Weekly Report

2016 Week 51 (December 18 - December 24, 2016) through 2017 Week 51 (December 17 - December 23, 2017)

Department of Health and Human Services Office of Analytics



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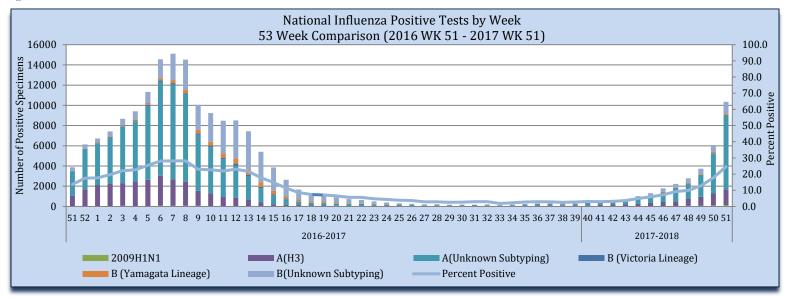
Purpose

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 51, there were 42,102 specimens collected and tested for influenza, of those 10,344 were positive (24.6%).

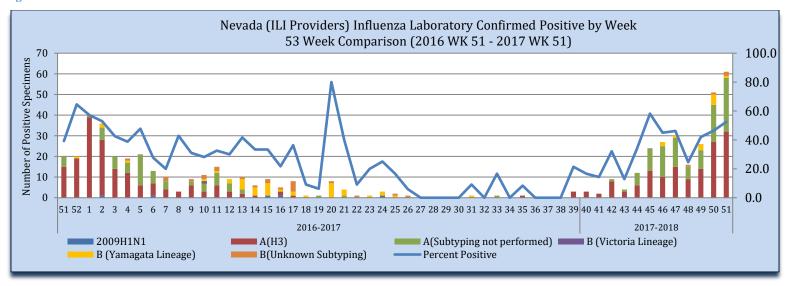
Figure 1



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 51, where there were 122 specimens collected, in which 64 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.

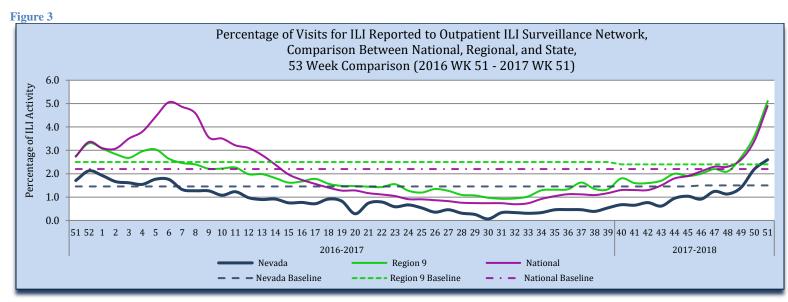
Nevada State Public Health Laboratory (NSPHL) has tested 173 specimens for influenza from sentinel providers, of which there have been 149 positive (86.1%). Southern Nevada Public Health Laboratory (SNPHL) has tested 31 specimens this season of which there have been 3 positive. Nationally, there have been 296,393 specimens sent to the WHO and NERVSS laboratories of which 31,568 have been positive (10.7%). 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 51)		State of Nevada (Season)		National (Week 51)		National (Season)	
	1101112			#	%	#	%	#	%	#	%
Specimens Tested	173	31	449	122	-	653	-	42,102		296,393	
Influenza Positives	149	3	117	64	52.5	269	41.2	10,344	24.6	31,568	10.7
<u>Influenza A:</u>	138	3	112	61	95.3	253	94.1	9,054	87.5	26,393	83.6
A (2009 H1N1)	4	0	0	3	4.9	4	1.6	144	1.6	584	2.2
A (H3)	134	3	5	32	52.5	142	56.1	1,553	17.2	6,330	24.0
A (Sub-typing not performed)	0	0	107	26	42.6	107	42.3	7,357	81.3	19,479	73.8
Influenza B:	11	0	5	3	4.7	16	5.9	1,290	12.5	5,175	16.4
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	12	0.9	67	1.3
B (Yamagata Lineage)	11	0	1	1	33.3	12	75.0	140	10.9	667	12.9
B (Sub-typing not performed)	0	0	4	2	66.7	4	25.0	1,138	88.2	4,441	85.8

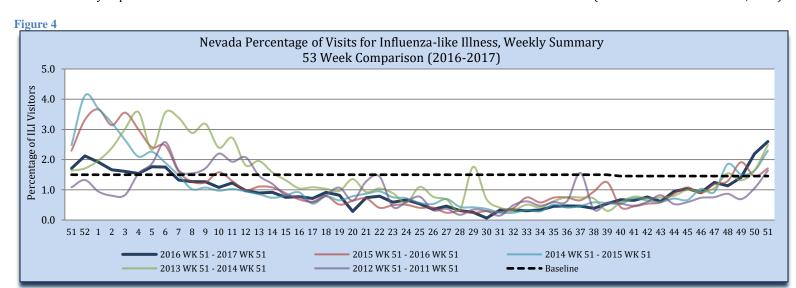
Source of Data: CDC: FluView Report and CDC: ILINet.

