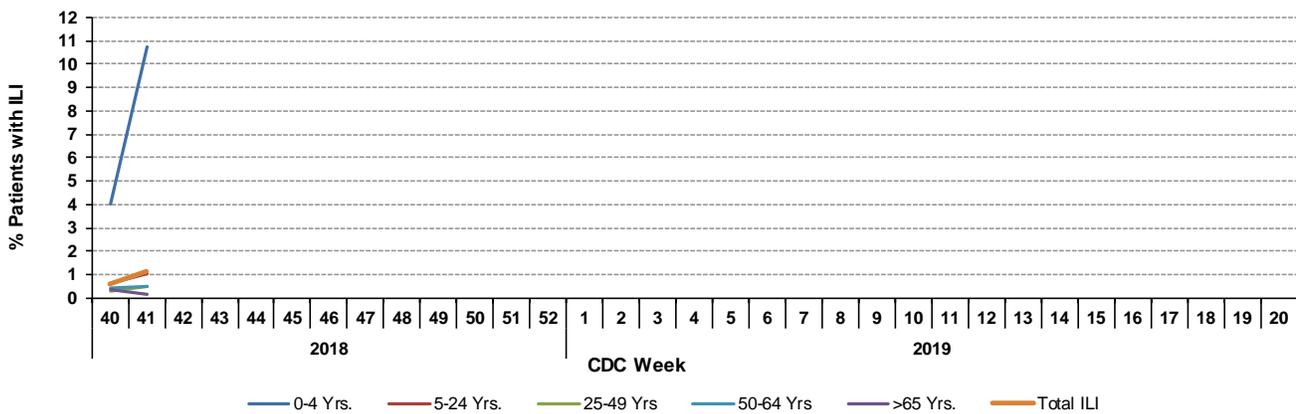


Date: Wednesday, October 17, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

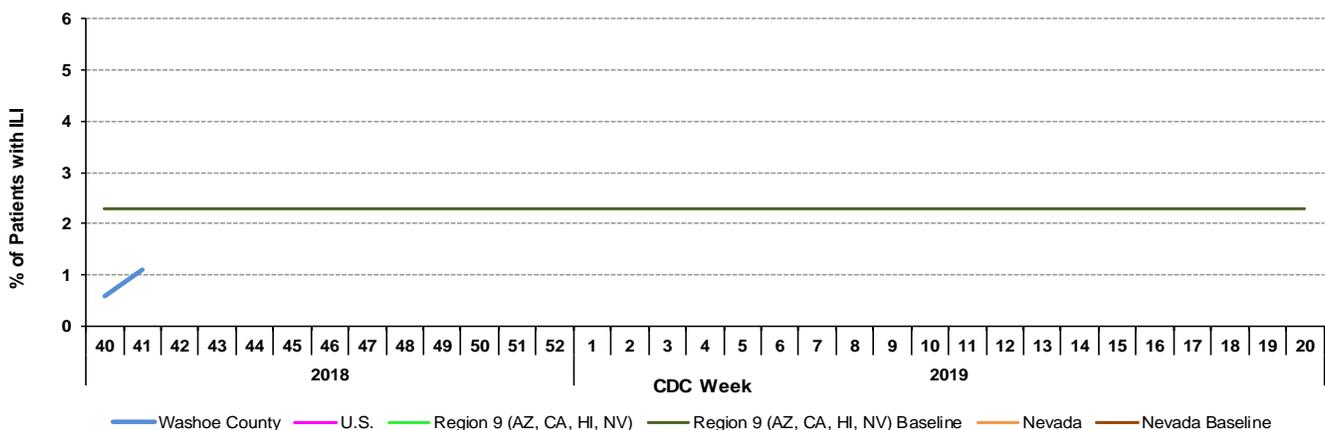
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 79 patients with influenza-like-illness (ILI) for week ending October 13, 2018 (week 41). The percentage of persons seen with ILI by the twelve providers was 1.1% (79/7147) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (10.7%) and lowest among  $\geq 65$  years (0.2%). During week 40, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.4%. Nationwide during week 40 the percentage of visits to sentinel providers due to ILI was 1.4% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.6% to 2.2%. All of the ten regions reported a proportion of outpatient visits for ILI below their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

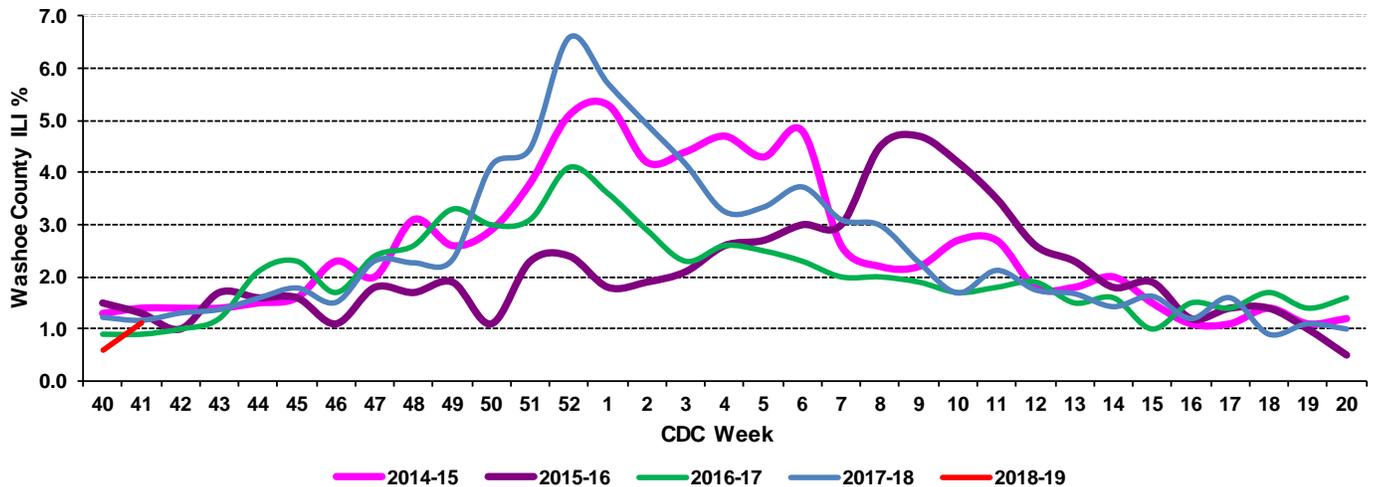


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



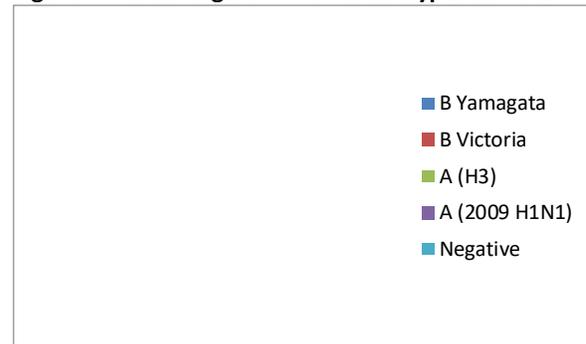
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	
A (2009 H1N1)	0	
B (Yamagata)	0	
B (Victoria)	0	
Negative	0	
Total (All Subtypes)	0	

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

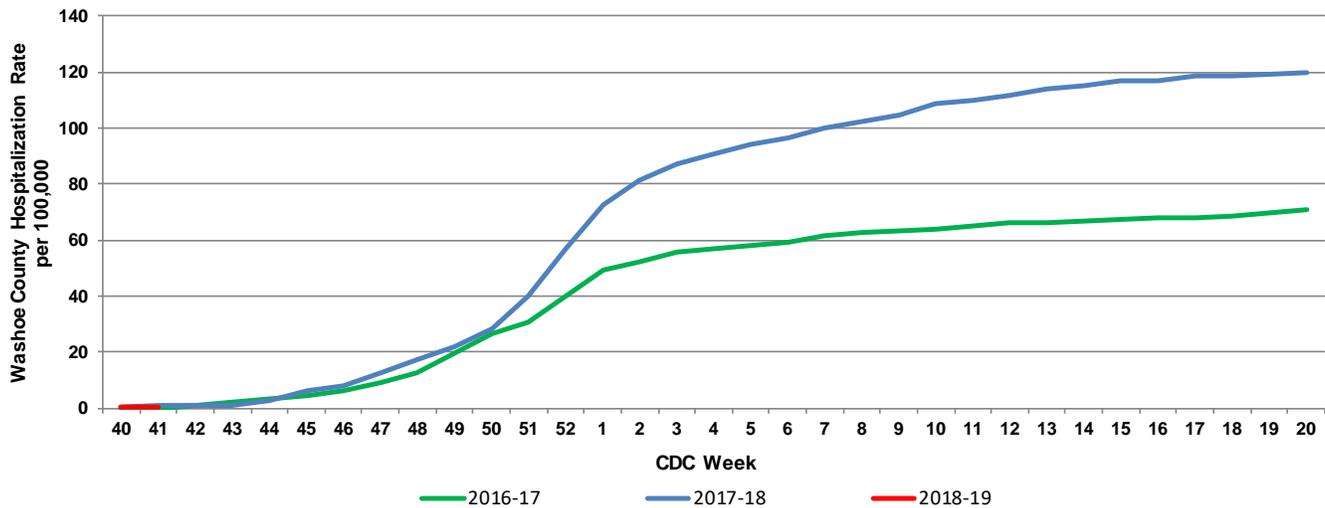
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 41) October 7 - October 13, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - October 13, 2018									
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
<b>Total # of cases reported</b>	0	N/A	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	N/A	0	0.0	0	0.0	0	0.0
Influenza A (2009 H1N1)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (seasonal H3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (not subtyped)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	100.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (non-RIDT**)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

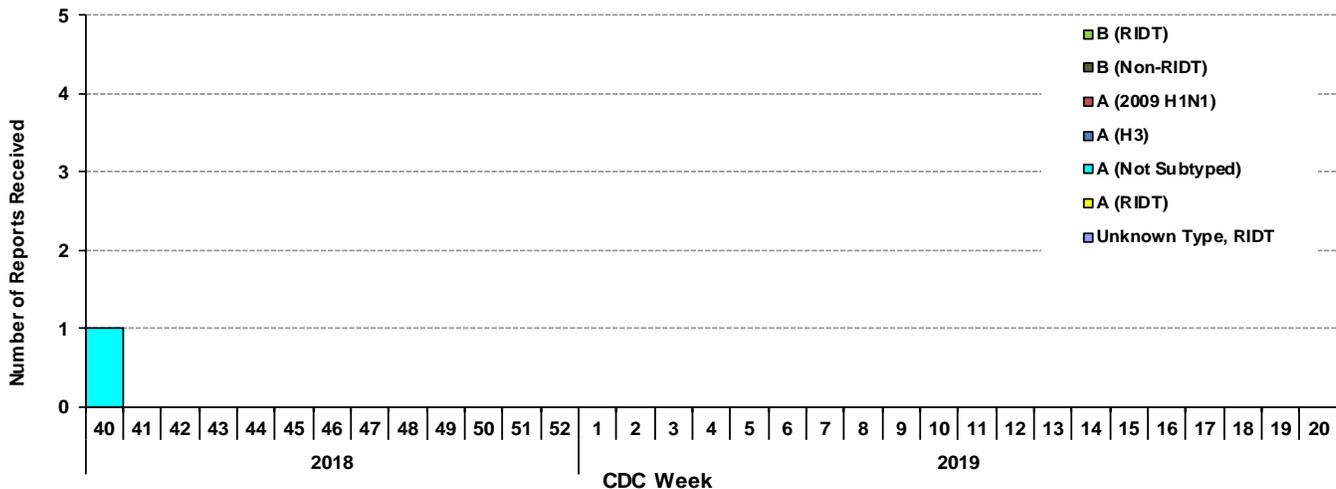
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

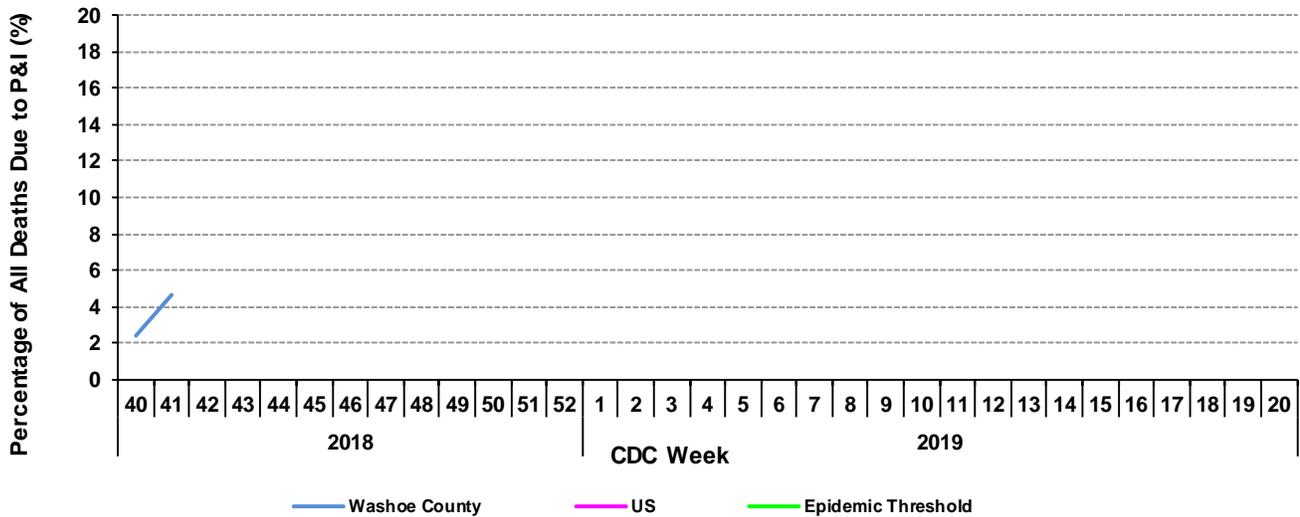
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 41 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 41 was 86. This reflects a P&I ratio of 4.7%. The national P&I for week 40 are not yet available. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is six. This reflects an overall P&I ratio of 3.6% (6/169).

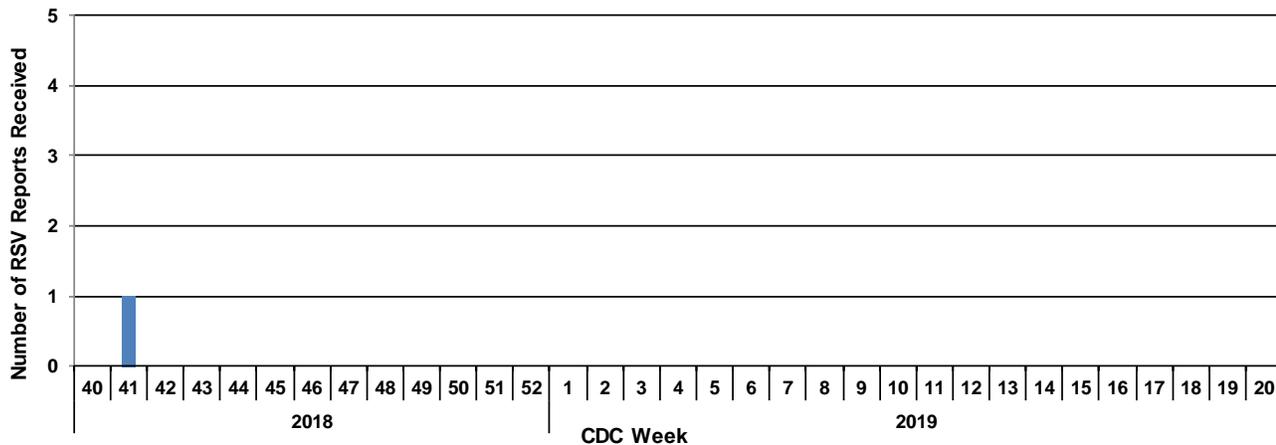
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

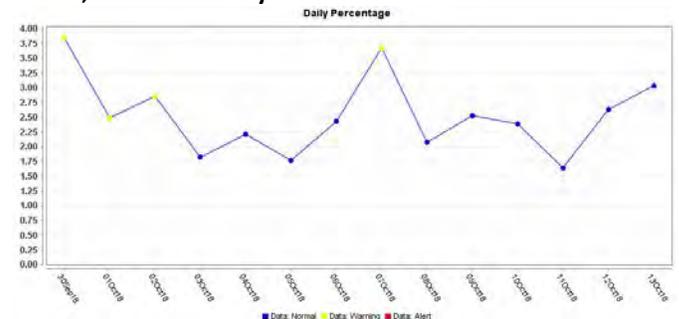


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

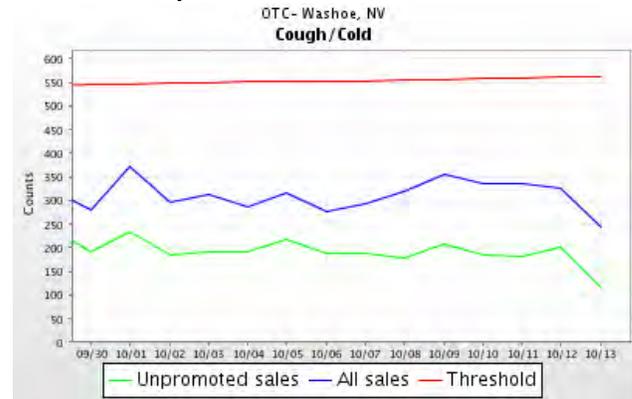
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

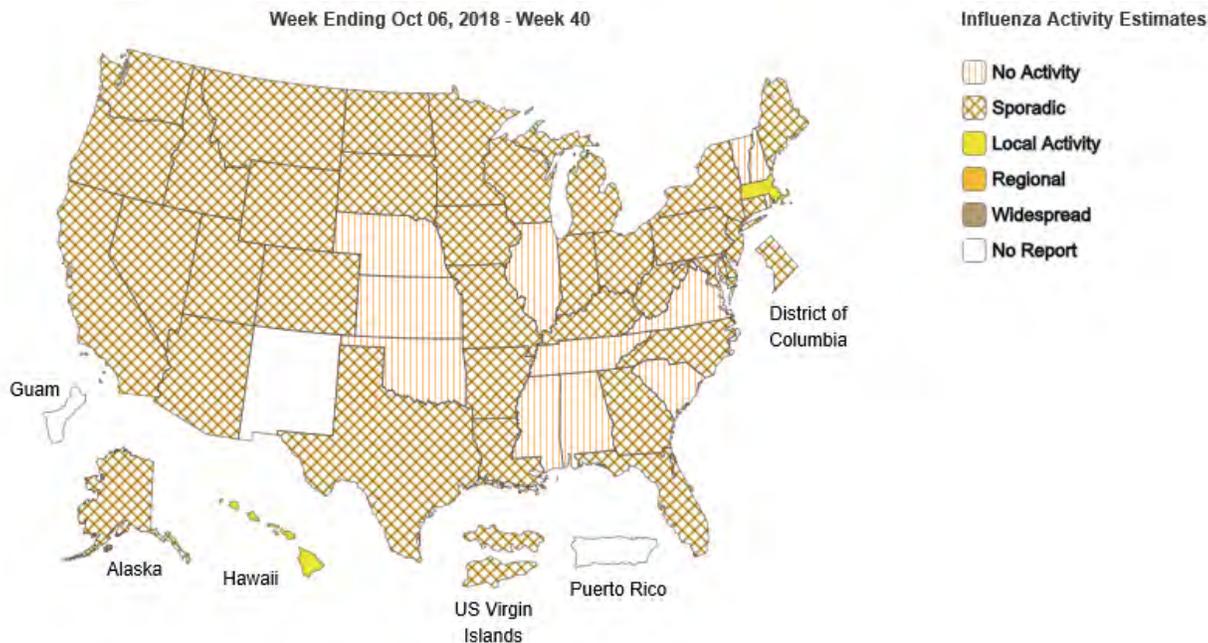


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 40, the following influenza activity was reported:

- Local influenza activity was reported by two states (Hawaii and Massachusetts).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and 35 states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Washington, West Virginia, Wisconsin and Wyoming).
- No influenza activity was reported by 12 states (Alabama, Illinois, Kansas, Mississippi, Nebraska, New Hampshire, Oklahoma, Rhode Island, South Carolina, Tennessee, Vermont, and Virginia).
- Guam, Puerto Rico and one state (New Mexico) did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

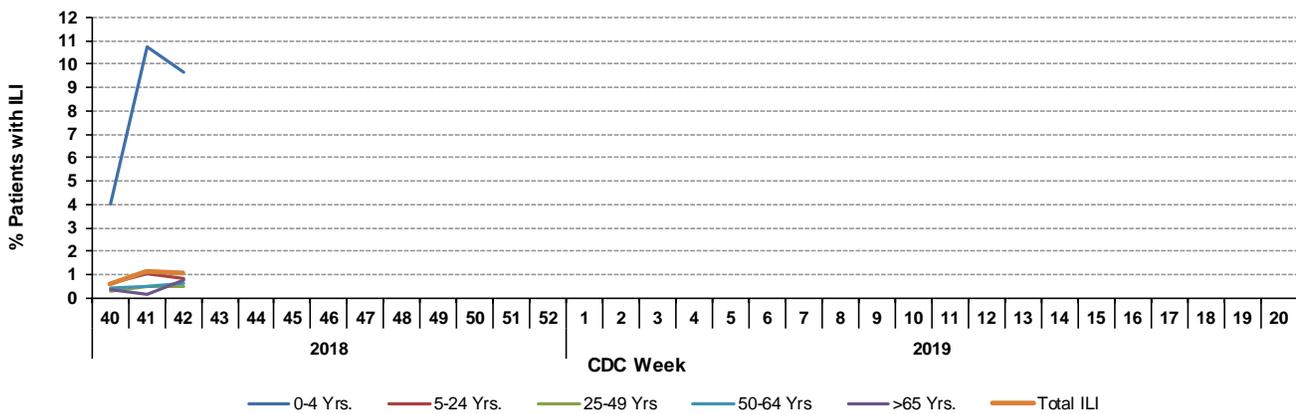
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, October 24, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

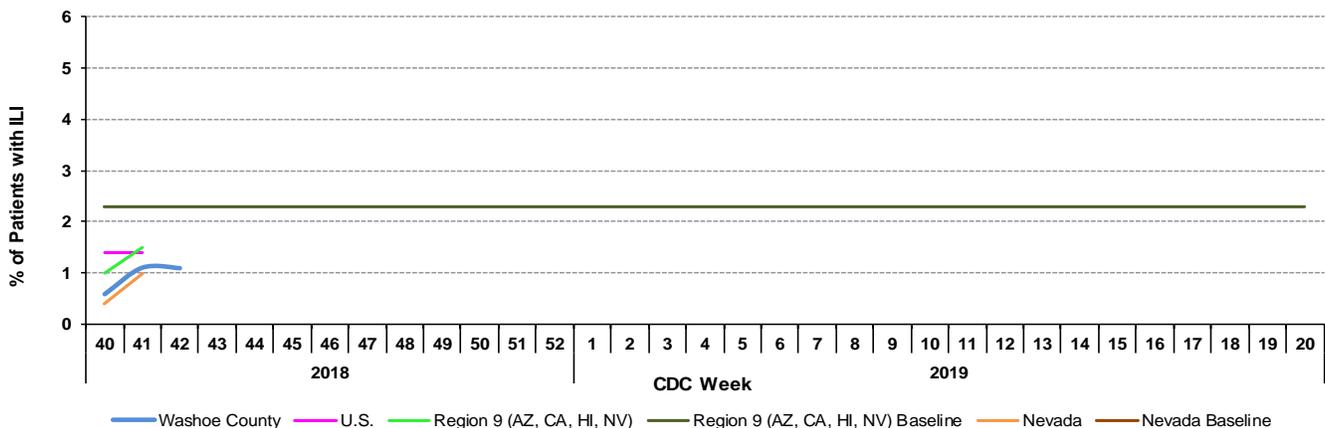
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 79 patients with influenza-like-illness (ILI) for week ending October 20, 2018 (week 42). The percentage of persons seen with ILI by the twelve providers was 1.1% (79/7209) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (9.7%) and lowest among 25-49 years (0.5%). During week 41, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.0%. Nationwide during week 41 the percentage of visits to sentinel providers due to ILI was 1.4% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 2.0%. All of the ten regions reported a proportion of outpatient visits for ILI below their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

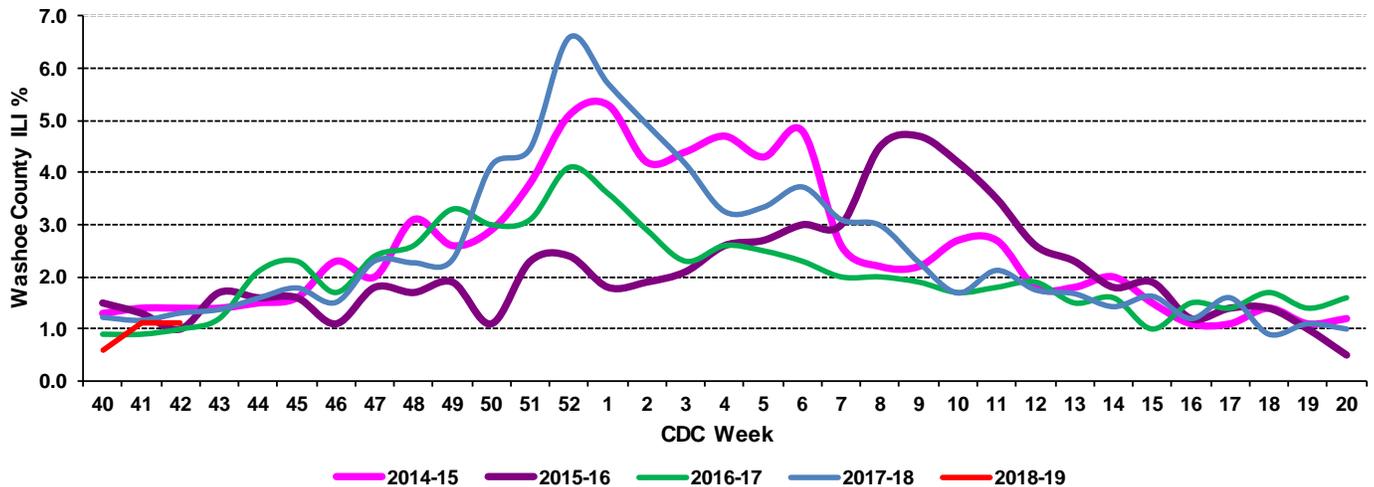


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



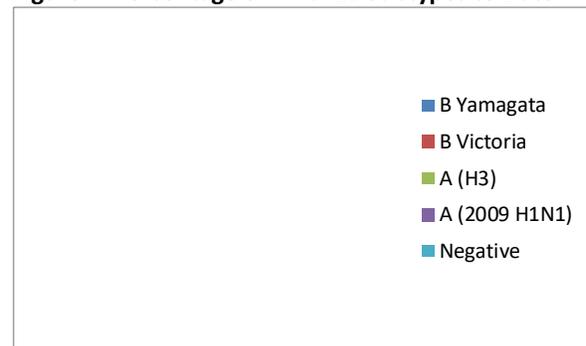
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	
A (2009 H1N1)	0	
B (Yamagata)	0	
B (Victoria)	0	
Negative	0	
Total (All Subtypes)	0	

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

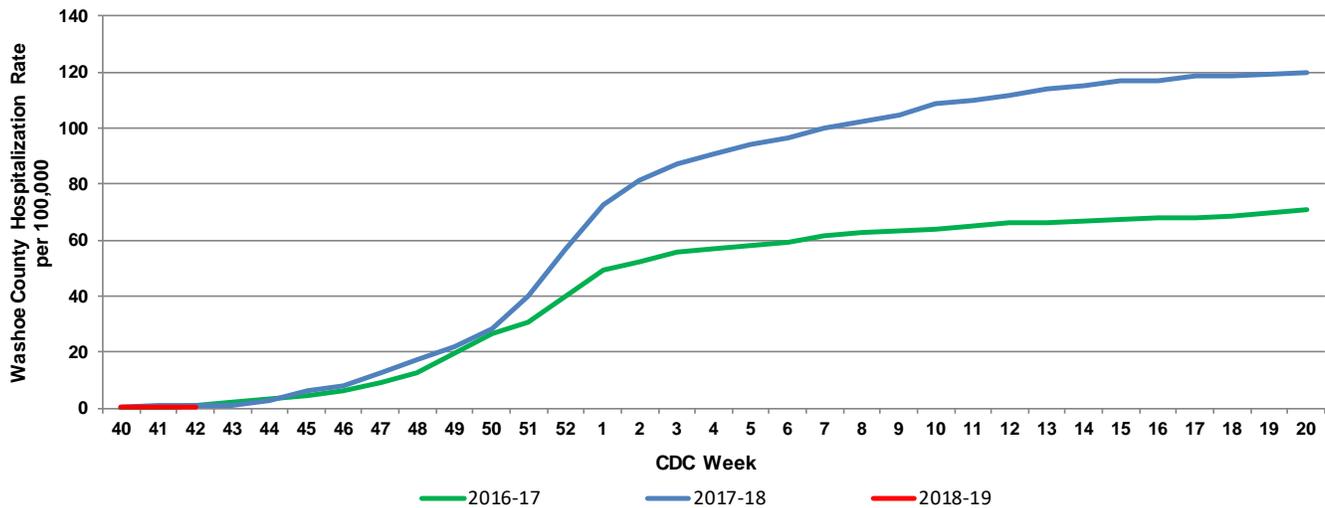
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 42) October 14 - October 20, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - October 20, 2018									
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
<b>Total # of cases reported</b>	0	N/A	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	N/A	0	0.0	0	0.0	0	0.0
Influenza A (2009 H1N1)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (seasonal H3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (not subtyped)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	100.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (non-RIDT**)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

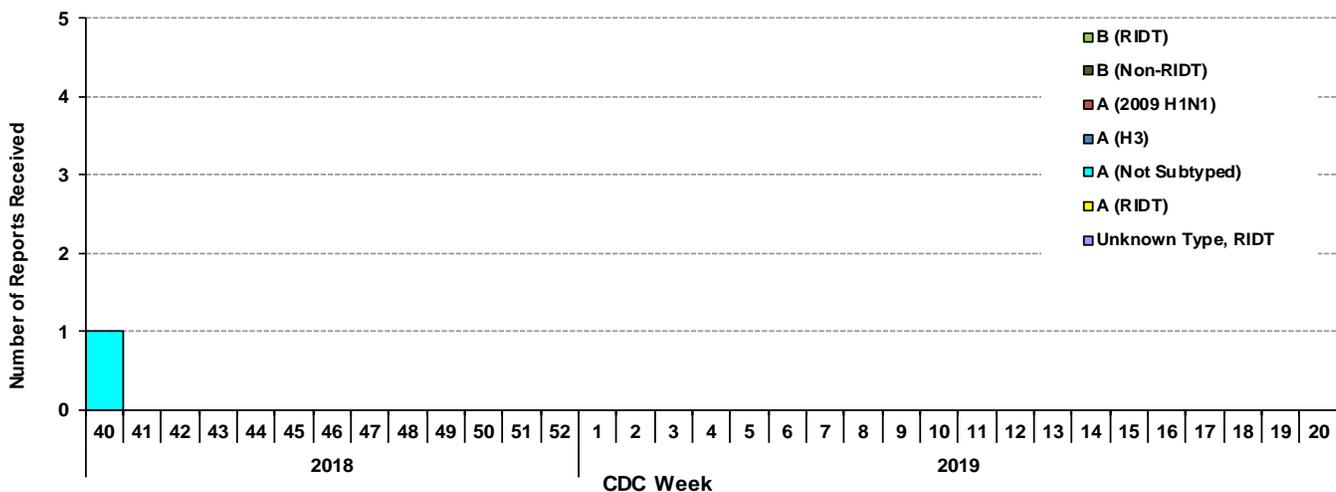
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

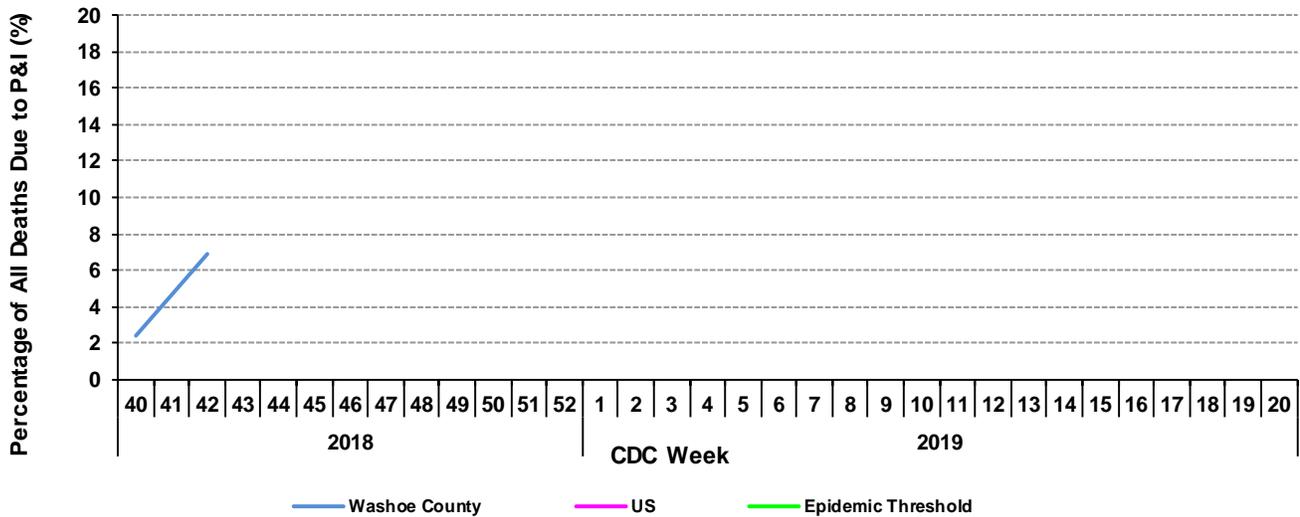
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 42 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 42 was 87. This reflects a P&I ratio of 6.9%. Nationally 5.6% of the deaths occurring during Week 40 were due to P&I. This was below the Week 40 epidemic threshold of 5.8%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 12. This reflects an overall P&I ratio of 4.7% (12/256).

