Weekly Report

2017 Week 2 (January 8 - January 14, 2017) through 2018 Week 2 (January 7 - January 13, 2018)

Department of Health and Human Services Office of Analytics



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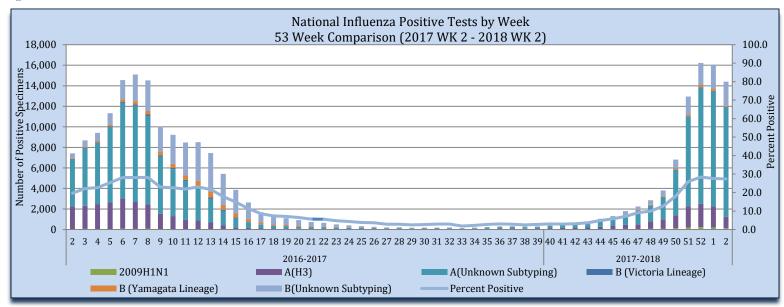
Purpose

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 2, there were 52,677 specimens collected and tested for influenza, of those 14,401 were positive (27.3%).

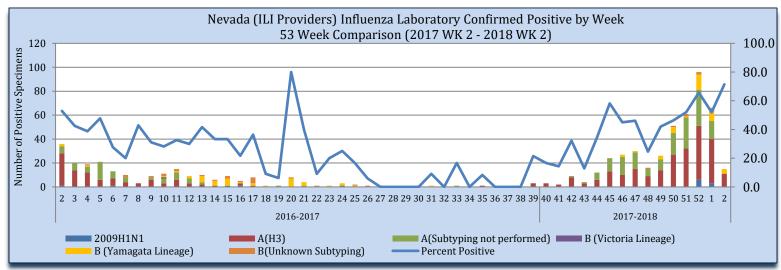
Figure 1



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 2, where there were 21 specimens collected, in which 15 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.

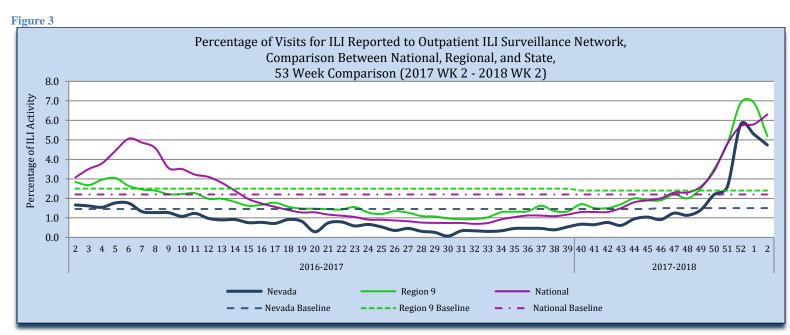
Nevada State Public Health Laboratory (NSPHL) has tested 326 specimens for influenza from sentinel providers, of which there have been 276 positive (84.7%). Southern Nevada Public Health Laboratory (SNPHL) has tested 37 specimens this season of which there have been 4 positive. Nationally, there have been 480,349 specimens sent to the WHO and NERVSS laboratories of which 81,771 have been positive (17.0%). 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 NPHL Laboratories		State of Nevada (Week 2)		State of Nevada (Season)		National (Week 2)		National (Season)	
				#	%	#	%	#	%	#	%	
Specimens Tested	326	37	585	21	-	948	-	52,677		480,349		
Influenza Positives	276	4	166	15	71.4	446	47.0	14,401	27.3	81,771	17.0	
<u>Influenza A:</u>	240	3	157	11	73.3	400	89.7	11,941	82.9	68,357	83.6	
A (2009 H1N1)	13	0	0	0	0.0	13	3.3	118	1.0	1,219	1.8	
A (H3)	227	3	5	11	100.0	235	58.8	1,111	9.3	12,489	18.3	
A (Sub-typing not performed)	0	0	152	0	0.0	152	38.0	10,712	89.7	54,649	79.9	
Influenza B:	36	1	9	4	26.7	46	10.3	2,460	17.1	13,414	16.4	
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	11	0.4	123	0.9	
B (Yamagata Lineage)	36	0	1	4	100.0	37	80.4	112	4.6	1,366	10.2	
B (Sub-typing not performed)	0	1	8	0	0.0	9	19.6	2,337	95.0	11,925	88.9	

