



## Public Health Update

August 13, 2018

### 2017 – 2018 Influenza Season Wrap-Up

**Overview:** In the United States, influenza viruses are most common during the fall and winter months. Influenza activity often begins to increase in October and November. Most of the time flu activity peaks between December and February and can last as late as May. This annually recurring time is called “flu season.” Influenza surveillance for the 2017-2018 flu season officially began on October 1, 2017. Throughout the flu season, based on a variety of data sources, the Southern Nevada Health District (SNHD) provided weekly influenza snapshots to give the community the most complete and up to date view of influenza activity in Clark County, Nevada. The 2017-2018 flu season ended on May 19, 2018. This is a summary report for the season.

**Summary of Influenza Activity:** Influenza activity increased in mid-December 2017 and peaked in the period of December 24, 2017 - January 13, 2018. Season totals include 1,348 confirmed cases\*, 980 hospitalizations, and 62 deaths including 3 deaths of children under age 18 attributed to influenza.

**Laboratory Surveillance:** The Southern Nevada Public Health Laboratory (SNPHL), commercial laboratories, and healthcare providers reported cases who tested positive for influenza by Rapid Influenza Diagnostic Tests (RIDTs) and confirmative laboratory tests such as Reverse-Transcriptase Polymerase Chain Reaction (RT-PCR). In addition, positive results of influenza virus type and influenza A virus subtype were also reported. The most common virus type identified during this season was Influenza A (69%); however, influenza B viruses have been reported more frequently since the middle of February, claiming 28.7% of isolates. Table 1 represents testing data, including the type and subtypes identified in the 2017-2018 season.

Table 1: Positive Influenza Types Reported by SNPHL and Partners\*\*, Clark County, NV (2017- 2018 Season)

Influenza Type		Test Type		Total	Percentage
	Subtype	RIDT	Non-RIDT		
Influenza A	A (Seasonal H3)		37	37	0.3%
	A (H1N1 pdm09)		7	7	0.1 %
	A (not subtyped)	7,255	310	7,565	68.6 %
Influenza B		2,992	169	3,161	28.7 %
Undifferentiated influenza A/B		247	4	251	2.3 %
Total				11,021	100%

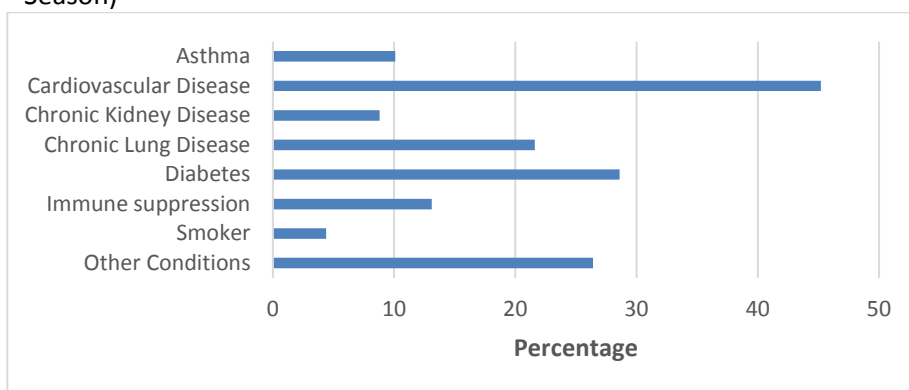
**Influenza Hospitalizations:** Hospitalizations and deaths due to influenza are reportable to SNHD. During the 2017-2018 season, 980 hospitalizations and 62 deaths, including three pediatric deaths (aged 0-17 years), attributed to influenza were reported to SNHD. Influenza type A was the predominant virus identified in individuals hospitalized for influenza (83.4%). Of those hospitalized for influenza with documented immunization status (n=228), 91% received seasonal influenza vaccine. The highest percentage of hospitalization and death was among adults aged ≥65 years (Table 2).

