Weekly Report

2017 Week 3 (January 15 - January 21, 2017) through 2018 Week 3 (January 14 - January 20, 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.

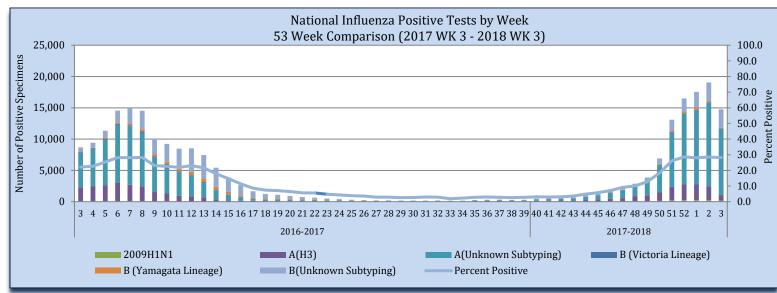
Purpose

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 3, there were 52,485 specimens collected and tested for influenza, of those 14,770 were positive (28.1%).

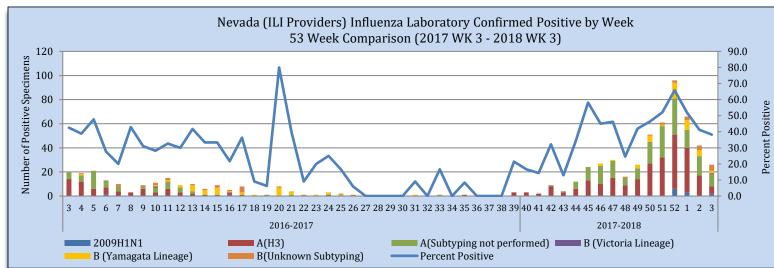




Source of Data: CDC: FluView Weekly Report.

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 3, where there were 68 specimens collected, in which 26 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

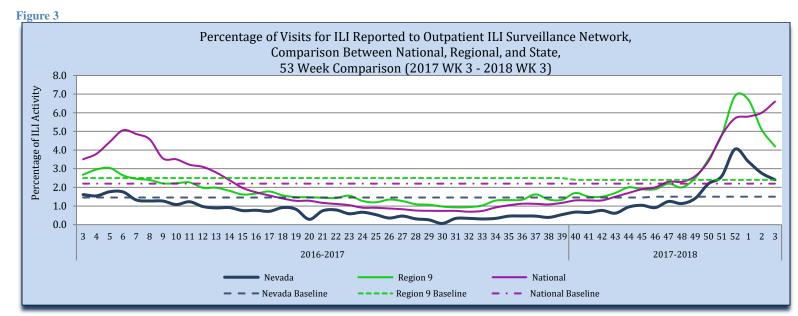
Nevada State Public Health Laboratory (NSPHL) has tested 346 specimens for influenza from sentinel providers, of which there have been 294 positive (85.0%). Southern Nevada Public Health Laboratory (SNPHL) has tested 37 specimens this season of which there have been 4 positive. Nationally, there have been 552,652 specimens sent to the WHO and NERVSS laboratories of which 103,319 have been positive (18.7%). 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 3)		State of Nevada (Season)		National (Week 3)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	346	37	714	68	-	1097	-	52,485		552,652	
Influenza Positives	294	4	201	26	38.2	499	45.5	14,770	28.1	103,319	18.7
Influenza A:	254	3	183	18	69.2	440	88.2	11,672	79.0	85,722	83.0
A (2009 H1N1)	15	0	0	2	11.1	15	3.4	144	1.2	1,530	1.8
A (H3)	239	3	5	6	33.3	247	56.1	914	7.8	15,376	17.9
A (Sub-typing not performed)	0	0	178	10	55.6	178	40.5	10,614	90.9	68,816	80.3
Influenza B:	40	1	18	8	30.8	59	11.8	3,098	21.0	17,597	17.0
B (Victoria Lineage)	1	0	0	1	12.5	1	1.7	8	0.3	184	1.0
B (Yamagata Lineage)	39	0	1	2	25.0	40	67.8	127	4.1	1,750	9.9
B (Sub-typing not performed)	0	1	17	5	62.5	18	30.5	2,963	95.6	15,663	89.0

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

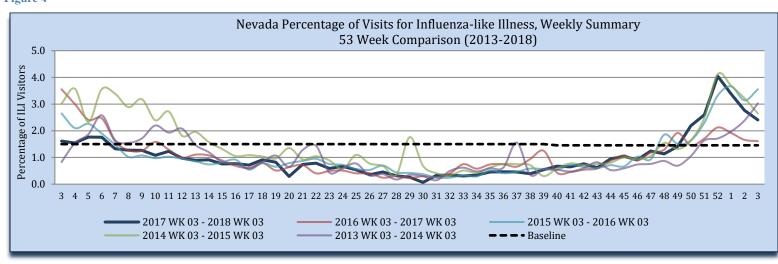
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 3 is 2.4% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 3 is 4.2% 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 6.6% which is above the national baseline 2.2%.



