Weekly Report

2016 Week 13 (March 27 - April 02, 2016) through 2017 Week 13 (March 26 - April 01)

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.

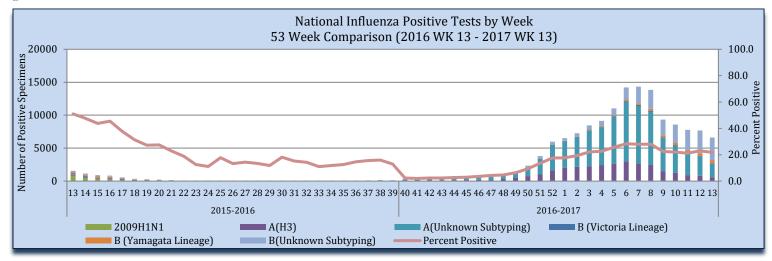
Purpose

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 13, there were 30,437 specimens collected and tested for influenza, of those 6,614 were positive (21.7%).

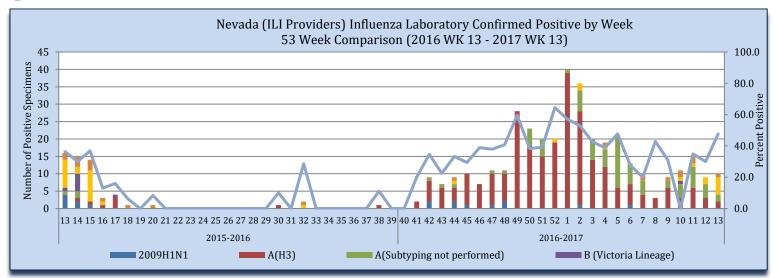
Figure 1



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. During week 13, there were 21 specimens collected and 10 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 315 specimens for influenza from sentinel providers, of which there have been 272 positive (86.3%). Southern Nevada Public Health Laboratory (SNPHL) has tested 61 specimens this season of which there have been 5 positives. Nationally, there have been 793,337 specimens sent to the WHO and NERVSS laboratories of which 143,226 have been positive (18.1%). 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 13)		State of Nevada (Season)		National (Week 13)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	315	61	567	21		943		30,437		793,337	
Influenza Positives	272	5	96	10	47.6	373	39.6	6,614	21.7	143,226	18.1
Influenza A:	258	5	85	4	40.0	348	93.3	2,612	39.5	110,340	77.0
A (2009 H1N1)	9	0	1	0	0.0	10	2.9	26	1.0	827	0.7
A (H3)	249	5	8	2	50.0	262	75.3	576	22.1	29,211	26.5
A (Sub-typing not performed)	0	0	76	2	50.0	76	21.8	2,010	77.0	80,302	72.8
Influenza B:	14	0	11	6	60.0	25	6.7	4,002	60.5	32,886	23.0
B (Victoria Lineage)	1	0	0	0	0.0	1	4.0	104	2.6	1,574	4.8
B (Yamagata Lineage)	13	0	1	5	83.3	14	56.0	484	12.1	3310	10.1
B (Sub-typing not performed)	0	0	10	1	16.7	10	40.0	3,414	85.3	28,002	85.1

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

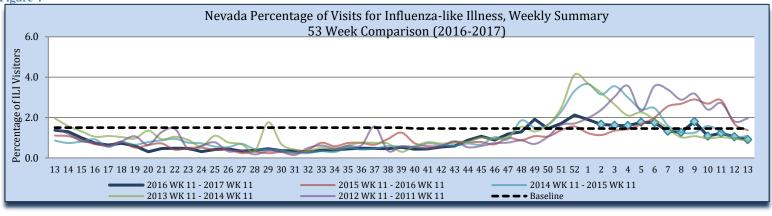
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 13 is 0.9% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 13 is 2.1% 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 13 is 2.9% 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 13 - 2017 WK 13) 6.0 Percentage of ILI Activity 5.0 4.0 3.0 2.0 1.0 0.0 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 5 6 7 8 9 10 11 12 13 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 13, 0.9% of visits to sentinel providers were due to ILI; this is lower than the 2015-2016 influenza season (1.3%). There were 18,104 patients seen by sentinel providers during week 13, of which 163 patients presented with ILI; week 13 of 2016, there were 226 patients seen with ILI (17,450 total patients seen).

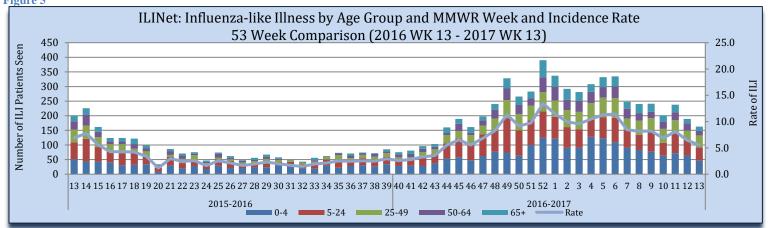
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 13, patients age 0-4 were the greatest number of patients seen with ILI, at 46 patients seen. The rate for week 13 is 5.6 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 2017 is 2,935,490.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

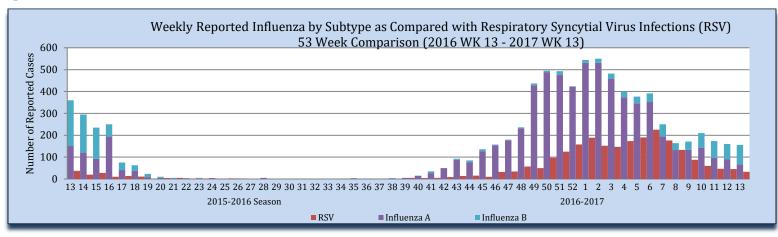
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 13, there were 162 influenza cases reported to the state, 67 influenza A, 89 influenza B and 6 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current W	eek (Week 13)		Cumulative Influenza Season					
	Α	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	6	19	0	25	814	37	2	853		
Rural Community Health Services	4	7	0	11	581	38	37	656		
Southern Nevada Health District	54	52	6	112	2860	470	211	3541		
Washoe County Health District	3	11	0	14	1962	110	142	2214		
State of Nevada	67	89	6	162	6217	655	392	7264		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

Hospitalizations

There were 2 hospitalization associated with influenza reported to the state health authority for week 13.

Table 3

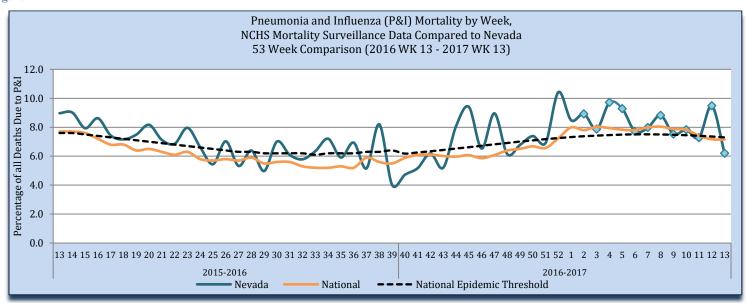
Influenza Hospitalizations								
Donoutina Iuria di ation	Current Weel	k (Week 13)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	0	0.0	31	6.2				
Rural Community Health Services	0	0.0	18	3.6				
Southern Nevada Health District	0	0.0	174	34.7				
Washoe County Health District	2	100	281	55.5				
State of Nevada	2	100	504	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 24 P&I deaths and 387 total deaths for week 13 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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Recommended Citation:

Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. Influenza Weekly Report, 2016 Week 13 (March 27, 2016) through 2017 Week 13 (April 01), Nevada. May 2017 i 10 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.

