Weekly Report

2016 Week 52 (December 25 - December 31, 2016) through 2017 Week 52 (December 24 - December 30, 2017)

Department of Health and Human Services Office of Analytics



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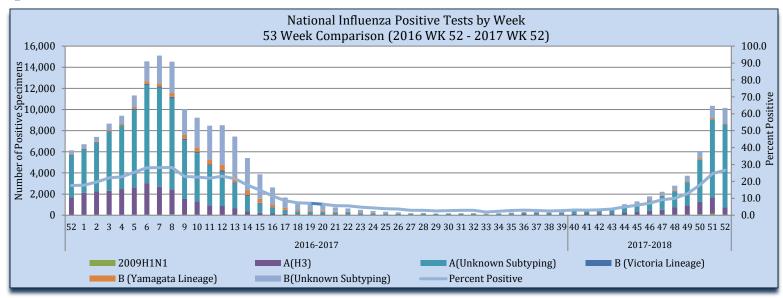
Purpose

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 52, there were 38,027 specimens collected and tested for influenza, of those 10,151 were positive (26.7%).

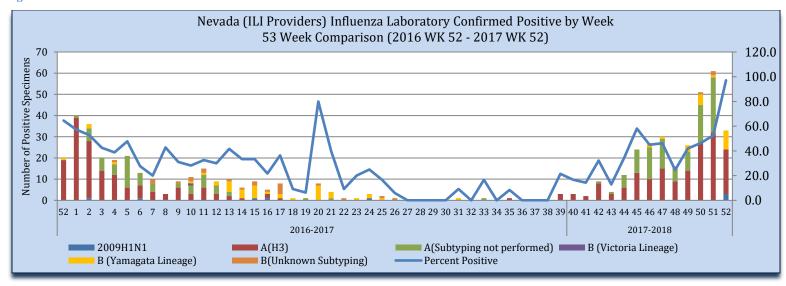
Figure 1



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 52, where there were 34 specimens collected, in which 33 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.

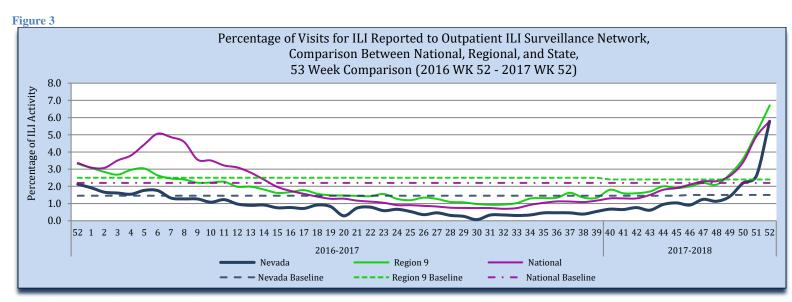
Nevada State Public Health Laboratory (NSPHL) has tested 207 specimens for influenza from sentinel providers, of which there have been 182 positive (87.9%). Southern Nevada Public Health Laboratory (SNPHL) has tested 31 specimens this season of which there have been 3 positive. Nationally, there have been 334,420 specimens sent to the WHO and NERVSS laboratories of which 41,719 have been positive (12.5%). 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 52)		State of Nevada (Season)		National (Week 52)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	207	31	449	34	-	687	-	38,027		334,420	
Influenza Positives	182	3	117	33	97.1	302	44.0	10,151	26.7	41,719	12.5
<u>Influenza A:</u>	162	3	112	24	72.7	277	91.7	8,602	84.7	34,995	83.9
A (2009 H1N1)	7	0	0	3	12.5	7	2.5	60	0.7	644	1.8
A (H3)	155	3	5	21	87.5	163	58.8	682	7.9	7,012	20.0
A (Sub-typing not performed)	0	0	107	0	0.0	107	38.6	7,860	91.4	27,339	78.1
Influenza B:	20	0	5	9	27.3	25	8.3	1,549	15.3	6,724	16.1
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	9	0.6	76	1.1
B (Yamagata Lineage)	20	0	1	9	100.0	21	84.0	81	5.2	748	11.1
B (Sub-typing not performed)	0	0	4	0	0.0	4	16.0	1,459	94.2	5,900	87.7

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

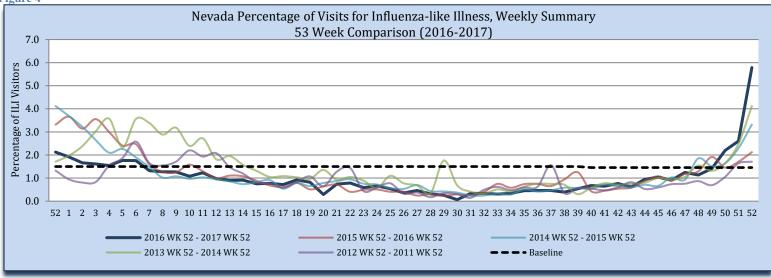
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 52 is 5.8% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 52 is 6.7% 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 52 is 5.8% which is above the national baseline 2.2%.



