Weekly Report

2015 Week 51 (December 20 - December 26) through 2016 Week 51 (December 18 - December 24)

Department of Health and Human Services Division of Public and Behavioral Health Office of Public Health Informatics and Epidemiology



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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 51, there were 18,191 specimens collected and tested for influenza, of those 2,069 were positive (11.4%).

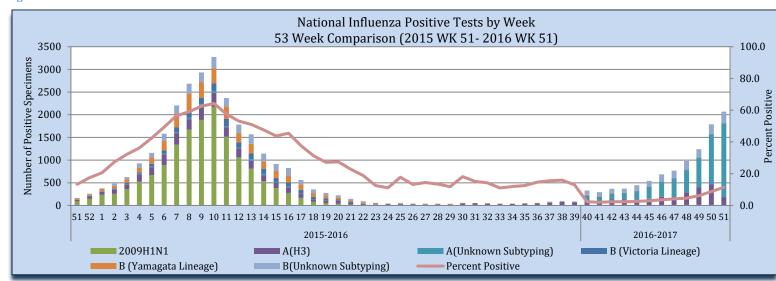
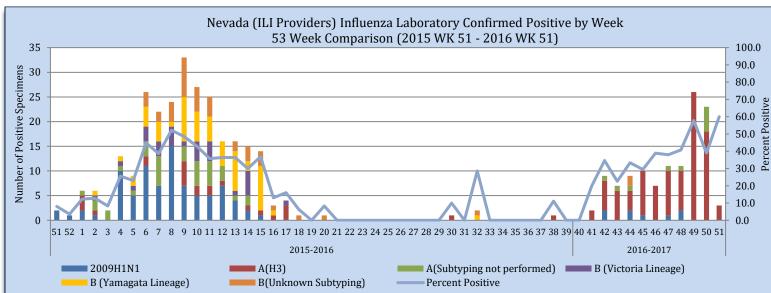


Figure 1

The Nevada total includes laboratory tests for all Nevada residents tested by sentinel providers including out of state laboratories. During week 51, there were 5 specimens collected and 3 were positive (60.0%). There is a two week delay for laboratory surveillance.

Figure 2



Source of Data: CDC: ILINet.

Source of Data: CDC: FluView Weekly Report.

Influenza Weekly Report

Nevada State Public Health Laboratory (NSPHL) has tested 126 specimens for influenza from sentinel providers, of which there have been 103 positive (81.7%). Southern Nevada Public Health Laboratory (SNPHL) has tested 33 specimens this season of which there have been 0 positives. Nationally, there have been 214,246 specimens sent to the WHO and NERVSS laboratories of which 9,878 have been positive (4.6%). 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.

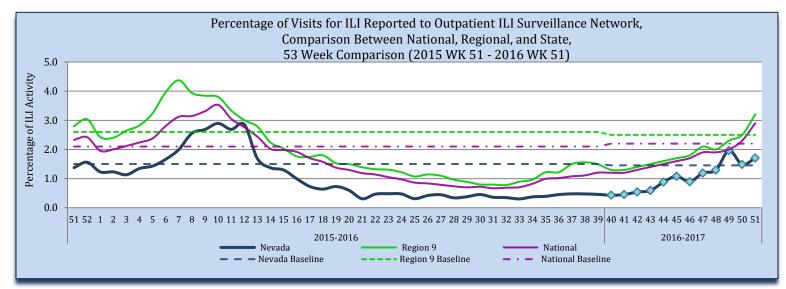
Table 1

	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)	
				#	%	#	%	#	%	#	%
Specimens Tested	126	33	160	5		319		18,191		214,246	
Influenza Positives	103	0	15	3	60.0	118	37.0	2,069	11.4	9,878	4.6
Influenza A:	103	0	13	3	100	116	98.3	1,809	87.4	7,996	80.9
A (2009 H1N1)	7	0	1	0	0.0	8	6.9	4	0.2	111	1.4
А (Н3)	96	0	2	3	100	98	84.5	182	10.1	2,292	28.7
A (Sub-typing not performed)	0	0	10	0	0.0	10	8.6	1,623	89.7	5,593	69.9
Influenza B:	0	0	2	0	0.0	2	1.7	260	12.6	1,882	19.1
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	3	1.2	75	4.0
B (Yamagata Lineage)	0	0	0	0	0.0	0	0.0	4	1.5	56	3.0
B (Sub-typing not performed)	0	0	2	0	0.0	2	100	253	97.3	1,751	93.0

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 51 is 1.7% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 51 is 3.2% which is above the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 51 is 2.9% which is above the national baseline 2.2%.

