# Influenza Weekly Report

2017 Week 10 (March 5 - March 11, 2017) through 2018 Week 10 (March 4 - March 10, 2018)

# Department of Health and Human Services Office of Analytics



Brian Sandoval Governor State of Nevada

Richard Whitley, MS
Director
Department of Health and Human Services

Julie Kotchevar, Ph.D.

Administrator

Division of Public and Behavioral Health

Leon Ravin, M.D.

Acting Chief Medical Officer

Division of Public and Behavioral Health

Data for the graphs and tables on the following pages are provisional and may be updated as additional information becomes available.

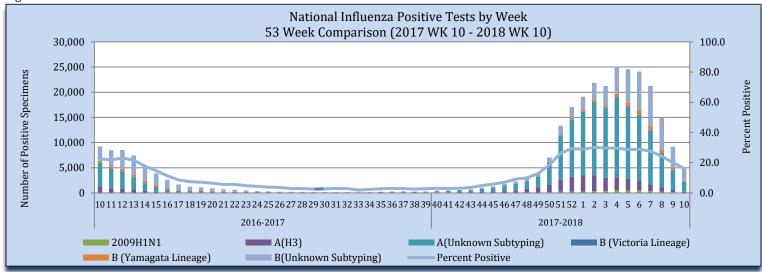
### **Purpose**

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 10, there were 29,464 specimens collected and tested for influenza, of those 4,784 were positive (16.2%).

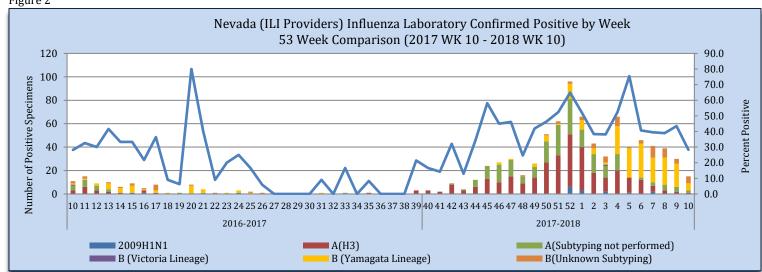




Source of Data: CDC: FluView Weekly Report.

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 10, where there were 53 specimens collected, in which 15 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.

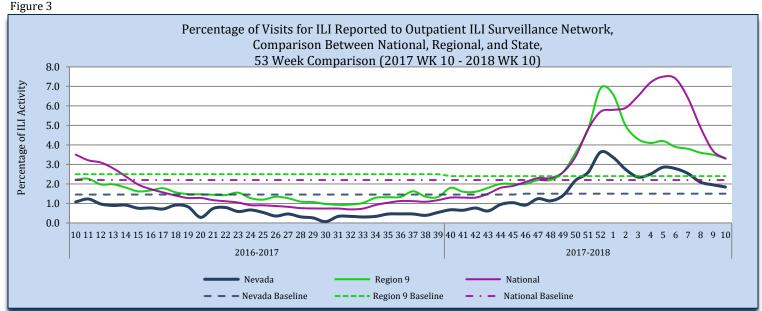
Nevada State Public Health Laboratory (NSPHL) has tested 580 specimens for influenza from sentinel providers, of which there have been 502 positive (86.6%). Southern Nevada Public Health Laboratory (SNPHL) has tested 82 specimens this season of which there have been 6 positive. Nationally, there have been 1,049,746 specimens sent to the WHO and NERVSS laboratories of which 239,076 have been positive (22.8%). 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 10)		State of Nevada (Season)		National (Week 10)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	580	82	1,082	53	-	1,744	-	29,464		1,049,746	
Influenza Positives	502	6	276	15	28.3	784	45.0	4,784	16.2	239,076	22.8
Influenza A:	317	3	217	3	20.0	537	68.5	2,205	46.1	174,130	72.8
A (2009 H1N1)	17	0	1	0	0	18	3.4	55	2.5	4,415	2.5
A (H3)	300	3	8	1	33.3	311	57.9	173	7.8	28,950	16.6
A (Sub-typing not performed)	0	0	208	2	66.7	208	38.7	1,977	89.7	140,765	80.8
Influenza B:	185	3	59	12	80.0	247	31.5	2,579	53.9	64,946	27.2
B (Victoria Lineage)	1	0	0	0	0	1	0.4	25	1.0	722	1.1
B (Yamagata Lineage)	184	0	4	6	50.0	188	76.1	173	6.7	6,592	10.1
B (Sub-typing not performed)	0	3	55	6	50.0	58	23.5	2,381	92.3	57,662	88.8

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

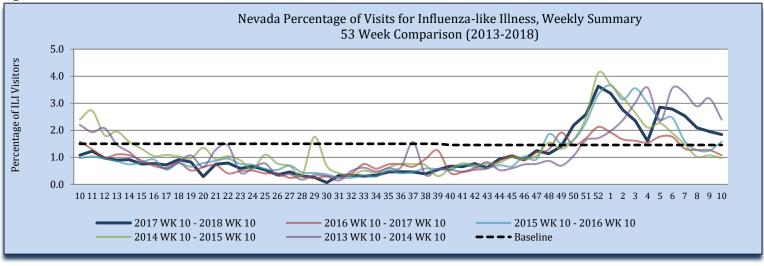
Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 10 is 1.8% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 10 is 3.3% 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 10 is 3.3% which is above the national baseline 2.2%.