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

During week 52, 5.8% of visits to sentinel providers were due to ILI; this greater than the 2016-2017 influenza season (2.1%). There were 11,217 patients seen by sentinel providers during week 52, of which 649 patients presented with ILI; week 52 of 2016, there were 390 patients seen with ILI (18,359 total patients seen). Data availability depends on sentinel provider reporting.

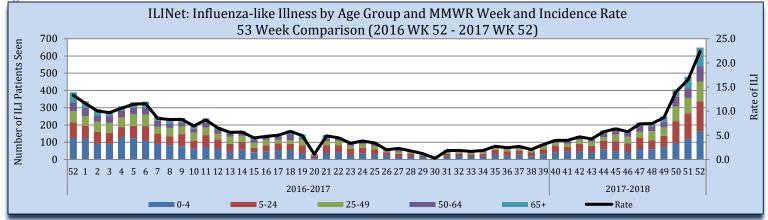




Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 52, patients ages 5-24 were the greatest number of patients seen with ILI, at 171 patients seen. The rate for week 52 is 22.4 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 2017 is 2,935,520.





Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

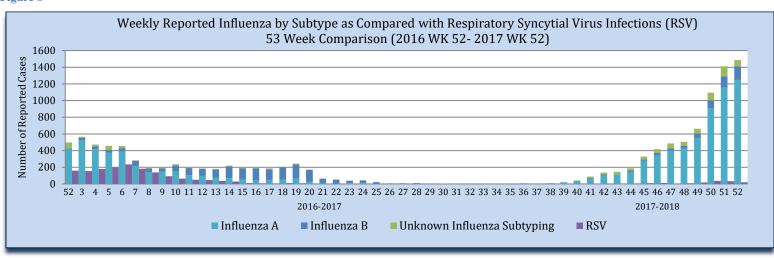
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 52, there were 1,486 influenza cases reported to the state, 1,248 influenza A, 164 influenza B and 74 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 52)				Cumulative Influenza Season					
	Α	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	120	27	9	156	585	75	9	669		
Rural Community Health Services	105	19	1	125	427	34	2	463		
Southern Nevada Health District	570	34	27	631	2998	216	426	3,640		
Washoe County Health District	453	84	37	574	1746	295	181	2,222		
State of Nevada	1,248	164	74	1,486	5,756	620	618	6,994		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 112 hospitalizations associated with influenza reported to the state health authority for week 52.

Table 3

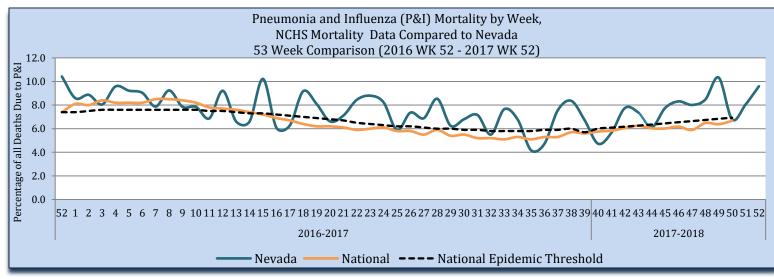
Influenza Hospitalizations								
Donoutina Inviadiation	Current Weel	k (Week 52)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	11	9.8%	66	10.2%				
Rural Community Health Services	7	6.3%	25	3.9%				
Southern Nevada Health District	23	20.5%	309	47.8%				
Washoe County Health District	71	63.4%	246	38.1%				
State of Nevada	112	100.0%	646	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 11th, there were 40 P&I deaths and 417 total deaths for week 52 in Nevada. Please note that the CDC does not have updated P&I counts for week 51 or week 52.

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 January 2018.

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Recommended Citation:

Department of Health and Human Services. Office of Analytics. Influenza Weekly Report, 2016 Week 52 (December 25, 2016) through 2017 Week 52 (December 30, 2017), Nevada. January 2018 i 52 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.

