Influenza Weekly Report

2017 Week 14 (April 2 - April 8, 2017) through 2018 Week 14 (April1 - April 7, 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.

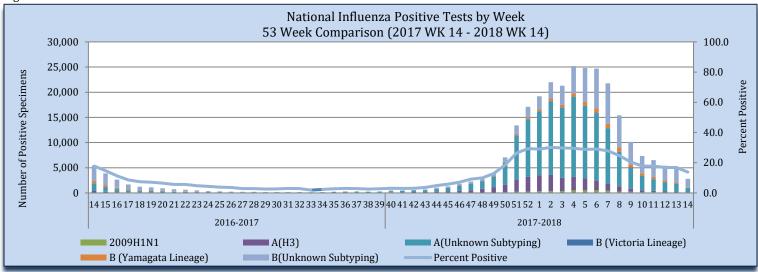
Purpose

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 14, there were 20,397 specimens collected and tested for influenza, of those 2,811 were positive (13.8%).

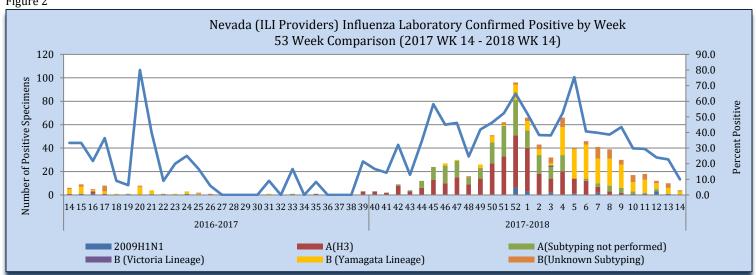




Source of Data: CDC FluView Weekly Report.

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 14, where there were 40 specimens collected, in which 4 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 618 specimens for influenza from sentinel providers, of which there have been 532 positive (86.1%). Southern Nevada Public Health Laboratory (SNPHL) has tested 104 specimens this season of which there have been 7 positive. Nationally, there have been 1,188,456 specimens sent to the WHO and NERVSS laboratories of which 264,470 have been positive (22.3%). 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.

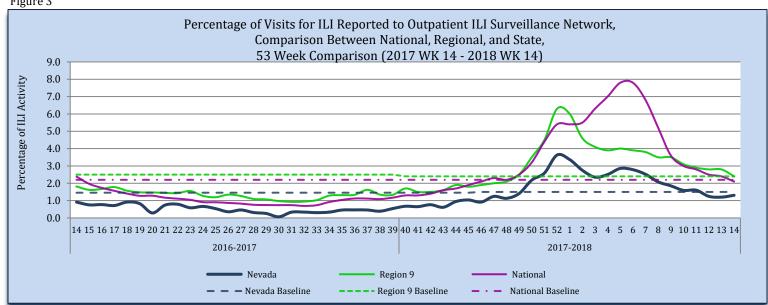
Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	SNPHL	All Other Laboratories	State of Nevada (Week 14)		State of Nevada (Season)		National (Week 14)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	618	104	1,221	40	-	1,943	-	20,397		1,188,456	
Influenza Positives	532	7	291	4	10.0	830	42.7	2,811	13.8	264,470	22.3
Influenza A:	321	4	220	0	0	545	65.7	970	34.5	184,679	69.8
A (2009 H1N1)	20	1	1	0	0	22	4.0	42	4.3	5,120	2.8
A (H3)	301	3	8	0	0	312	57.2	65	6.7	30,760	16.7
A (Sub-typing not performed)	0	0	211	0	0	211	38.7	863	89.0	148,799	80.6
Influenza B:	211	3	71	4	100	285	34.3	1,841	65.5	79,791	30.2
B (Victoria Lineage)	1	0	0	0	0	1	0.4	21	1.1	1,050	1.3
B (Yamagata Lineage)	210	0	4	3	75.0	214	75.1	125	6.8	8,898	11.2
B (Sub-typing not performed)	0	3	67	1	25.0	70	24.6	1,695	92.1	69,843	87.5

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 14 is 1.3% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 14 is 2.4% which is equal to 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 14 is 2.1% which is below the national baseline of 2.2%.