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

During week 3, 2.4% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (1.6%). There were 17,736 patients seen by sentinel providers during week 3, of which 427 patients presented with ILI; week 3 of 2017, there were 281 patients seen with ILI (17,434 total patients seen). Data availability depends on sentinel provider reporting.

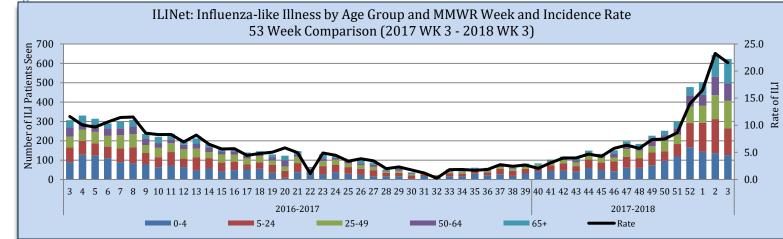
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 3, patients ages 5-24 were the greatest number of patients seen with ILI, at 133 patients seen. The rate for week 3 is 14.4 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)

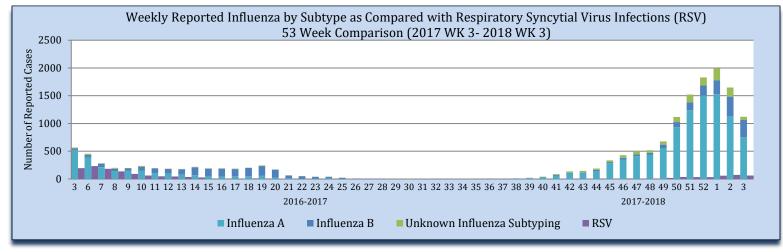
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 3, there were 1,120 influenza cases reported to the state, 754 influenza A, 310 influenza B and 56 unknown subtyping.

	Reported Influenza Cases by County Jurisdiction and Influenza Type								
Reporting Jurisdiction	Current Week (Week 3)				Cumulative Influenza Season				
	А	В	Unknown	Total	А	В	Unknown	Total	
Carson City Health and Human Services	121	41	5	167	982	211	28	1,221	
Rural Community Health Services	87	64	1	152	758	141	13	912	
Southern Nevada Health District	402	120	40	562	5130	606	839	6,575	
Washoe County Health District	144	85	10	239	2713	609	270	3,592	
State of Nevada	754	310	56	1,120	9,583	1,567	1,150	12,300	

Table 2

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 77 hospitalizations associated with influenza reported to the state health authority for week 3.

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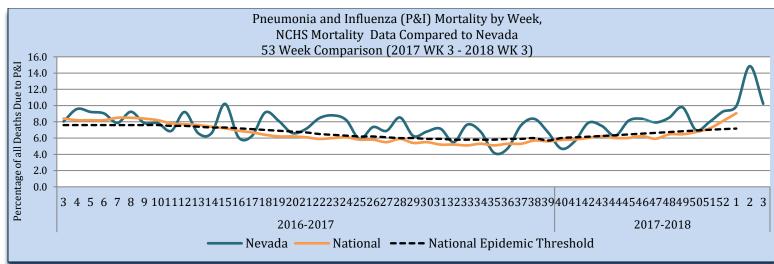
Influenza Hospitalizations								
Deporting Jurisdiction	Current Wee	k (Week 3)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	12	15.6%	110	9.3%				
Rural Community Health Services	2	2.6%	33	2.8%				
Southern Nevada Health District	38	49.4%	644	54.5%				
Washoe County Health District	25	32.5%	394	33.4%				
State of Nevada	77	100.0%	1,181	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 29th, there were 41 P&I deaths and 401 total deaths for week 3 in Nevada. Please note that the CDC does not have updated P&I counts for week 2 or week 3.

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 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.

Comments, suggestions, and requests for further information may be addressed to:

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