# Weekly Report

2016 Week 45 (November 6 - November 12, 2016) through 2017 Week 45 (November 5 - November 11)

## 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.

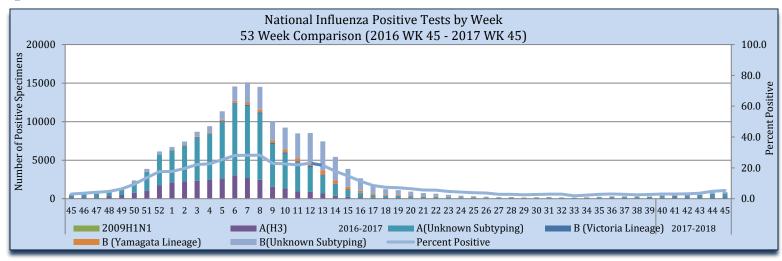
#### **Purpose**

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 45, there were 18,252 specimens collected and tested for influenza, of those 1,073 were positive (5.9%).

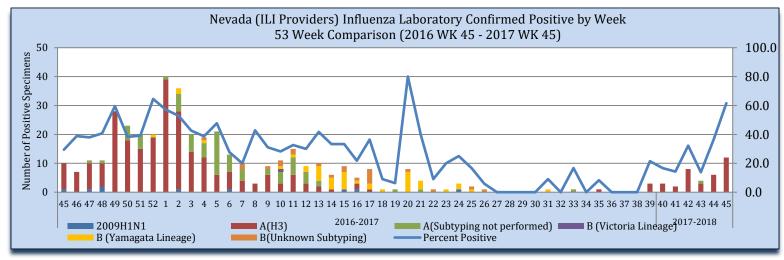
Figure 1



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 45, where there were 39 specimens collected, in which 24 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 38 specimens for influenza from sentinel providers, of which there have been 32 positive (84%). Southern Nevada Public Health Laboratory (SNPHL) has tested 3 specimens this season of which there have been 0 positive.

Nationally, there have been 105,965 specimens sent to the WHO and NERVSS laboratories of which 4,244 have been positive (4.0%). 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.

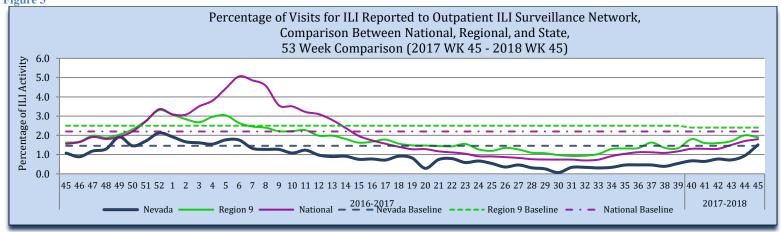
Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	SNPHL	All Other Laboratories	State of Nevada (Week 45)		State of Nevada (Season)		National (Week 45)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	38	3	120	39		161		18,252		105,965	
Influenza Positives	32	0	22	24	61.5	54	33.5	1,073	5.9	4,244	4.0
Influenza A:	32	0	22	24	100	54	100	860	80.1	3,262	76.9
A (2009 H1N1)	1	0	0	1	4.2	1	1.9	26	3.0	109	3.3
A (H3)	31	0	3	12	50	34	63	240	27.9	1,036	31.8
A (Sub-typing not performed)	0	0	19	11	45.8	19	35.2	594	69.1	2,117	64.9
<u>Influenza B:</u>	0	0	0	0	0	0	0	213	19.9	982	23.1
B (Victoria Lineage)	0	0	0	0	0	0	0	3	1.4	5	0.5
B (Yamagata Lineage)	0	0	0	0	0	0	0	19	8.9	89	9.1
B (Sub-typing not performed)	0	0	0	0	0	0	0	191	89.7	888	90.4

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 45 is 1.5% which is equal to the state baseline of 1.5%. Region 9 ILI percentage for week 45 is 1.9% which is the below the region baseline 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 45 is 2.0% which is below the national baseline 2.2%.