Table 2: Influenza Hospitalizations and Deaths, Clark County, NV (2017 – 2018 Season)

Age Group	# of Deaths (Percentage)	# of Hospitalizations (Percentage)
0-4	1 (1.6%)	48 (4.9%)
05-17	2 (3.2%)	30 (3.1%)
18-24	1 (1.6%)	29 (2.9%)
25-49	2 (3.2%)	118 (12%)
50-64	14 (22.6%)	184 (18.8%)
65+	42 (67.7%)	571 (58.3%)
Total Confirmed Cases*	62 (100%)	980 (100%)

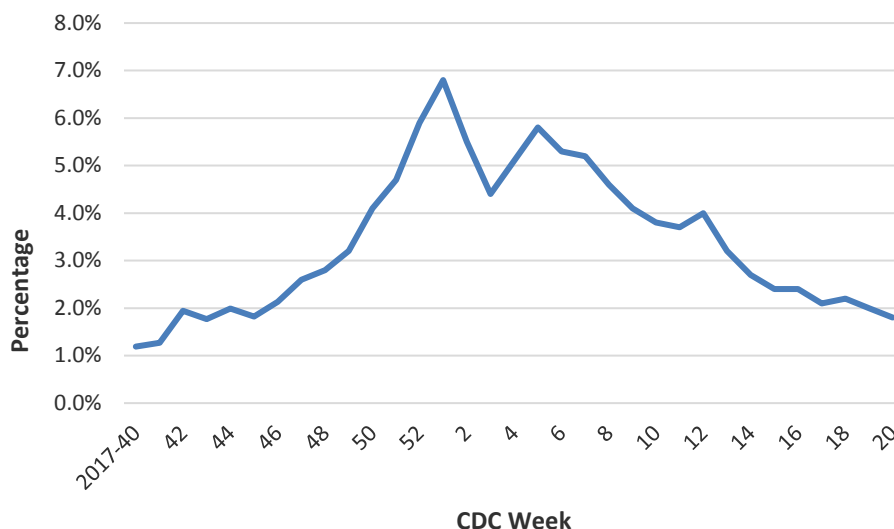
Hospitalized patients were also assessed for underlying conditions on admission. Of those with documented status of underlying conditions (n=846), 633 (75%) had one or more underlying conditions at the time of hospitalization. Cardiovascular disease was the most common documented underlying condition (45.2%) (Figure 1).

Figure 1: Selected Underlying Medical Conditions of Hospitalized Cases, Clark County, NV (2017-2018 Season)



**Syndromic Surveillance:** SNHD utilizes Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) to conduct syndromic surveillance in Clark County, NV. Emergency room (ER) visits in 16 local hospitals\*\*\* for influenza like illness (ILI)\*\*\*\* through 2017- 2018 season were captured by ESSENCE (Figure 2).

Figure 2: Weekly Percentage of Emergency Room Visits for Influenza-Like Illness, Clark County, NV (2017- 2018 Season)



\*Confirmed Cases: Cases with evidence of a positive influenza test by reverse-transcriptase polymerase chain reaction (RT-PCR), viral culture, immunofluorescent antibody staining (direct [DFA] or indirect [IFA]), immunohistochemical (IHC) antigen staining, rapid influenza diagnostic tests (RIDTs) with hospitalizations for 24 hours or longer, or RIDTs with death.

\*\*Partners include: commercial laboratories, hospital laboratories and 84 healthcare providers. The complete list of reporters can be downloaded [here](#).

\*\*\*Local hospital emergency rooms include: Boulder City Hospital, Centennial Hills Hospital, Desert Springs Hospital Medical Center, Henderson Hospital, Mesa View Regional Hospital, Mountain View Hospital, Mountain's Edge Hospital, North Vista Hospital, Southern Hills Hospital and Medical Center, Spring Valley Hospital and Medical Center, St. Rose Dominican Hospital – Rose de Lima Campus, St. Rose Dominican Hospital – Siena Campus, St. Rose Dominican Hospital – San Martin Campus, Summerlin Hospital Medical Center, Sunrise Hospital and Medical Center, University Medical Center and Valley Hospital Medical Center.

\*\*\*\*Syndromic Influenza like illness (ILI) definition in ESSENCE: Influenza or fever with cough or fever with sore throat.

Although the 2017-2018 flu season has ended, all healthcare providers are encouraged to continue reporting influenza cases online at <https://www.southernnevadahealthdistrict.org/diseasereports/forms/disease-reporting> If you have any questions on influenza or influenza surveillance, please contact the Office of Epidemiology and Disease Surveillance (OEDS) at (702) 759-1300.

Joseph P. Iser, MD, DrPH, MSc  
Chief Health Officer  
Southern Nevada Health District

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action

**280 South Decatur Boulevard, Las Vegas, NV 89127 • Phone (702) 759-1000 • [www.snhd.info](http://www.snhd.info)**