Weekly Report

2017 Week 4 (January 22 - January 28, 2017) through 2018 Week 4 (January 21 - January 27, 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.

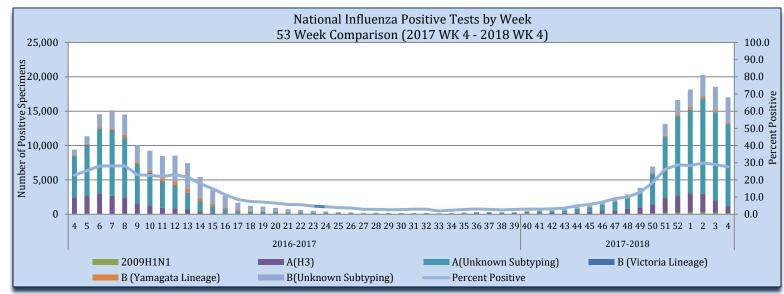
Purpose

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 4, there were 61,860 specimens collected and tested for influenza, of those 17,024 were positive (27.5%).

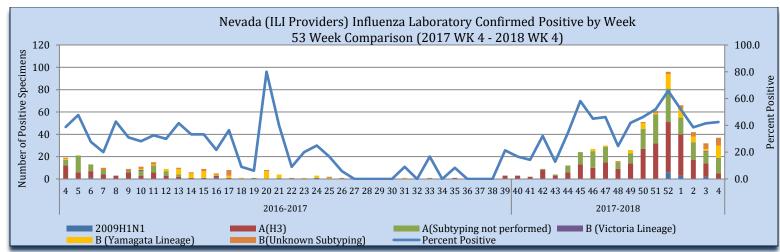
Figure 1



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 4, where there were 87 specimens collected, in which 37 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.

Influenza Weekly Report

Nevada State Public Health Laboratory (NSPHL) has tested 371 specimens for influenza from sentinel providers, of which there have been 316 positive (85.2%). Southern Nevada Public Health Laboratory (SNPHL) has tested 44 specimens this season of which there have been 4 positive. Nationally, there have been 629.214 specimens sent to the WHO and NERVSS laboratories of which 126,117 have been positive (20.0%). 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.

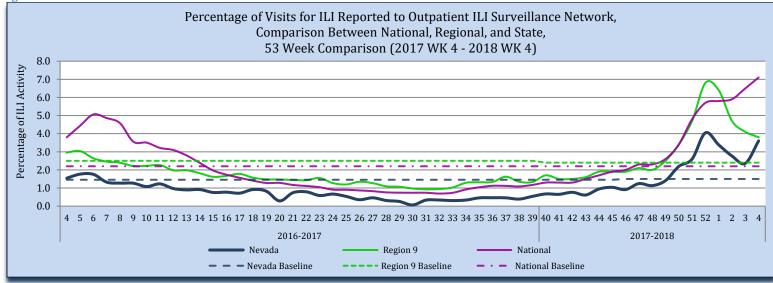
Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	SNPHL	All Other Laboratories	State of Nevada (Week 4)		State of Nevada (Season)		National (Week 4)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	371	44	785	87	-	1200	-	61,860		629,214	
Influenza Positives	316	4	222	37	42.5	542	45.2	17,024	27.5	126,117	20.0
Influenza A:	265	3	197	19	51.4	465	85.8	13,072	76.8	103,551	82.1
A (2009 H1N1)	15	0	0	0	0.0	15	3.2	189	1.4	1,896	1.8
A (H3)	250	3	5	5	26.3	258	55.5	1,017	7.8	18,068	17.4
A (Sub-typing not performed)	0	0	192	14	73.7	192	41.3	11,866	90.8	83,587	80.7
Influenza B:	51	1	25	18	48.6	77	14.2	3,952	23.2	22,566	17.9
B (Victoria Lineage)	1	0	0	0	0.0	1	1.3	13	0.3	228	1.0
B (Yamagata Lineage)	50	0	1	11	61.1	51	66.2	201	5.1	2,292	10.2
B (Sub-typing not performed)	0	1	24	7	38.9	25	32.5	3,738	94.6	20,046	88.8

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 4 is 3.6% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 4 is 3.8% which is the above the region baseline of 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 4 is 7.1% which is above the national baseline 2.2%.