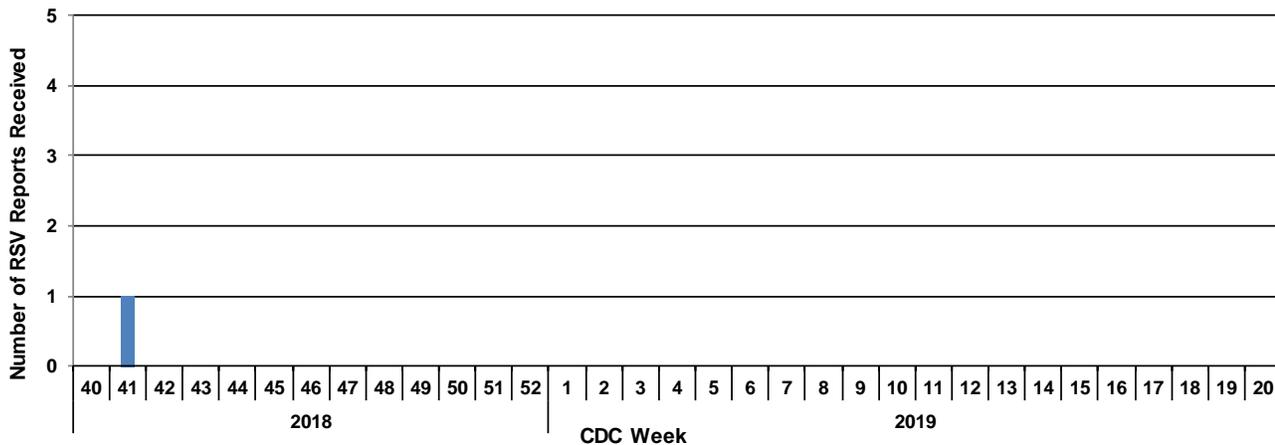
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

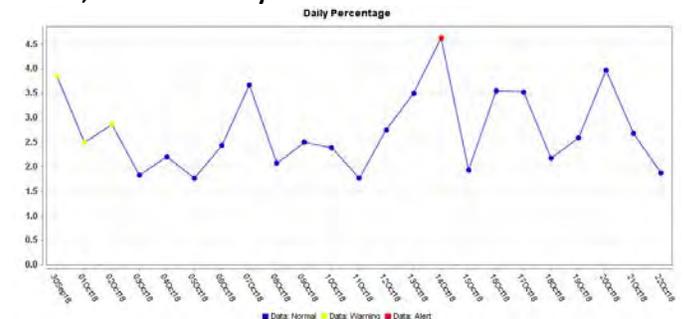


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

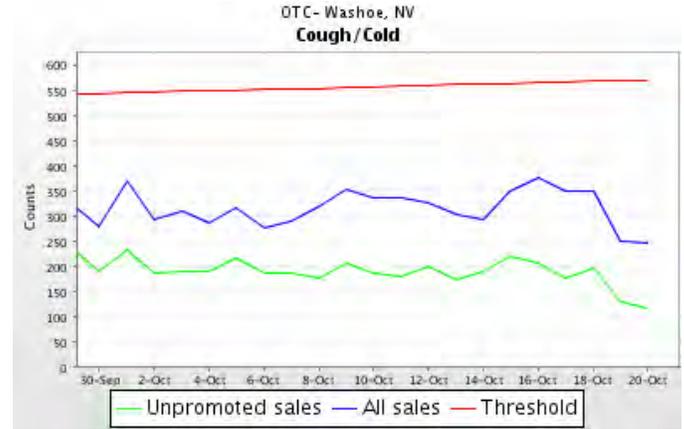
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

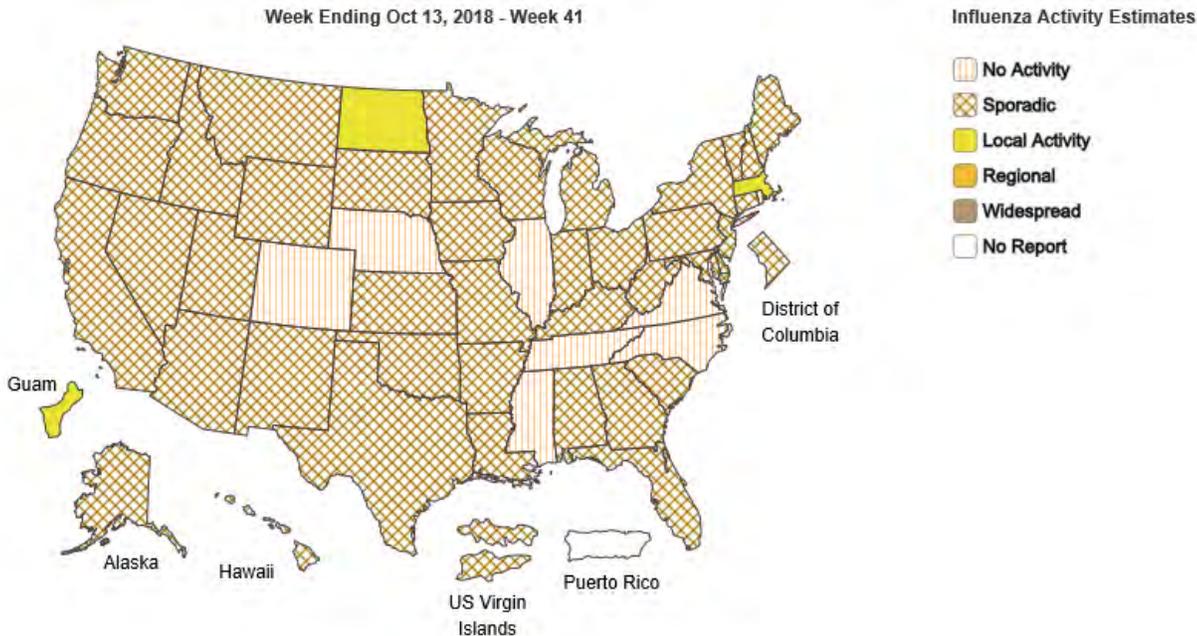


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 41, the following influenza activity was reported:

- Local influenza activity was reported by Guam and two states (Massachusetts and North Dakota).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and 40 states (Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin and Wyoming).
- No influenza activity was reported by eight states (Colorado, Illinois, Mississippi, Nebraska, North Carolina, Rhode Island, Tennessee, and Virginia).
- Puerto Rico did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

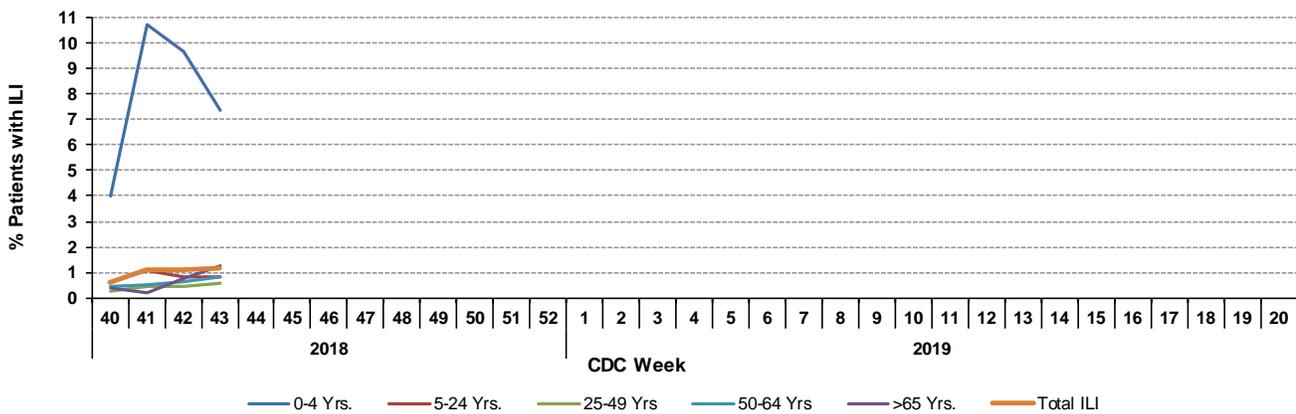
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, October 31, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

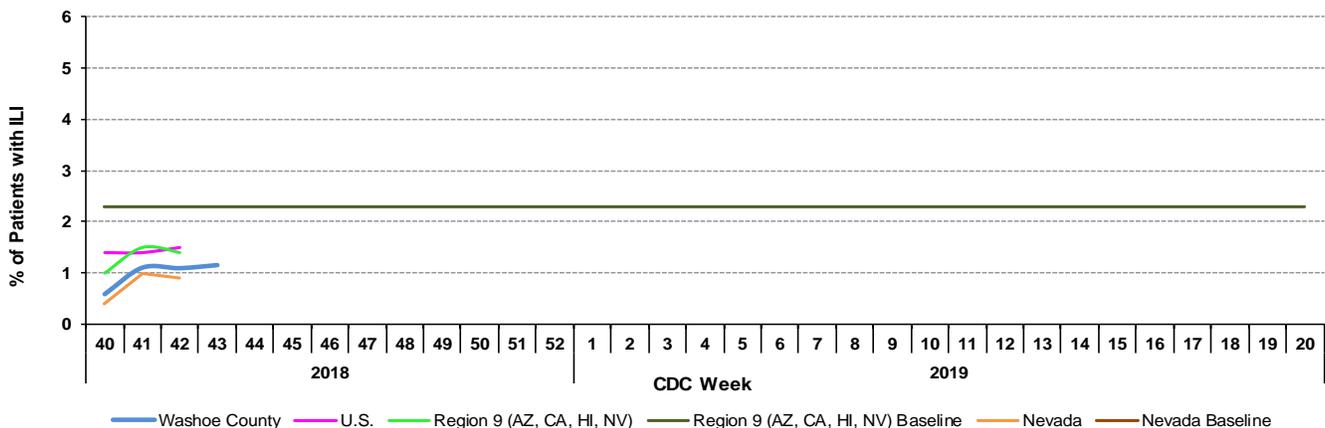
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 83 patients with influenza-like-illness (ILI) for week ending October 27, 2018 (week 43). The percentage of persons seen with ILI by the twelve providers was 1.2% (83/7180) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (7.3%) and lowest among 25-49 years (0.6%). During week 42, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.9%. Nationwide during week 42 the percentage of visits to sentinel providers due to ILI was 1.5% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.6% to 2.5%. All of the ten regions reported a proportion of outpatient visits for ILI below their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

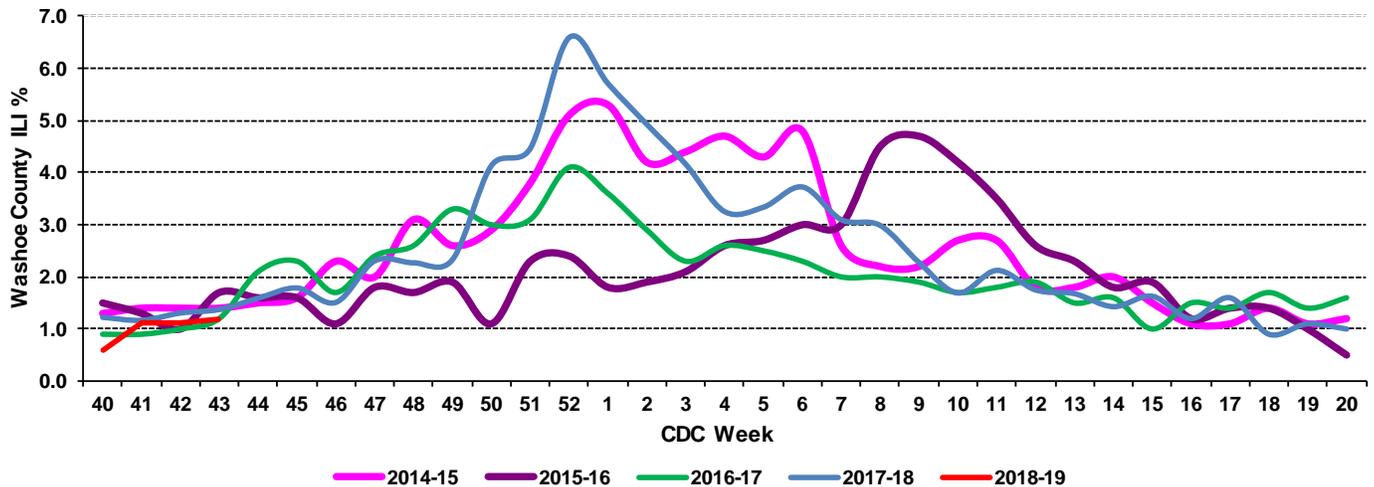


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



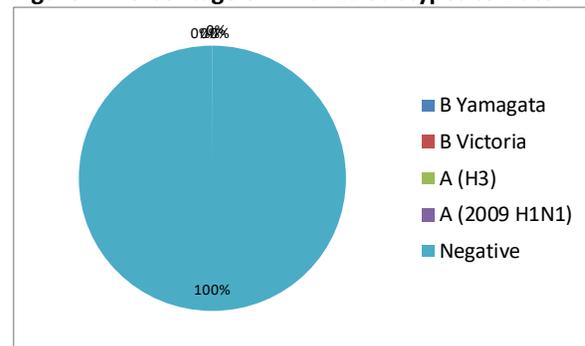
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	0	0
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	1	100
Total (All Subtypes)	1	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

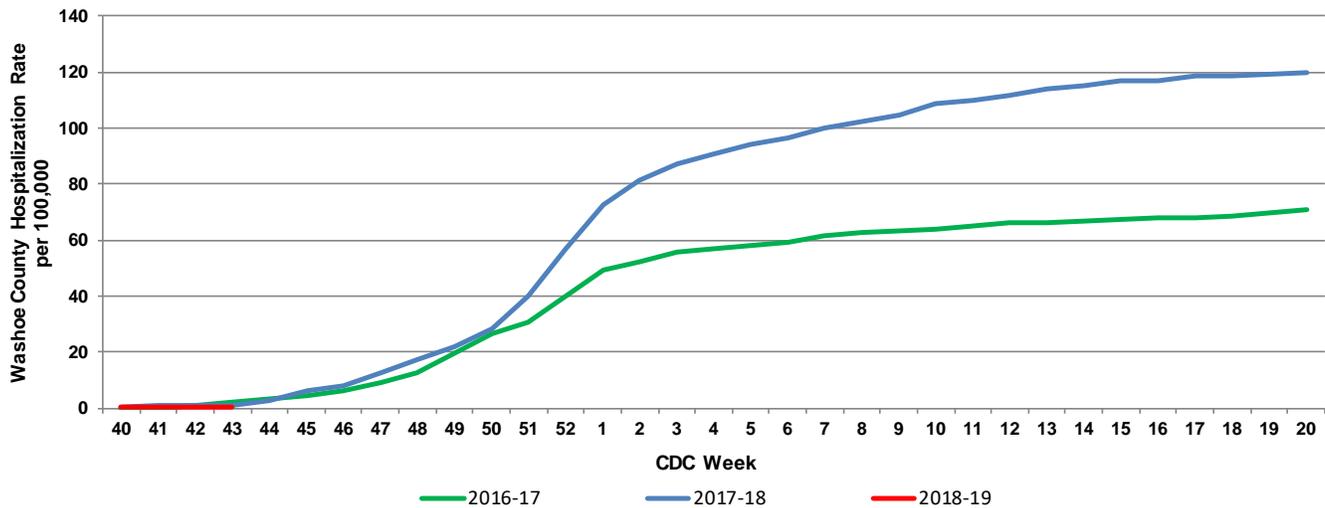
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 43) October 21 - October 27, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - October 27, 2018									
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
<b>Total # of cases reported</b>	0	N/A	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	N/A	0	0.0	0	0.0	0	0.0
Influenza A (2009 H1N1)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (seasonal H3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (not subtyped)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	100.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza A (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza B (non-RIDT**)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

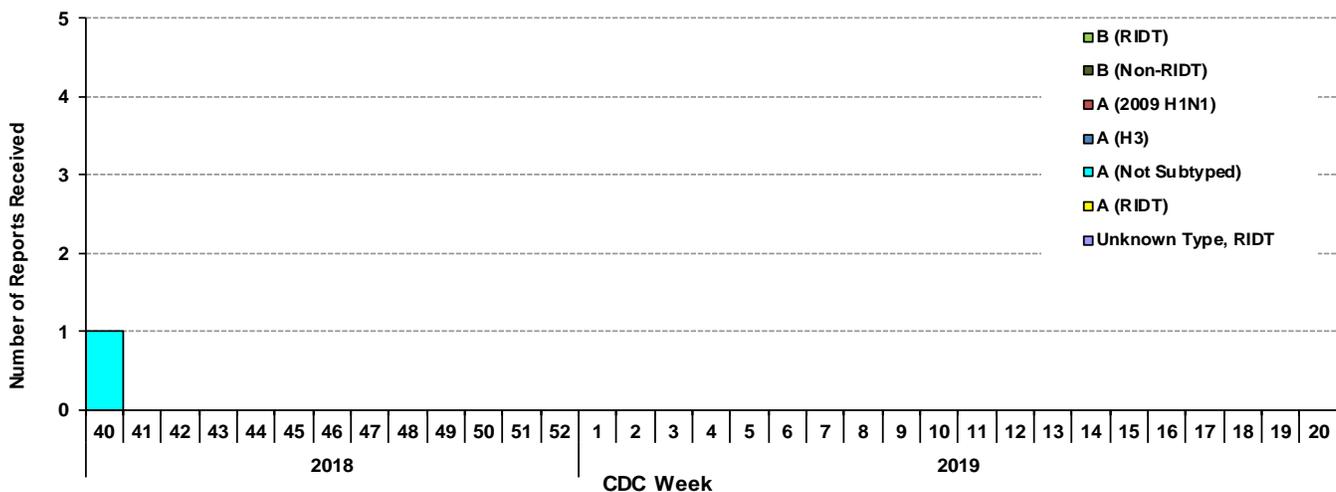
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

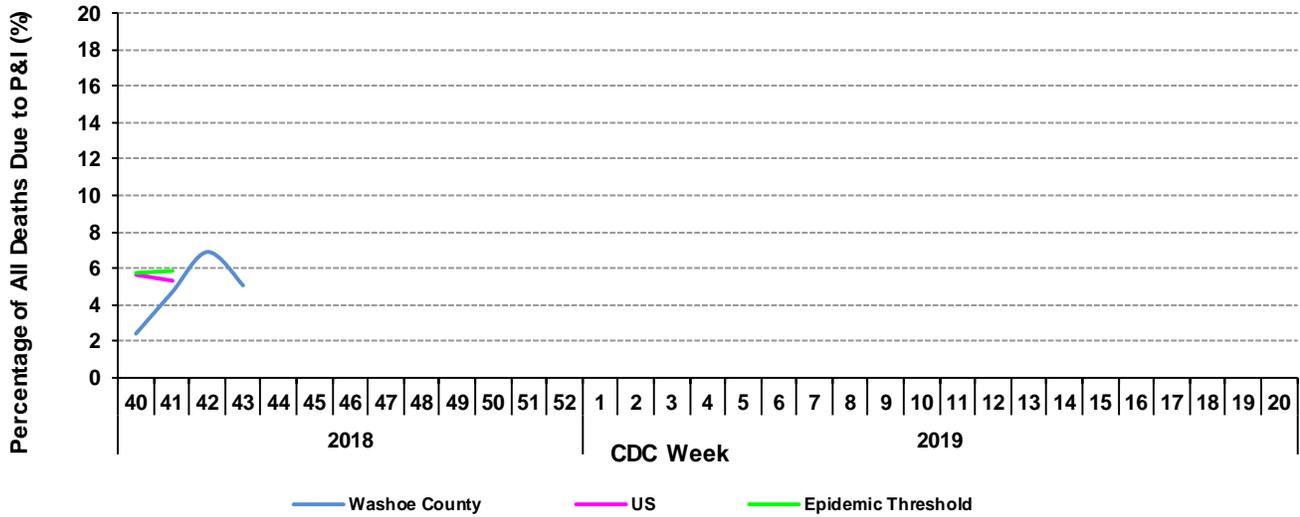
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 43 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 43 was 79. This reflects a P&I ratio of 5.1%. Nationally 5.3% of the deaths occurring during Week 41 were due to P&I. This was below the Week 41 epidemic threshold of 5.9%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 16. This reflects an overall P&I ratio of 4.8% (16/335).

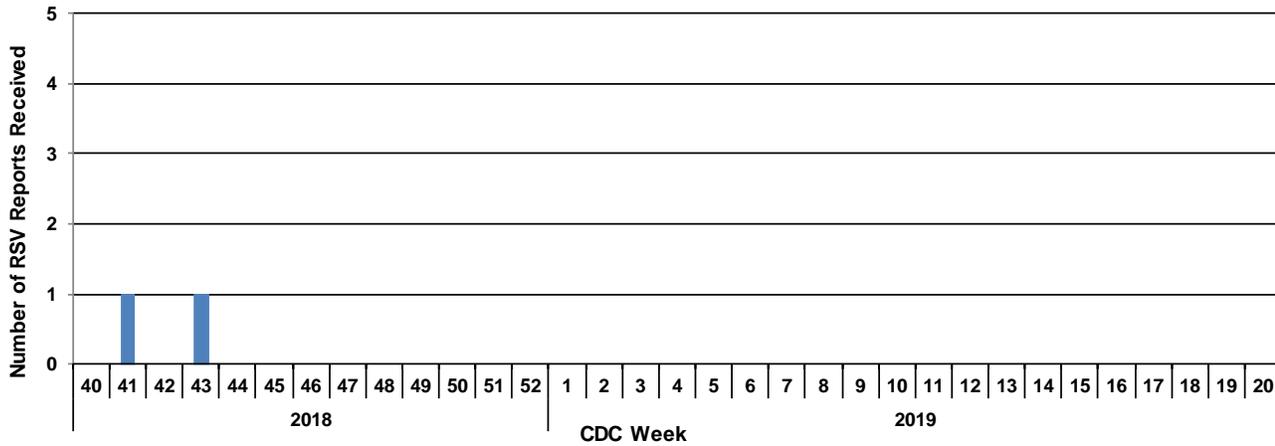
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

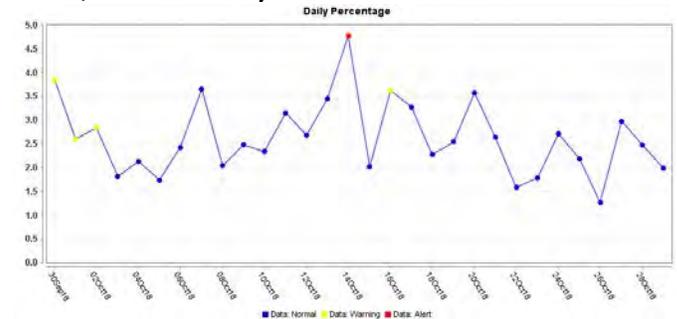


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

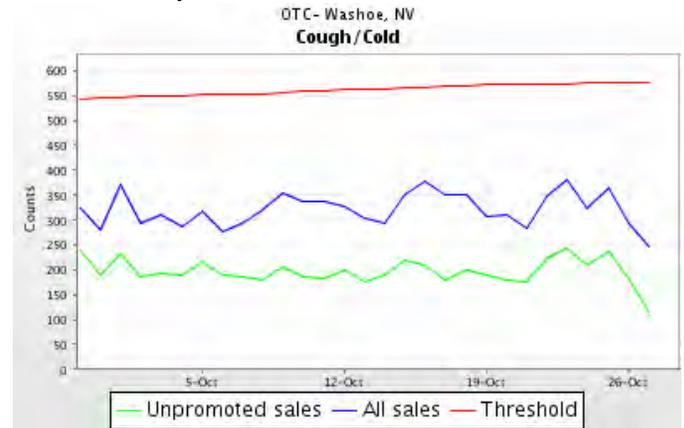
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

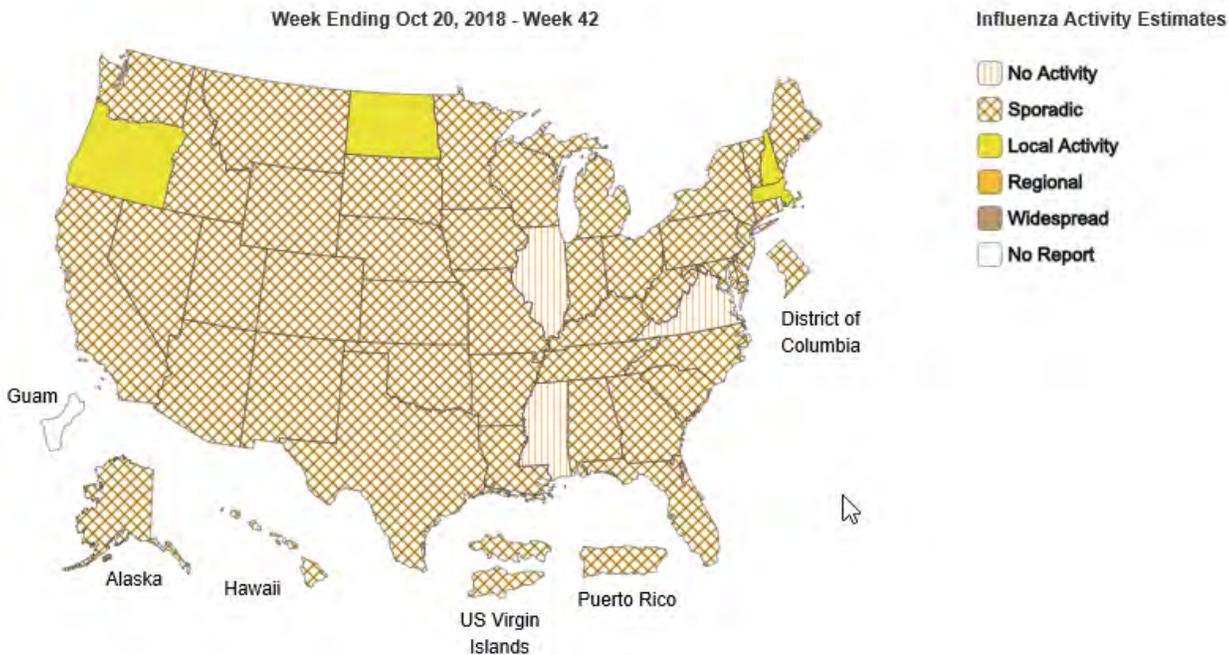


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 42, the following influenza activity was reported:

- Local influenza activity was reported by four states (Massachusetts, New Hampshire, North Dakota, and Oregon).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 42 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming).
- No influenza activity was reported by four states (Illinois, Mississippi, Rhode Island, and Virginia).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

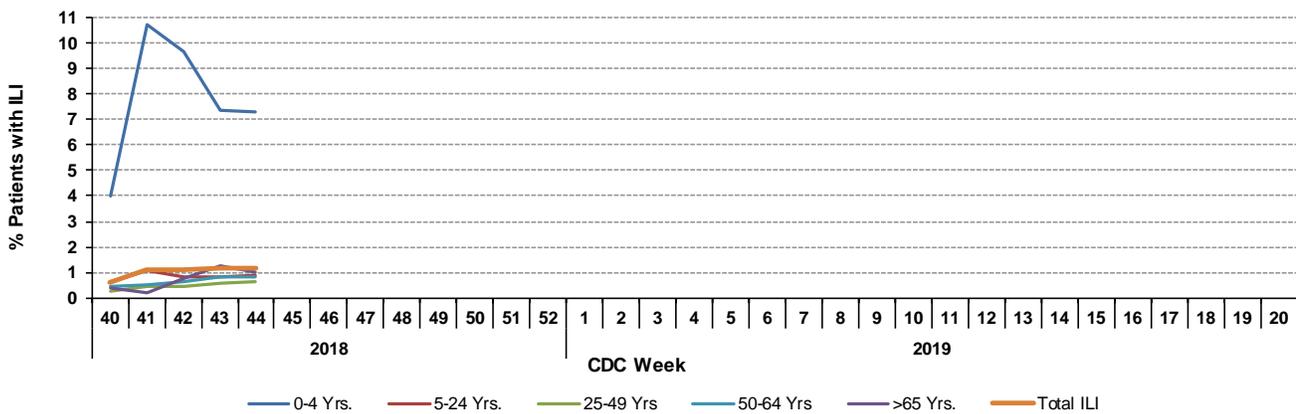
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, November 7, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

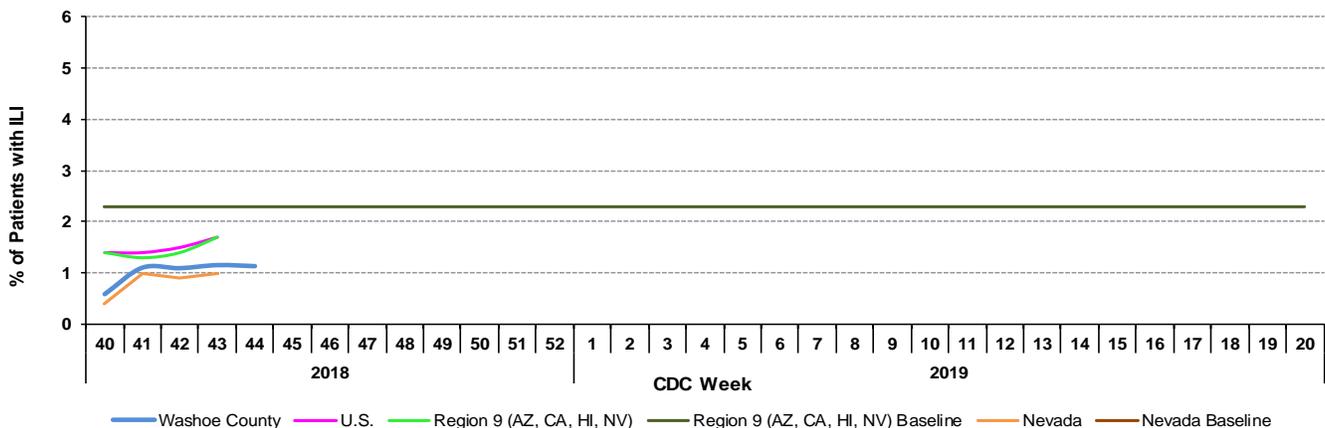
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 79 patients with influenza-like-illness (ILI) for week ending November 3, 2018 (week 44). The percentage of persons seen with ILI by the twelve providers was 1.1% (79/6957) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (7.3%) and lowest among 25-49 years (0.6%). During week 43, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.0%. Nationwide during week 43 the percentage of visits to sentinel providers due to ILI was 1.7% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 2.7%. All of the ten regions reported a proportion of outpatient visits for ILI below their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

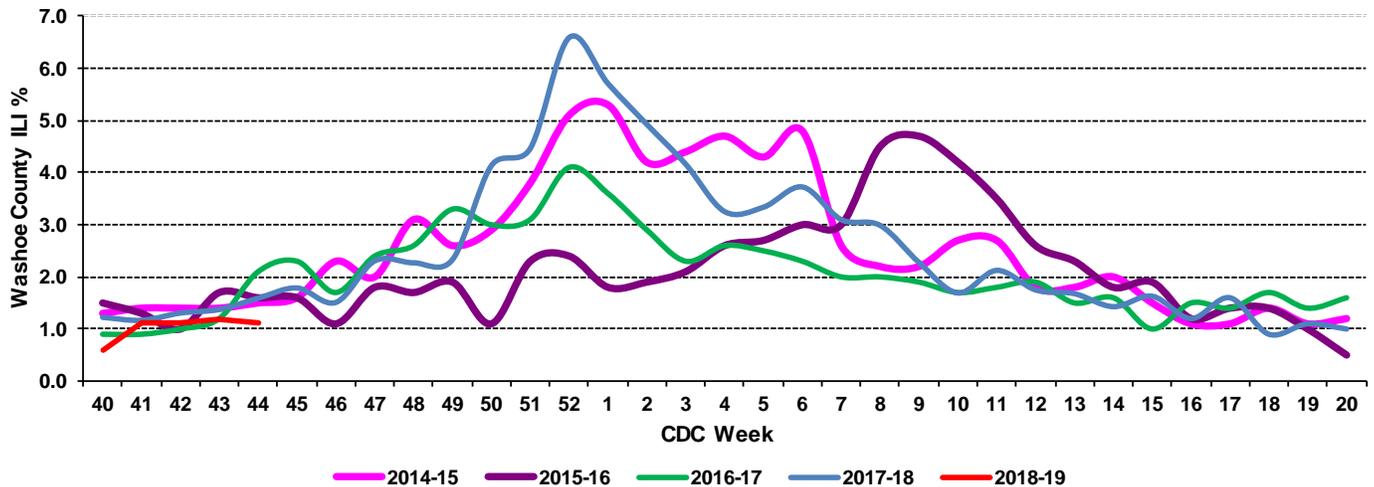


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



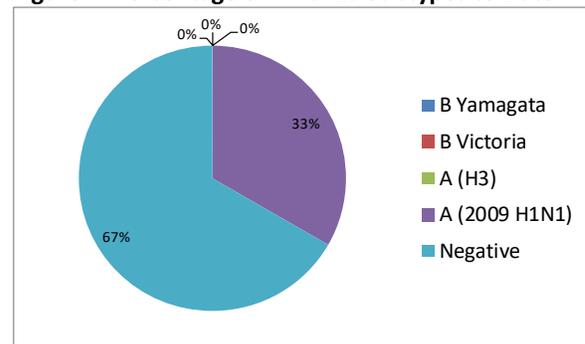
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	1	33%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	67%
Total (All Subtypes)	3	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

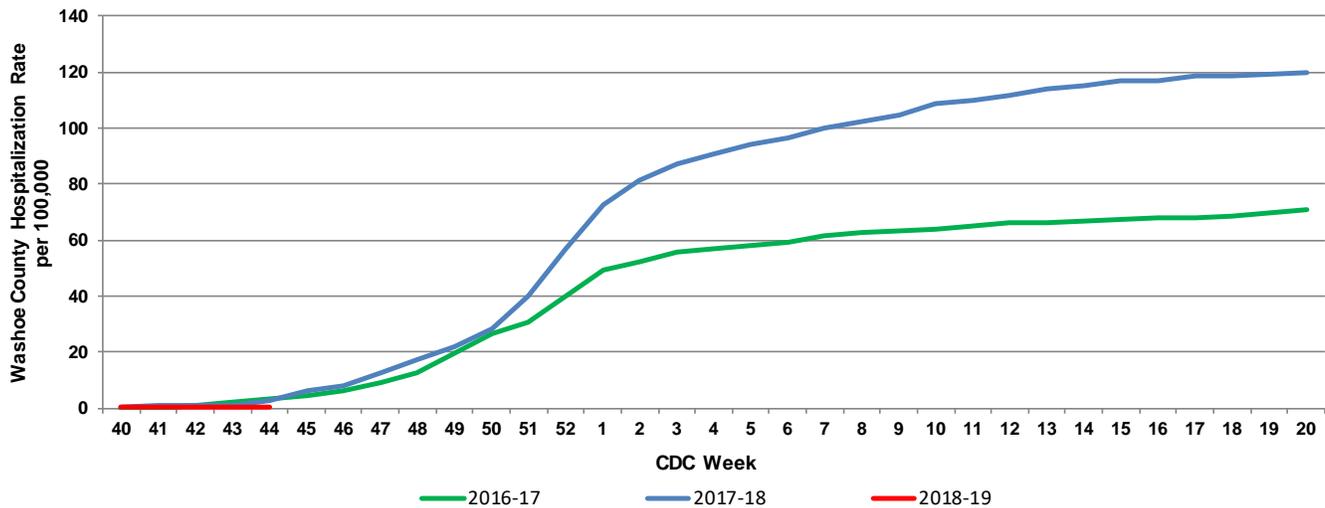
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 44)								Cumulative for 2018-2019 Influenza Season							
	October 28 - November 3, 2018								September 30, 2018 - November 3, 2018							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	1	N/A	1	100.0	0	0.0	0	0.0	2	N/A	1	50.0	0	0.0	0	0.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (not subtyped)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	1	50.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (RIDT*)	1	100.0	1	100.0	0	#DIV/0!	0	#DIV/0!	1	50.0	1	100.0	0	#DIV/0!	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

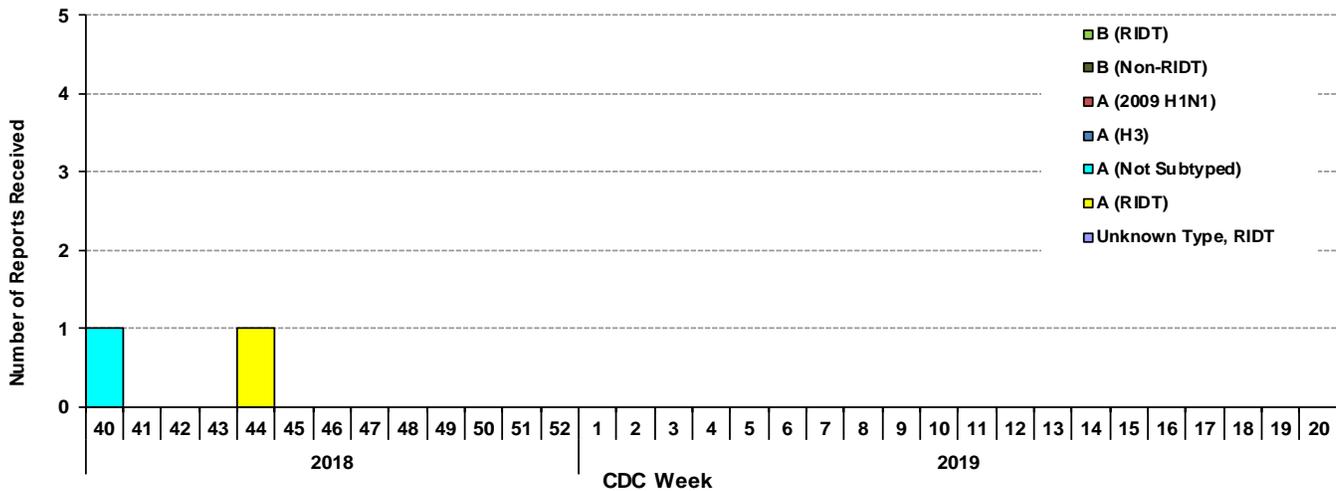
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

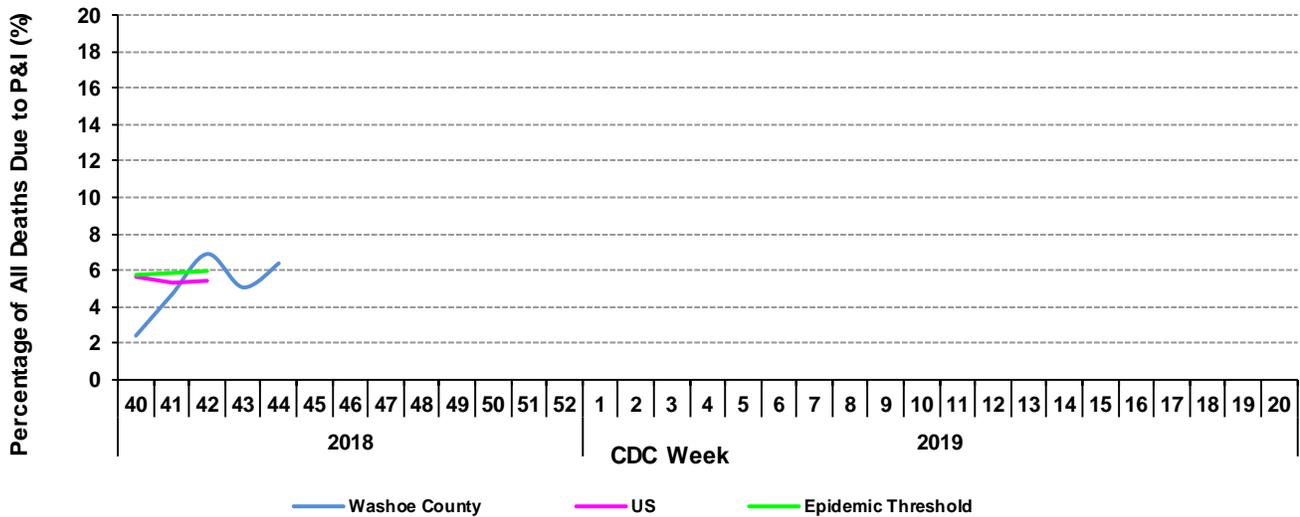
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 44 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 44 was 94. This reflects a P&I ratio of 6.4%. Nationally 5.4% of the deaths occurring during Week 42 were due to P&I. This was below the Week 42 epidemic threshold of 6.0%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 22. This reflects an overall P&I ratio of 5.1% (22/429).

