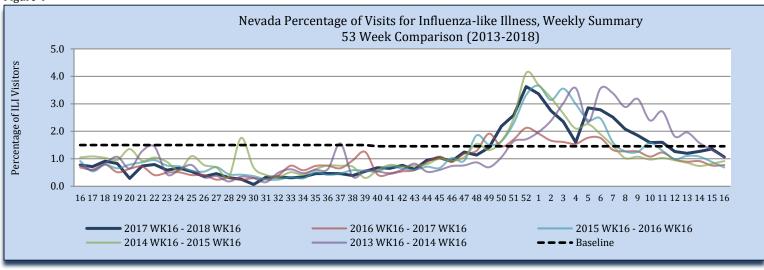
Figure 3



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

During week 16, 1.1% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (0.8%). There were 9,206 patients seen by sentinel providers during week 16, of which 98 patients presented with ILI; week 16 of 2017, there were 139 patients seen with ILI (18,021 total patients seen). Data availability depends on sentinel provider reporting.

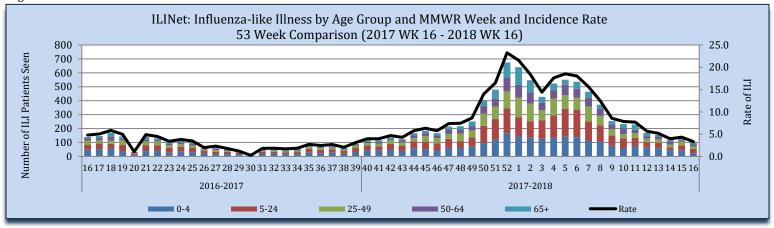
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 16, patients ages 5-24 were the greatest number of patients seen with ILI, at 30 patients seen. The rate for week 16 is 3.3 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 2018 is 2,969,849.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

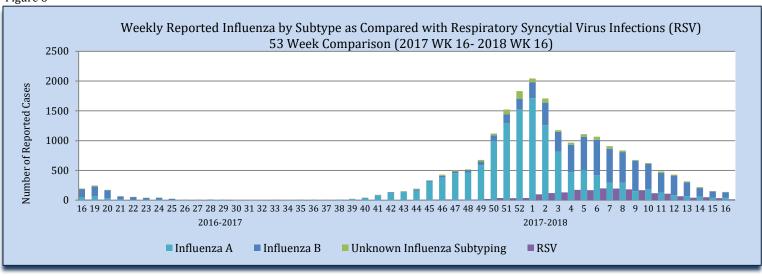
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 7 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 16, there were 138 influenza cases reported to the state, 44 influenza A, 89 influenza B and 5 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	A	В	Unknown	Total		
Carson City Health and Human Services	5	12	0	17	1,315	730	86	2,131		
Rural Community Health Services	2	2	0	4	1,085	941	30	2,056		
Southern Nevada Health District	28	50	2	80	7,386	3,015	286	10,687		
Washoe County Health District	9	25	3	37	3,285	1,812	424	5,521		
State of Nevada	44	89	5	138	13,071	6,498	826	20,395		

Source: to Office of Analytics: NBS and SNHD: NETSS.

Figure 6



Source of Data: to Office of Analytics: NBS and SNHD: NETSS.

Hospitalizations

There were 9 hospitalizations associated with influenza reported to the state health authority for week 16.

Table 3

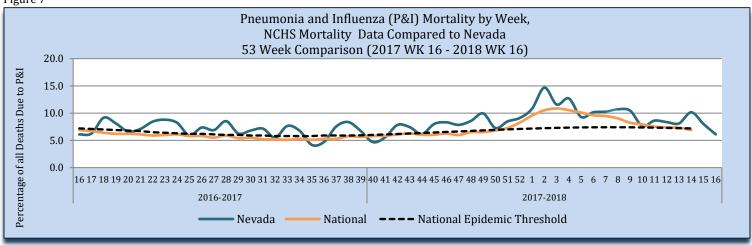
Influenza Hospitalizations								
Reporting Jurisdiction	Current Weel	k (Week 16)	Cumulative Influenza Season					
Keporting Juli Suiction	#	%	#	%				
Carson City Health and Human Services	1	11.1	156	9.4				
Rural Community Health Services	1	11.1	45	2.7				
Southern Nevada Health District	5	55.6	940	56.4				
Washoe County Health District	2	22.2	525	31.5				
State of Nevada	9	100	1,666	100				

Source: Reported to Office of Analytics 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 1st, there were 24 P&I deaths and 393 total deaths for week 16 in Nevada. Please note that the CDC does not have updated P&I counts for week 15 or week 16.

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 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 transmitted 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.
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- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2017-2018. Accessed May 2018.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2018. Accessed April 2018.

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