Weekly Report

2016 Week 12 (March 20 - March 26, 2016) through 2017 Week 12 (March 19 - March 25)

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.

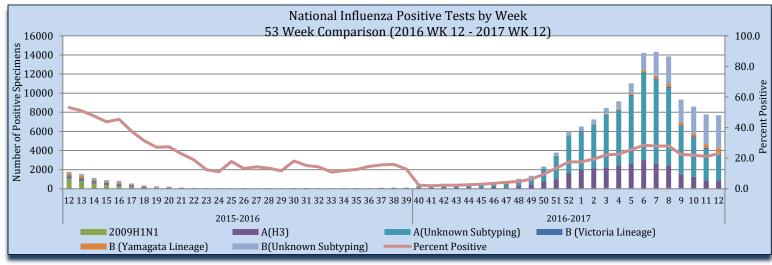
Purpose

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 12, there were 33,499 specimens collected and tested for influenza, of those 7,689 were positive (23%).

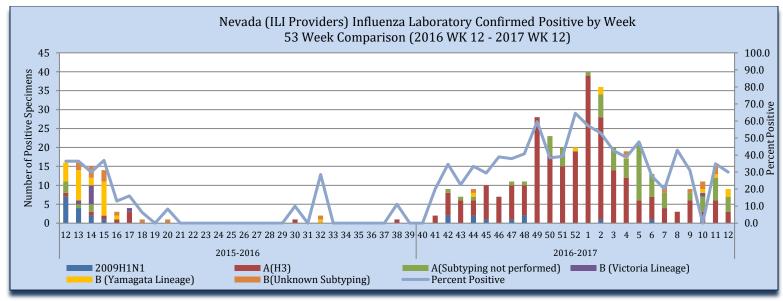
Figure 1



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. During week 12, there were 30 specimens collected and 9 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 308 specimens for influenza from sentinel providers, of which there have been 266 positive (86.4%). Southern Nevada Public Health Laboratory (SNPHL) has tested 61 specimens this season of which there have been 5 positives. Nationally, there have been 762,900 specimens sent to the WHO and NERVSS laboratories of which 136,612 have been positive (17.9%). 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 12)		State of Nevada (Season)		National (Week 12)		National (Season)	
		011111		#	%	#	%	#	%	#	%
Specimens Tested	308	61	553	30		922		33,499		762,900	
Influenza Positives	266	5	92	9	30.0	363	39.4	7,689	23.0	136,612	17.9
Influenza A:	257	5	82	7	77.8	344	94.8	3,667	47.7	107,728	78.9
A (2009 H1N1)	9	0	1	0	0.0	10	2.9	28	0.8	801	0.7
A (H3)	248	5	7	3	42.9	260	75.6	784	21.4	28,635	26.6
A (Sub-typing not performed)	0	0	74	4	57.1	74	21.5	2,855	77.9	78,292	72.8
Influenza B:	9	0	10	2	22.2	19	5.2	4,022	52.3	28,884	21.1
B (Victoria Lineage)	1	0	0	0	0.0	1	5.3	133	3.3	1,470	5.1
B (Yamagata Lineage)	8	0	1	2	100.0	9	47.4	436	10.8	2,826	9.8
B (Sub-typing not performed)	0	0	9	0	0.0	9	47.4	3,453	85.9	24,588	85.1

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

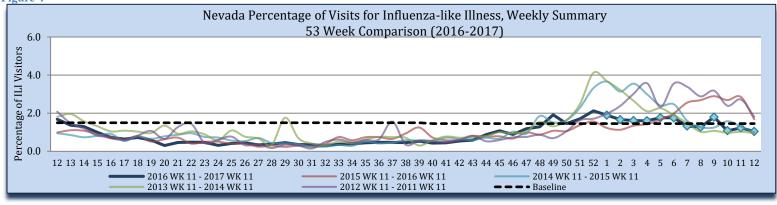
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 12 is 1.0% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 12 is 2.0% which is the below the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 12 is 3.2% which is above the national baseline 2.2%.