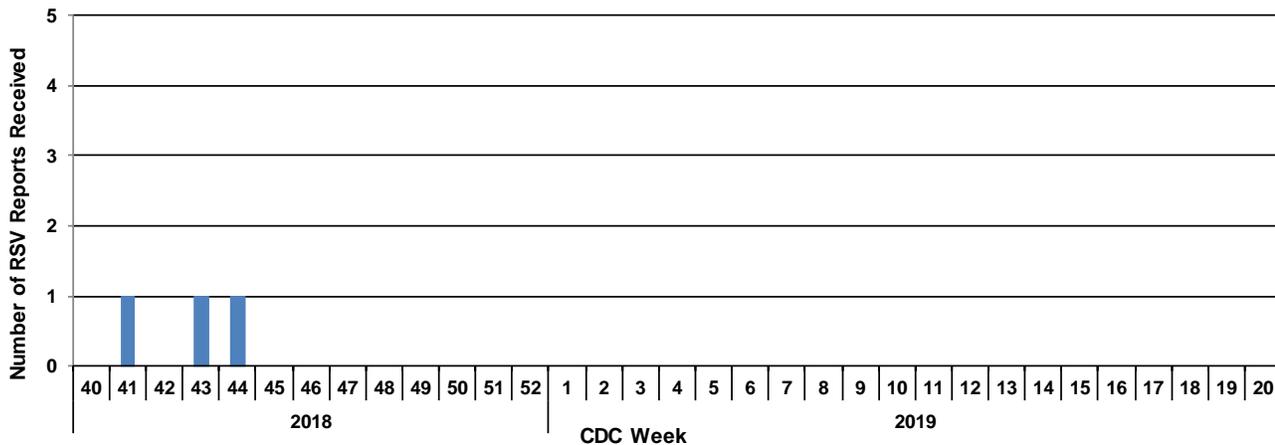
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

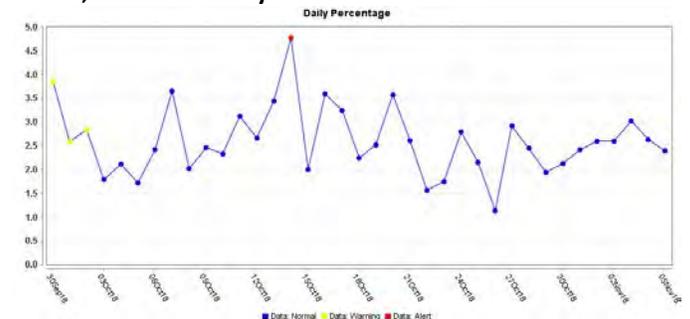


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

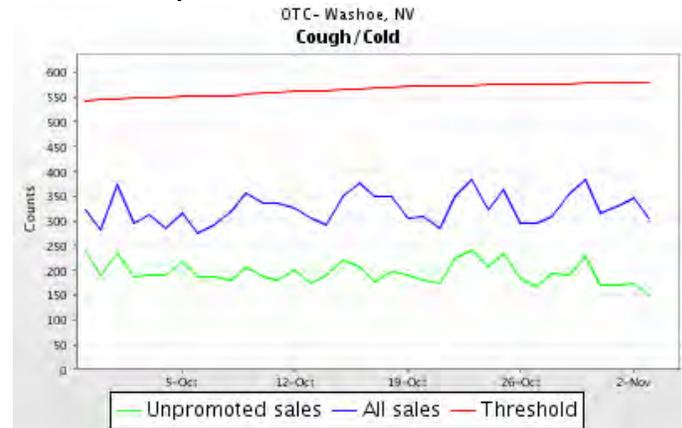
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

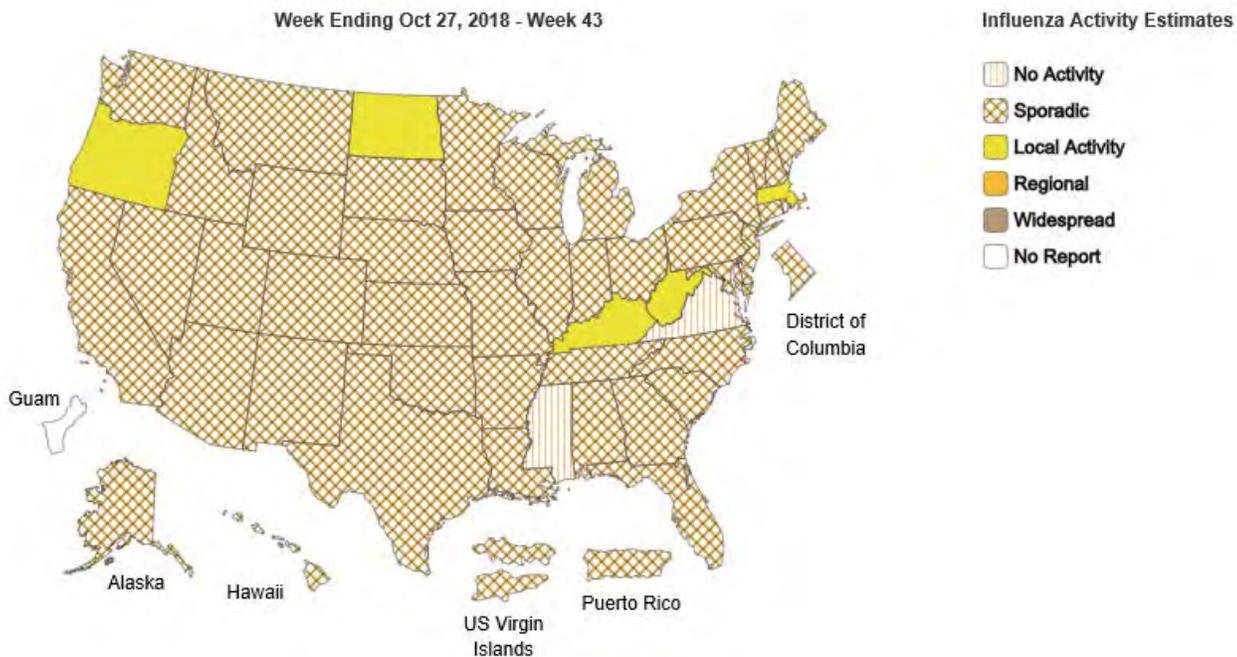


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 43, the following influenza activity was reported:

- Local influenza activity was reported by five states (Kentucky, Massachusetts, North Dakota, Oregon, and West Virginia).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 43 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming).
- No influenza activity was reported by two states (Mississippi and Virginia).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

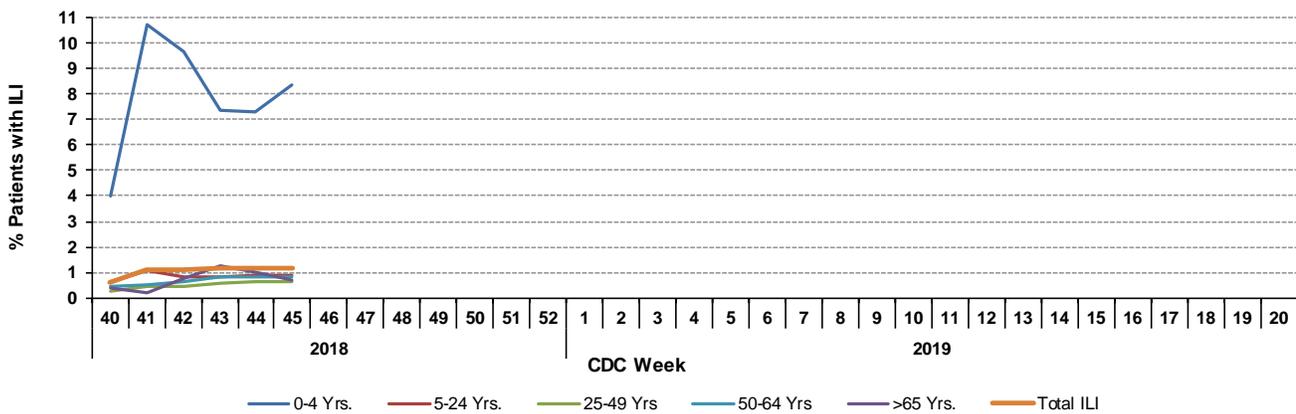
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, November 14, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

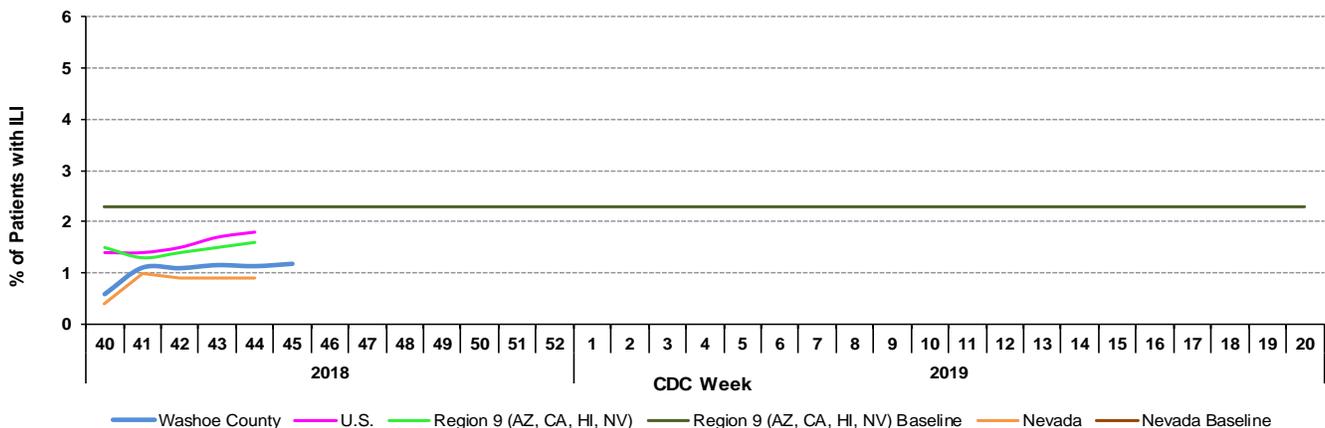
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 83 patients with influenza-like-illness (ILI) for week ending November 10, 2018 (week 45). The percentage of persons seen with ILI by the twelve providers was 1.2% (83/7024) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (8.4%) and lowest among 25-49 years (0.6%). During week 44, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.9%. Nationwide during week 44 the percentage of visits to sentinel providers due to ILI was 1.8% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 2.7%. One of the ten regions (Region 7) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

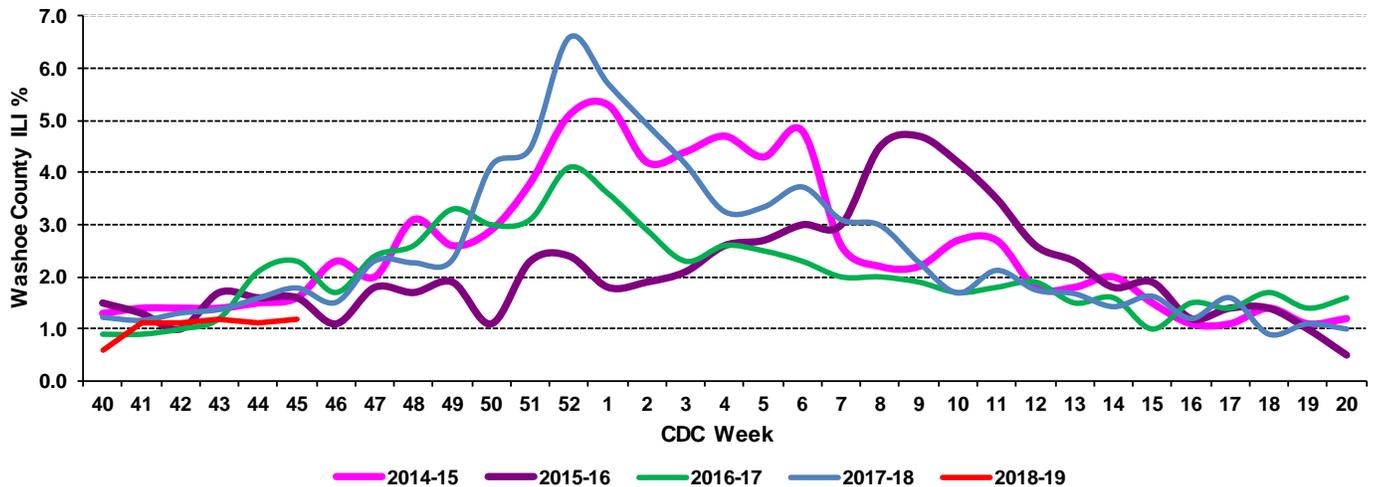


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



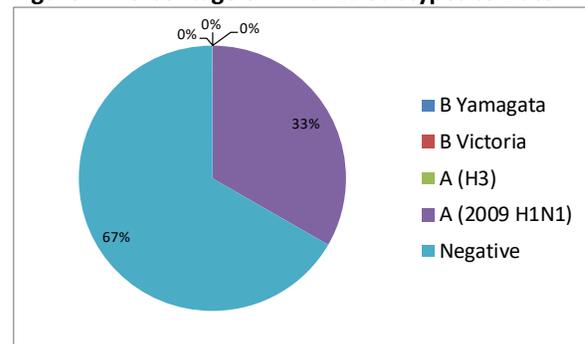
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	1	33%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	67%
Total (All Subtypes)	3	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

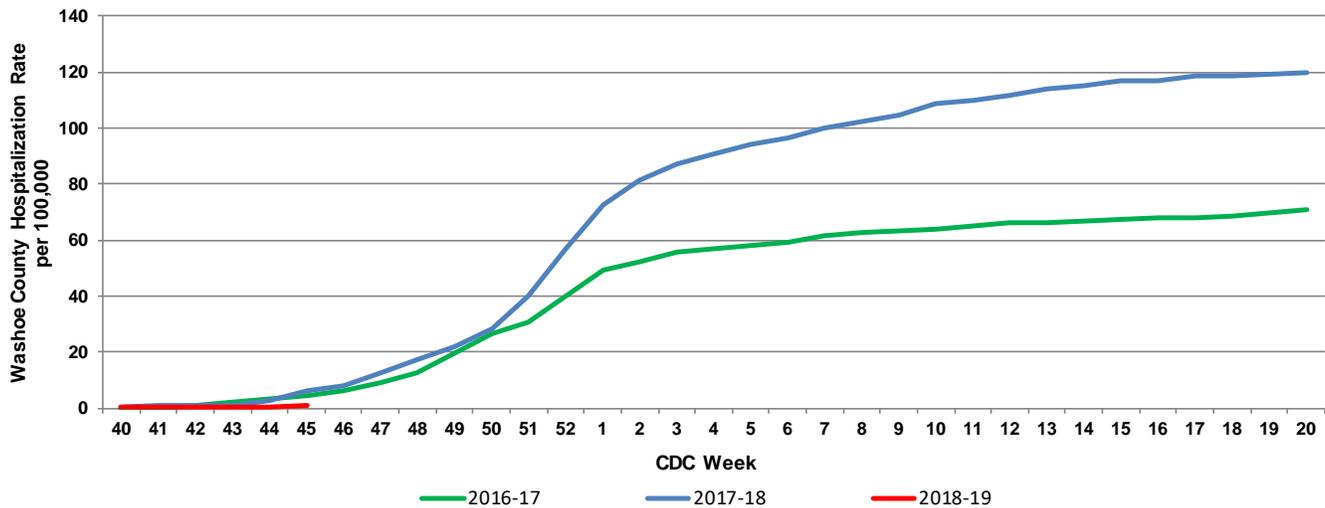
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 45) November 4 - November 10, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - November 10, 2018							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	1	N/A	0	0.0	0	0.0	0	0.0	3	N/A	1	33.3	0	0.0	0	0.0
Influenza A (2009 H1N1)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (not subtyped)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	33.3	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza A (RIDT*)	1	100.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	2	66.7	1	100.0	0	#DIV/0!	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	#DIV/0!	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

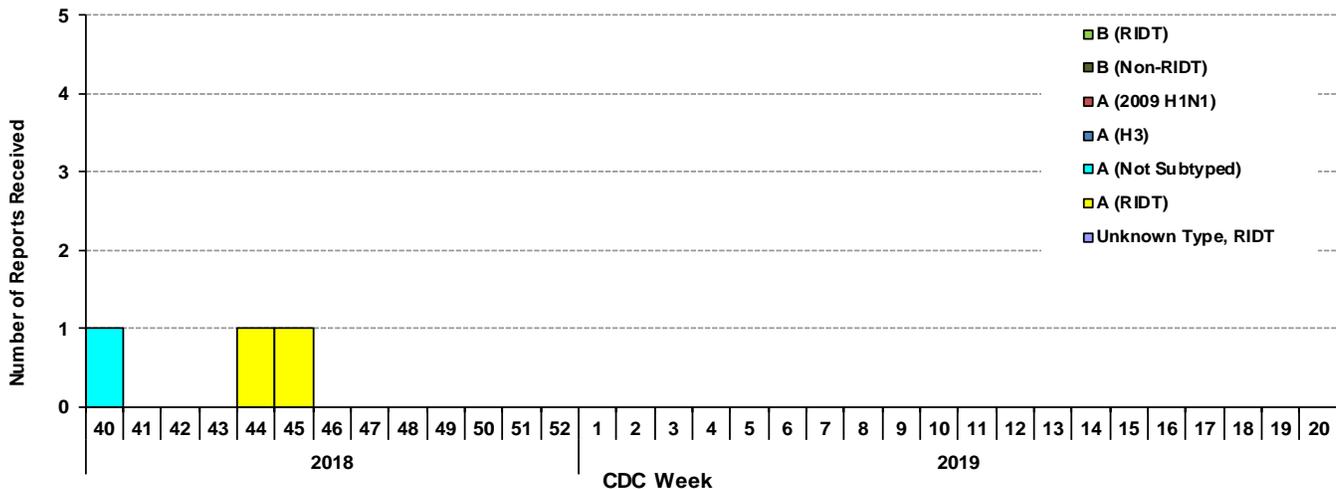
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

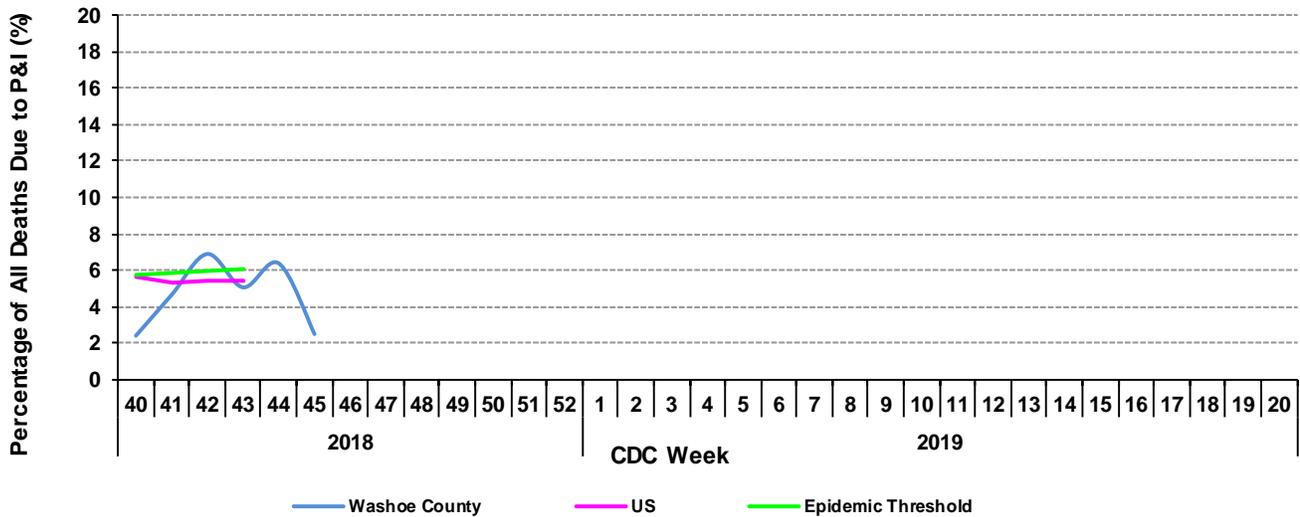
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Two death certificates were received for week 45 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 45 was 80. This reflects a P&I ratio of 2.5%. Nationally 5.4% of the deaths occurring during Week 43 were due to P&I. This was below the Week 43 epidemic threshold of 6.1%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 24. This reflects an overall P&I ratio of 4.7% (24/509).

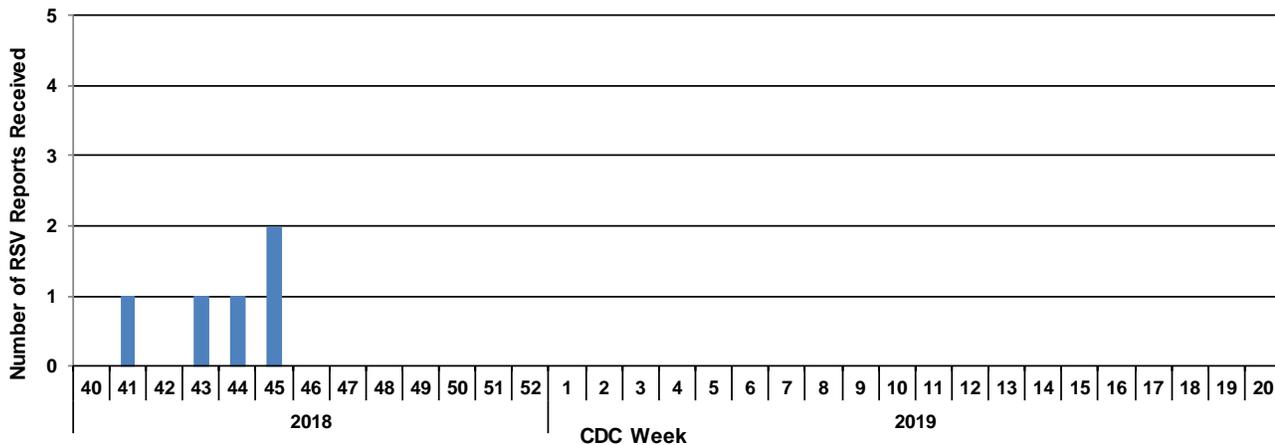
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

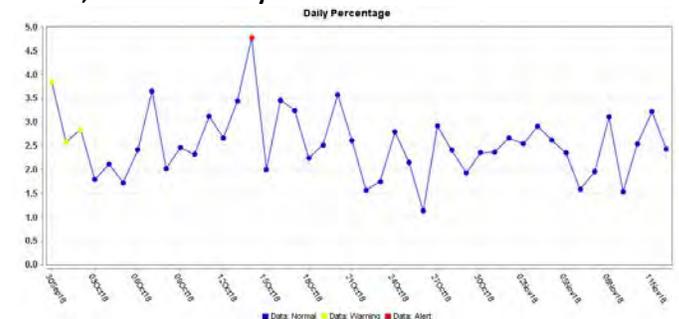


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

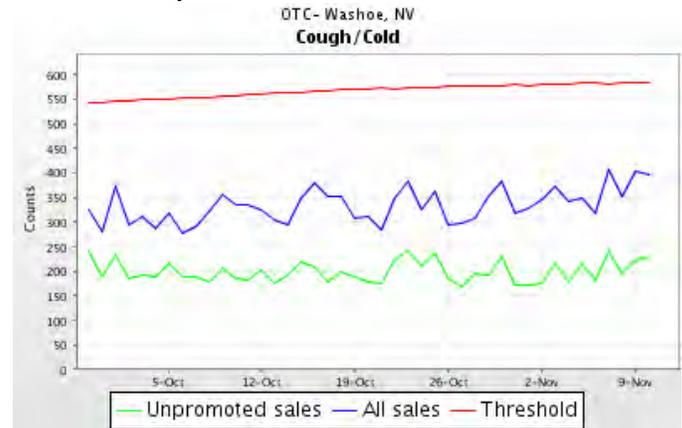
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 44, the following influenza activity was reported:

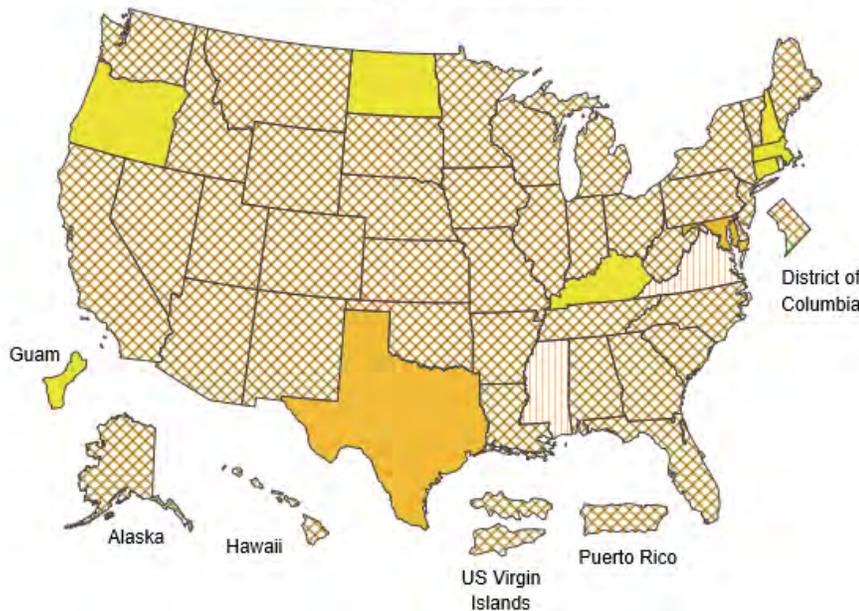
- Regional influenza activity was reported by two states (Maryland and Texas).
- Local influenza activity was reported by Guam and six states (Connecticut, Kentucky, Massachusetts, New Hampshire, North Dakota, and Oregon).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 40 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming).
- No influenza activity was reported by two states (Mississippi and Virginia).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**

Week Ending Nov 03, 2018 - Week 44

Influenza Activity Estimates

- ▨ No Activity
- ▨ Sporadic
- Local Activity
- Regional
- Widespread
- No Report



**Washoe County Influenza Resources**

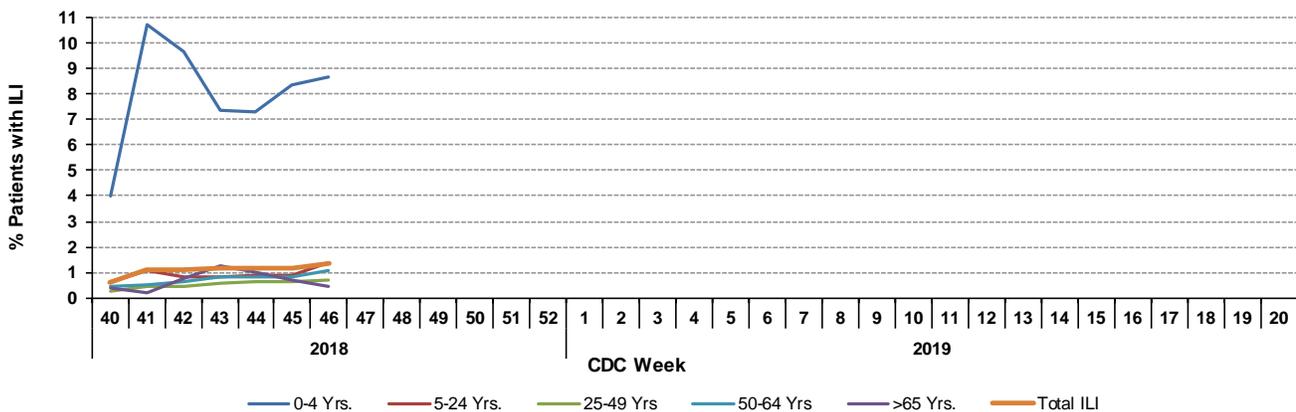
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, November 21, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

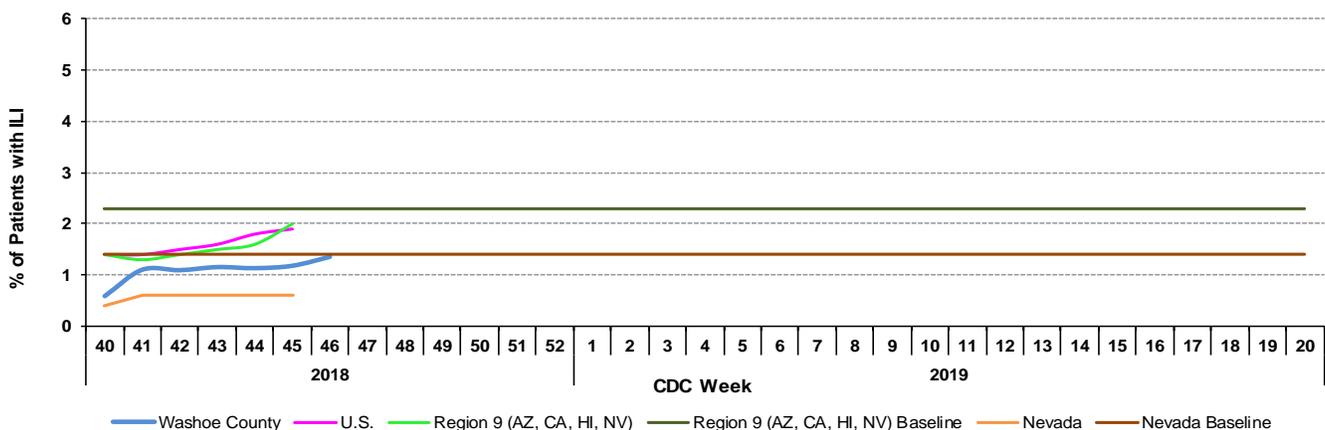
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 93 patients with influenza-like-illness (ILI) for week ending November 17, 2018 (week 46). The percentage of persons seen with ILI by the twelve providers was 1.4% (93/6854) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (8.7%) and lowest among  $\geq 65$  years (0.5%). During week 45, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.6%. Nationwide during week 45 the percentage of visits to sentinel providers due to ILI was 1.9% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.0% to 2.8%. One of the ten regions (Region 7) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

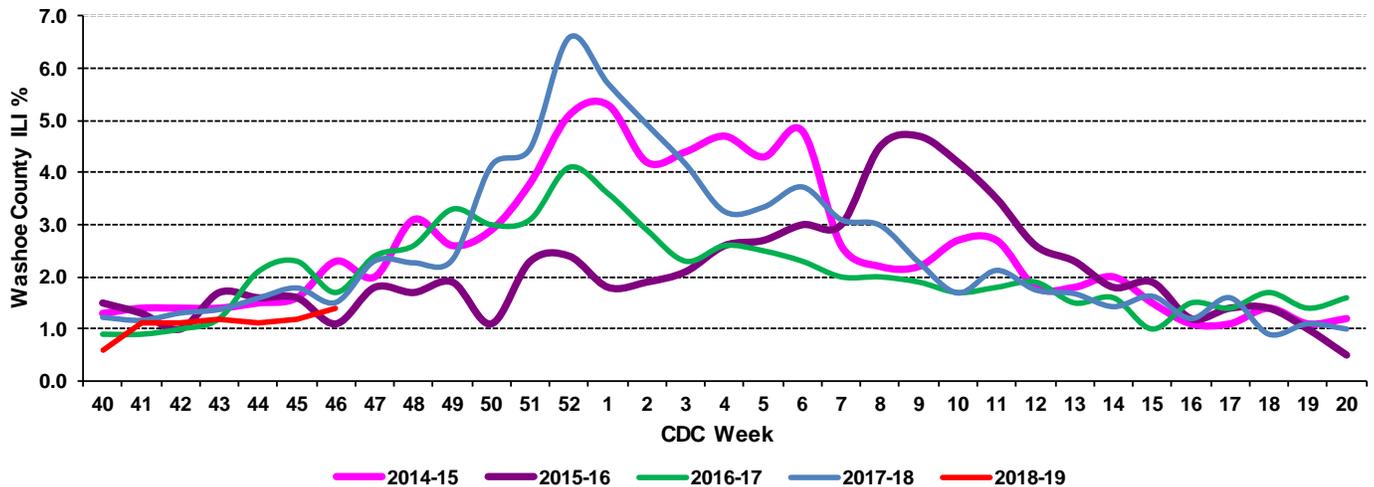


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



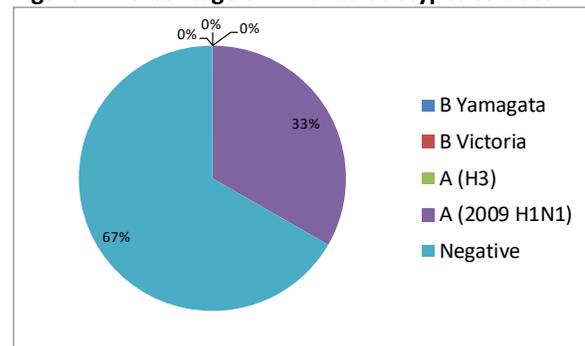
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	1	33%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	67%
Total (All Subtypes)	3	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

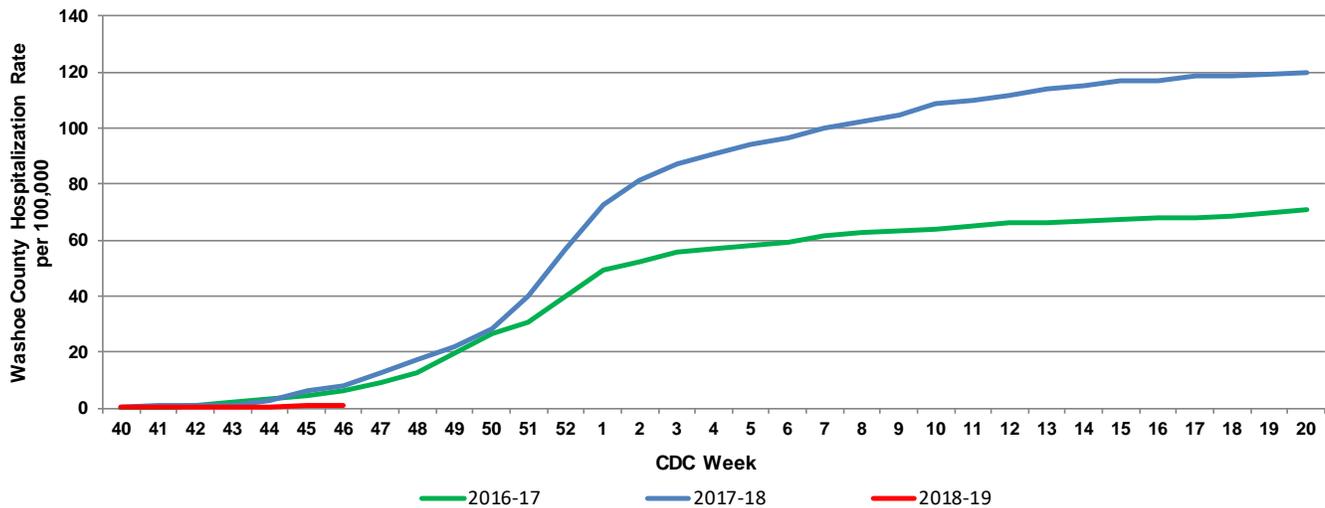
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 46) November 11 - November 17, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - November 17, 2018							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	1	N/A	0	0.0	1	100.0	0	0.0	4	N/A	1	25.0	1	25.0	0	0.0
Influenza A (2009 H1N1)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (not subtyped)	1	100.0	0	#DIV/0!	1	100.0	0	#DIV/0!	2	50.0	0	0.0	1	100.0	0	#DIV/0!
Influenza A (RIDT*)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	2	50.0	1	100.0	0	0.0	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	#DIV/0!	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

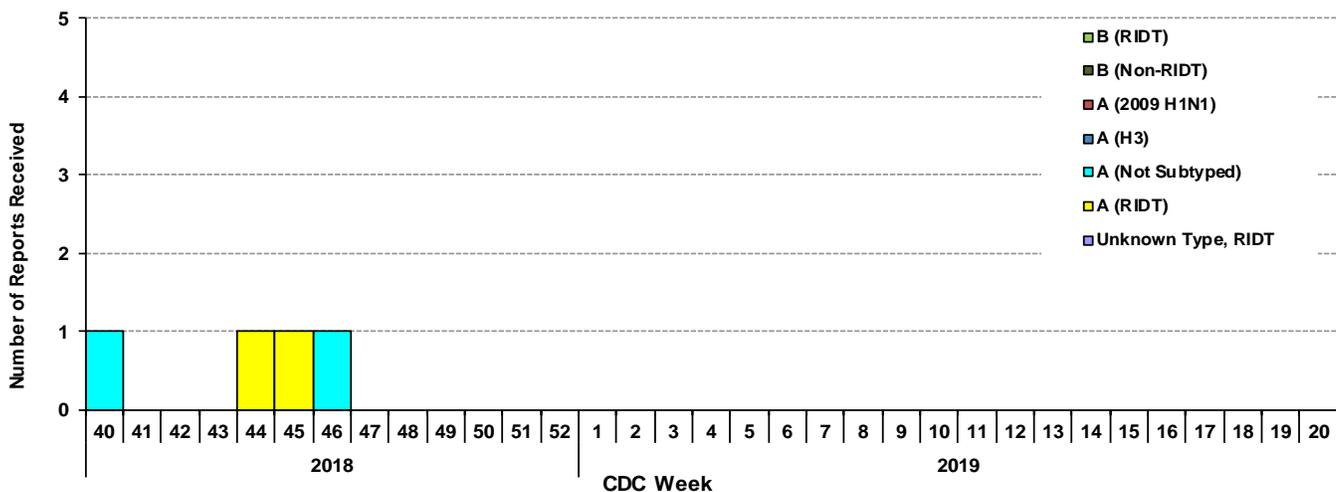
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

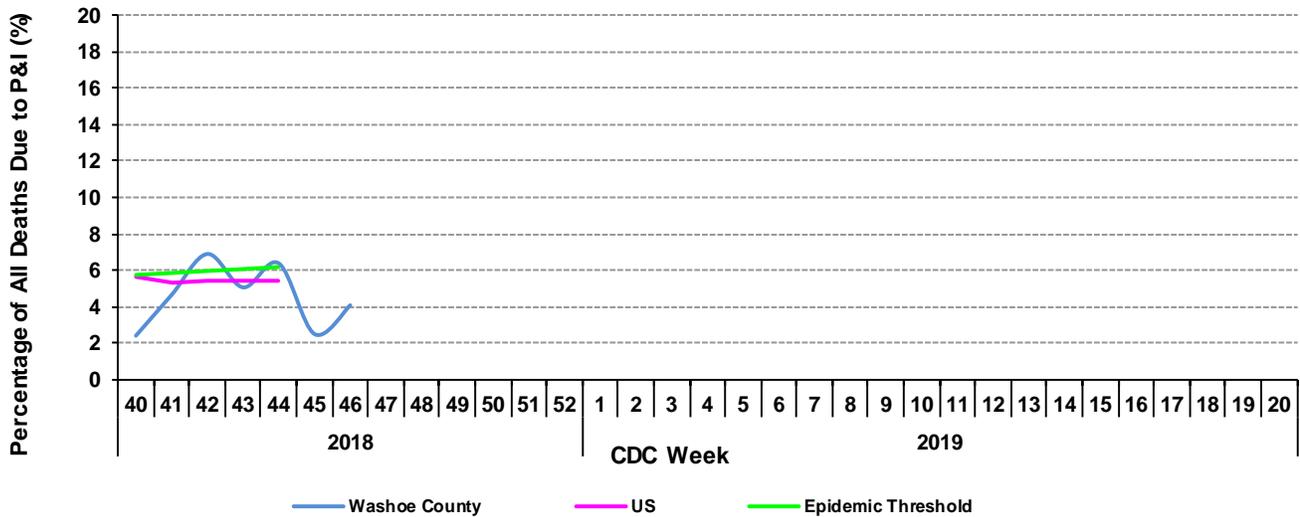
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 46 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 46 was 98. This reflects a P&I ratio of 4.1%. Nationally 5.4% of the deaths occurring during Week 44 were due to P&I. This was below the Week 44 epidemic threshold of 6.2%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 28. This reflects an overall P&I ratio of 4.6% (28/607).

