Influenza Weekly Report

2017 Week 15 (April 9 - April 15, 2017) through 2018 Week 15 (April 8 - April 14, 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.

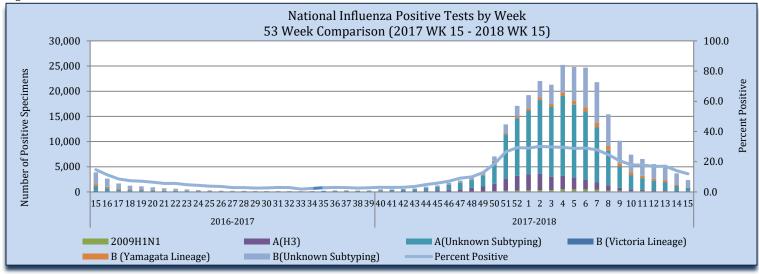
Purpose

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 15, there were 19,633 specimens collected and tested for influenza, of those 2,344 were positive (11.9%).

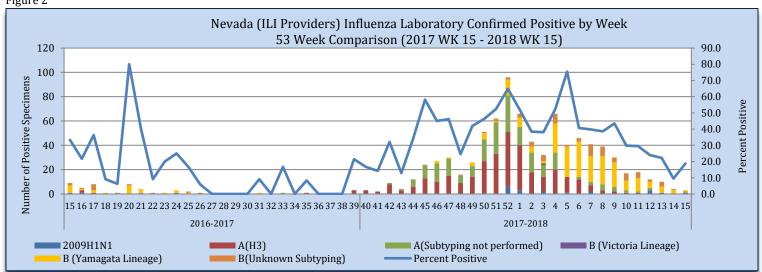




Source of Data: CDC: FluView Weekly Report.

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 15, where there were 16 specimens collected, in which 3 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 623 specimens for influenza from sentinel providers, of which there have been 534 positive (85.7%). Southern Nevada Public Health Laboratory (SNPHL) has tested 107 specimens this season of which there have been 7 positive. Nationally, there have been 1,216,495 specimens sent to the WHO and NERVSS laboratories of which 268,377 have been positive (22.1%). 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.

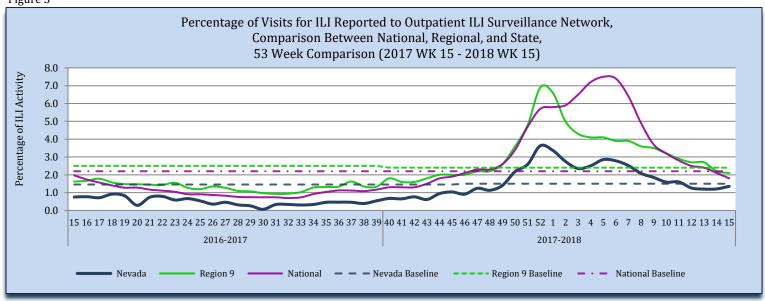
Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	All Other		(Week 15)		State of Nevada (Season)		National (Week 15)		National (Season)	
		J		#	%	#	%	#	%	#	%
Specimens Tested	623	107	1,232	16	-	1,962	-	19,633		1,216,495	
Influenza Positives	534	7	292	3	18.8	833	42.5	2,344	11.9	268,377	22.1
Influenza A:	322	4	221	2	66.7	547	65.7	805	34.3	186,013	69.3
A (2009 H1N1)	20	1	1	0	0	22	4.0	40	5.0	5,271	2.8
A (H3)	302	3	8	1	50.0	313	57.2	59	7.3	30,991	16.7
A (Sub-typing not performed)	0	0	212	1	50.0	212	38.8	706	87.7	149,751	80.5
Influenza B:	212	3	71	1	33.3	286	34.3	1,539	65.7	82,364	30.7
B (Victoria Lineage)	1	0	0	0	0	1	0.3	20	1.3	1,125	1.4
B (Yamagata Lineage)	211	0	4	1	100	215	75.2	132	8.6	9,371	11.4
B (Sub-typing not performed)	0	3	67	0	0	70	24.5	1,387	90.1	71,868	87.3

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 15 is 1.4% which is below the state baseline of 1.5%. Region 9 ILI percentage for week 15 is 2.1% which is below the regional baseline of 2.4%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 15 is 1.8% which is below the national baseline of 2.2%.

