# Weekly Report

2016 Week 49 (December 4 - December 10, 2016) through 2017 Week 49 (December 3 - December 9, 2017)

Department of Health and Human Services Office of Analytics



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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 49, there were 26,723 specimens collected and tested for influenza, of those 3,178 were positive (11.9%).

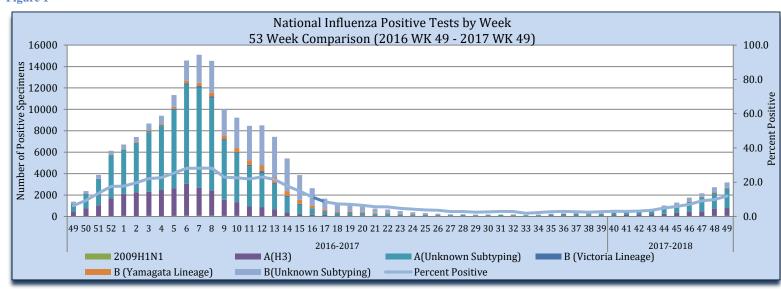
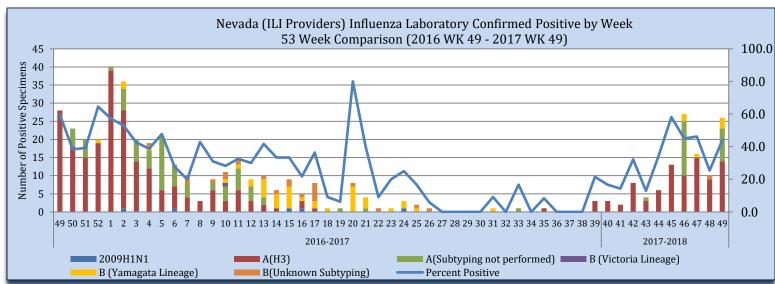


Figure 1

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 49, where there were 59 specimens collected, in which 26 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.

Source of Data: CDC: FluView Weekly Report.

#### Influenza Weekly Report

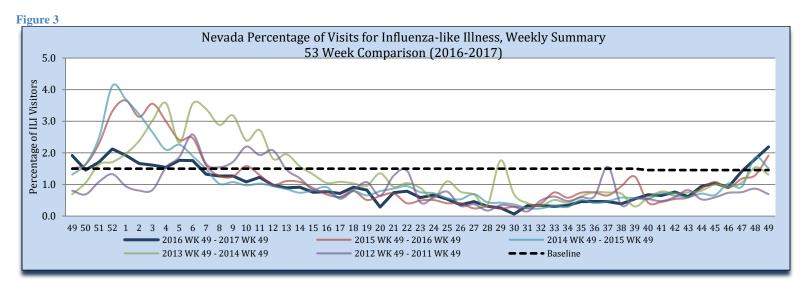
Nevada State Public Health Laboratory (NSPHL) has tested 97 specimens for influenza from sentinel providers, of which there have been 83 positive (85.6%). Southern Nevada Public Health Laboratory (SNPHL) has tested 16 specimens this season of which there have been 2 positive. Nationally, there have been 216,653 specimens sent to the WHO and NERVSS laboratories of which 14,418 have been positive (6.7%). 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 49)		State of Nevada (Season)		National (Week 49)		National (Season)	
		0111112		#	%	#	%	#	%	#	%
Specimens Tested	97	16	303	59	-	416	-	26,723		216,653	
Influenza Positives	83	2	69	26	44.1	154	37.0	3,178	11.9	14,418	6.7
Influenza A:	78	2	67	23	88.5	147	95.5	2,612	82.2	11,453	79.4
A (2009 H1N1)	1	0	0	0	0.0	1	0.7	53	2.0	308	2.7
A (H3)	77	2	4	14	60.9	83	56.5	743	28.4	3,354	29.3
${ m A}$ (Sub-typing not performed)	0	0	63	9	39.1	63	42.9	1,816	69.5 %	7,791	68.0 %
Influenza B:	5	0	2	3	11.5	7	4.5	566	17.8	2,965	20.6
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	4	0.7	29	1.0
B (Yamagata Lineage)	5	0	1	3	100.0	6	85.7	59	10.4	363	12.2
B (Sub-typing not performed)	0	0	1	0	0.0	1	14.3	503	88.9	2,573	86.8

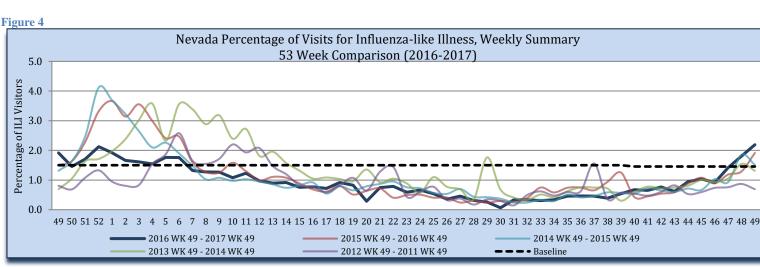
Source of Data: CDC: FluView Report and CDC: ILINet.