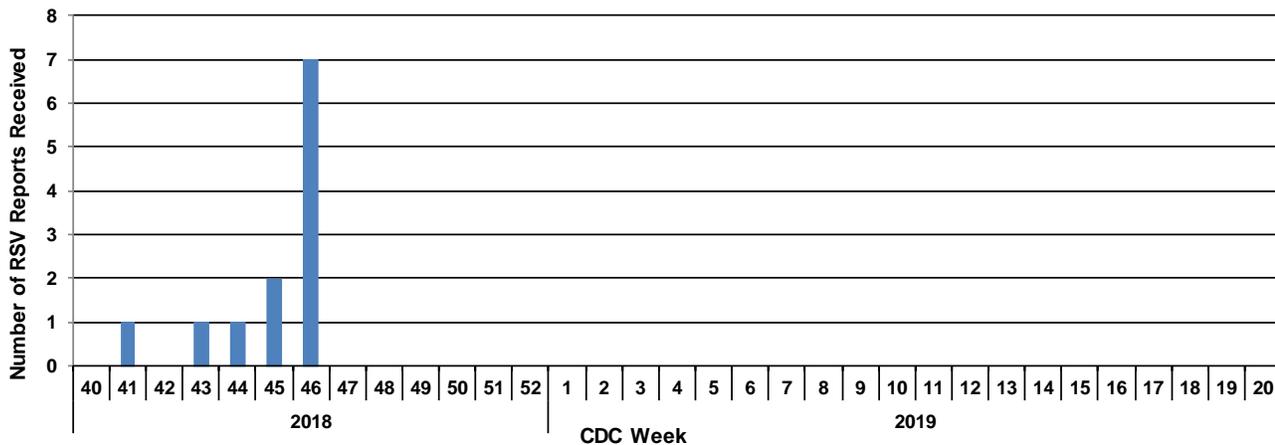
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

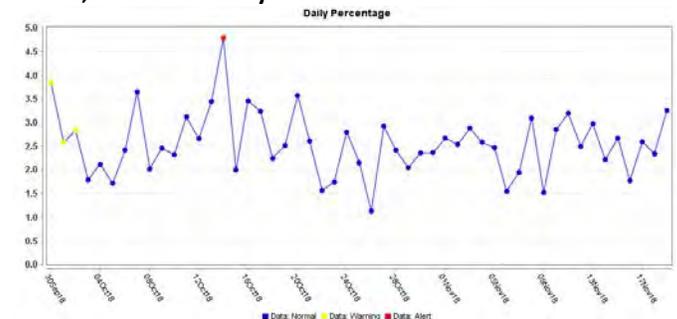


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

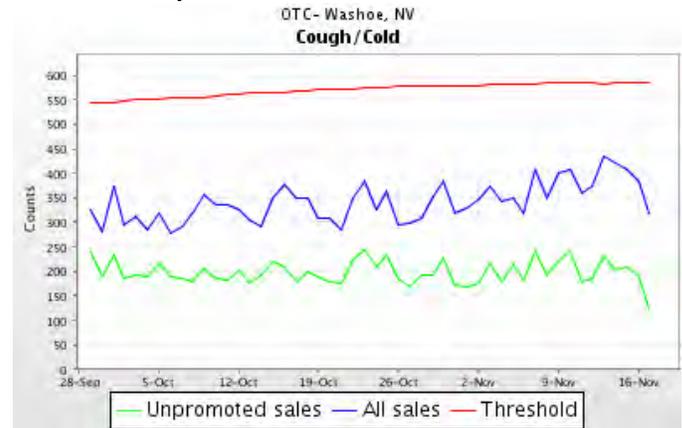
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



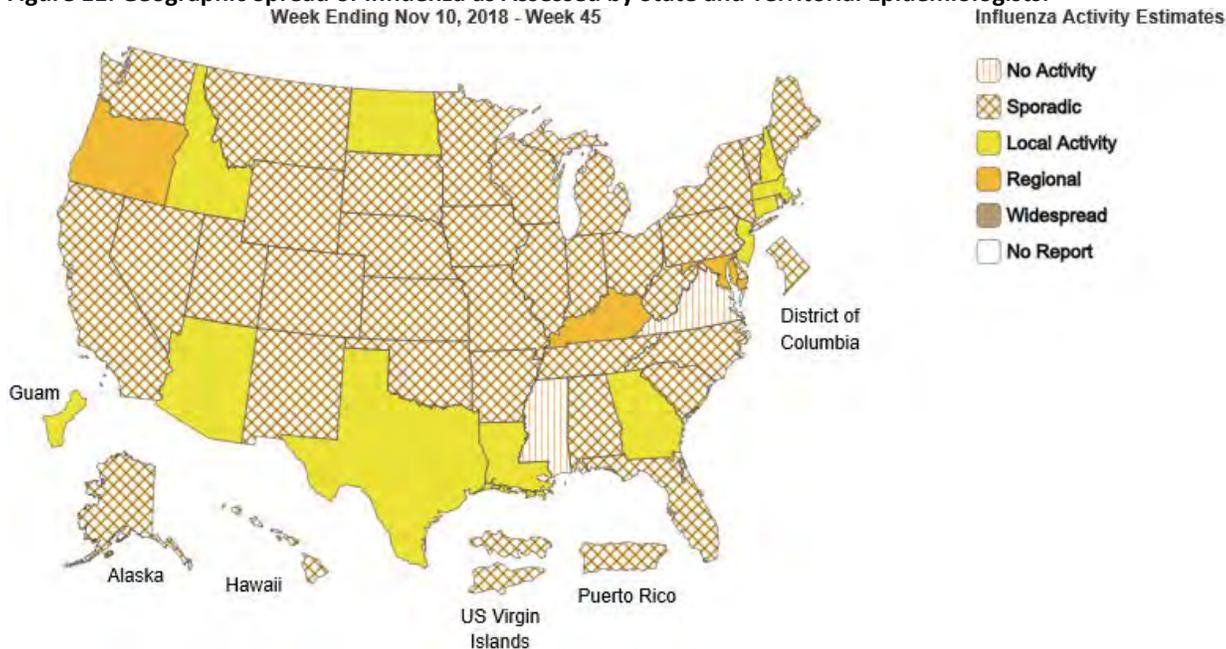
**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 45, the following influenza activity was reported:

- Regional influenza activity was reported by three states (Kentucky, Maryland and Oregon).
- Local influenza activity was reported by Guam and 10 states (Arizona, Connecticut, Georgia, Idaho, Louisiana, Massachusetts, New Hampshire, New Jersey, North Dakota, and Texas).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 35 states (Alabama, Alaska, Arkansas, California, Colorado, Delaware, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming).
- No influenza activity was reported by two states (Mississippi and Virginia).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**

Week Ending Nov 10, 2018 - Week 45



**Washoe County Influenza Resources**

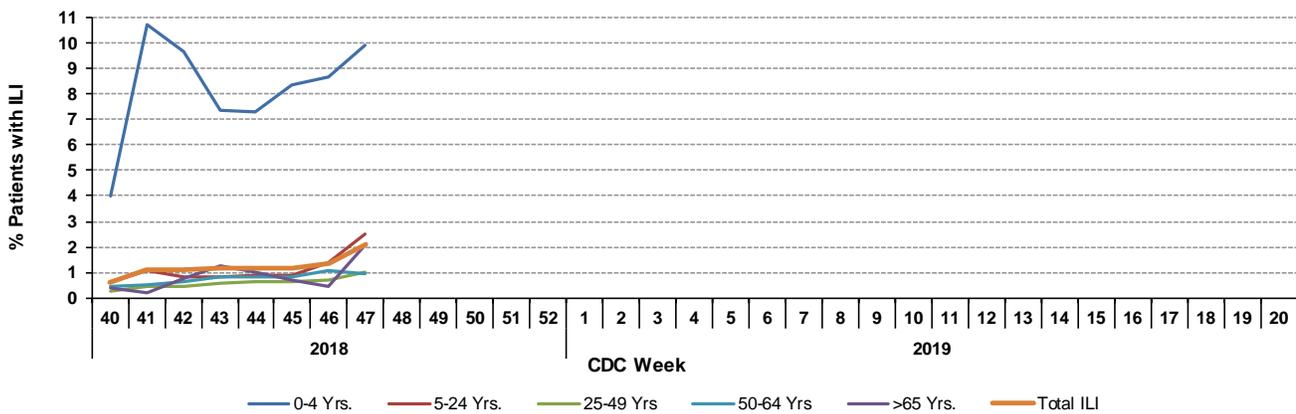
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washocounty.us](mailto:epicenter@washocounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, November 28, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

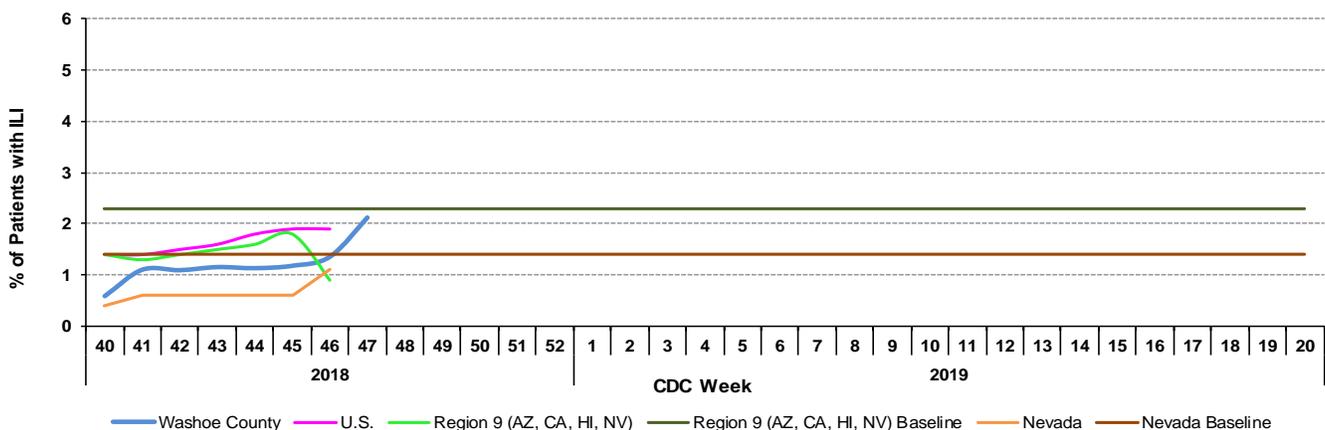
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 136 patients with influenza-like-illness (ILI) for week ending November 24, 2018 (week 47). The percentage of persons seen with ILI by the twelve providers was 2.1% (136/6404) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (9.9%) and lowest among 50-64 years (0.9%). During week 46, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.1%. Nationwide during week 46 the percentage of visits to sentinel providers due to ILI was 1.9% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.9% to 3.4%. Two of the ten regions (Regions 2 and 8) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

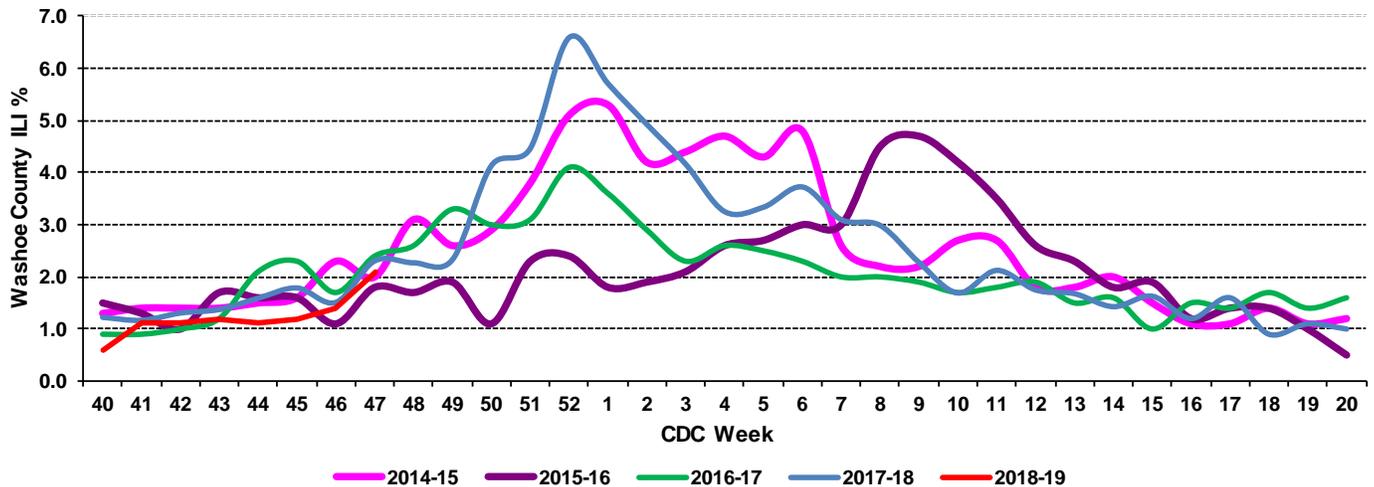


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



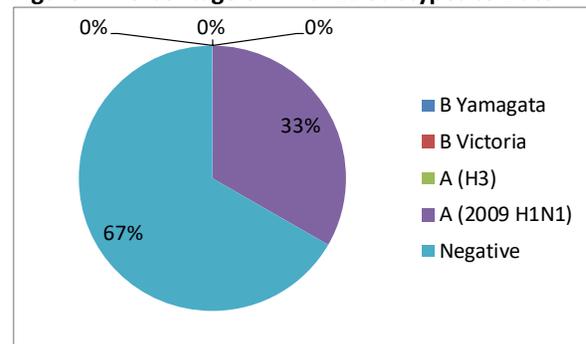
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	1	33%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	67%
Total (All Subtypes)	3	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

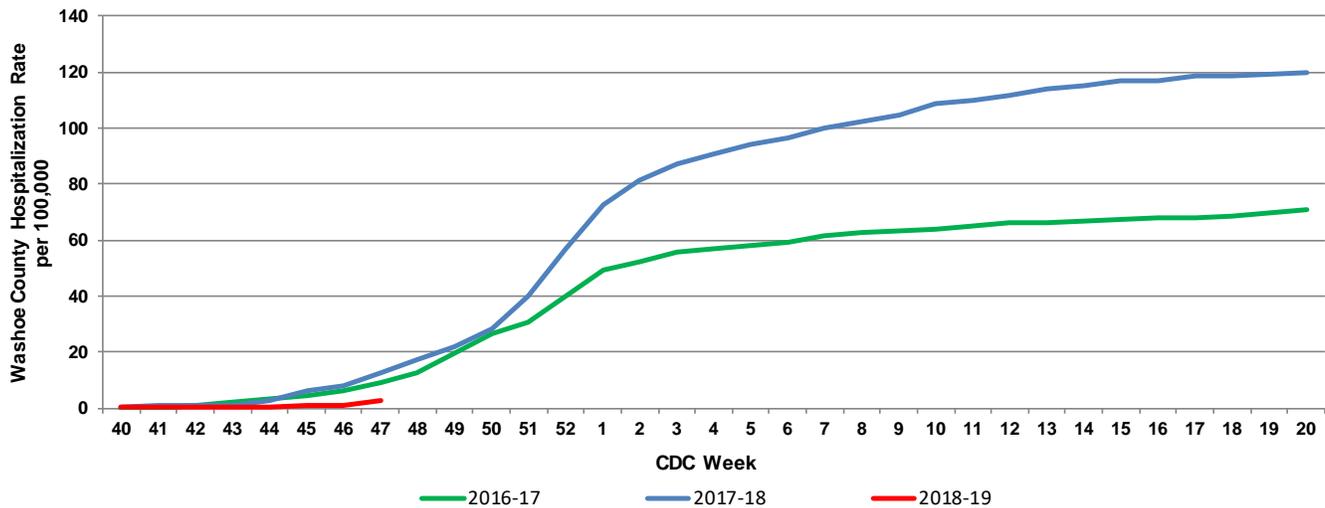
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 47) November 18 - November 24, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - November 24, 2018							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	7	N/A	1	14.3	3	42.9	0	0.0	11	N/A	2	18.2	4	36.4	0	0.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (not subtyped)	6	85.7	1	100.0	3	100.0	0	#DIV/0!	8	72.7	1	50.0	4	100.0	0	#DIV/0!
Influenza A (RIDT*)	1	14.3	0	0.0	0	0.0	0	#DIV/0!	3	27.3	1	50.0	0	0.0	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

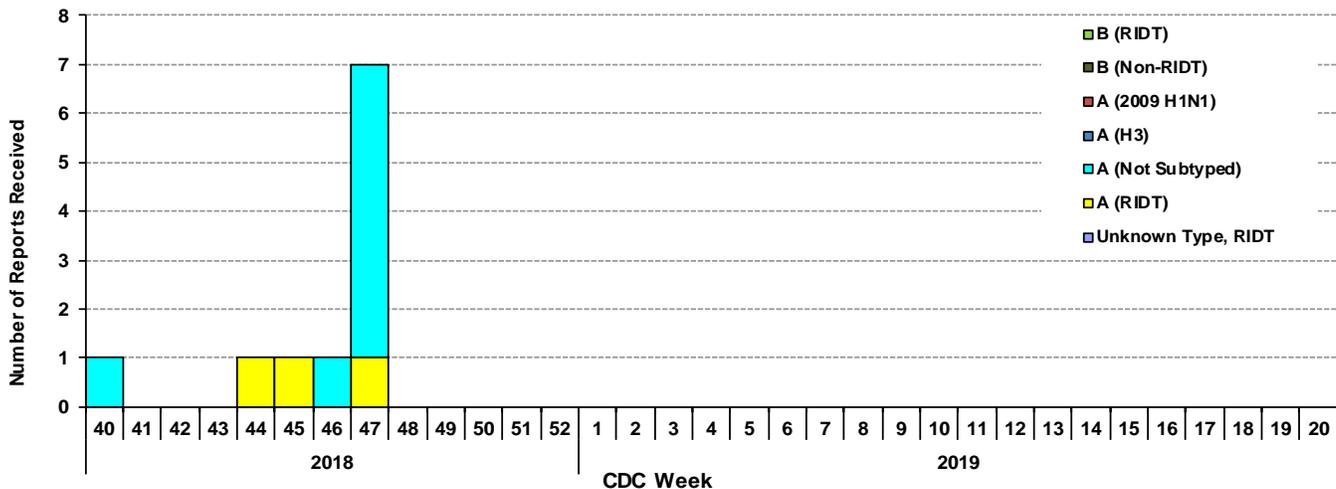
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

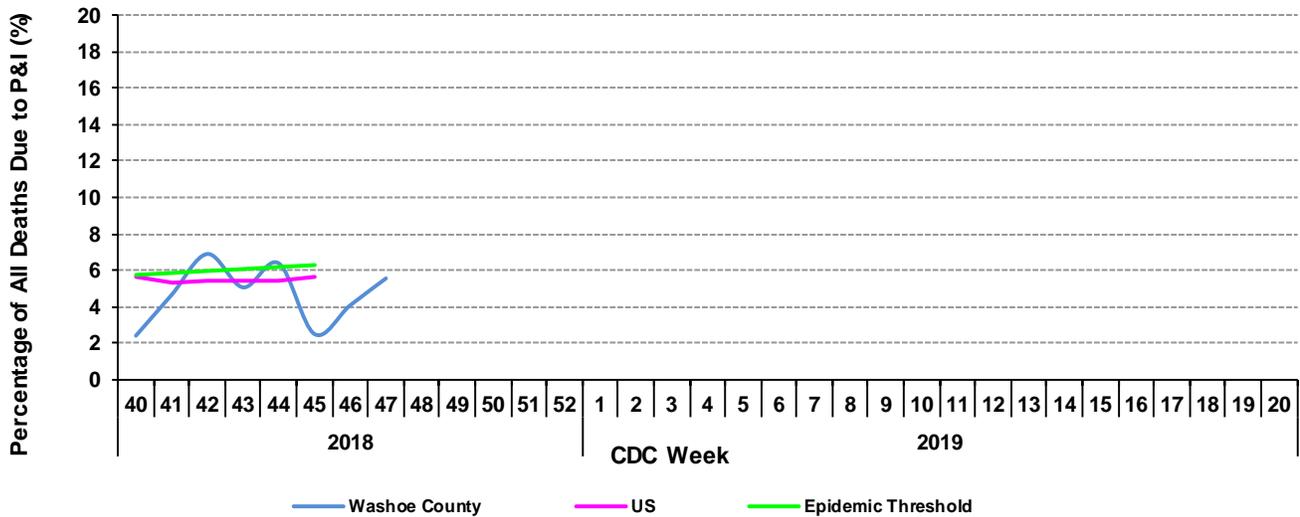
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Five death certificates were received for week 47 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 47 was 90. This reflects a P&I ratio of 5.6%. Nationally 5.6% of the deaths occurring during Week 45 were due to P&I. This was below the Week 45 epidemic threshold of 6.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 33. This reflects an overall P&I ratio of 4.7% (33/697).

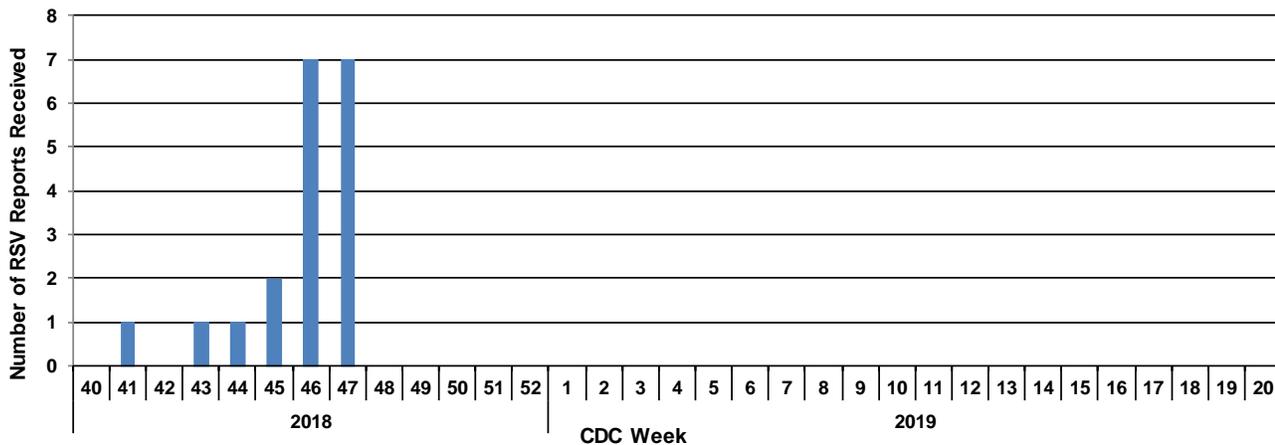
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

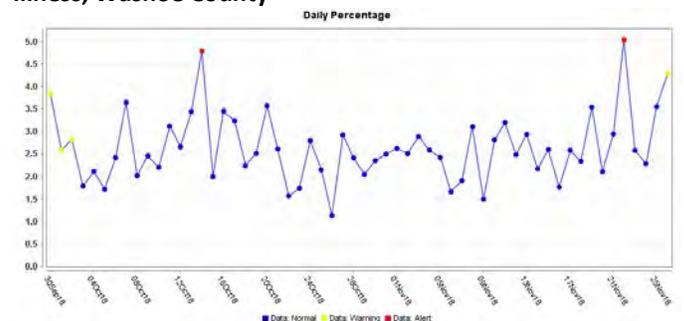


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

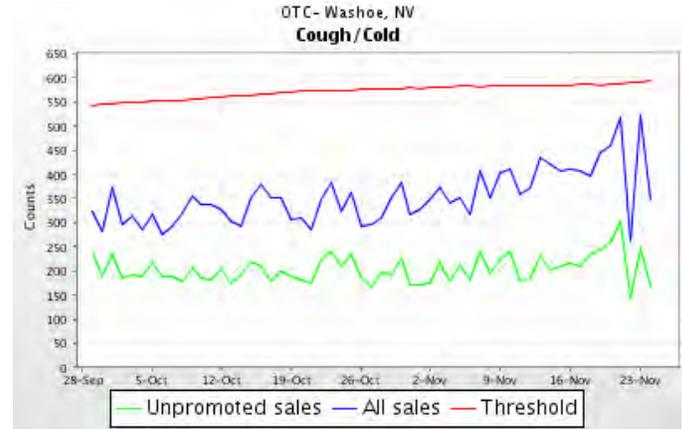
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

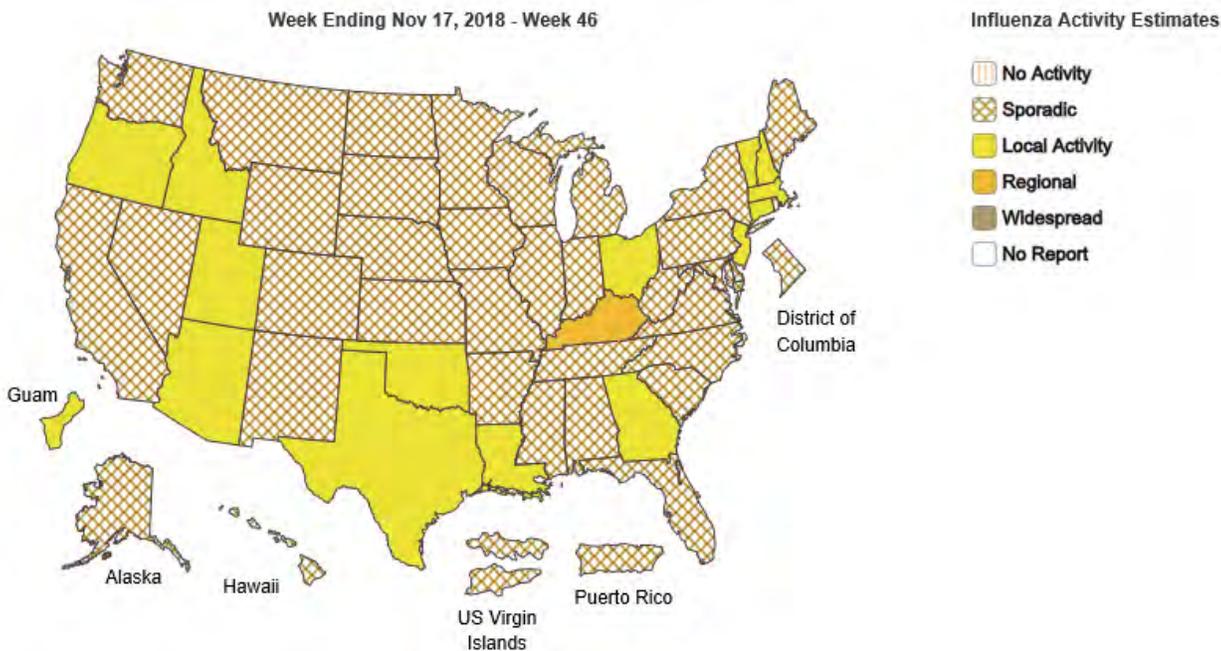


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 46, the following influenza activity was reported:

- Regional influenza activity was reported by one state (Kentucky).
- Local influenza activity was reported by Guam and 14 states (Arizona, Connecticut, Georgia, Idaho, Louisiana, Massachusetts, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Texas, Utah, and Vermont).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 35 states (Alabama, Alaska, Arkansas, California, Colorado, Delaware, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Virginia, Washington, West Virginia, Wisconsin, and Wyoming).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

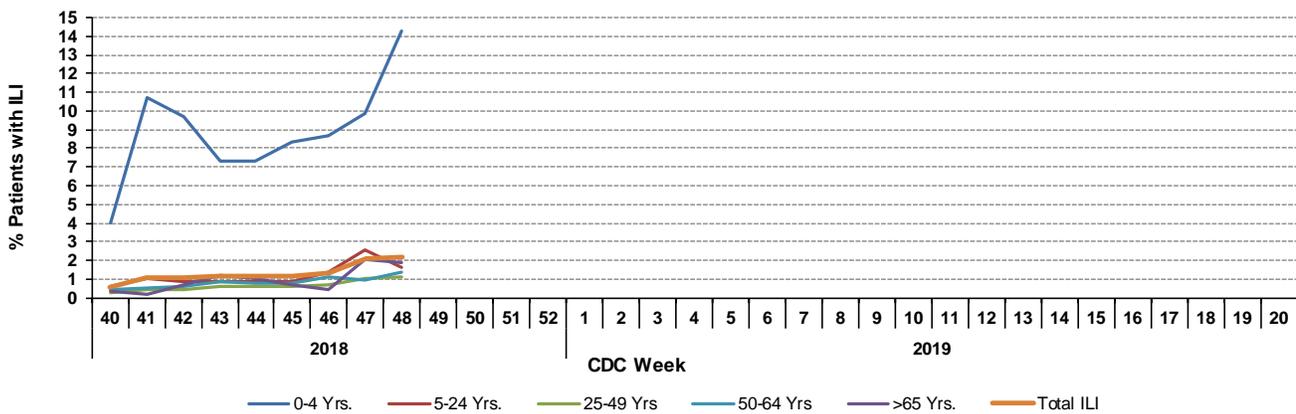
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, December 5, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

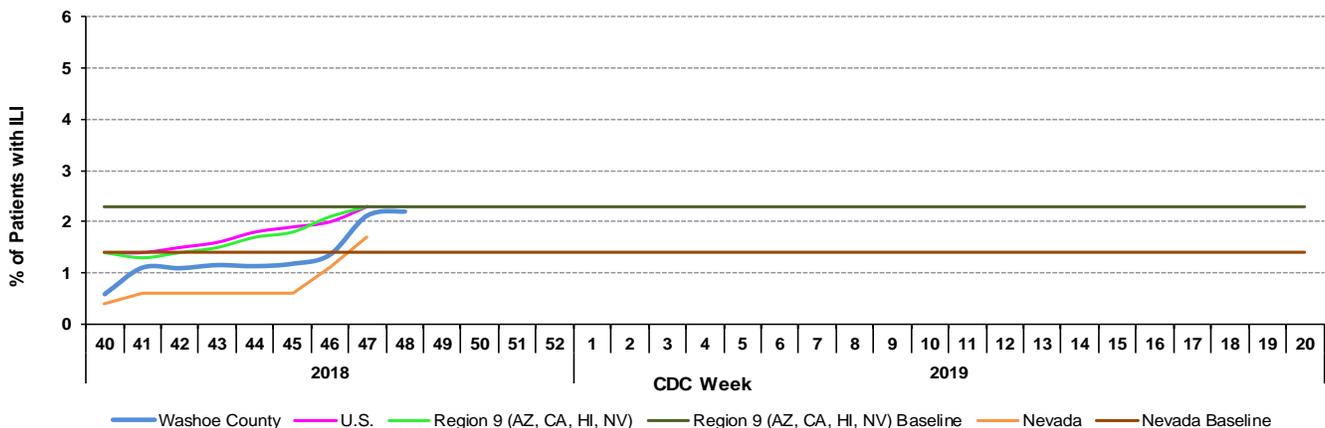
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 156 patients with influenza-like-illness (ILI) for the week ending December 1, 2018 (week 48). The percentage of persons seen with ILI by the twelve providers was 2.2% (156/7085) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (14.3%) and lowest among 25-49 years (1.1%). During week 47, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.7%. Nationwide during week 47 the percentage of visits to sentinel providers due to ILI was 2.3% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.0% to 3.5%. Five of the ten regions (Regions 2, 4, 7, 8 and 9) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

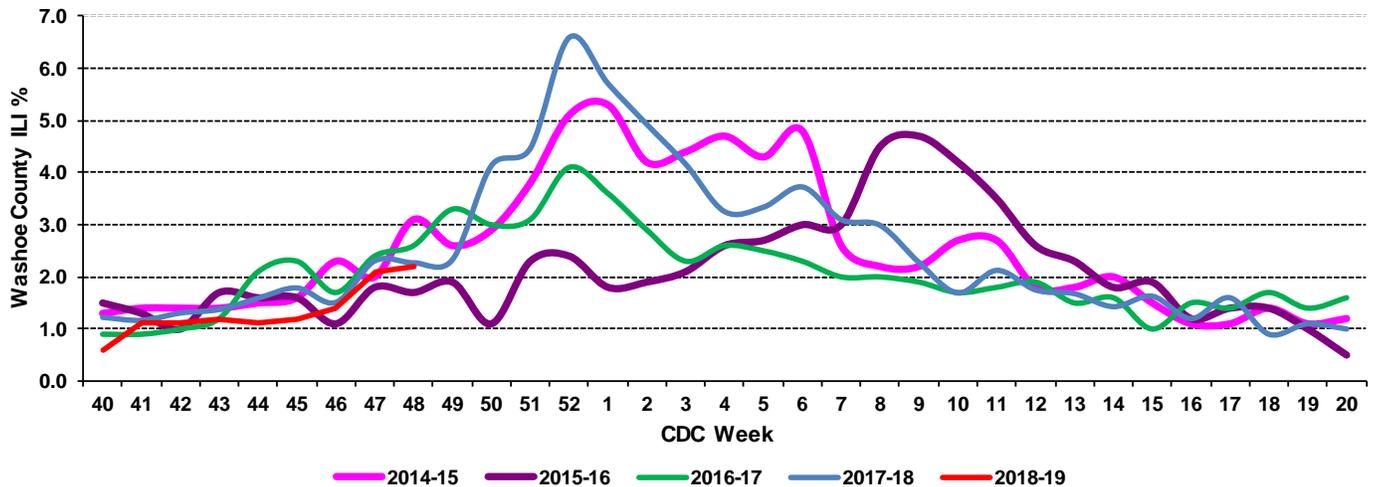


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



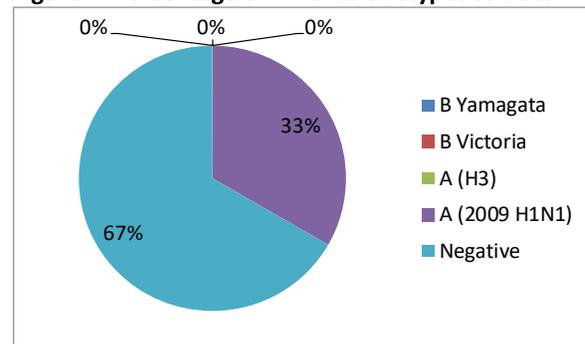
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	1	33%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	67%
Total (All Subtypes)	3	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