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

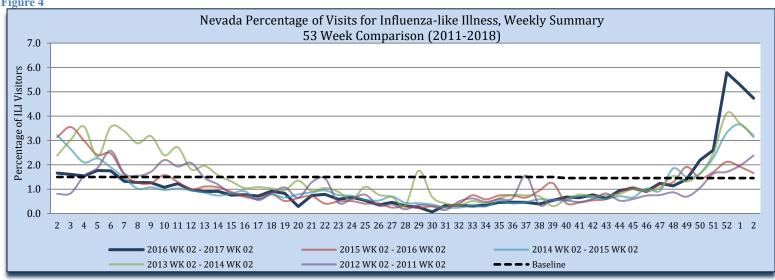
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 2 is 4.7% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 2 is 6.1% 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 2 is 5.8% which is above the national baseline 2.2%.



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

During week 2, 4.7% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (1.7%). There were 11,358 patients seen by sentinel providers during week 2, of which 538 patients presented with ILI; week 2 of 2017, there were 292 patients seen with ILI (17,572 total patients seen). Data availability depends on sentinel provider reporting.

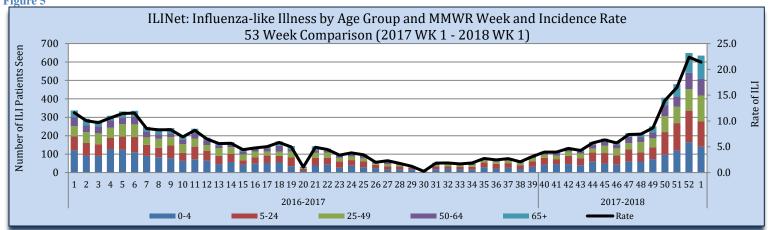
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 2, patients ages 0-4 were the greatest number of patients seen with ILI, at 132 patients seen. The rate for week 2 is 18.1 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 2018 is 2,969,849.





Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

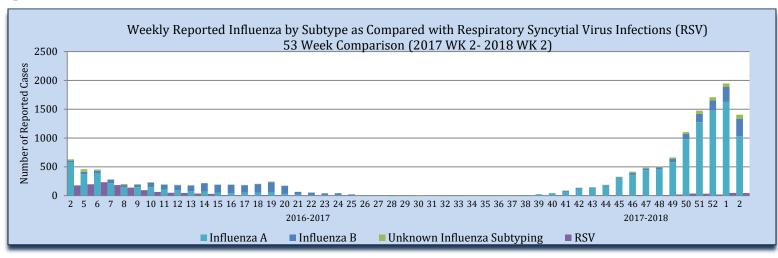
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 2, there were 1,404 influenza cases reported to the state, 1,030 influenza A, 305 influenza B and 69 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type								
Reporting Jurisdiction		Current W	eek (Week 2)		Cumulative Influenza Season				
	Α	В	Unknown	Total	A	В	Unknown	Total	
Carson City Health and Human Services	162	71	9	242	861	170	23	1,054	
Rural Community Health Services	100	26	10	136	671	77	12	760	
Southern Nevada Health District	443	102	23	568	4949	442	81	5,472	
Washoe County Health District	325	106	27	458	2569	524	260	3,353	
State of Nevada	1,030	305	69	1,404	9,050	1,213	376	10,639	

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 108 hospitalizations associated with influenza reported to the state health authority for week 2.

Table 3

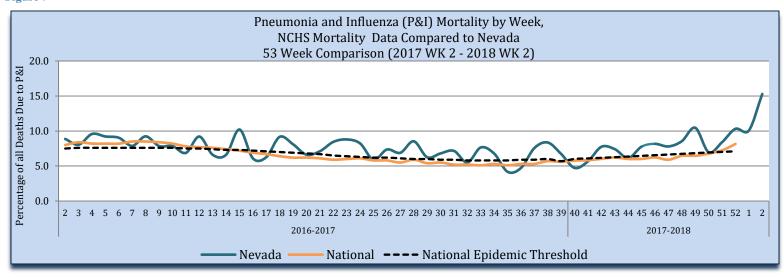
Influenza Hospitalizations								
Donosting Juriodiction	Current Wee	k (Week 2)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	18	16.7%	98	9.5%				
Rural Community Health Services	4	3.7%	31	3.0%				
Southern Nevada Health District	86	79.6%	567	55.2%				
Washoe County Health District	0	0.0%	331	32.2%				
State of Nevada	108	100.0%	1027	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 January 22^{nd} , there were 61 P&I deaths and 399 total deaths for week 2 in Nevada. Please note that the CDC does not have updated P&I counts for week 1 or week 2.

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

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