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 49 is 2.2% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 49 is 2.7% 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 49 is 2.7% which is above the national baseline 2.2%.



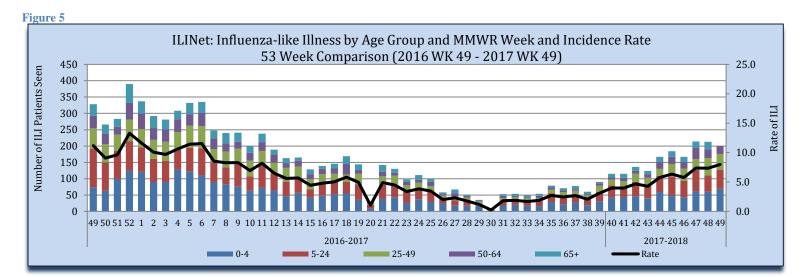
Source of Data: CDC: Flu View Report and CDC: ILINet.

During week 49, 2.2% of visits to sentinel providers were due to ILI; this greater than the 2016-2017 influenza season (1.9%). There were 10,550 patients seen by sentinel providers during week 49, of which 231 patients presented with ILI; week 49 of 2016, there were 328 patients seen with ILI (17,130 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 49, patients ages0-4 were the greatest number of patients seen with ILI, at 69 patients seen. The rate for week 49 is 8.0 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.



Source of Data: CDC: ILINet.

## Influenza Positive Surveillance (NBS and NETSS)

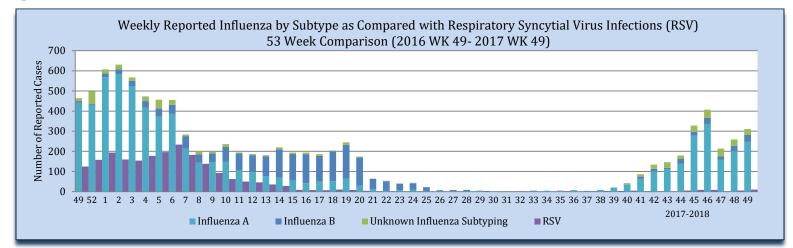
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 49, there were 311 influenza cases reported to the state, 247 influenza A, 34 influenza B and 30 unknown subtyping.

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Table	2
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	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current We	eek (Week 49)		Cumulative Influenza Season					
	А	В	Unknown	Total	А	В	Unknown	Total		
Carson City Health and Human Services	28	9	0	37	297	18	0	315		
Rural Community Health Services	48	3	0	51	162	8	0	170		
Southern Nevada Health District	0	0	11	11	532	48	173	753		
Washoe County Health District	171	22	19	212	680	107	83	870		
State of Nevada	247	34	30	311	1,671	181	256	2,108		

Source: OPHIE: NBS and SNHD: NETSS.

#### Figure 6



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

# **Hospitalizations**

There were 16 hospitalizations associated with influenza reported to the state health authority for week 49.

Table 3

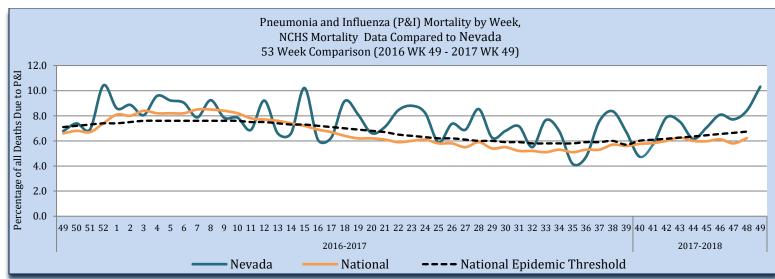
Influenza Hospitalizations									
Reporting Jurisdiction	Current Weel	x (Week 49)	Cumulative Influenza Season						
Kepol ung jul isulcuon	#	%	#	%					
Carson City Health and Human Services	7	43.8%	33	12.6%					
Rural Community Health Services	0	0.0%	5	1.9%					
Southern Nevada Health District	9	56.3%	147	56.3%					
Washoe County Health District	0	0.0%	76	29.1%					
State of Nevada	16	100.0%	261	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 December 27<sup>th</sup>, there were 39 P&I deaths and 378 total deaths for week 48 in Nevada. Please note that the CDC does not have updated P&I counts for week 49.

#### 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. <u>http://www.cdc.gov/flu/weekly/pastreports.htm</u>.
- 2. Nevada State Demographer's Office. 2003-2020 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2015.
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- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2016-2017. Accessed November 2017.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2017. Accessed December 2017.

## Comments, suggestions, and requests for further information may be addressed to:

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