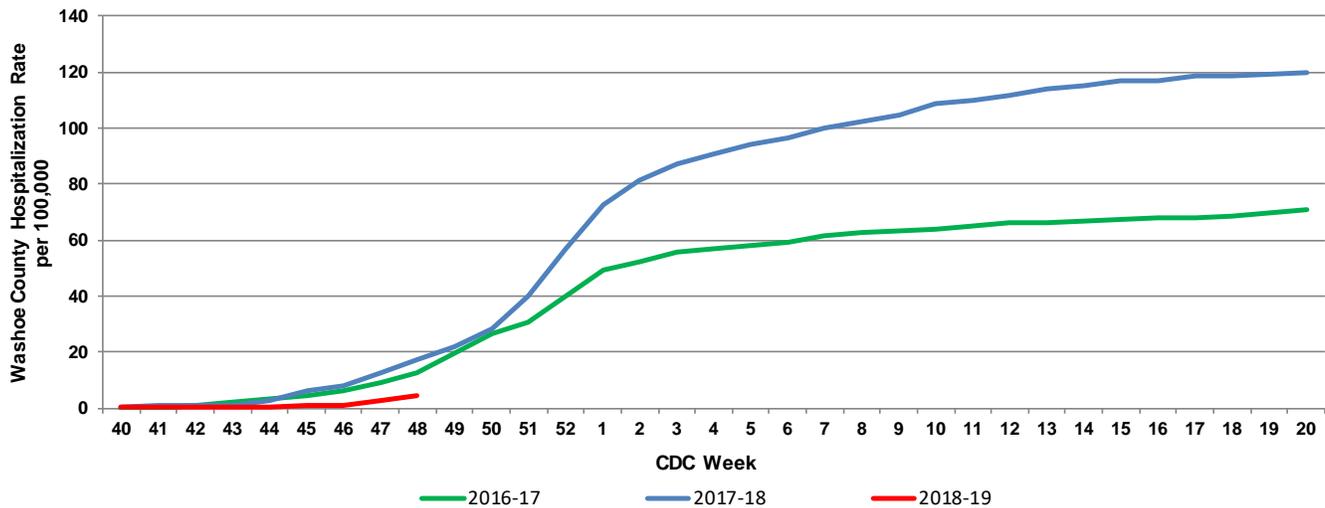
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 48) November 25 - December 1, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - December 1, 2018							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	10	N/A	2	20.0	1	10.0	0	0.0	21	N/A	4	19.0	5	23.8	0	0.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (not subtyped)	9	90.0	2	100.0	1	100.0	0	#DIV/0!	17	81.0	3	75.0	5	100.0	0	#DIV/0!
Influenza A (RIDT*)	1	10.0	0	0.0	0	0.0	0	#DIV/0!	4	19.0	1	25.0	0	0.0	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

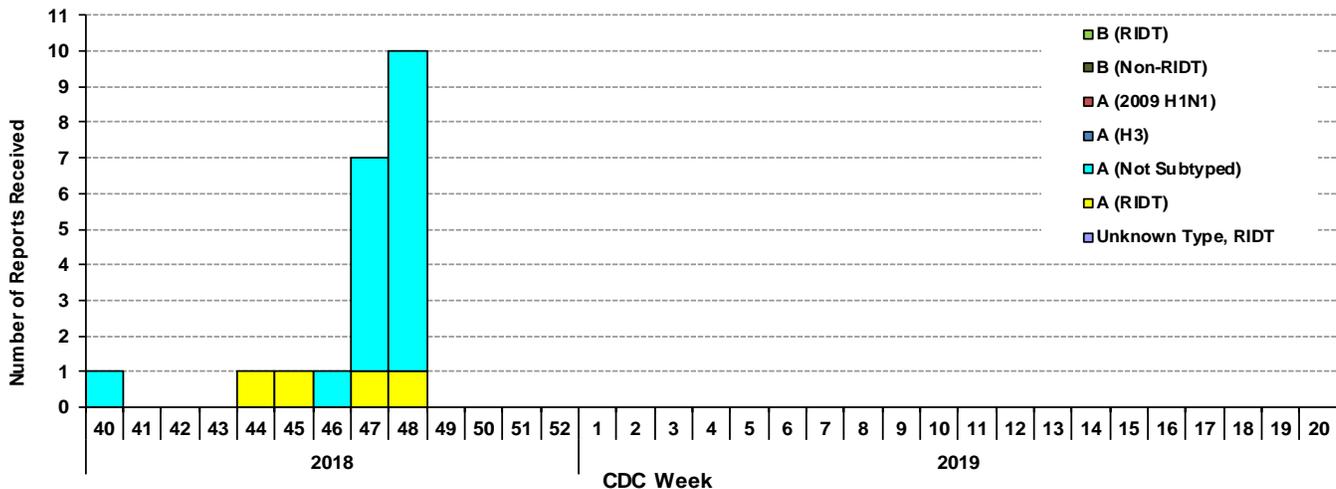
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

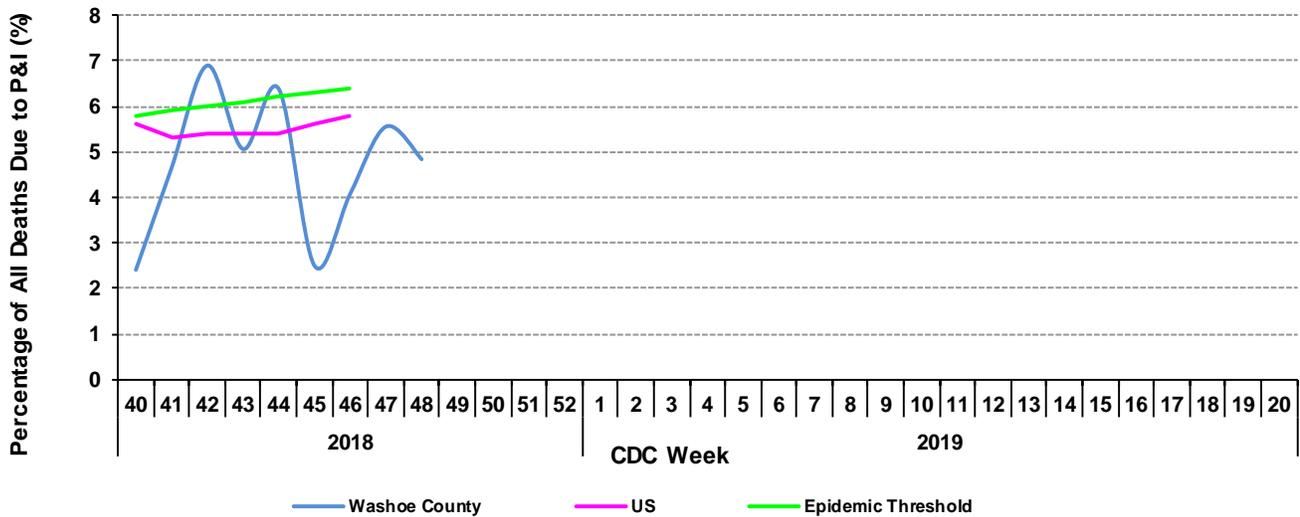
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 48 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 48 was 124. This reflects a P&I ratio of 4.8%. Nationally 5.8% of the deaths occurring during Week 46 were due to P&I. This was below the Week 46 epidemic threshold of 6.4%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 39. This reflects an overall P&I ratio of 4.8% (39/821).

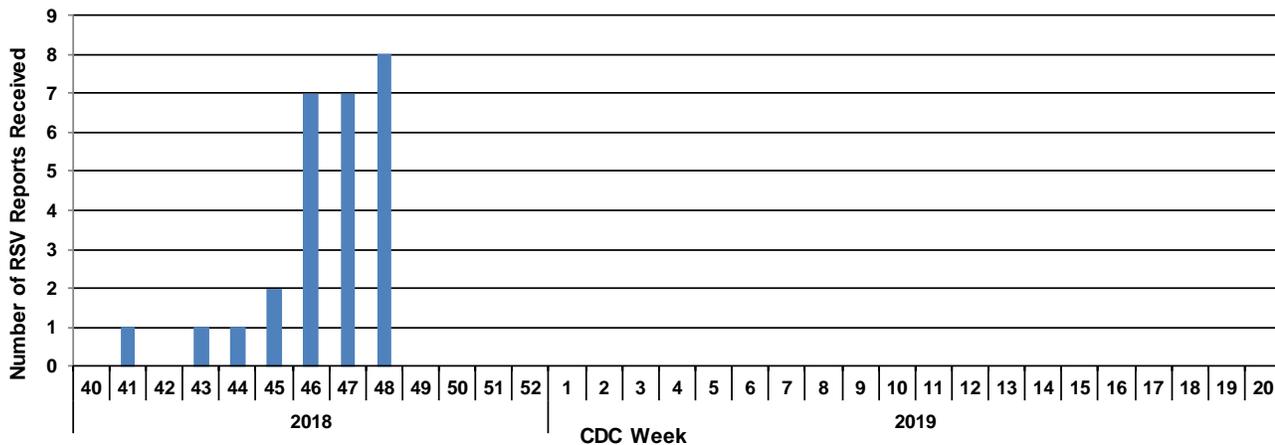
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019



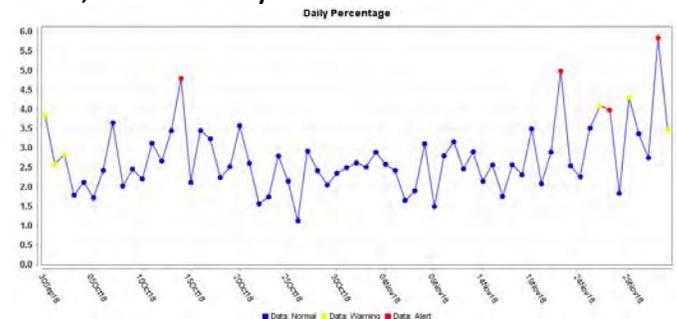
**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms.

(Data source: ESSENCE)

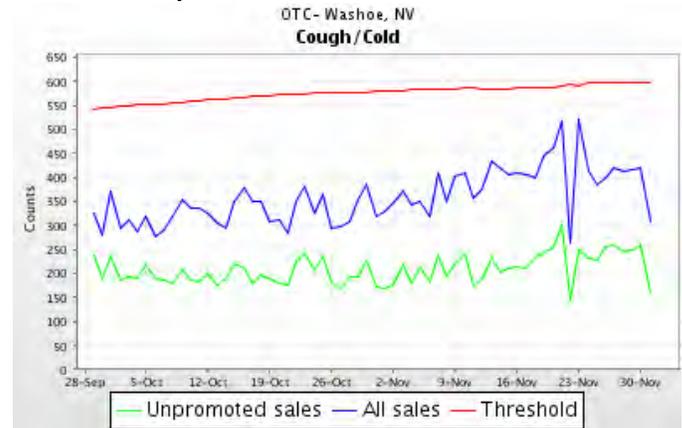
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

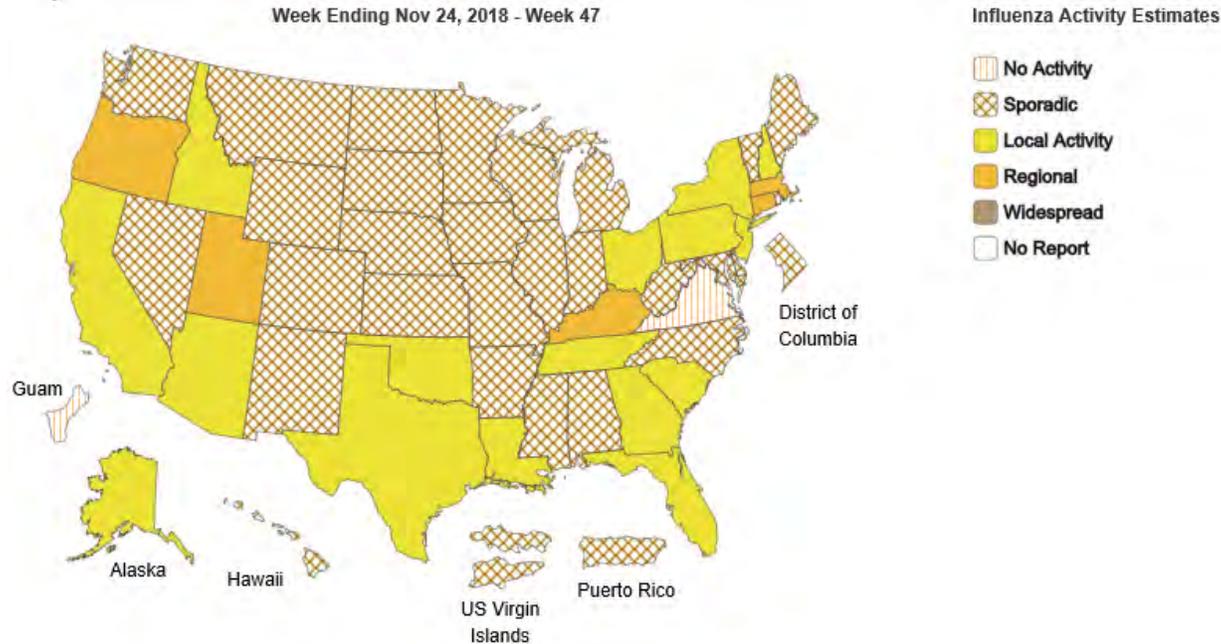


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 47, the following influenza activity was reported:

- Regional influenza activity was reported by five states (Connecticut, Kentucky, Massachusetts, Oregon, and Utah).
- Local influenza activity was reported by 16 states (Alaska, Arizona, California, Florida, Georgia, Idaho, Louisiana, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, and Texas).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 28 states (Alabama, Arkansas, Colorado, Delaware, Hawaii, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Rhode Island, South Dakota, Vermont, Washington, West Virginia, Wisconsin, and Wyoming).
- No influenza activity was reported by Guam and one state (Virginia).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

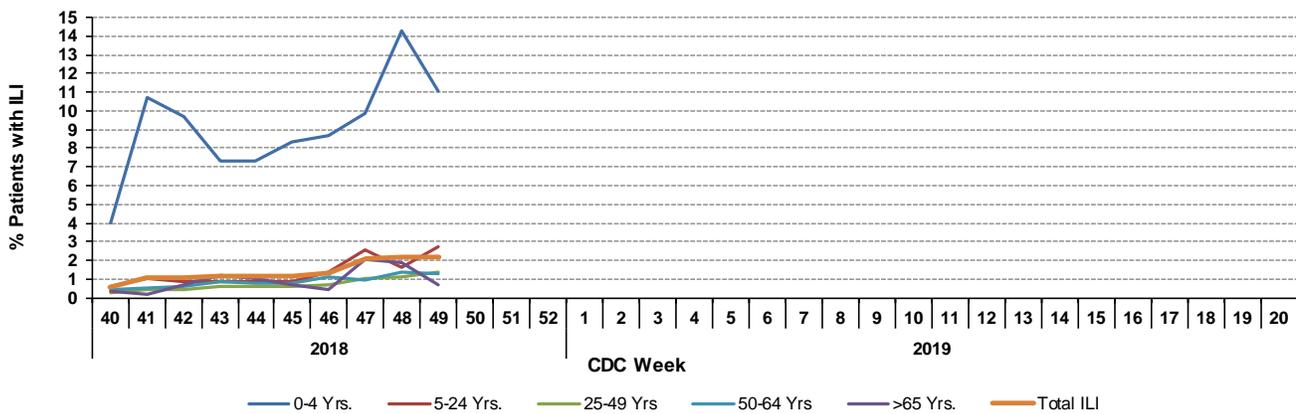
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, December 12, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

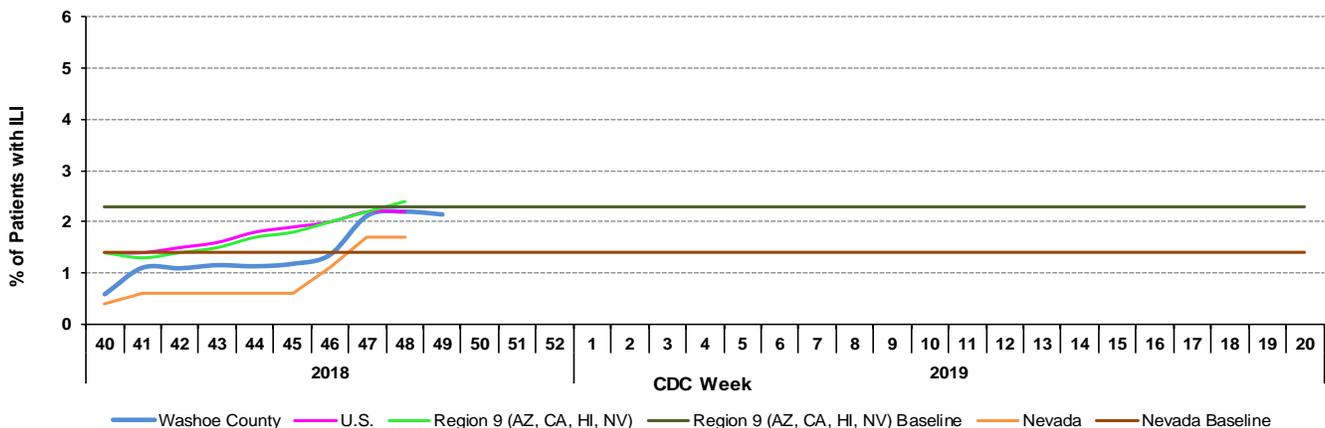
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 143 patients with influenza-like-illness (ILI) for the week ending December 8, 2018 (week 49). The percentage of persons seen with ILI by the twelve providers was 2.1% (143/6661) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (11.1%) and lowest among  $\geq 65$  years (0.7%). During week 48, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.7%. Nationwide during week 48 the percentage of visits to sentinel providers due to ILI was 2.2% which is at the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.8% to 3.2%. Four of the ten regions (Regions 4, 7, 8 and 9) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

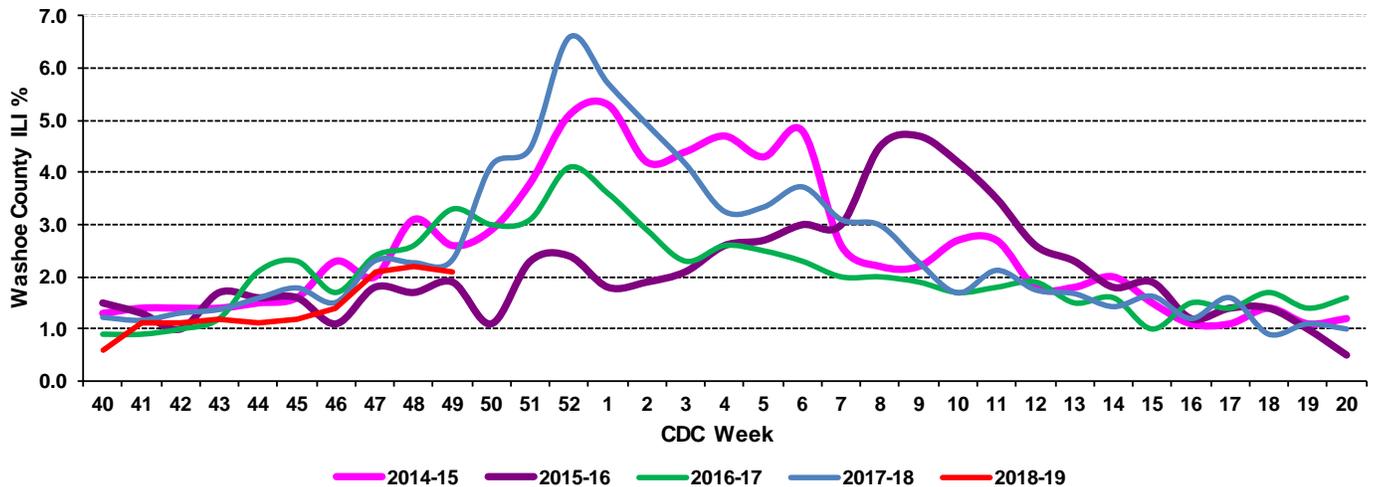


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



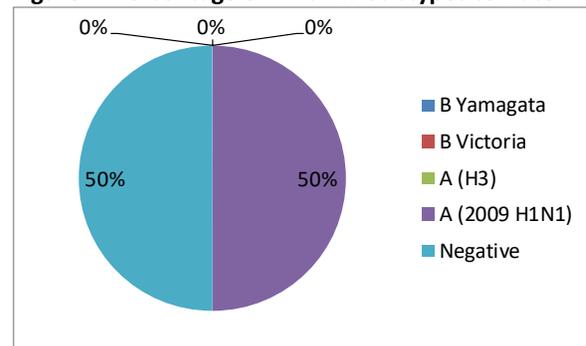
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	2	50%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	50%
Total (All Subtypes)	4	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

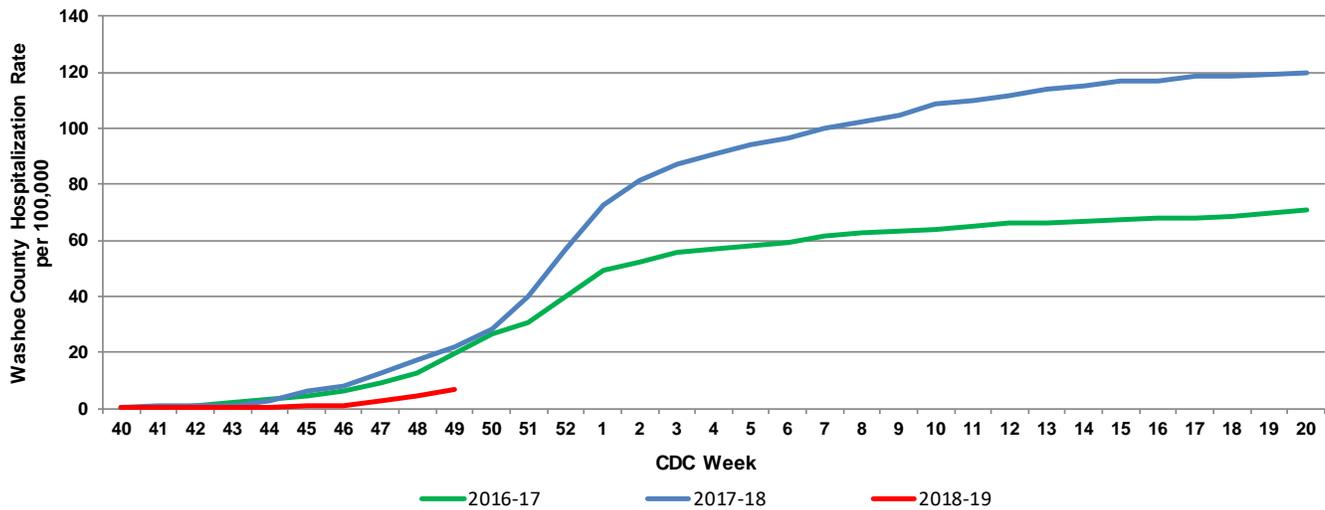
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 49) December 2 - December 8, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - December 8, 2018							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	11	N/A	4	36.4	2	18.2	0	0.0	32	N/A	8	25.0	7	21.9	0	0.0
Influenza A (2009 H1N1)	1	9.1	0	0.0	0	0.0	0	#DIV/0!	1	3.1	0	0.0	0	0.0	0	#DIV/0!
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza A (not subtyped)	9	81.8	4	100.0	2	100.0	0	#DIV/0!	26	81.3	7	87.5	7	100.0	0	#DIV/0!
Influenza A (RIDT*)	1	9.1	0	0.0	0	0.0	0	#DIV/0!	5	15.6	1	12.5	0	0.0	0	#DIV/0!
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	#DIV/0!

\*RIDT: \*Rapid Influenza Diagnostic Test

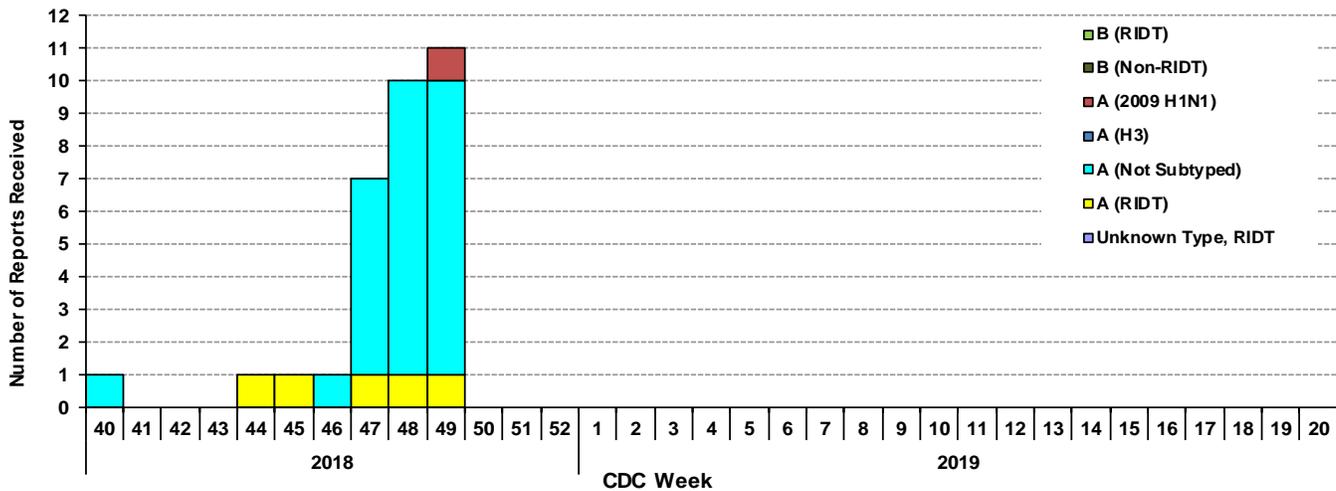
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

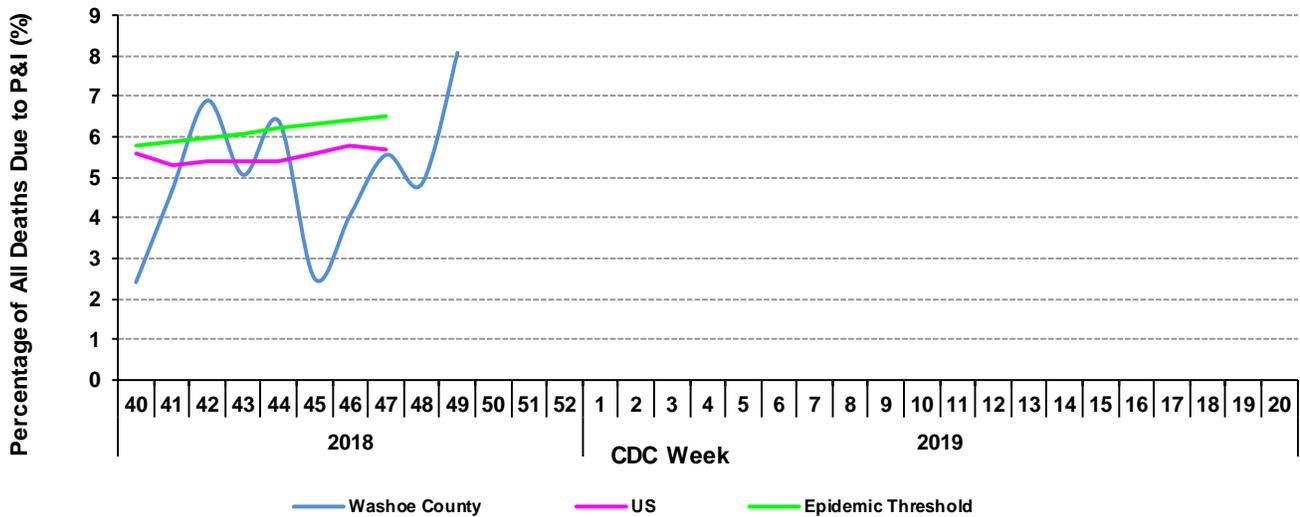
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date zero (0) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Eight death certificates were received for week 49 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 49 was 99. This reflects a P&I ratio of 8.1%. Nationally 5.7% of the deaths occurring during Week 47 were due to P&I. This was below the Week 47 epidemic threshold of 6.5%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 47. This reflects an overall P&I ratio of 5.1% (47/920).

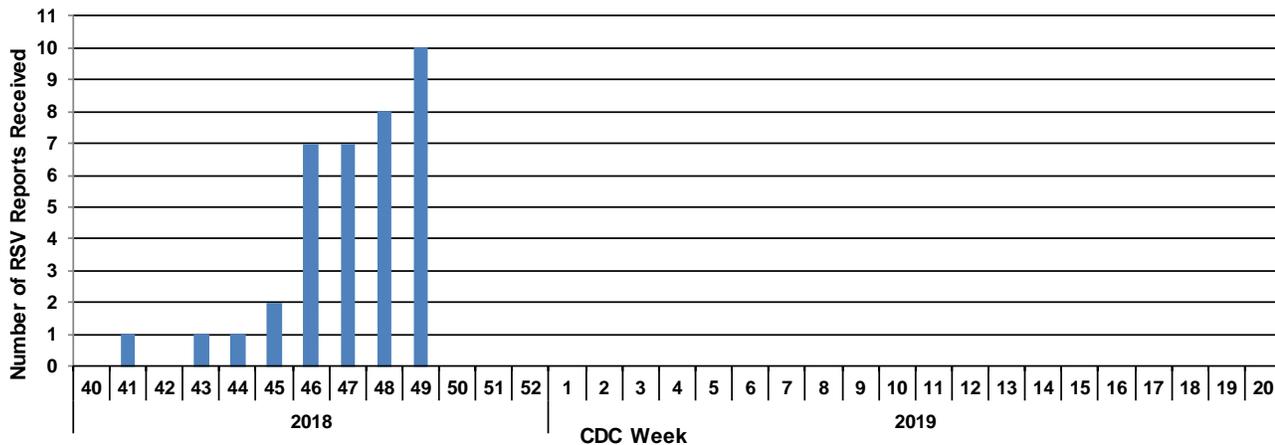
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

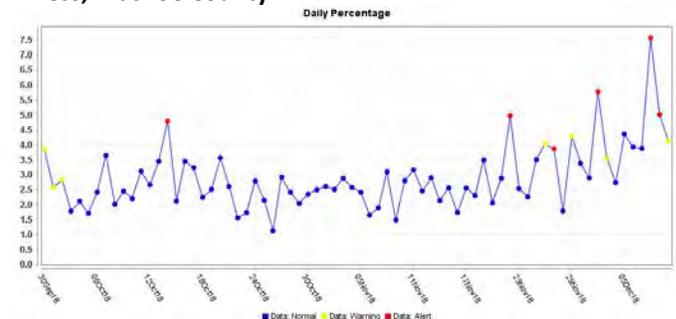


**Syndromic Surveillance**

*Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits*

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

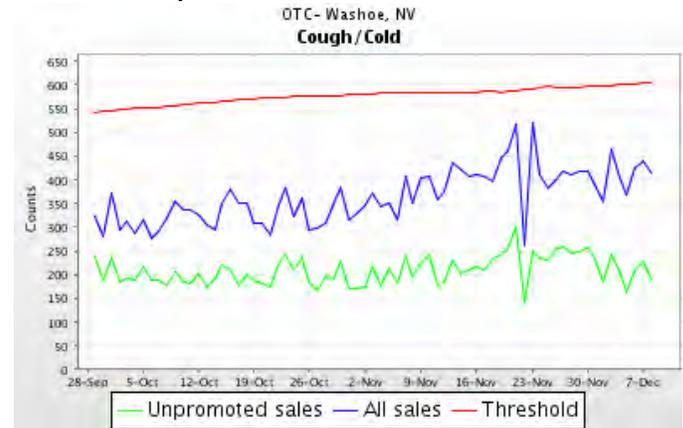
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 48, the following influenza activity was reported:

- Widespread influenza activity was reported by one state (Massachusetts).
- Regional influenza activity was reported by nine states (California, Connecticut, Georgia, Kentucky, Louisiana, Nevada, New York, Oregon, and Vermont).
- Local influenza activity was reported by 18 states (Arizona, Colorado, Delaware, Florida, Idaho, Illinois, Michigan, Montana, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah, and West Virginia).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 22 states (Alabama, Alaska, Arkansas, Hawaii, Indiana, Iowa, Kansas, Maine, Maryland, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Dakota, Rhode Island, South Dakota, Tennessee, Virginia, Washington, Wisconsin, and Wyoming).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**

Week Ending Dec 01, 2018 - Week 48



**Washoe County Influenza Resources**

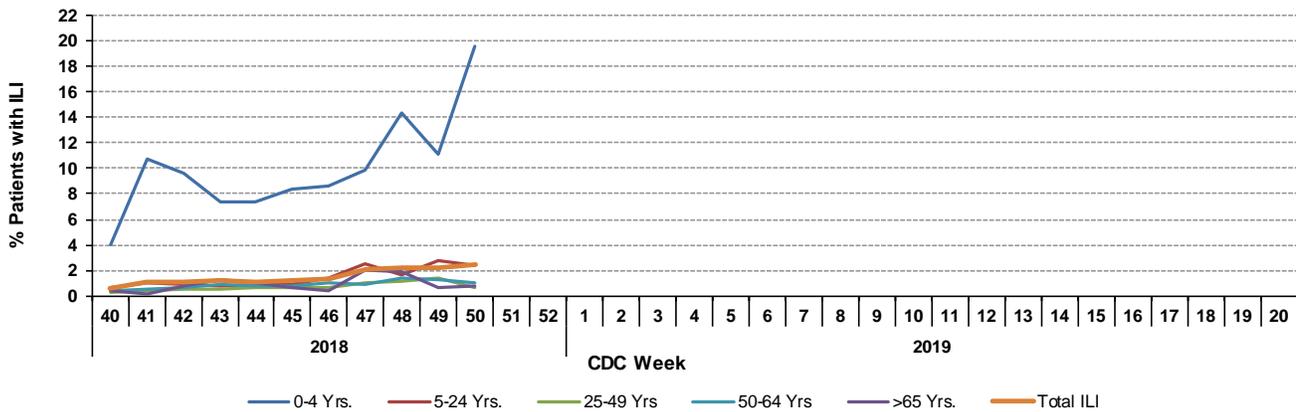
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, December 19, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

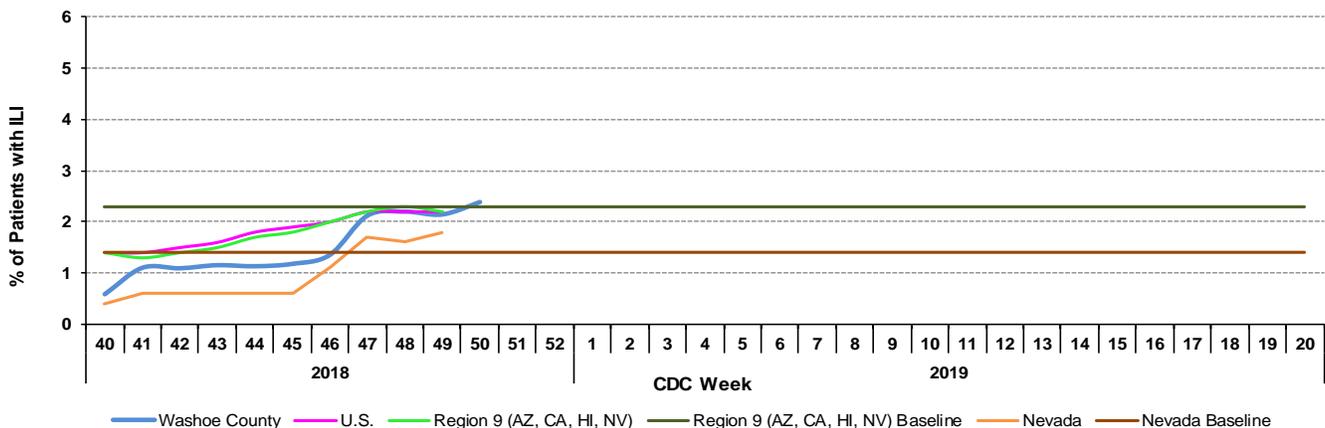
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Eleven of the twelve participating providers in Washoe County reported a total of 153 patients with influenza-like-illness (ILI) for the week ending December 15, 2018 (week 50). The percentage of persons seen with ILI by the eleven providers was 2.4% (153/6404) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (19.6%) and lowest among 25-49 years (0.7%). During week 49, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.8%. Nationwide during week 49 the percentage of visits to sentinel providers due to ILI was 2.2% which is at the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.0% to 3.4%. Five of the ten regions (Regions 1, 2, 4, 7, and 8) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

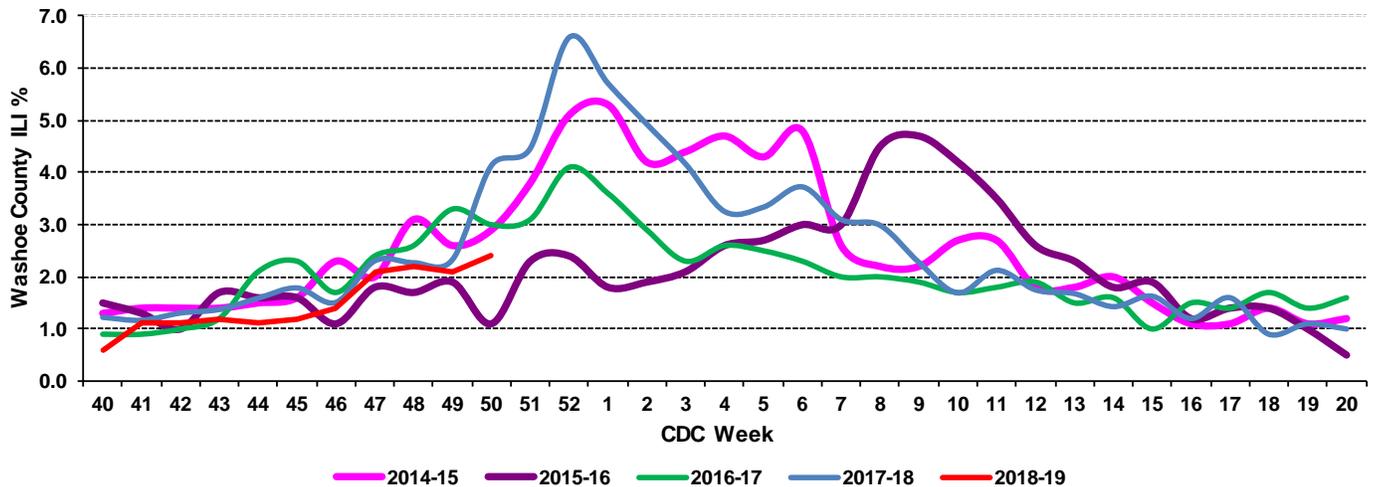


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



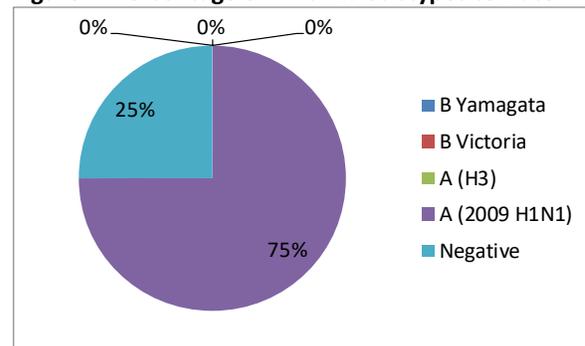
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	6	75%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	2	25%
Total (All Subtypes)	8	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