Figure 3

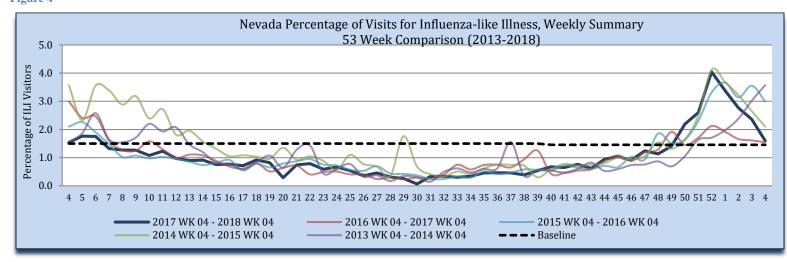


Source of Data: CDC: Flu View Report and CDC: ILINet.

During week 4, 3.6% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (1.5%). There were 11,723 patients seen by sentinel providers during week 4, of which 427 patients presented with ILI; week 4 of 2017, there were 308 patients seen with ILI (19,948 total patients seen). Data availability depends on sentinel provider reporting.

Figure 4

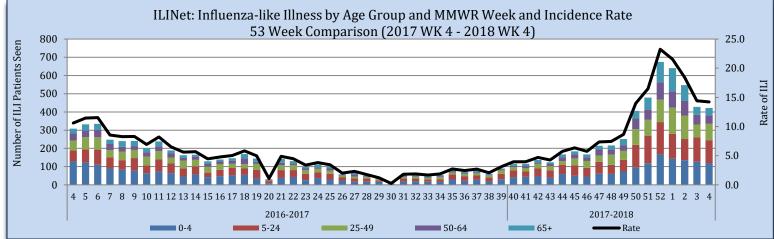
Influenza Weekly Report



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 4, patients ages 5-24 were the greatest number of patients seen with ILI, at 125 patients seen. The rate for week 4 is 14.2 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.

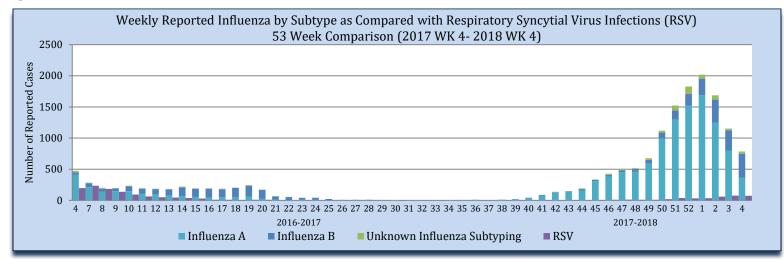
Influenza Positive Surveillance (NBS and NETSS)

Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 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 4, there were 784 influenza cases reported to the state, 365 influenza A, 385 influenza B and 34 unknown subtyping.

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current W	/eek (Week 4)		Cumulative Influenza Season					
	А	В	Unknown	Total	А	В	Unknown	Total		
Carson City Health and Human Services	65	55	6	126	1046	265	34	1,345		
Rural Community Health Services	42	115	2	159	800	256	15	1,071		
Southern Nevada Health District	180	118	7	305	5993	783	202	6,978		
Washoe County Health District	78	97	19	194	2791	706	289	3,786		
State of Nevada	365	385	34	784	10,630	2,010	540	13,180		

Table 2

Figure 6



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

Hospitalizations

There were 41 hospitalizations associated with influenza reported to the state health authority for week 4.

Table 3

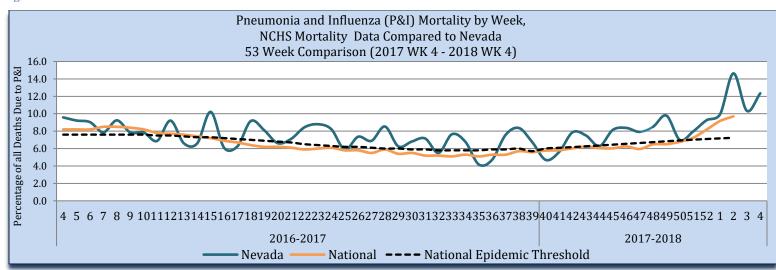
Influenza Hospitalizations								
Deporting Jurisdiction	Current Wee	k (Week 4)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	5	12.2%	116	9.5%				
Rural Community Health Services	0	0.0%	35	2.9%				
Southern Nevada Health District	20	48.8%	664	54.2%				
Washoe County Health District	16	39.0%	410	33.5%				
State of Nevada	41	100.0%	1,225	100.0%				

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 February 6th, there were 50 P&I deaths and 405 total deaths for week 4 in Nevada. Please note that the CDC does not have updated P&I counts for week 3 or week 4.

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. <u>http://www.cdc.gov/flu/weekly/pastreports.htm</u>.
- 2. Nevada State Demographer's Office. 2003-2020 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2015.
- 3. Office of Analytics. DHHS. NBS. 2016-2018. Accessed February 2018.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2017-2018. Accessed February 2018.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2018. Accessed February 2018.

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