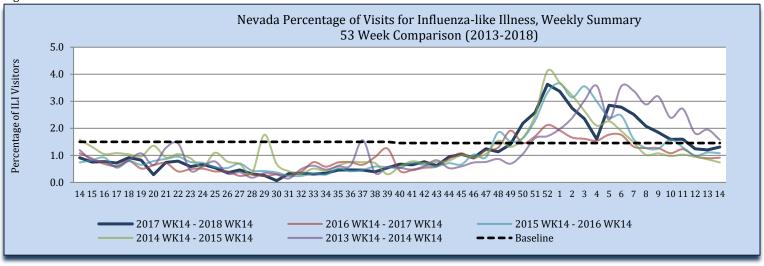
Figure 3



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

During week 14, 1.3% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (0.9%). There were 8,185 patients seen by sentinel providers during week 14, of which 107 patients presented with ILI; week 14 of 2017, there were 165 patients seen with ILI (18,044 total patients seen). Data availability depends on sentinel provider reporting.

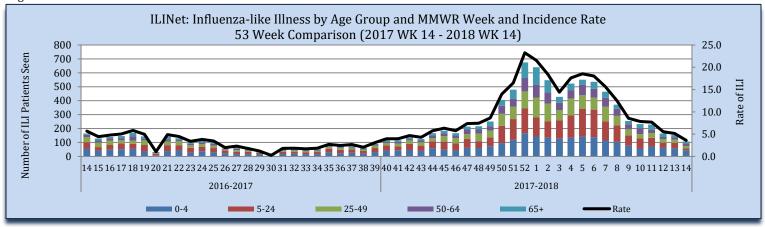
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 14, patients ages 0-4 were the greatest number of patients seen with ILI, at 44 patients seen. The rate for week 14 is 3.6 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)

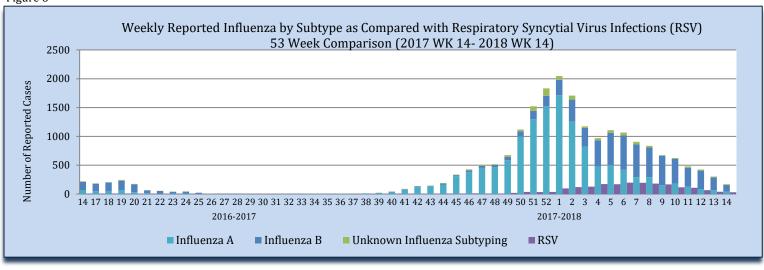
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 7 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 14, there were 171 influenza cases reported to the state, 46 influenza A, 110 influenza B and 15 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current W	eek (Week 14)		Cumulative Influenza Season					
	A	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	0	0	1	1	1,295	670	86	2,051		
Rural Community Health Services	4	7	0	11	1,081	938	30	2,049		
Southern Nevada Health District	31	69	7	107	7,328	2,885	281	10,494		
Washoe County Health District	11	34	7	52	3,266	1,759	413	5,438		
State of Nevada	46	110	15	171	12,970	6,252	810	20,032		

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 12 hospitalizations associated with influenza reported to the state health authority for week 14.

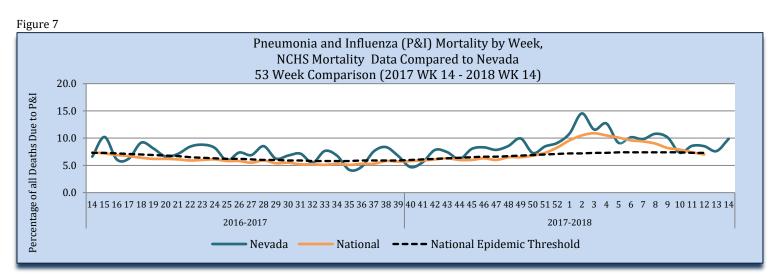
Table 3

Influenza Hospitalizations								
Domoutium Invindintion	Current Weel	k (Week 14)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	149	9.1				
Rural Community Health Services	0	0.0	44	2.7				
Southern Nevada Health District	7	58.3	931	56.7				
Washoe County Health District	5	41.7	517	31.5				
State of Nevada	12	100	1.641	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 April 16th, there were 37 P&I deaths and 374 total deaths for week 14 in Nevada. Please note that the CDC does not have updated P&I counts for week 13 or week 14.



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 April 2018.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2018. Accessed April 2018.

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Recommended Citation:

Department of Health and Human Services. Office of Analytics. Influenza Weekly Report, 2017 Week 14 (April 2, 2017) through 2018 Week 14 (March 7, 2018), Nevada. April 2018 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.