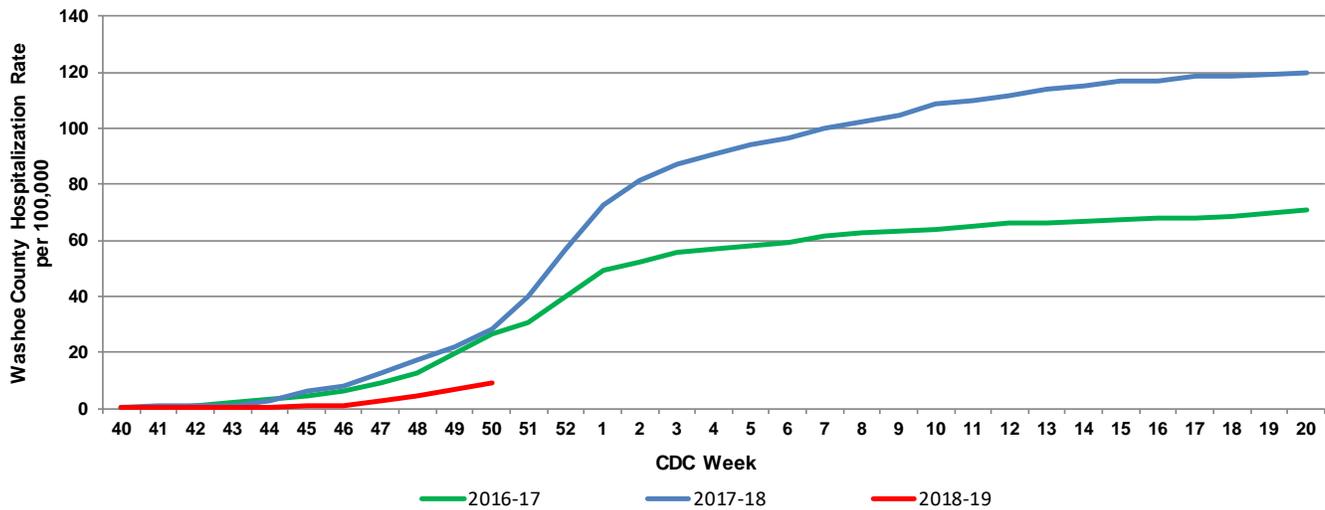
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 50) December 9 - December 15, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - December 15, 2018							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	10	N/A	2	20.0	1	10.0	0	0.0	42	N/A	10	23.8	8	19.0	1	2.4
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	2.4	0	0.0	0	0.0	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	9	90.0	2	100.0	1	100.0	0	#DIV/0!	35	83.3	9	90.0	8	100.0	1	100.0
Influenza A (RIDT*)	1	10.0	0	0.0	0	0.0	0	#DIV/0!	6	14.3	1	10.0	0	0.0	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

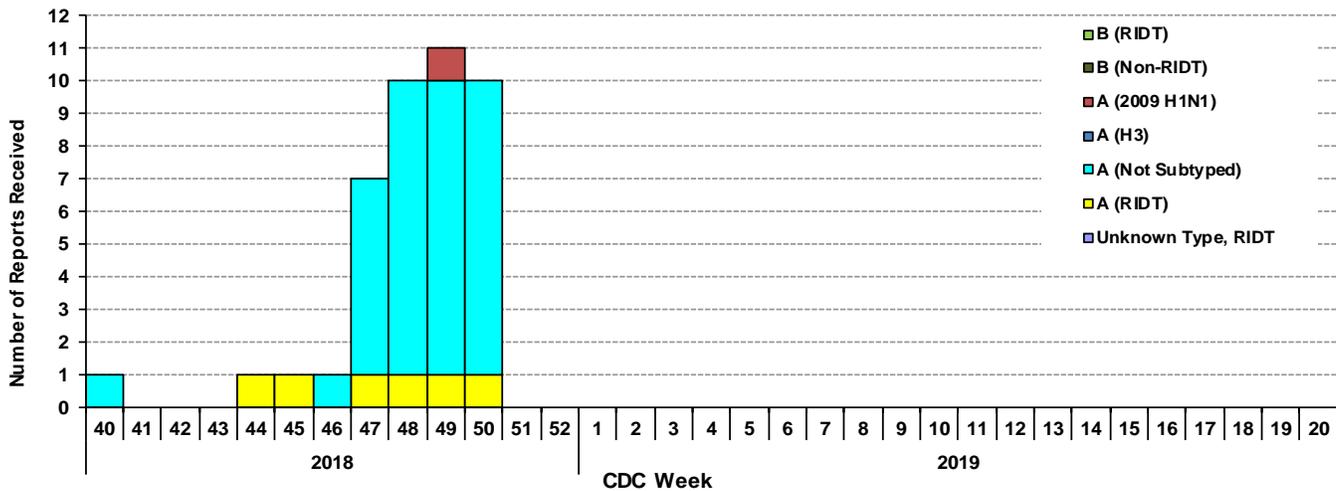
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

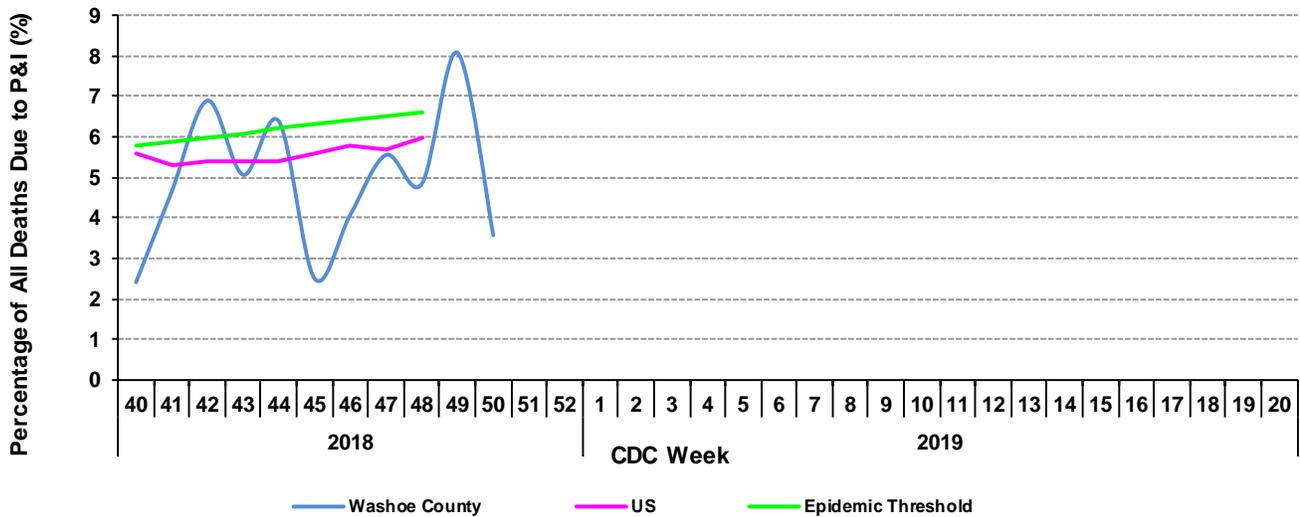
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date one (1) influenza-associated death has been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 50 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 50 was 112. This reflects a P&I ratio of 3.6%. Nationally 6.0% of the deaths occurring during Week 48 were due to P&I. This was below the Week 48 epidemic threshold of 6.6%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 51. This reflects an overall P&I ratio of 4.9% (51/1032).

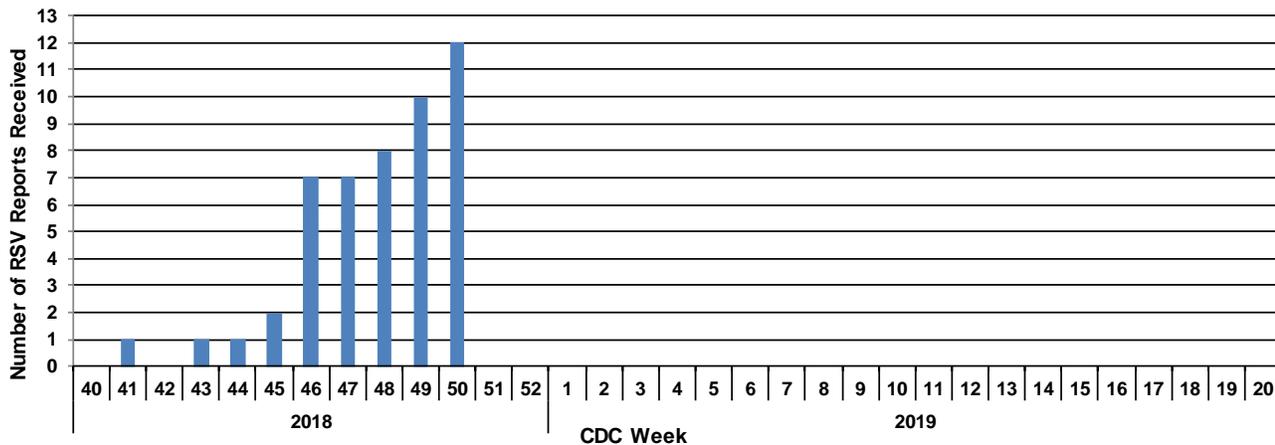
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

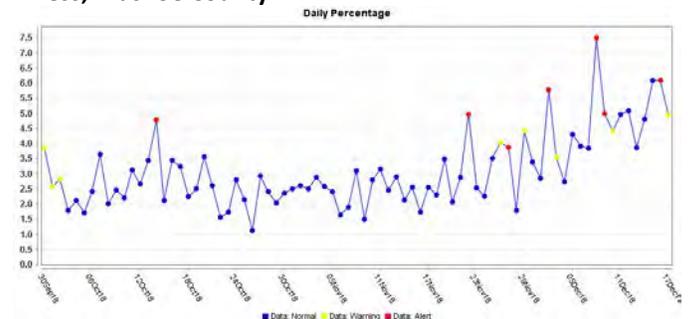


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

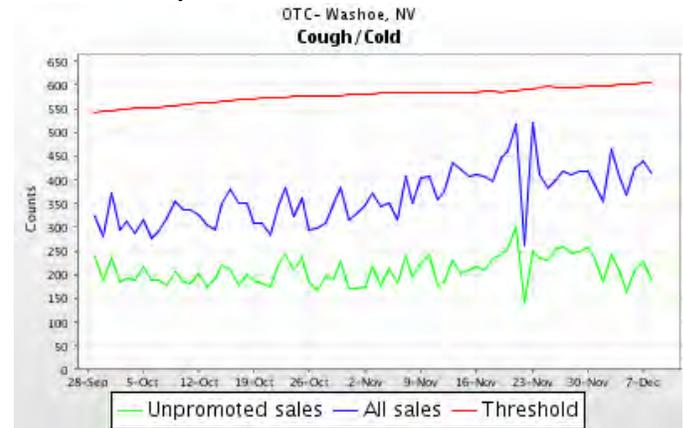
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

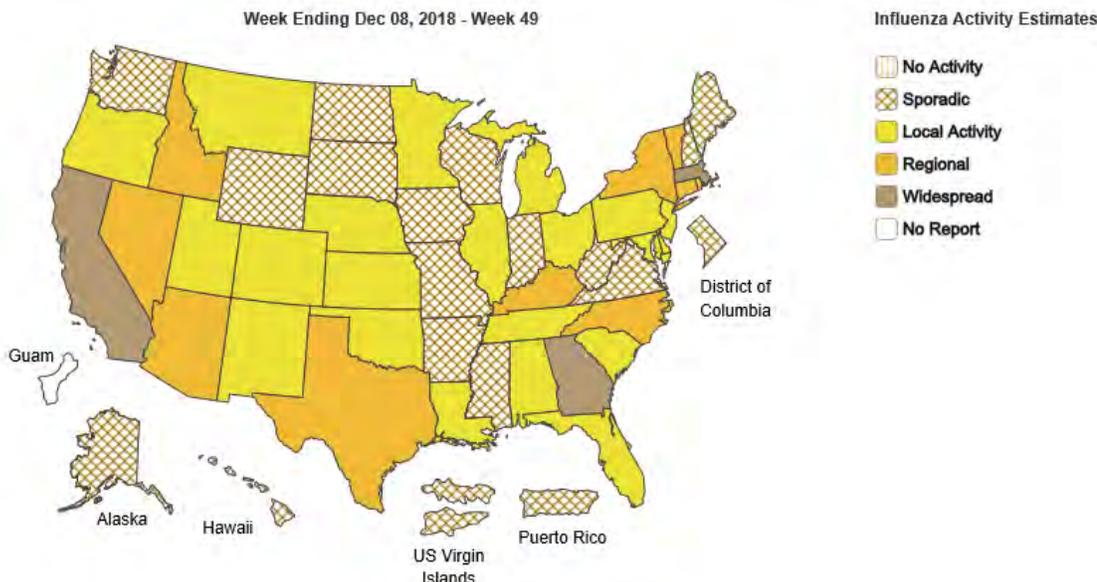


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 49, the following influenza activity was reported:

- Widespread influenza activity was reported by three states (California, Georgia, and Massachusetts).
- Regional influenza activity was reported by 10 states (Arizona, Connecticut, Idaho, Kentucky, Nevada, New York, North Carolina, Rhode Island, Texas, and Vermont).
- Local influenza activity was reported by 21 states (Alabama, Colorado, Delaware, Florida, Illinois, Kansas, Louisiana, Maryland, Michigan, Minnesota, Montana, Nebraska, New Jersey, New Mexico, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, and Utah).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 16 states (Alaska, Arkansas, Hawaii, Indiana, Iowa, Maine, Mississippi, Missouri, New Hampshire, North Dakota, South Dakota, Virginia, Washington, West Virginia, Wisconsin, and Wyoming).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

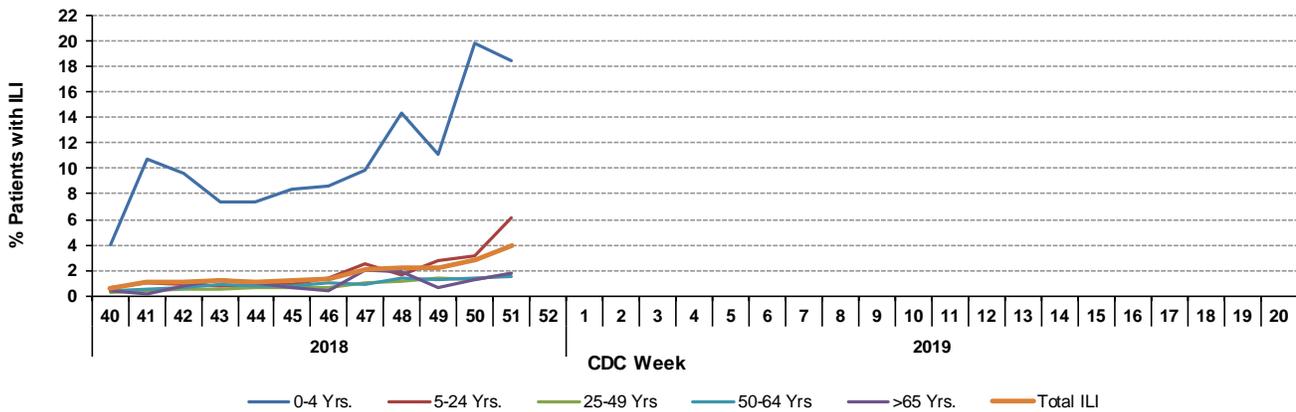
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, December 26, 2018  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

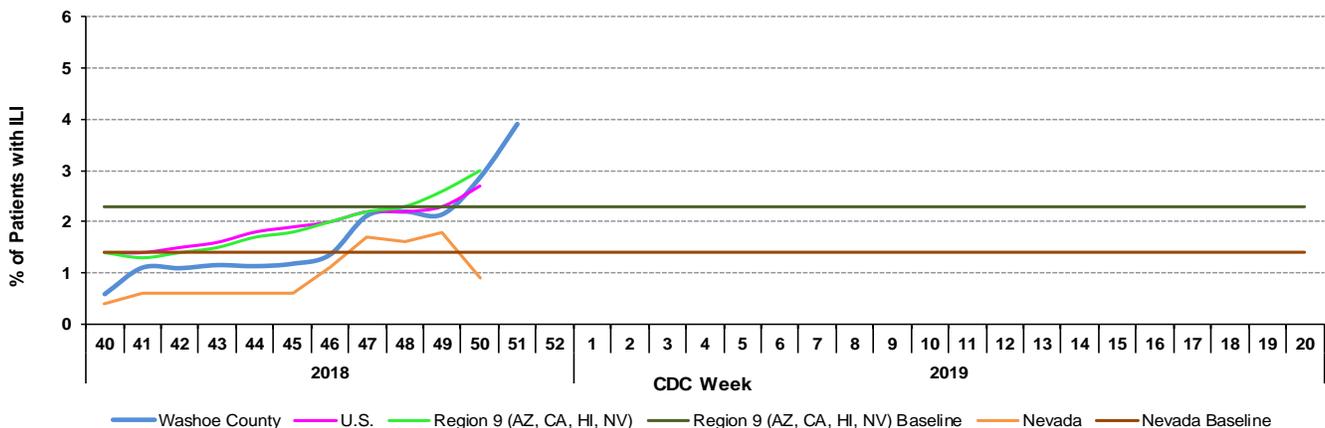
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Eleven of the twelve participating providers in Washoe County reported a total of 243 patients with influenza-like-illness (ILI) for the week ending December 22, 2018 (week 51). The percentage of persons seen with ILI by the eleven providers was 3.9% (243/6212) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (18.4%) and lowest among 50-64 years (1.6%). During week 50, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.9%. Nationwide during week 50 the percentage of visits to sentinel providers due to ILI was 2.7% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.1% to 3.9%. Eight of the ten regions (Regions 1, 2, 3, 4, 7, 8, 9, and 10) reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

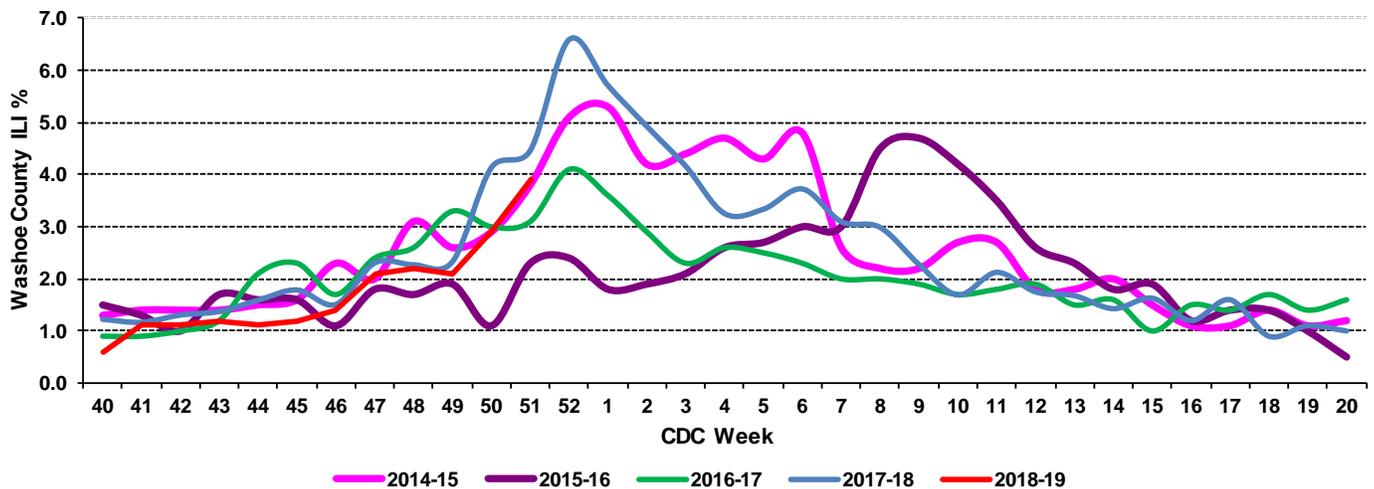


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



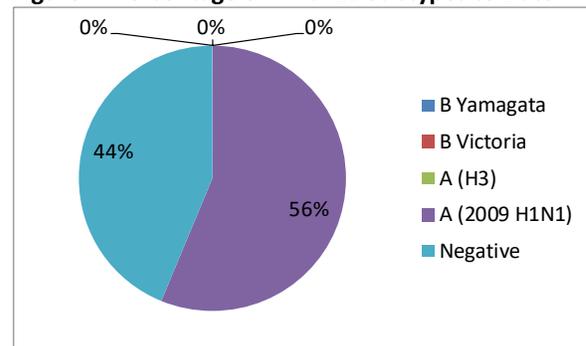
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	0	0
A (2009 H1N1)	9	56%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	7	44%
Total (All Subtypes)	16	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

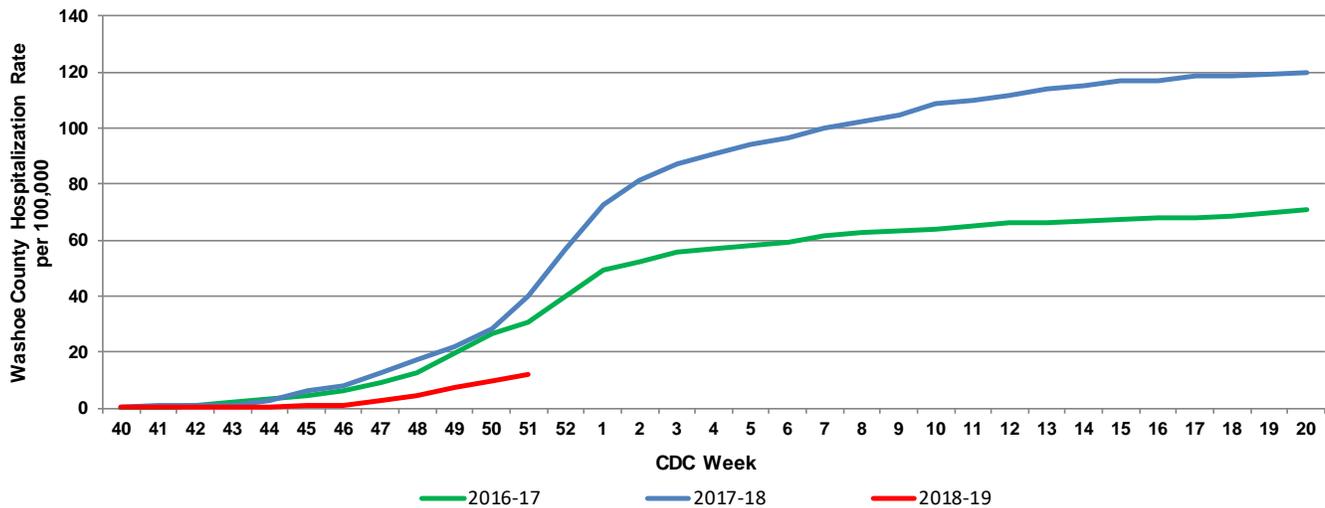
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 51) December 16 - December 22, 2018								Cumulative for 2018-2019 Influenza Season September 30, 2018 - December 22, 2018							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	11	N/A	4	36.4	1	9.1	0	0.0	55	N/A	14	25.5	11	20.0	1	1.8
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	2	3.6	0	0.0	1	9.1	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	9	81.8	4	100.0	1	100.0	0	#DIV/0!	44	80.0	13	92.9	10	90.9	1	100.0
Influenza A (RIDT*)	1	9.1	0	0.0	0	0.0	0	#DIV/0!	8	14.5	1	7.1	0	0.0	0	0.0
Influenza B (RIDT*)	1	9.1	0	0.0	0	0.0	0	#DIV/0!	1	1.8	0	0.0	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

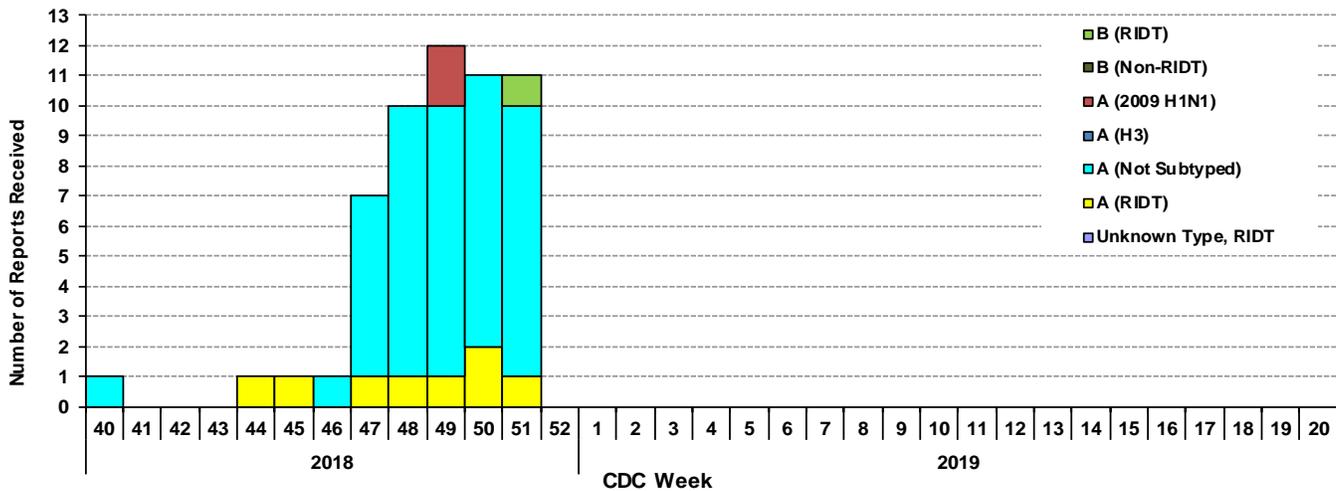
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

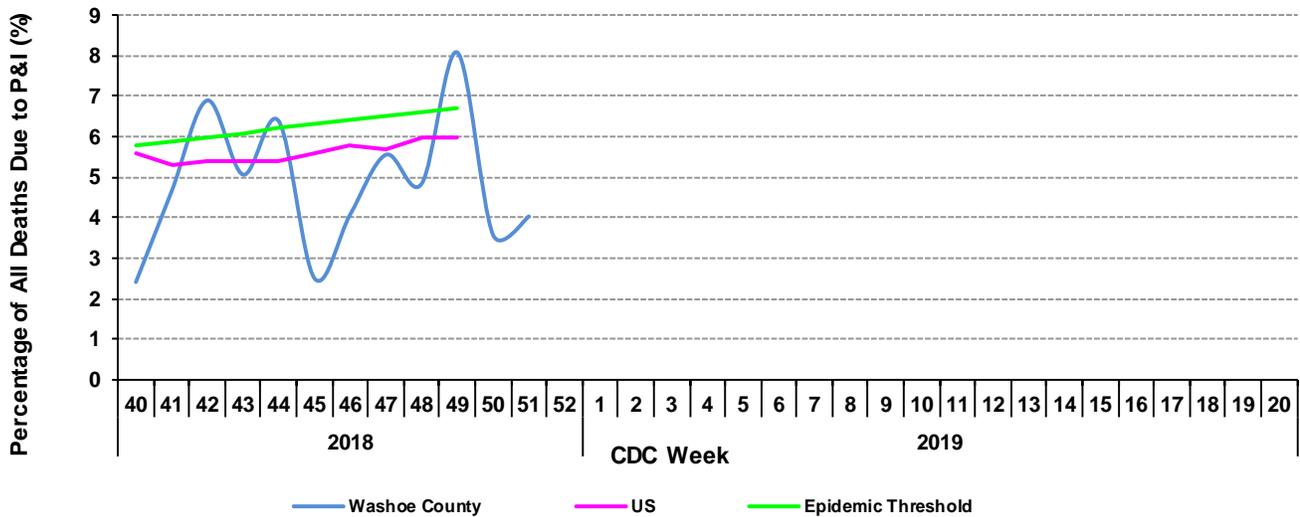
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date one (1) influenza-associated death has been reported.

**Pneumonia and Influenza (P&I) Mortality**

Five death certificates were received for week 51 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 51 was 124. This reflects a P&I ratio of 4.0%. Nationally 6.0% of the deaths occurring during Week 49 were due to P&I. This was below the Week 49 epidemic threshold of 6.7%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 56. This reflects an overall P&I ratio of 4.8% (56/1156).

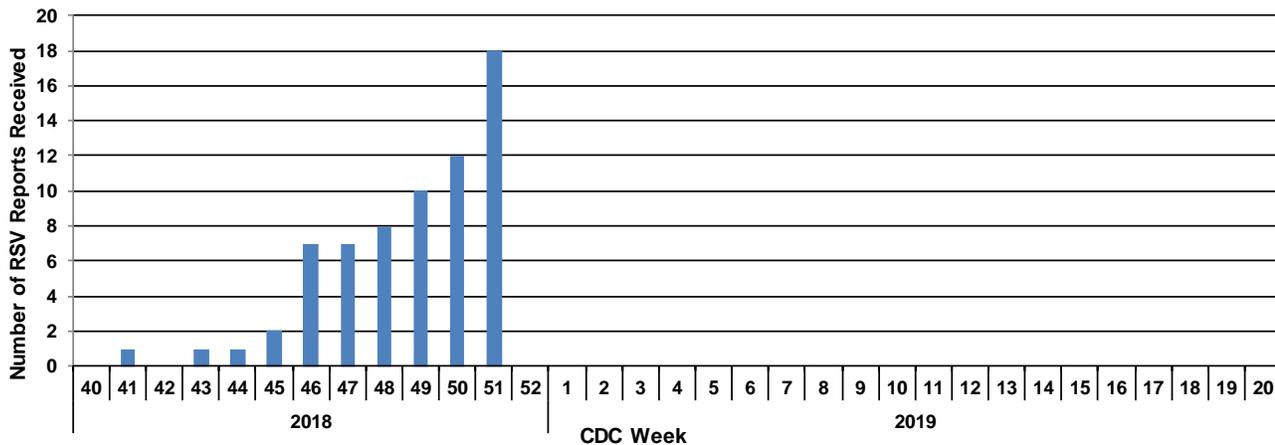
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

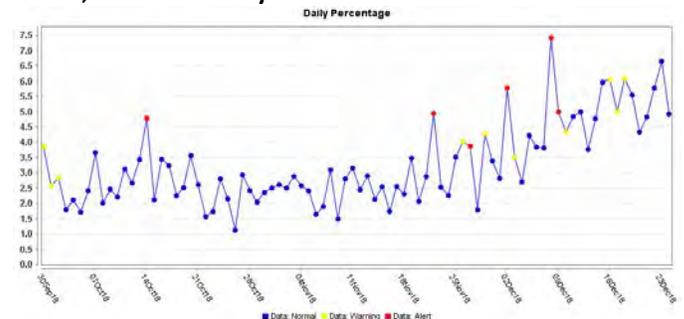


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

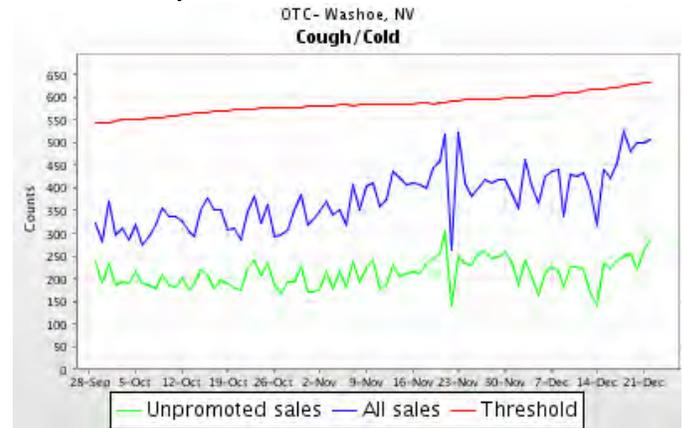
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 50, the following influenza activity was reported:

- Widespread influenza activity was reported by Guam and six states (Alabama, California, Delaware, Georgia, Massachusetts, and New York).
- Regional influenza activity was reported by 18 states (Arizona, Connecticut, Florida, Idaho, Kentucky, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, and Virginia).
- Local influenza activity was reported by 19 states (Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, North Dakota, Oklahoma, South Carolina, Tennessee, Utah, and Wyoming).
- Sporadic influenza activity was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and seven states (Alaska, Hawaii, Maine, South Dakota, Washington, West Virginia, and Wisconsin).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

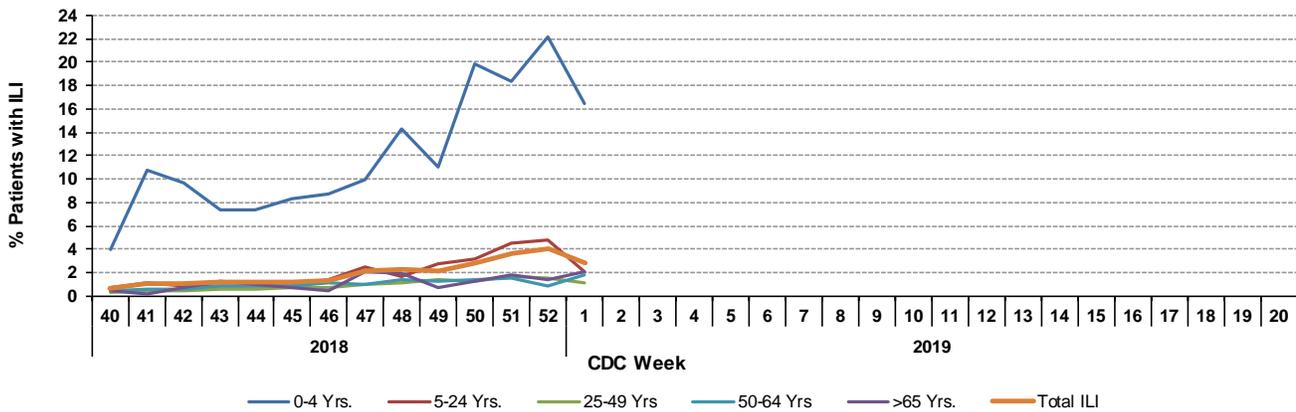
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, January 9, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

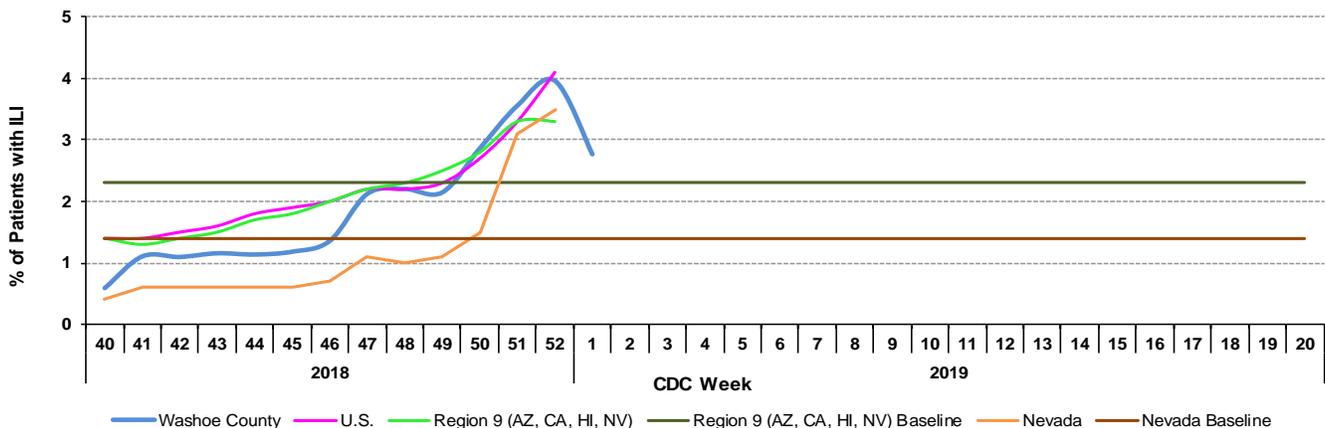
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 186 patients with influenza-like-illness (ILI) for the week ending January 5, 2019 (week 1). The percentage of persons seen with ILI by the twelve providers was 2.8% (186/6720) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (16.4%) and lowest among 25-49 years (1.1%). During week 52, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.5%. Nationwide during week 52 the percentage of visits to sentinel providers due to ILI was 4.1% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.7% to 6.1%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