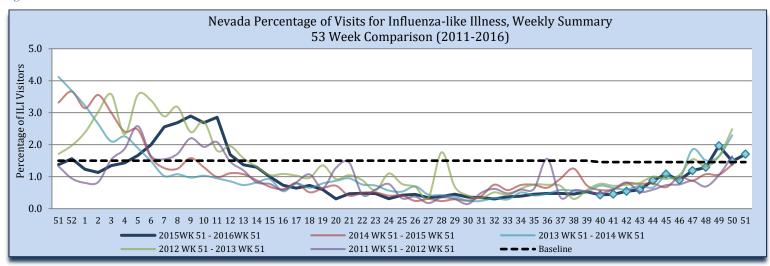
Figure 3



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

During week 51, 1.7% of visits to sentinel providers were due to ILI; this is higher than the 2015-2016 influenza season (1.4%). There were 16,442 patients seen by sentinel providers during week 51, of which 280 patients presented with ILI; week 51 of 2015, there were 196 patients seen with ILI (14,243 total patients seen).

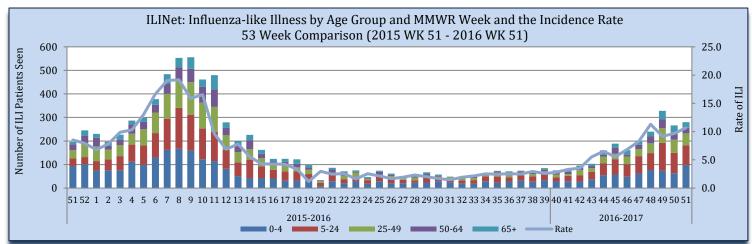
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 51, patients age 0-4 were the greatest number of patients seen with ILI, at 100 patients seen. The rate for week 51 is 9.6 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 2016 is 2,902,853.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

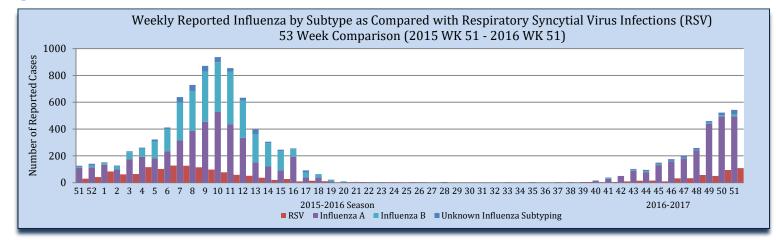
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 51, there were 543 influenza cases reported to the state, 495 influenza A, 17 influenza B and 31 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type								
Reporting Jurisdiction	Current Week (Week 51)				Cumulative Influenza Season				
	А	В	Unknown	Total	А	В	Unknown	Total	
Carson City Health and Human Services	79	0	0	79	392	0	2	394	
Rural Community Health Services	44	4	1	49	237	12	12	261	
Southern Nevada Health District	183	8	16	207	615	42	38	695	
Washoe County Health District	189	5	14	208	1,159	24	83	1,266	
State of Nevada	495	17	31	543	2,403	78	135	2,616	

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 40 hospitalization associated with influenza reported to the state health authority for week 51.

Table 3

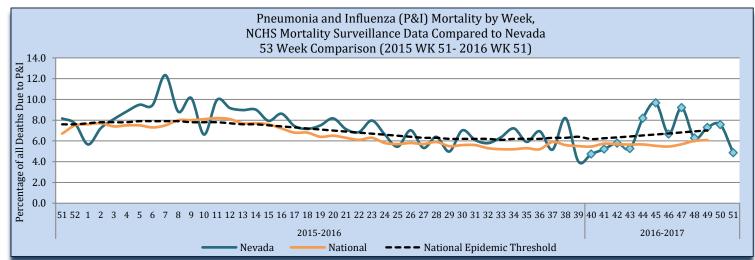
Influenza Hospitalizations								
Deporting Invisdiction	Current Weel	k (Week 51)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	3	1.4				
Rural Community Health Services	0	0.0	3	1.4				
Southern Nevada Health District	19	47.5	75	34.7				
Washoe County Health District	21	52.5	135	62.5				
State of Nevada	40	100	216	100				

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 3rd, there were 13 P&I deaths and 268 total deaths for week 51 in Nevada. The P&I mortality percent for Nevada is at 4.9%. Nationally, the P&I mortality percent has not been published 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. 2015-2016. Accessed December 2017.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2015-2016. Accessed January 2017.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2015-2016. Accessed January 2017.

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