Figure 3 Percentage of Visits for ILI Reported to Outpatient ILI Surveillance Network, Comparison Between National, Regional, and State, 53 Week Comparison (2016 WK 12 - 2017 WK 12) 6.0 Percentage of ILI Activity 5.0 4.0 3.0 2.0 1.0 0.0 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 6 7 8 9 10 11 12 2016-2017 Nevada Region 9 National Region 9 Baseline Nevada Baseline National Baseline

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

During week 12, 1.0% of visits to sentinel providers were due to ILI; this is lower than the 2015-2016 influenza season (1.4%). There were 18,125 patients seen by sentinel providers during week 12, of which 189 patients presented with ILI; week 12 of 2016, there were 200 patients seen with ILI (14,575 total patients seen).

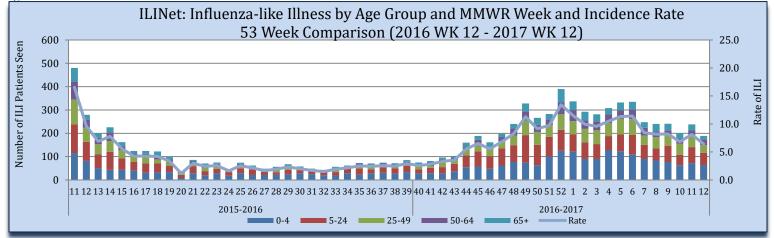
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 12, patients age 0-4 were the greatest number of patients seen with ILI, at 64 patients seen. The rate for week 12 is 6.4 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 2,935,490.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

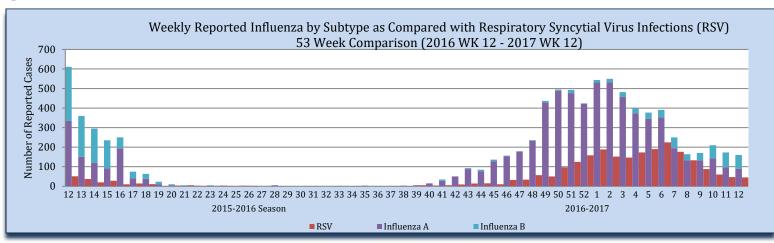
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 12, there were 166 influenza cases reported to the state, 89 influenza A, 71 influenza B and 6 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type								
Reporting Jurisdiction	Current Week (Week 12)				Cumulative Influenza Season				
	A	В	Unknown	Total	A	В	Unknown	Total	
Carson City Health and Human Services	9	4	0	13	808	18	2	828	
Rural Community Health Services	2	0	0	2	577	31	37	645	
Southern Nevada Health District	61	47	3	111	2806	418	205	3429	
Washoe County Health District	17	20	3	40	1959	99	142	2200	
State of Nevada	89	71	6	166	6150	566	386	7102	

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 6 hospitalization associated with influenza reported to the state health authority for week 12.

Table 3

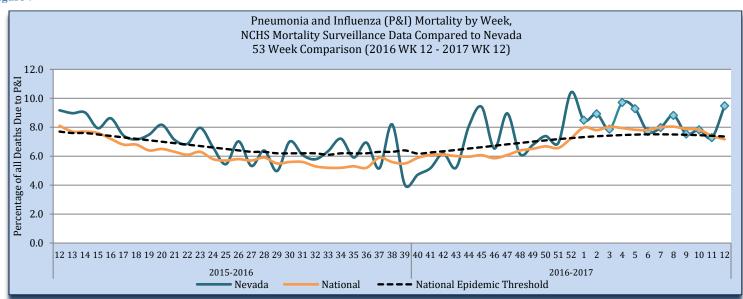
Influenza Hospitalizations								
Donouting Invited ation	Current Weel	k (Week 12)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	31	6.2				
Rural Community Health Services	0	0.0	18	3.6				
Southern Nevada Health District	2	33.3	174	34.7				
Washoe County Health District	4	66.7	279	55.6				
State of Nevada	6	100	502	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 April 27th, there were 40 P&I deaths and 422 total deaths for week 12 in Nevada.

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. 2015-2017. Accessed April 2017.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2015-2017. Accessed April 2017.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2015-2017. Accessed April 2017.

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