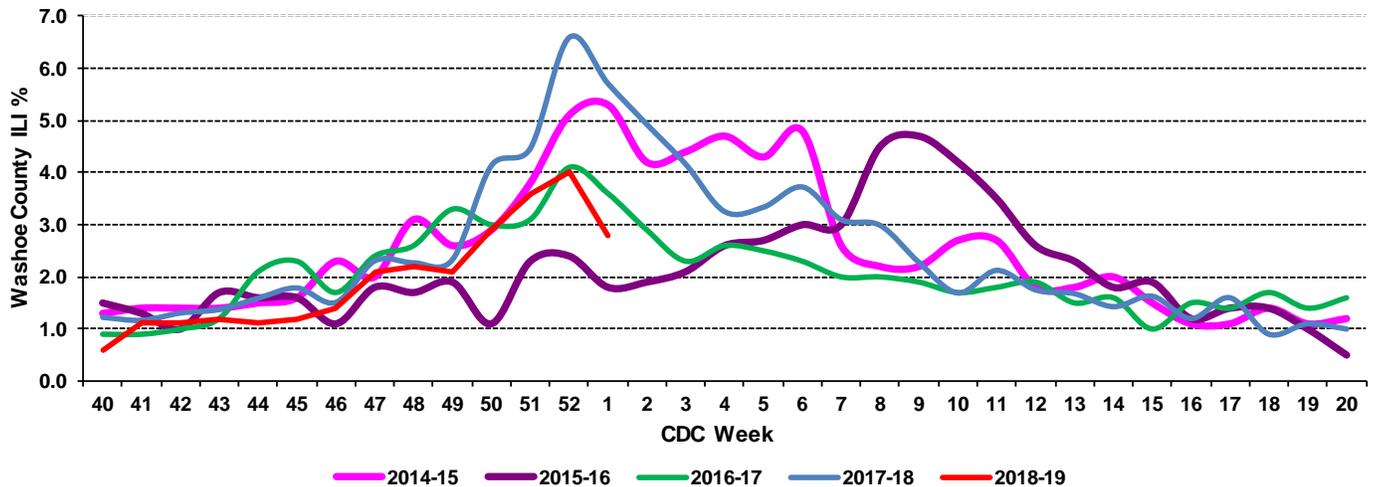


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



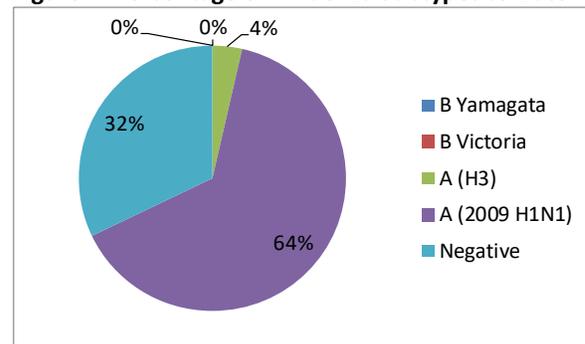
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3)	1	4%
A (2009 H1N1)	18	64%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	9	32%
Total (All Subtypes)	16	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

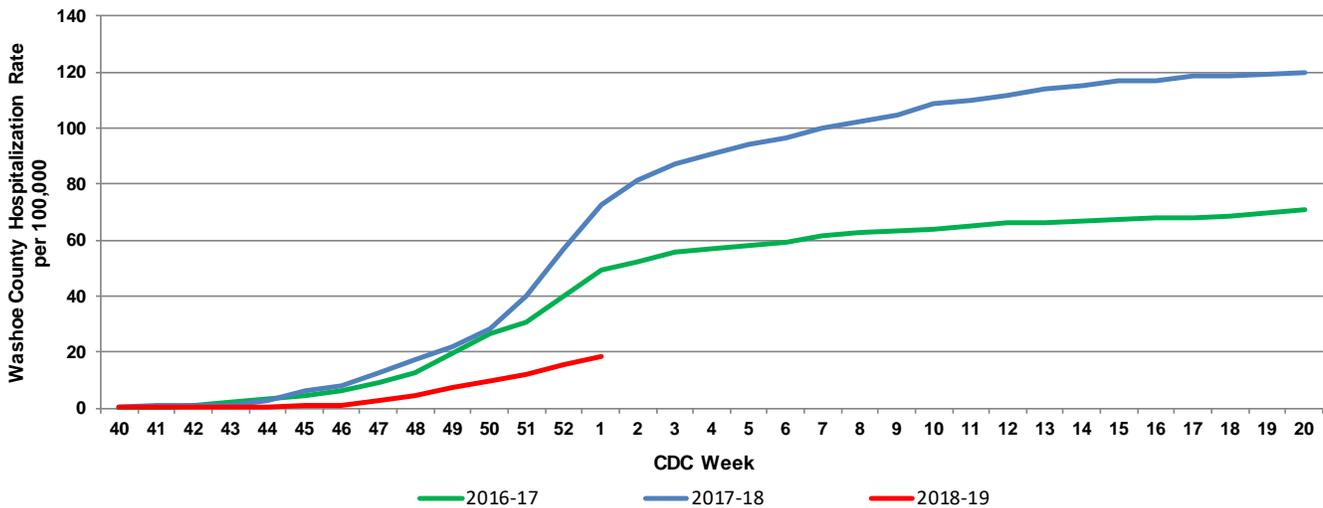
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 1) December 30, 2018 - January 5, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - January 5, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	12	N/A	3	25.0	1	8.3	0	0.0	84	N/A	19	22.6	14	16.7	1	1.2
Influenza A (2009 H1N1)	1	8.3	0	0.0	0	0.0	0	#DIV/0!	5	6.0	0	0.0	1	7.1	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	9	75.0	3	100.0	1	100.0	0	#DIV/0!	64	76.2	16	84.2	13	92.9	1	100.0
Influenza A (RIDT*)	2	16.7	0	0.0	0	0.0	0	#DIV/0!	13	15.5	2	10.5	0	0.0	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	2	2.4	1	5.3	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

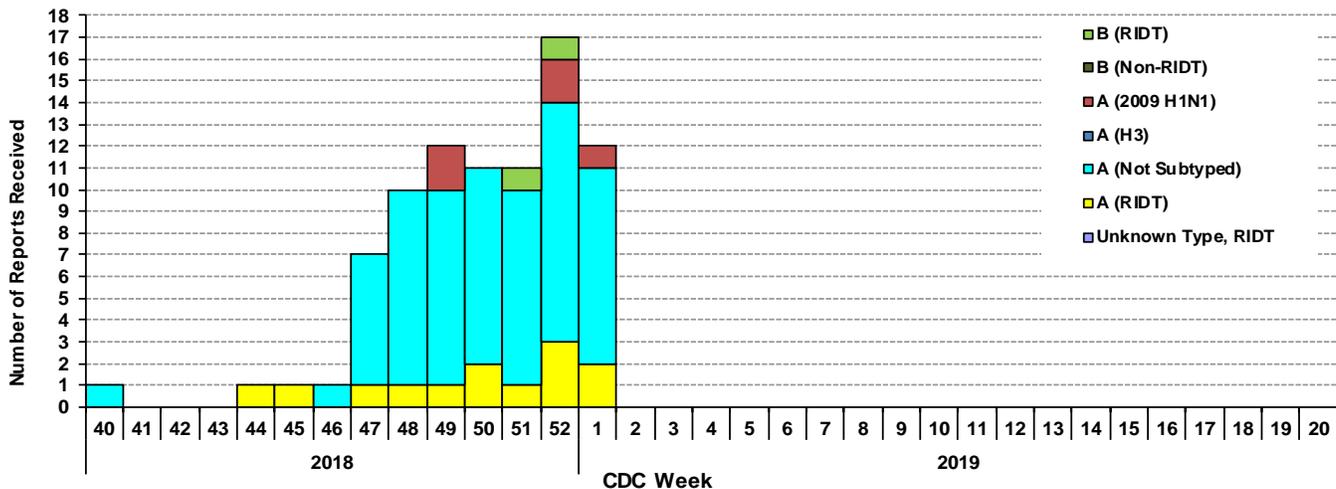
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

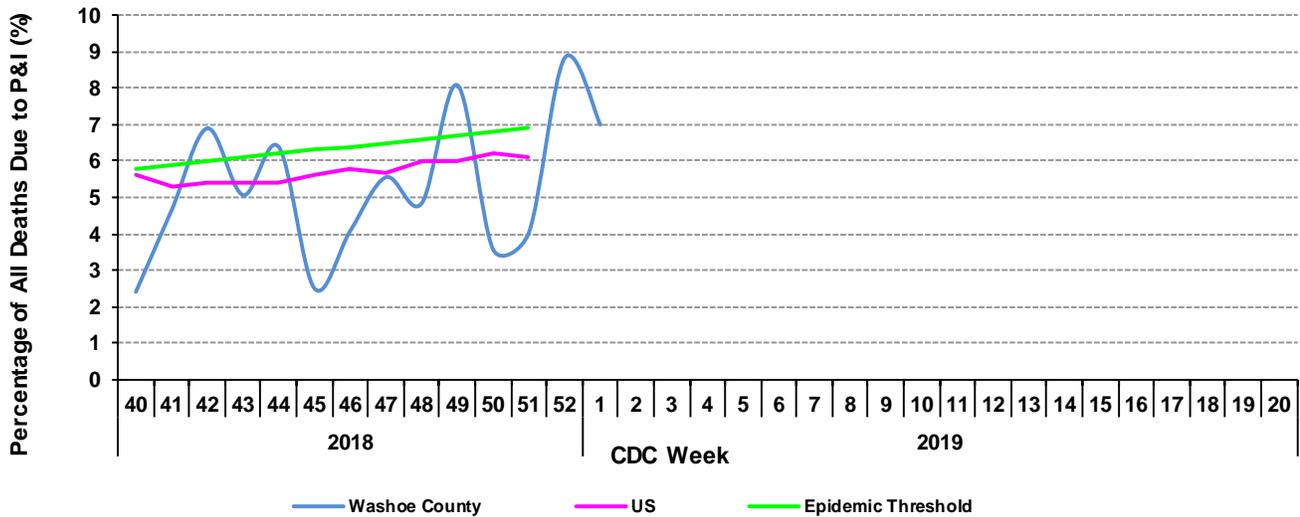
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date two (2) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Seven death certificates were received for week 1 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 1 was 100. This reflects a P&I ratio of 7.0%. Nationally 6.1% of the deaths occurring during Week 51 were due to P&I. This was below the Week 51 epidemic threshold of 6.9%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 69. This reflects an overall P&I ratio of 5.2% (69/1324).

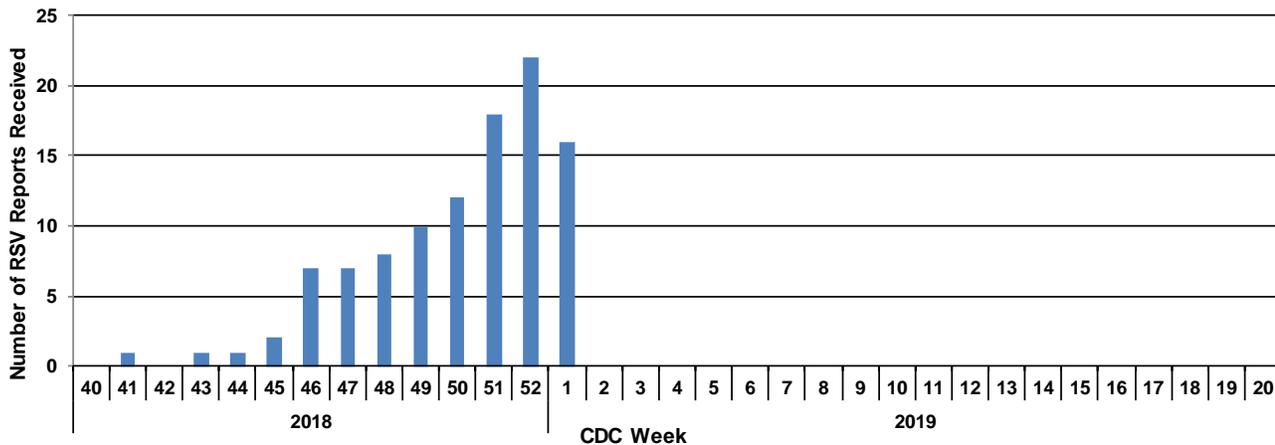
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

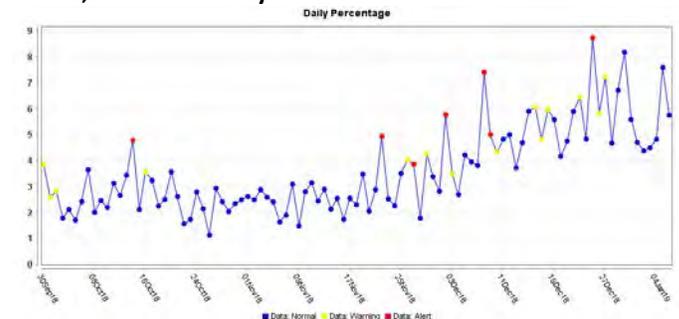


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

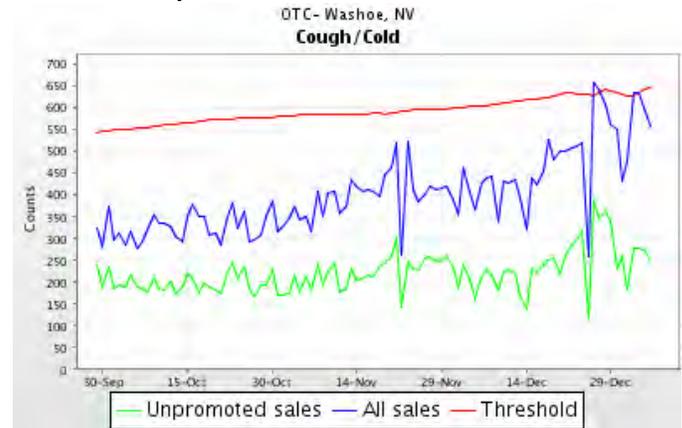
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

Figure 10. OTC sales for cough and/or cold remedies, Washoe County



Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

During week 52, the following influenza activity was reported:

- Widespread influenza activity was reported by 24 states (Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Massachusetts, Nebraska, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, and Virginia).
- Regional influenza activity was reported by Puerto Rico and 18 states (Arkansas, Illinois, Iowa, Kansas, Michigan, Missouri, Montana, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, West Virginia, and Wyoming).
- Local influenza activity was reported by six states (Maine, Maryland, Minnesota, Mississippi, Washington, and Wisconsin).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and two states (Alaska and Hawaii).
- Guam did not report.

Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:



Washoe County Influenza Resources

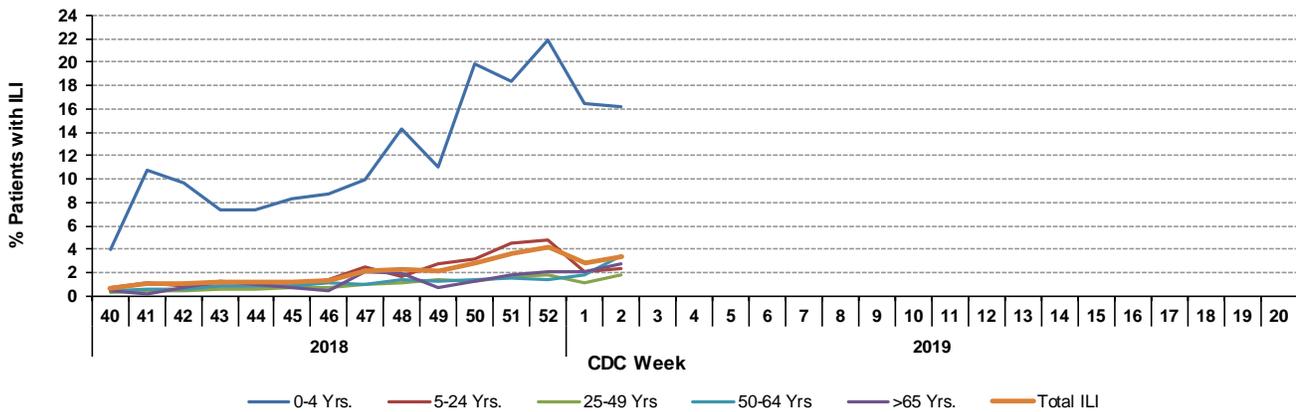
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, January 16, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

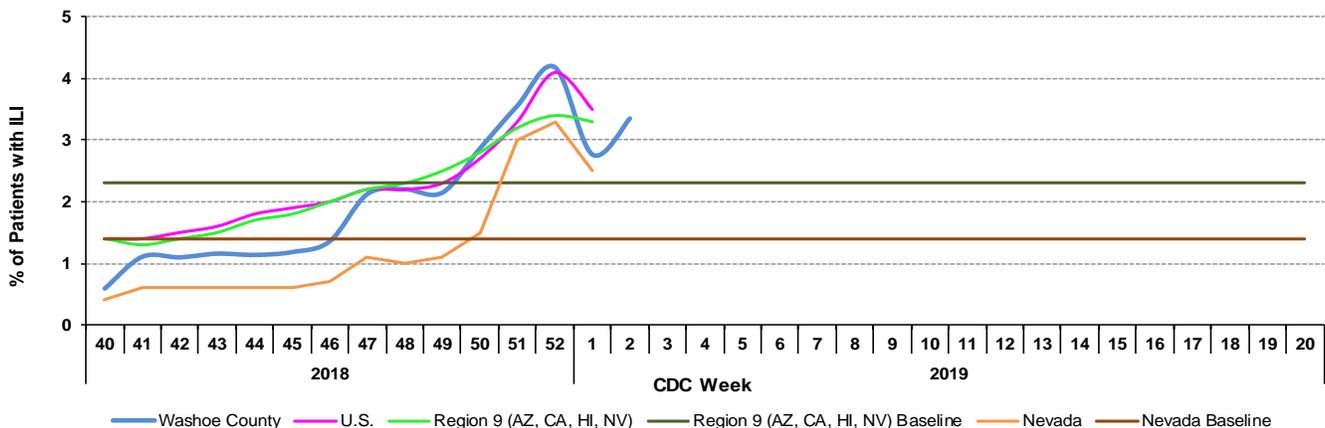
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 229 patients with influenza-like-illness (ILI) for the week ending January 12, 2019 (week 2). The percentage of persons seen with ILI by the twelve providers was 3.4% (229/6831) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (16.1%) and lowest among 25-49 years (1.8%). During week 1, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.5%. Nationwide during week 1 the percentage of visits to sentinel providers due to ILI was 3.5% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.7% to 4.9%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

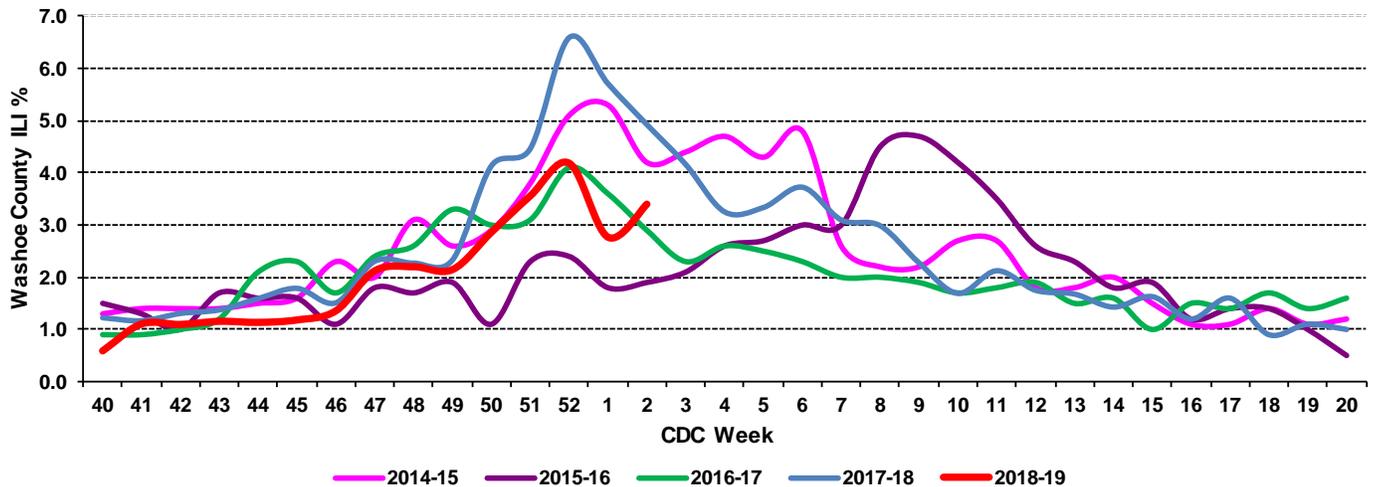


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



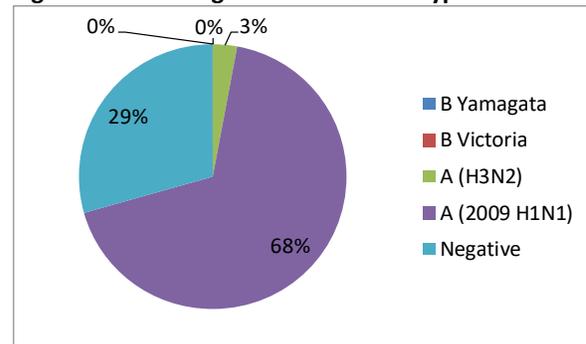
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	1	3%
A (2009 H1N1)	23	68%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	10	29%
Total (All Subtypes)	34	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

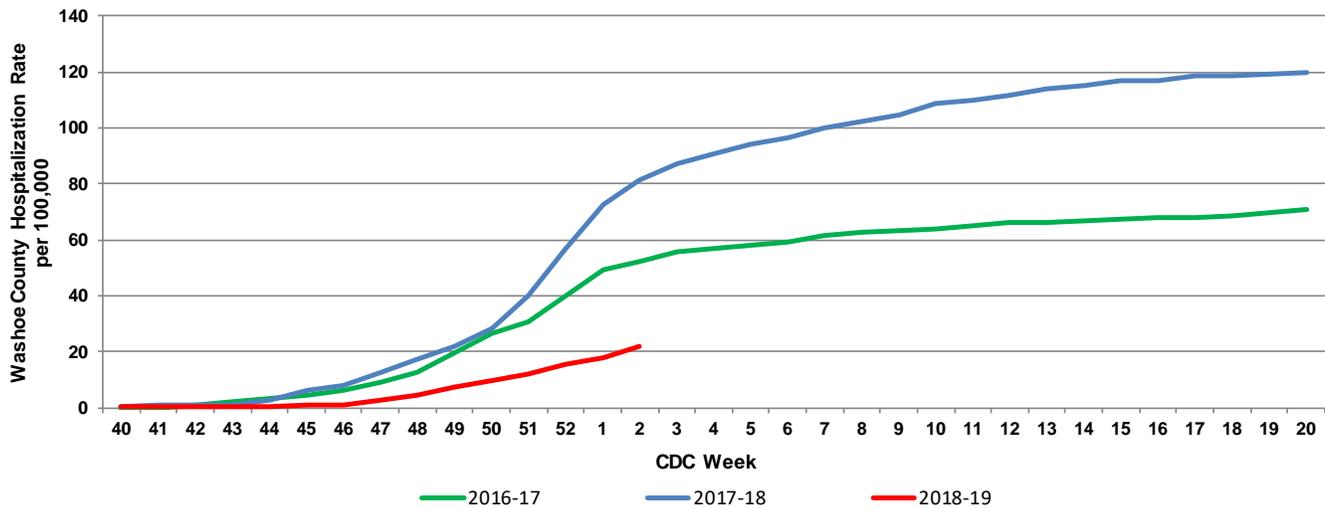
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 2) January 6, 2019 - January 12, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - January 5, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	19	N/A	5	26.3	3	15.8	0	0.0	101	N/A	25	24.8	17	16.8	1	1.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	4	4.0	1	4.0	1	5.9	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	15	78.9	4	80.0	3	100.0	0	#DIV/0!	78	77.2	20	80.0	16	94.1	1	100.0
Influenza A (RIDT*)	4	21.1	1	20.0	0	0.0	0	#DIV/0!	17	16.8	3	12.0	0	0.0	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	2	2.0	1	4.0	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

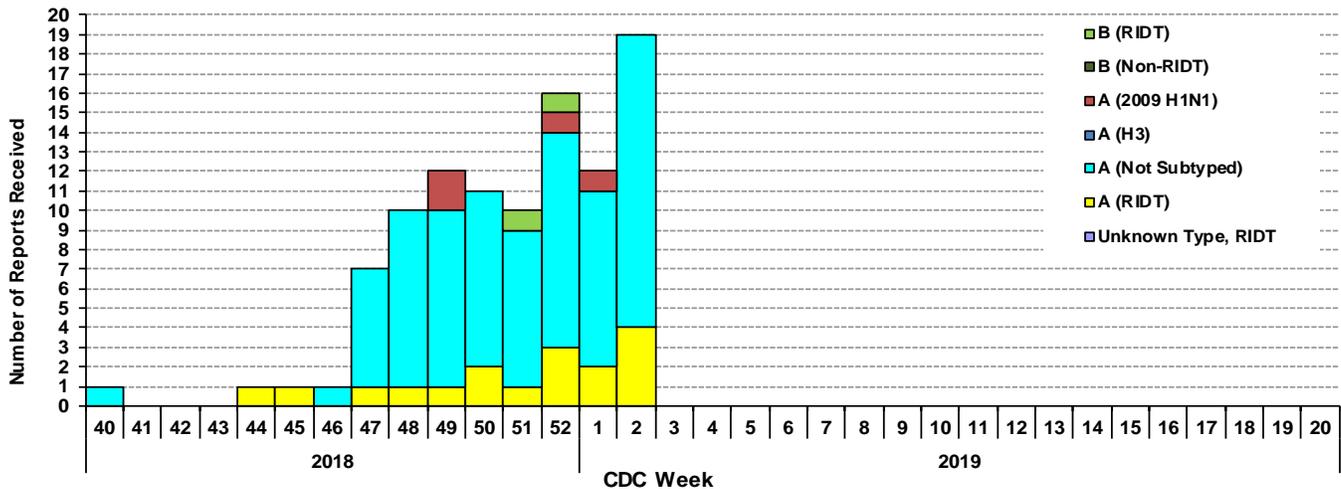
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

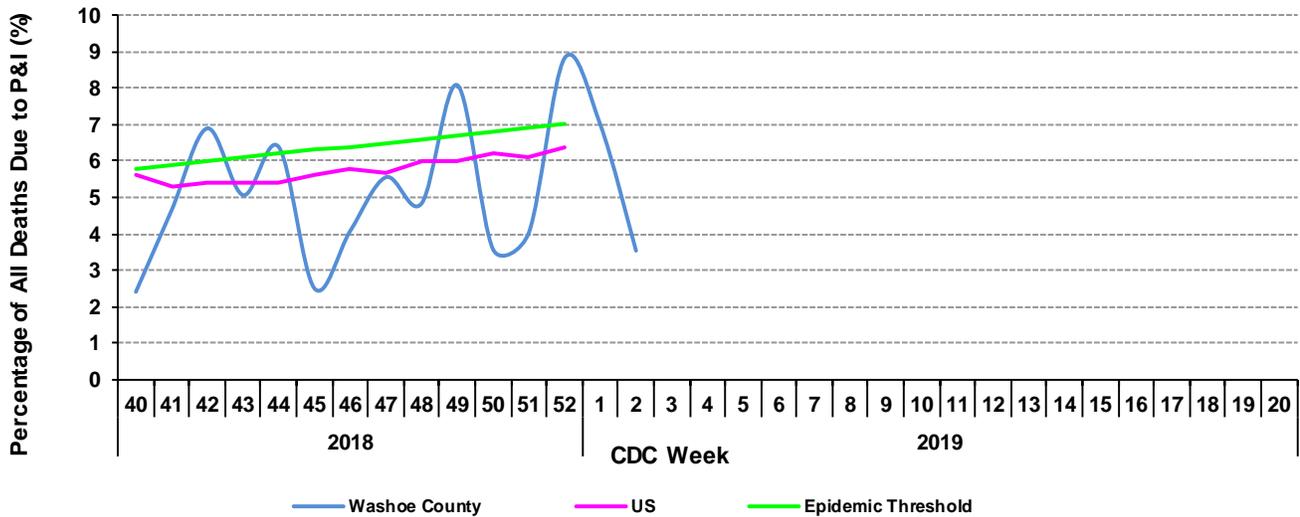
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date two (2) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 2 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 2 was 113. This reflects a P&I ratio of 3.5%. Nationally 6.4% of the deaths occurring during Week 52 were due to P&I. This was below the Week 52 epidemic threshold of 7.0%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 73. This reflects an overall P&I ratio of 5.1% (73/1437).

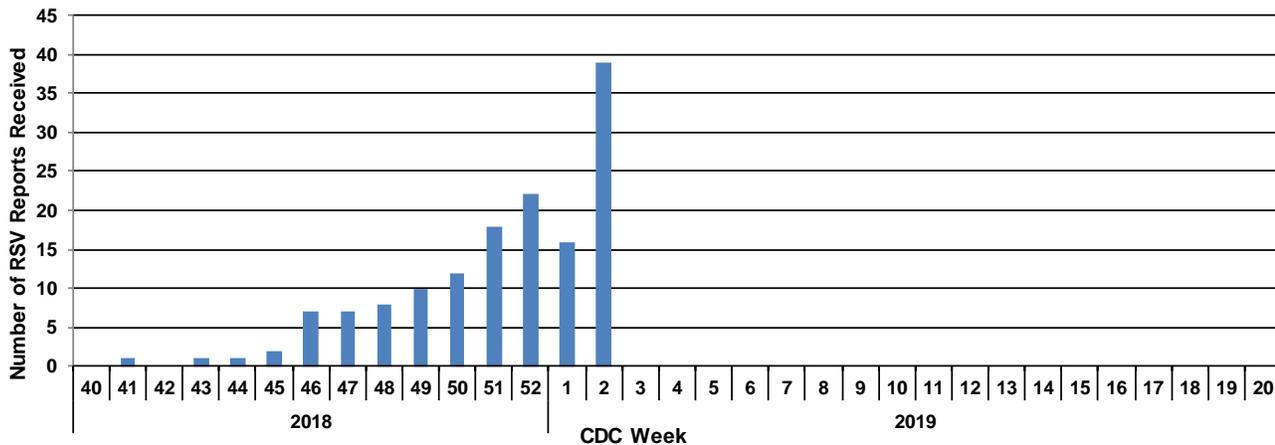
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

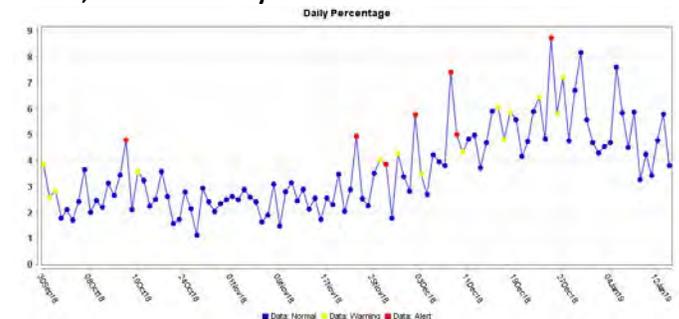


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

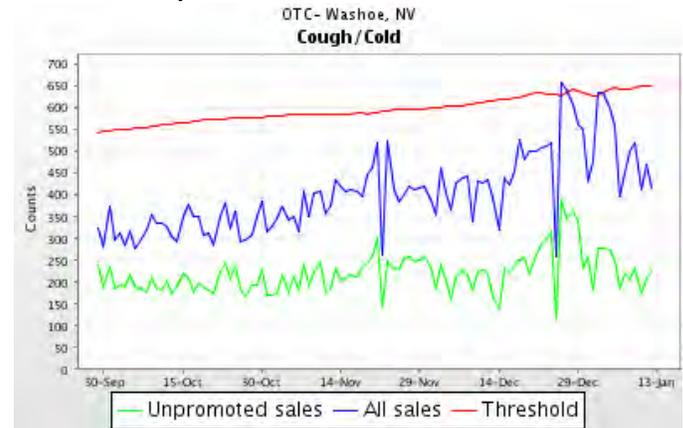
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



### Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

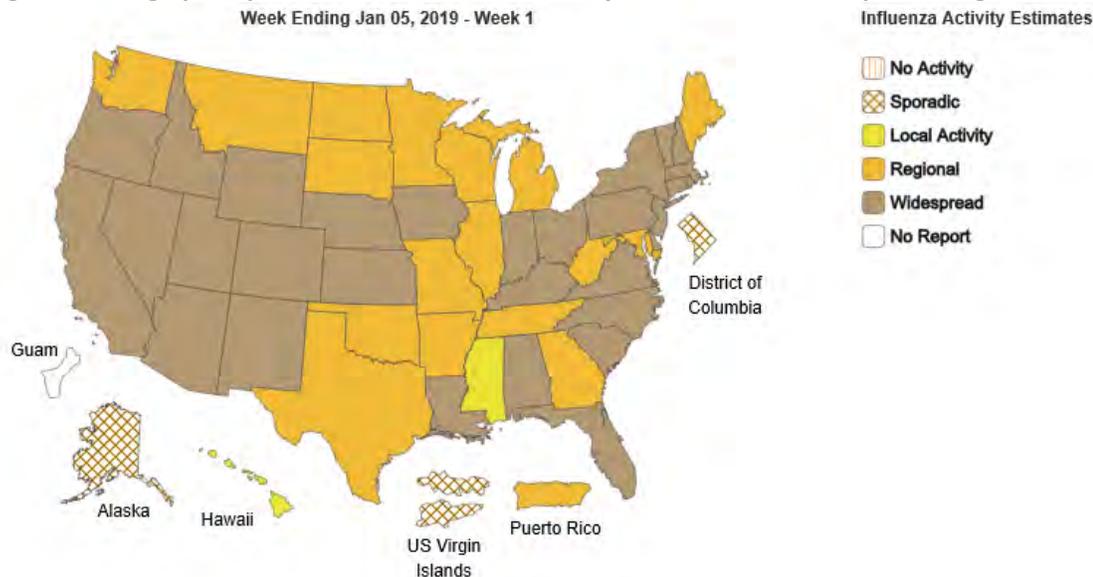


### Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

During week 1, the following influenza activity was reported:

- Widespread influenza activity was reported by 30 states (Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, Virginia, and Wyoming).
- Regional influenza activity was reported by Puerto Rico and 17 states (Arkansas, Georgia, Illinois, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Washington, West Virginia, and Wisconsin).
- Local influenza activity was reported by two states (Hawaii and Mississippi).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and one state (Alaska).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



### Washoe County Influenza Resources

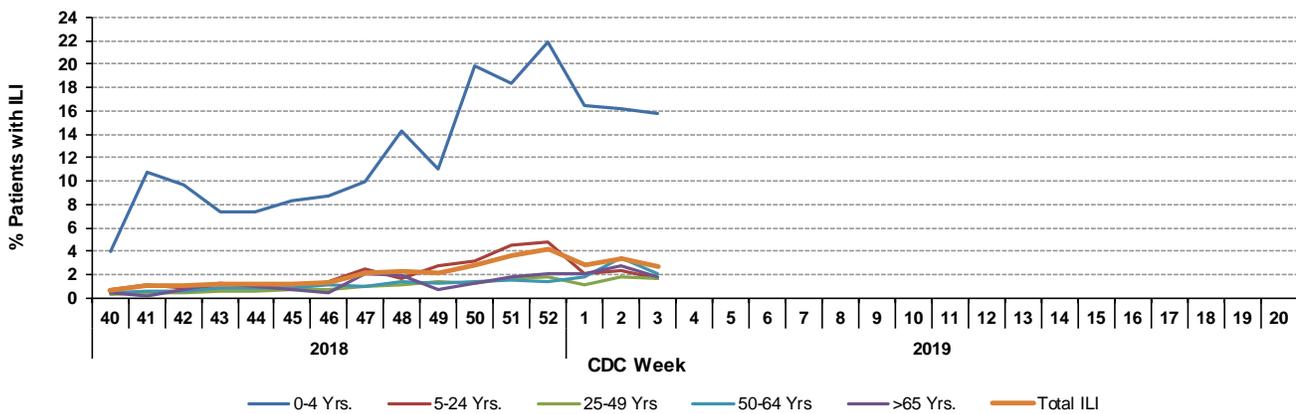
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, January 23, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

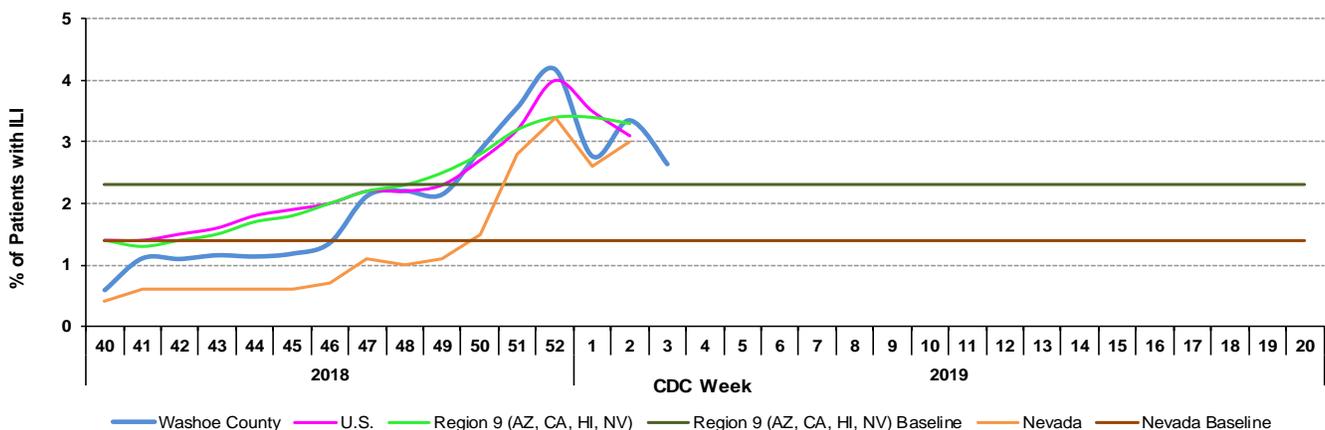
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 178 patients with influenza-like-illness (ILI) for the week ending January 19, 2019 (week 3). The percentage of persons seen with ILI by the twelve providers was 2.6% (178/6745) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (15.8%) and lowest among 5-24 years (1.6%). During week 2, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.0%. Nationwide during week 2 the percentage of visits to sentinel providers due to ILI was 3.1% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.8% to 4.2%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