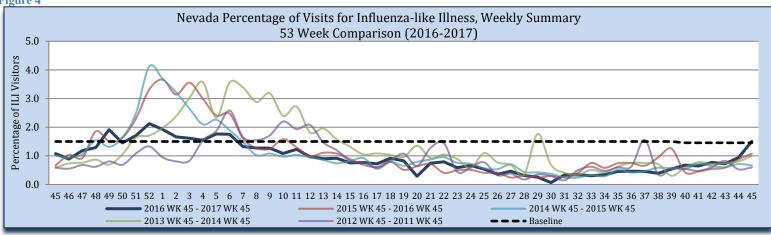
Figure 3



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

During week 45, 1.5% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (1.1%). There were 10,758 patients seen by sentinel providers during week 45, of which 162 patients presented with ILI; week 45 of 2016, there were 189 patients seen with ILI (17,530 total patients seen). Data availability depends on sentinel provider reporting.

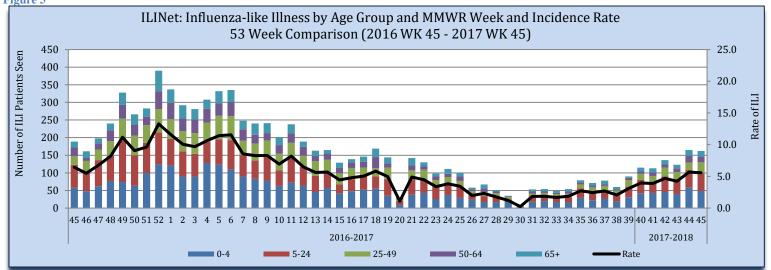




Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 45, patients ages 5-24 were the greatest number of patients seen with ILI, at 50 patients seen. The rate for week 45 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)

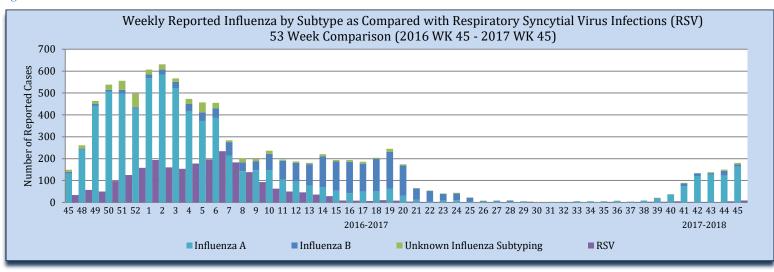
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 45, there were 181 influenza cases reported to the state, 163 influenza A, 11 influenza B and 7 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type								
Reporting Jurisdiction		Current W	eek (Week 45)		Cumulative Influenza Season				
	Α	В	Unknown	Total	A	В	Unknown	Total	
Carson City Health and Human Services	56	0	0	56	157	2	0	159	
Rural Community Health Services	9	1	0	10	43	3	0	46	
Southern Nevada Health District	12	0	0	12	264	27	0	291	
Washoe County Health District	86	10	7	103	179	34	21	234	
State of Nevada	163	11	7	181	643	66	21	730	

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



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

## Hospitalizations

There were 36 hospitalizations associated with influenza reported to the state health authority for week 45.

Table 3

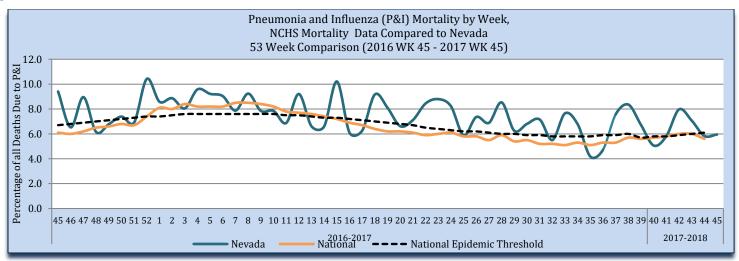
Influenza Hospitalizations								
Donostina Invidiation	Current Weel	k (Week 45)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	4	11.1%	14	13.9%				
Rural Community Health Services	0	0.0%	1	1.0%				
Southern Nevada Health District	17	47.2%	58	57.4%				
Washoe County Health District	15	41.7%	28	27.7%				
State of Nevada	36	100.0%	101	100.0%				

 $Source: Reported\ to\ Of fice\ of\ Public\ Health\ Informatics\ and\ Epidemiology\ from\ each\ Jurisdiction.$ 

## 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 November 28th, there were 20 P&I deaths and 336 total deaths for week 45 in Nevada. Please note that the CDC does not have updated P&I counts for week 45.

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 November 2017.
- 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 November 2017.

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

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