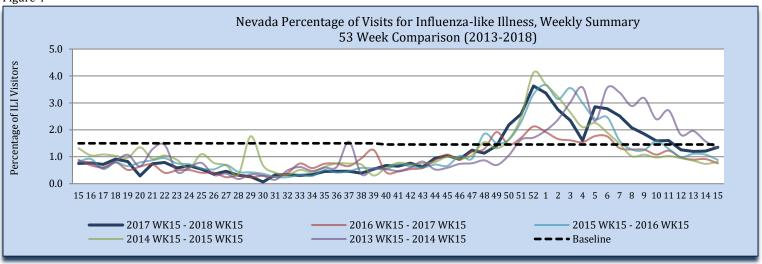
Figure 3



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

During week 15, 1.4% of visits to sentinel providers were due to ILI; this is greater than the 2016-2017 influenza season (0.8%). There were 9,156 patients seen by sentinel providers during week 15, of which 124 patients presented with ILI; week 15 of 2017, there were 129 patients seen with ILI (17,103 total patients seen). Data availability depends on sentinel provider reporting.

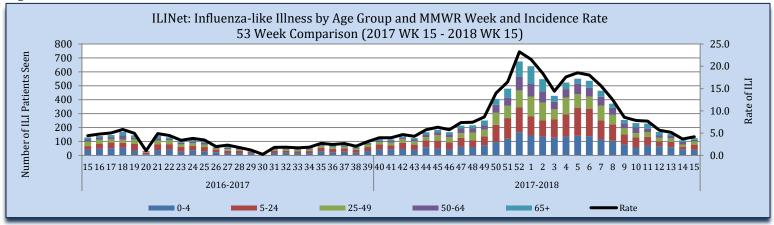
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 15, patients ages 0-4 were the greatest number of patients seen with ILI, at 41 patients seen. The rate for week 15 is 4.2 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)

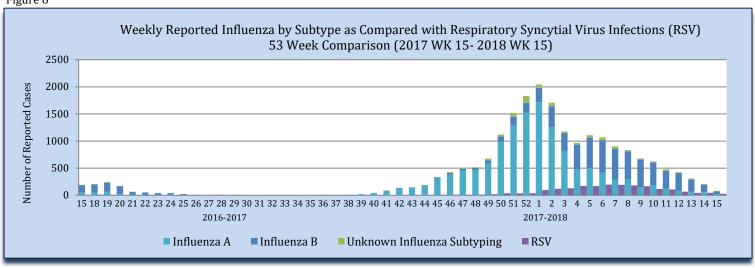
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 7 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 15, there were 80 influenza cases reported to the state, 22 influenza A, 48 influenza B and 10 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 15)				Cumulative Influenza Season					
	A	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	0	0	0	0	1,299	692	86	2,077		
Rural Community Health Services	2	1	0	3	1,083	939	30	2,052		
Southern Nevada Health District	10	19	2	31	7,343	2,915	283	10,541		
Washoe County Health District	10	28	8	46	3,276	1,787	421	5,484		
State of Nevada	22	48	10	80	13,001	6,333	820	20,154		

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 17 hospitalizations associated with influenza reported to the state health authority for week 15.

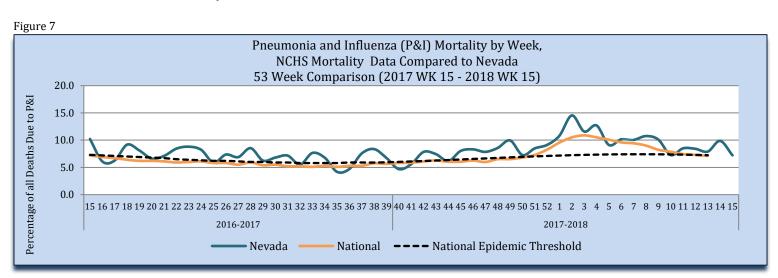
Table 3

Influenza Hospitalizations								
Donoutina Inviadiation	Current Weel	k (Week 15)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	6	35.3	155	9.3				
Rural Community Health Services	0	0	44	2.7				
Southern Nevada Health District	5	29.4	938	56.5				
Washoe County Health District	6	35.3	523	31.5				
State of Nevada	17	100	1.660	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 April 24th, there were 28 P&I deaths and 388 total deaths for week 15 in Nevada. Please note that the CDC does not have updated P&I counts for week 14 or week 15.



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

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