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

During week 10, 1.8% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (1.1%). There were 10,532 patients seen by sentinel providers during week 10, of which 194 patients presented with ILI; week 10 of 2017, there were 201 patients seen with ILI (18,624 total patients seen). Data availability depends on sentinel provider reporting.

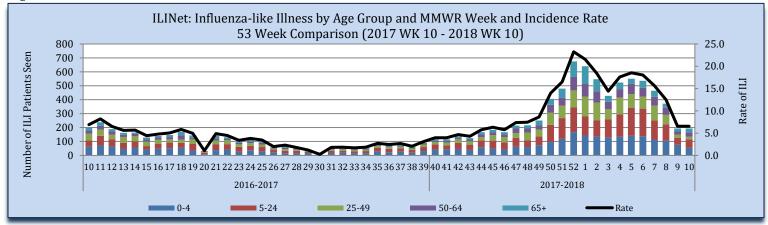
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 10, patients ages 5-24 were the greatest number of patients seen with ILI, at 61 patients seen. The rate for week 10 is 6.5 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 2018 is 2,969,849.

Figure 5



Source of Data: CDC: ILINet.

# Influenza Positive Surveillance (NBS and NETSS)

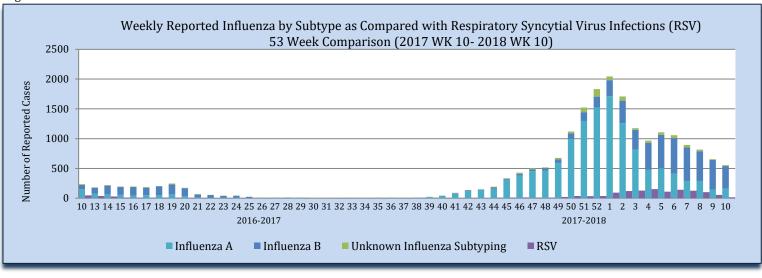
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 7 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 10, there were 556 influenza cases reported to the state, 160 influenza A, 379 influenza B and 17 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction		Current W	eek (Week 10)		Cumulative Influenza Season					
	A	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	8	32	5	45	1,276	581	77	1,934		
Rural Community Health Services	15	54	0	69	1,057	859	30	1,946		
Southern Nevada Health District	86	221	5	312	7,062	2,189	247	9,498		
Washoe County Health District	51	72	7	130	3,180	1,545	382	5,107		
State of Nevada	160	379	17	556	12,575	5,174	736	18,485		

Source: to Office of Analytics: NBS and SNHD: NETSS.

Figure 6



Source of Data: to Office of Analytics: NBS and SNHD: NETSS.

### **Hospitalizations**

There were 39 hospitalizations associated with influenza reported to the state health authority for week 10.

Table 3

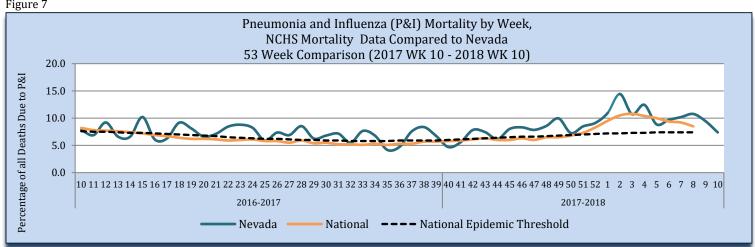
Influenza Hospitalizations								
Reporting Jurisdiction	Current Weel	k (Week 10)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	3	7.7	142	9.4				
Rural Community Health Services	3	7.7	42	2.8				
Southern Nevada Health District	15	38.5	830	55.2				
Washoe County Health District	18	46.2	489	32.5				
State of Nevada	39	100	1,503	100%				

Source: Reported to Office of Analytics 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 March 20th, there were 28 P&I deaths and 379 total deaths for week 10 in Nevada. Please note that the CDC does not have updated P&I counts for week 9 or week 10.

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 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 transmitted 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. Office of Analytics. DHHS. NBS. 2016-2018. Accessed March 2018.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2017-2018. Accessed March 2018.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2016-2018. Accessed March 2018.

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

Nevada Influenza Surveillance Program

Office of Analytics 4126 Technology Way Carson City, NV 89706

TEL: (775) 684-5997 FAX: (775) 684-5999

# **Compiled and Written by:**

Michelle Khau

# **Reviewed by:**

Helen See, MPH Melissa Peek-Bullock

### **Recommended Citation:**

Department of Health and Human Services. Office of Analytics. Influenza Weekly Report, 2017 Week 10 (March 5, 2017) through 2018 Week 10 (March 10, 2018), Nevada. March 2018 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.