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 51 is 2.6% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 51 is 5.1% 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 51 is 4.9% which is above the national baseline 2.2%.



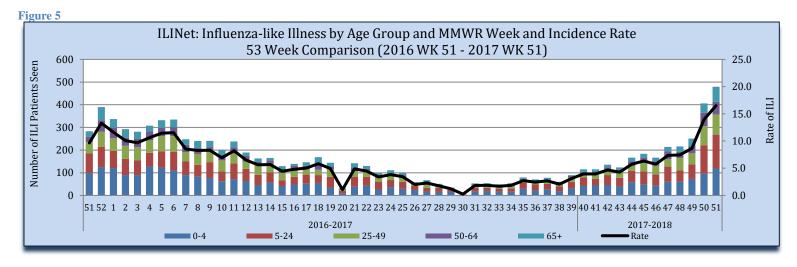
Source of Data: CDC: Flu View Report and CDC: ILINet.

During week 51, 2.6% of visits to sentinel providers were due to ILI; this greater than the 2016-2017 influenza season (1.7%). There were 18,426 patients seen by sentinel providers during week 51, of which 479 patients presented with ILI; week 51 of 2016, there were 283 patients seen with ILI (16,562 total patients seen). Data availability depends on sentinel provider reporting.



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 51, patients ages 5-24 were the greatest number of patients seen with ILI, at 149 patients seen. The rate for week 51 is 16.5 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 2017 is 2,935,510.



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

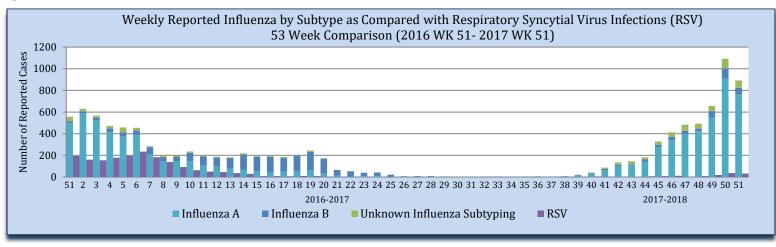
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 51, there were 1,375 influenza cases reported to the state, 1,134 influenza A, 133 influenza B and 108 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current W	eek (Week 51)		Cumulative Influenza Season					
	Α	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	80	13	0	93	435	45	0	480		
Rural Community Health Services	77	5	0	82	322	15	1	338		
Southern Nevada Health District	603	46	68	717	2424	171	362	2,957		
Washoe County Health District	374	69	40	483	1299	212	143	1,654		
State of Nevada	1,134	133	108	1,375	4,480	443	506	5,429		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



Source of Data: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There were 97 hospitalizations associated with influenza reported to the state health authority for week 51.

Table 3

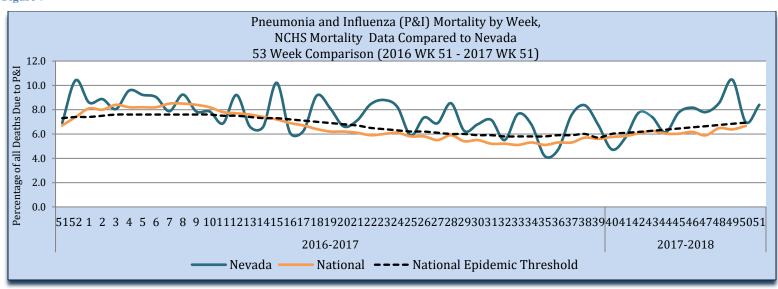
Influenza Hospitalizations								
Donouting Junisdiction	Current Weel	k (Week 51)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	10	10.3%	52	11.8%				
Rural Community Health Services	8	8.2%	18	4.1%				
Southern Nevada Health District	27	27.8%	195	44.3%				
Washoe County Health District	52	53.6%	175	39.8%				
State of Nevada	97	100.0%	440	100.0%				

Source: Reported to Office of Public Health Informatics and Epidemiology 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 5th, there were 32 P&I deaths and 381 total deaths for week 51 in Nevada. Please note that the CDC does not have updated P&I counts for week 51.

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

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