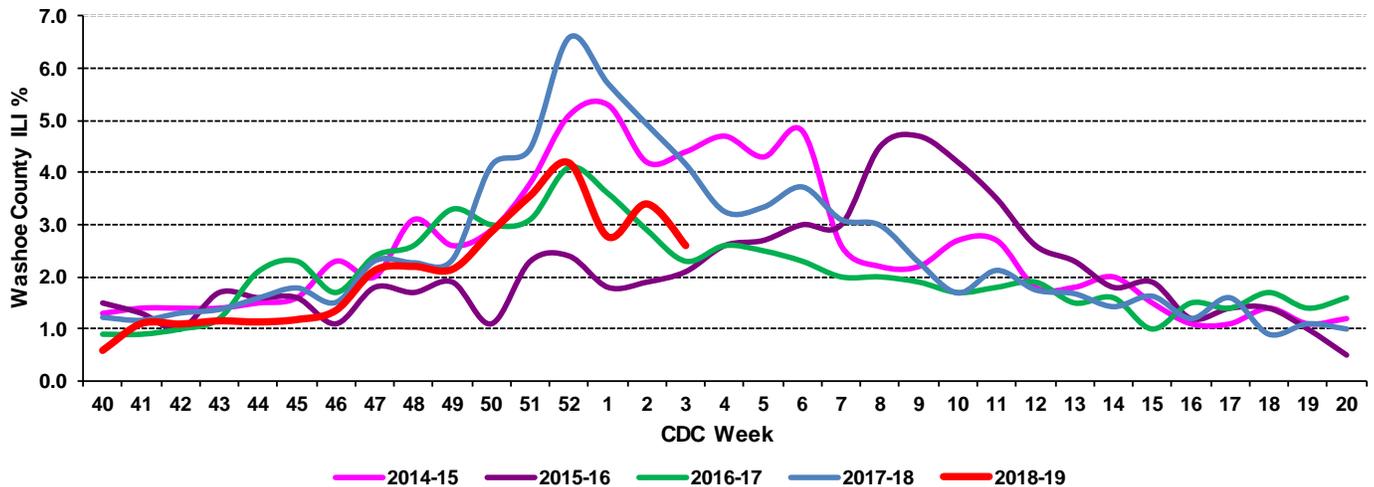


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



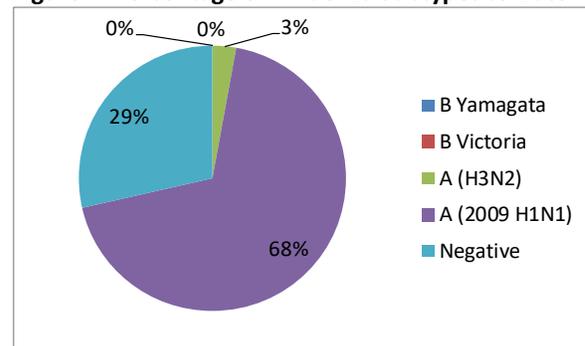
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	1	3%
A (2009 H1N1)	24	68%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	10	29%
Total (All Subtypes)	35	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

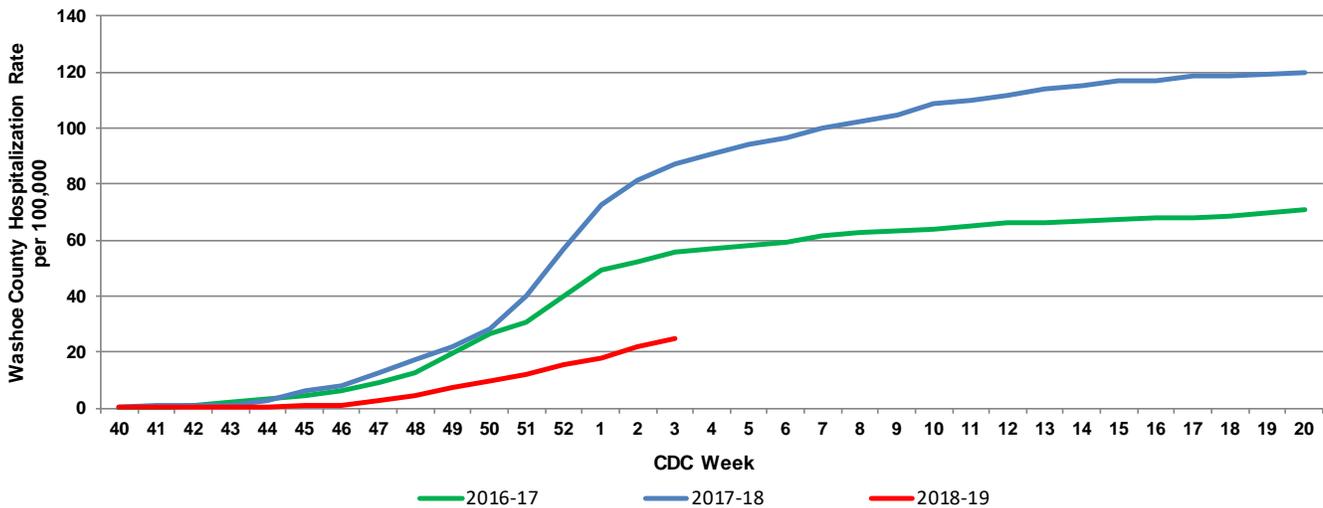
	Current Week (Week 3) January 13, 2019 - January 19, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - January 19, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	12	N/A	3	25.0	2	16.7	0	0.0	113	N/A	28	24.8	19	16.8	1	0.9
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	4	3.5	1	3.6	1	5.3	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	9	75.0	2	66.7	1	50.0	0	#DIV/0!	87	77.0	22	78.6	17	89.5	1	100.0
Influenza A (RIDT*)	2	16.7	0	0.0	1	50.0	0	#DIV/0!	19	16.8	3	10.7	1	5.3	0	0.0
Influenza B (RIDT*)	1	8.3	1	33.3	0	0.0	0	#DIV/0!	3	2.7	2	7.1	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

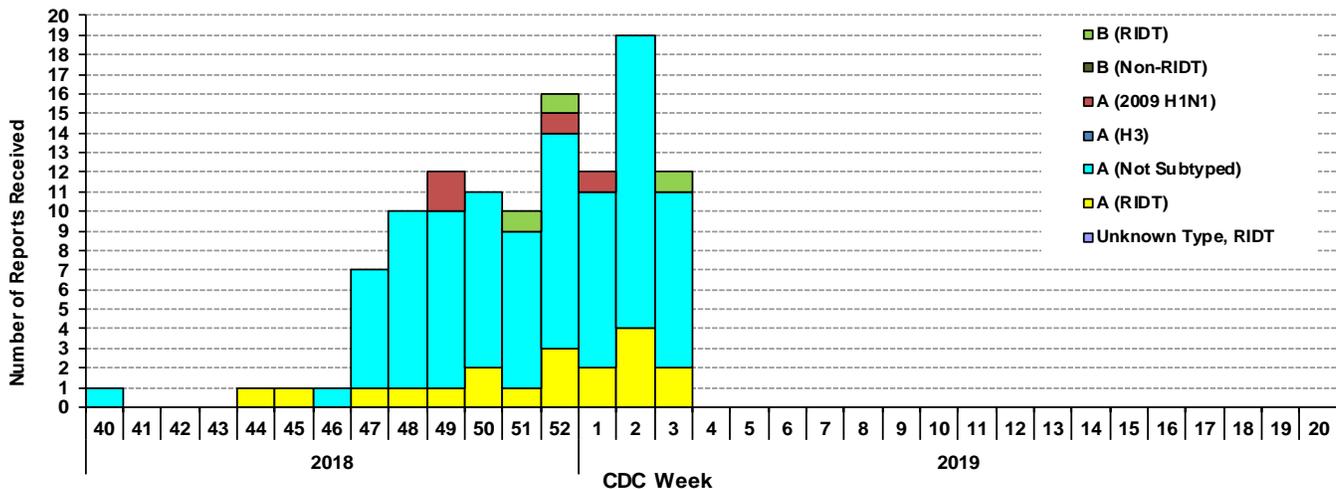
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

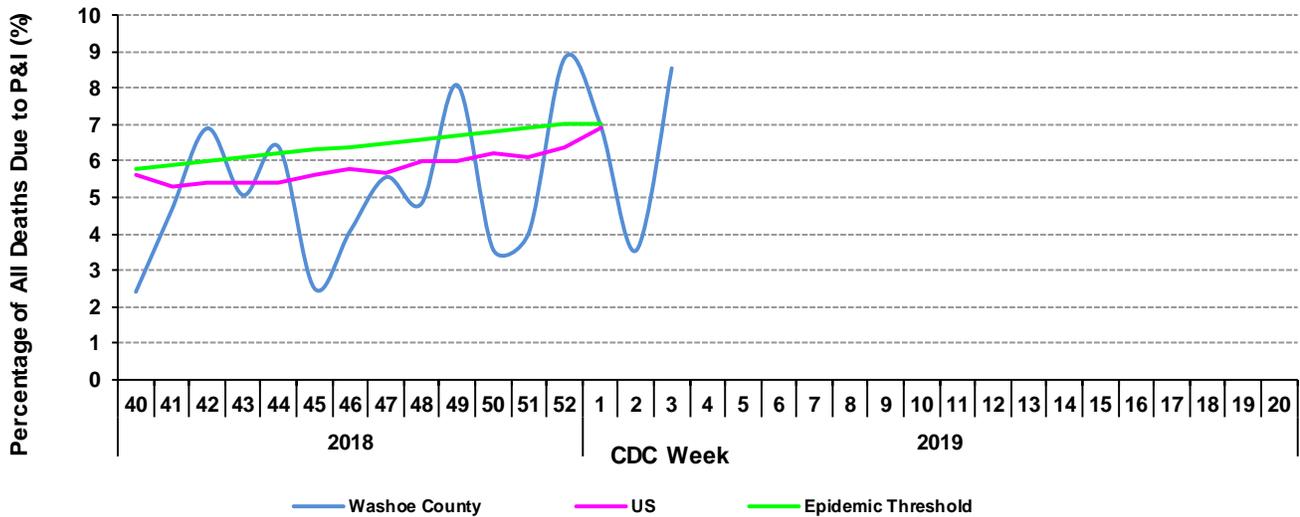
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date two (2) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Ten death certificates were received for week 3 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 3 was 117. This reflects a P&I ratio of 8.5%. Nationally 6.9% of the deaths occurring during Week 1 were due to P&I. This was below the Week 1 epidemic threshold of 7.0%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 83. This reflects an overall P&I ratio of 5.3% (83/1554).

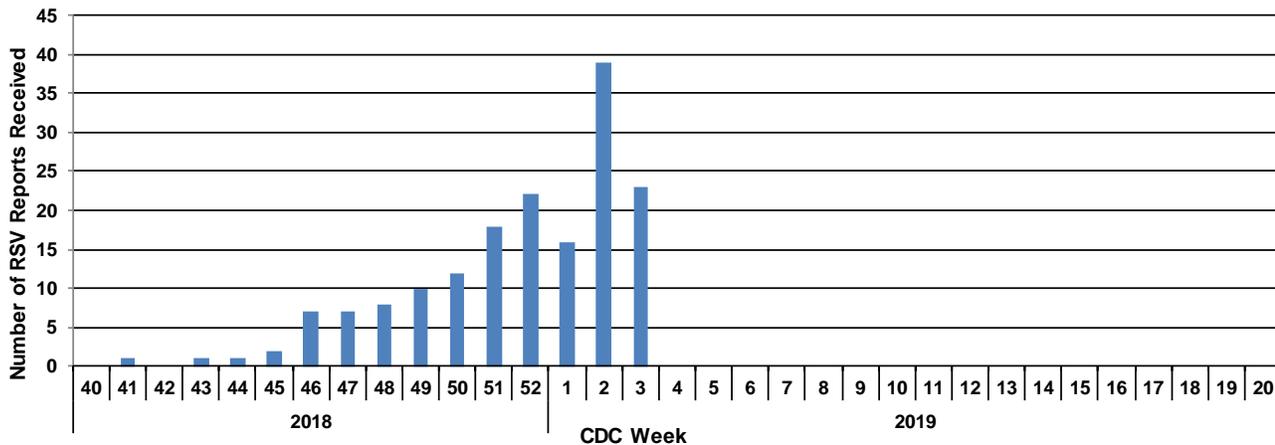
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

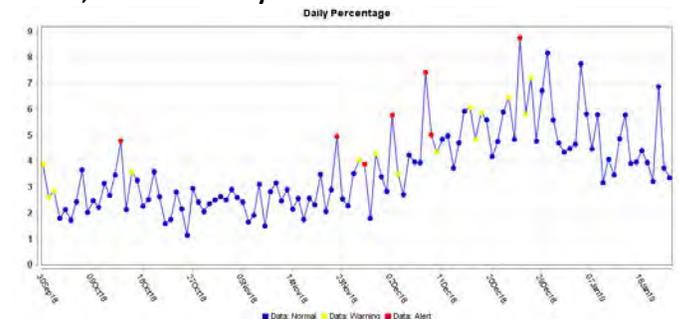


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

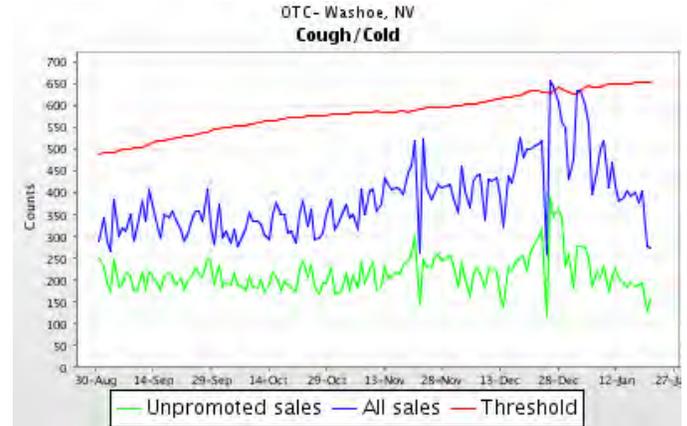
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 2, the following influenza activity was reported:

- Widespread influenza activity was reported by Guam and 30 states (Arizona, California, Colorado, Connecticut, Delaware, Florida, Idaho, Indiana, Kansas, Kentucky, Massachusetts, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Virginia, and Wyoming).
- Regional influenza activity was reported by Puerto Rico and 16 states (Alabama, Arkansas, Georgia, Illinois, Iowa, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, North Dakota, Texas, Washington, and Wisconsin).
- Local influenza activity was reported by three states (Alaska, Tennessee, and West Virginia).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and one state (Hawaii).

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

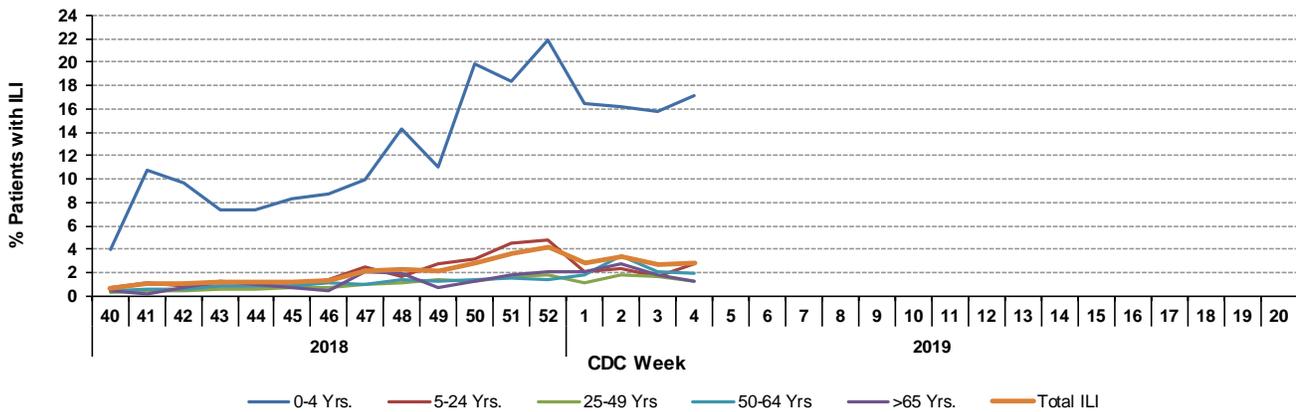
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, January 30, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

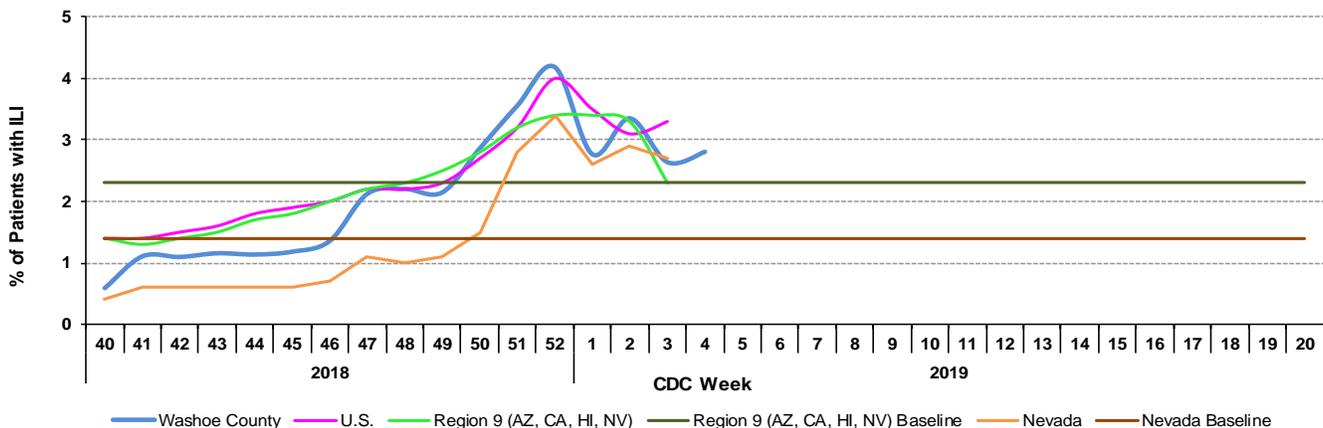
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 180 patients with influenza-like-illness (ILI) for the week ending January 26, 2019 (week 4). The percentage of persons seen with ILI by the twelve providers was 2.8% (180/6411) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (17.1%) and lowest among 25-49 and  $\geq 65$  years (1.2%). During week 3, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.7%. Nationwide during week 3 the percentage of visits to sentinel providers due to ILI was 3.3% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.9% to 5.1%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

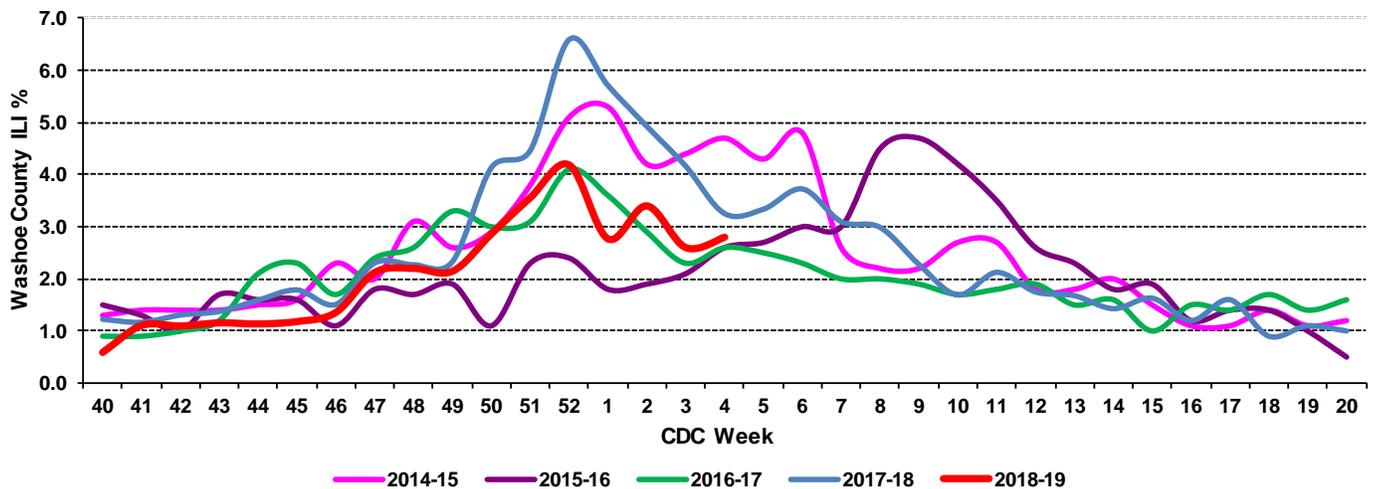


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



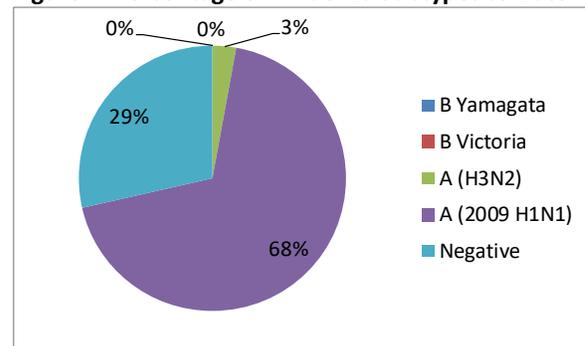
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	1	3%
A (2009 H1N1)	24	68%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	10	29%
Total (All Subtypes)	35	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 4) January 20, 2019 - January 26, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - January 26, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	13	N/A	6	46.2	1	7.7	0	0.0	126	N/A	34	27.0	20	15.9	1	0.8
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	4	3.2	1	2.9	1	5.0	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	8	61.5	4	66.7	1	100.0	0	#DIV/0!	95	75.4	26	76.5	18	90.0	1	100.0
Influenza A (RIDT*)	3	23.1	1	16.7	0	0.0	0	#DIV/0!	22	17.5	4	11.8	1	5.0	0	0.0
Influenza B (RIDT*)	2	15.4	1	16.7	0	0.0	0	#DIV/0!	5	4.0	3	8.8	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

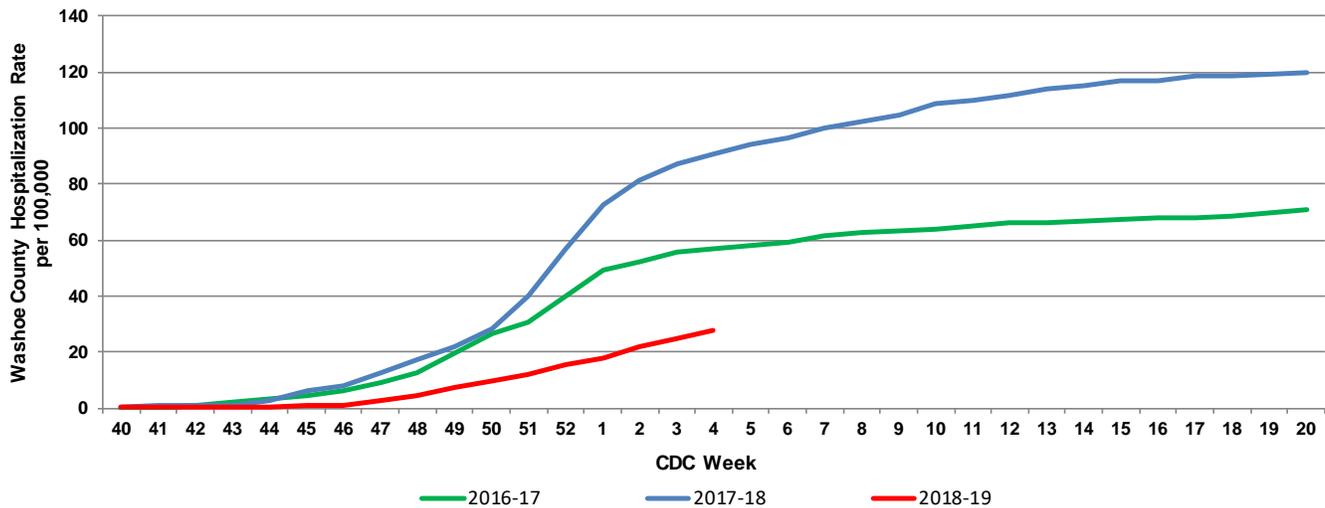
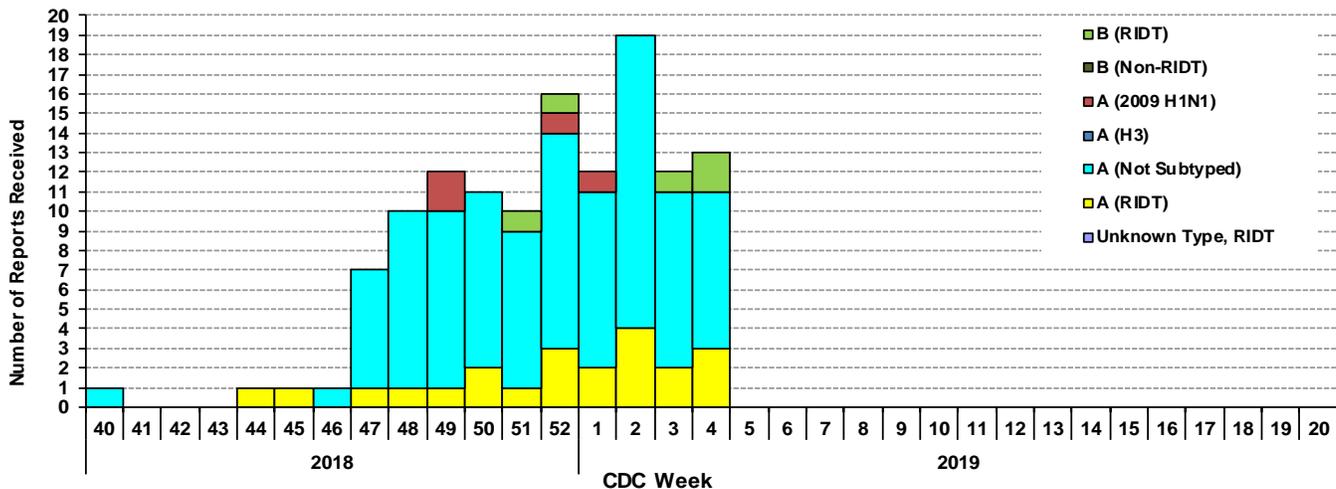


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

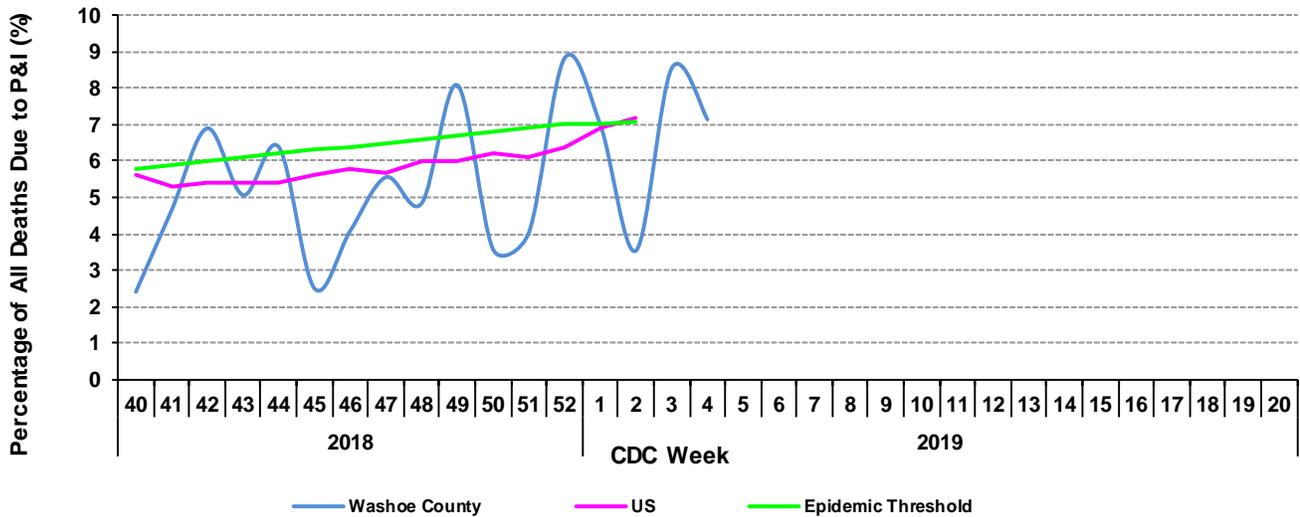
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date two (2) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Seven death certificates were received for week 4 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 4 was 98. This reflects a P&I ratio of 7.1%. Nationally 7.2% of the deaths occurring during Week 2 were due to P&I. This was above the Week 1 epidemic threshold of 7.1%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 90. This reflects an overall P&I ratio of 5.4% (90/1652).

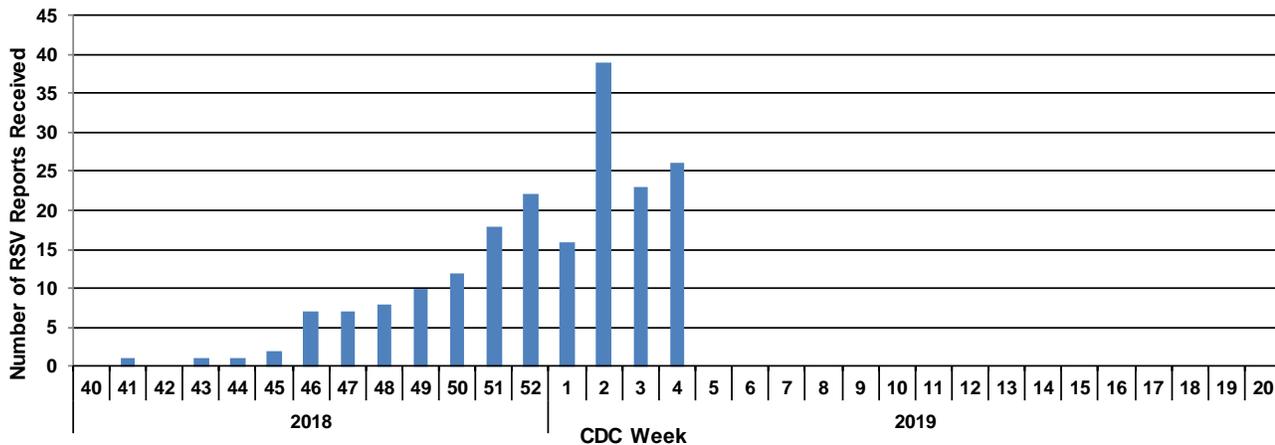
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

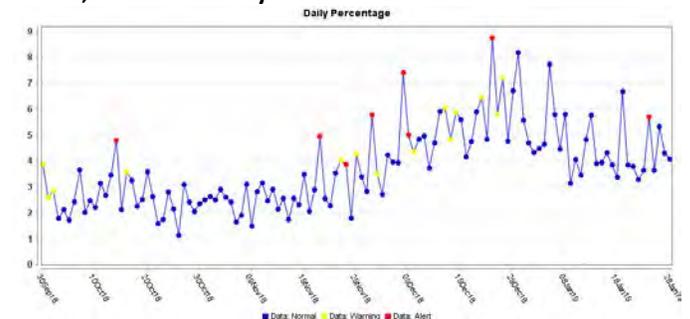


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

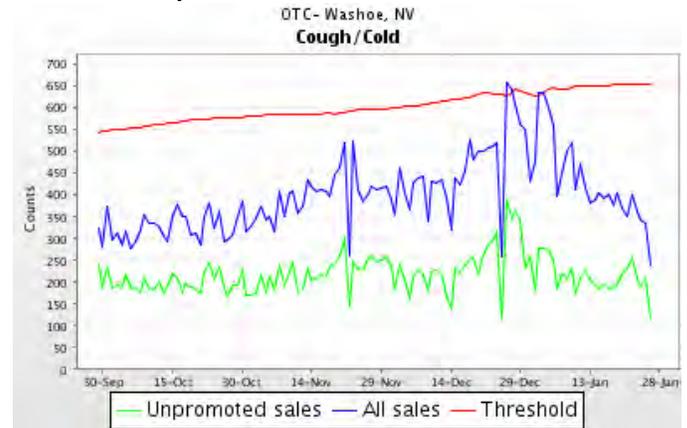
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

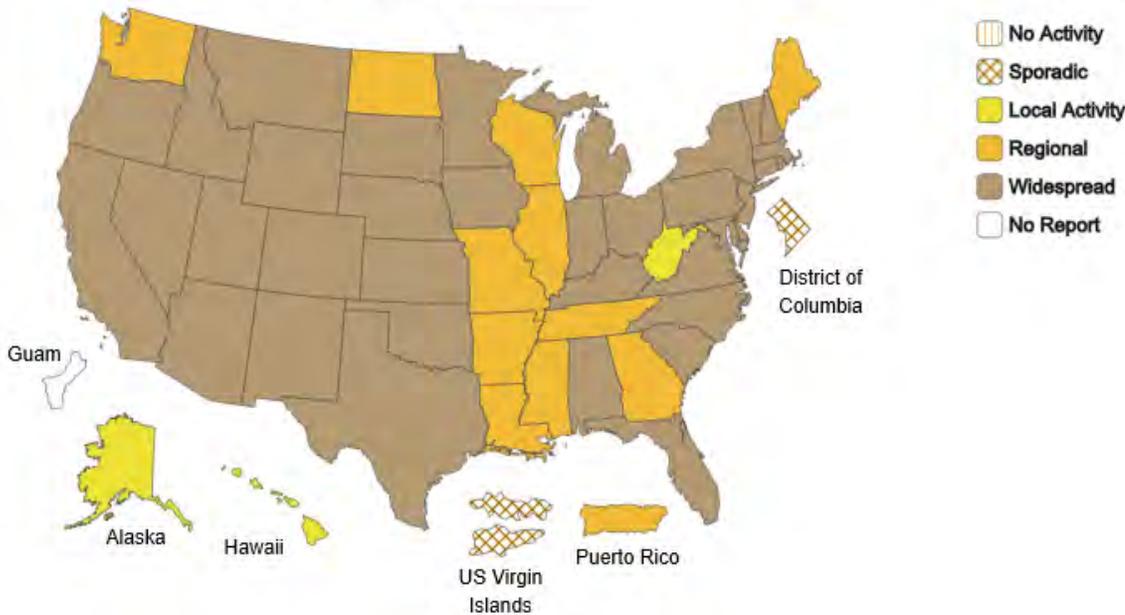
During week 3, the following influenza activity was reported:

- Widespread influenza activity was reported by 36 states (Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, and Wyoming).
- Regional influenza activity was reported by Puerto Rico and 11 states (Arkansas, Georgia, Illinois, Louisiana, Maine, Mississippi, Missouri, North Dakota, Tennessee, Washington, and Wisconsin).
- Local influenza activity was reported by three states (Alaska, Hawaii, and West Virginia).
- Sporadic influenza activity was reported by the District of Columbia and the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**

Week Ending Jan 19, 2019 - Week 3

Influenza Activity Estimates



**Washoe County Influenza Resources**

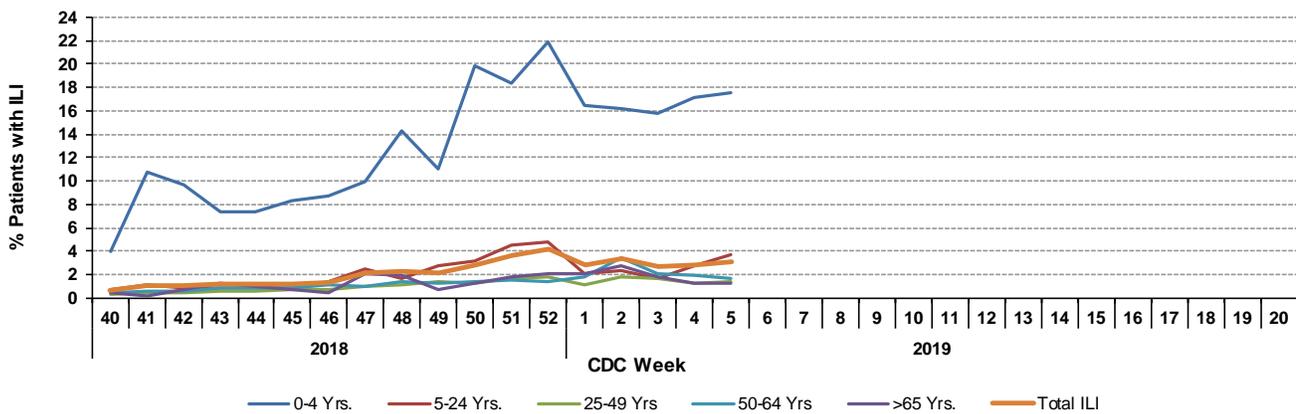
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, February 6, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

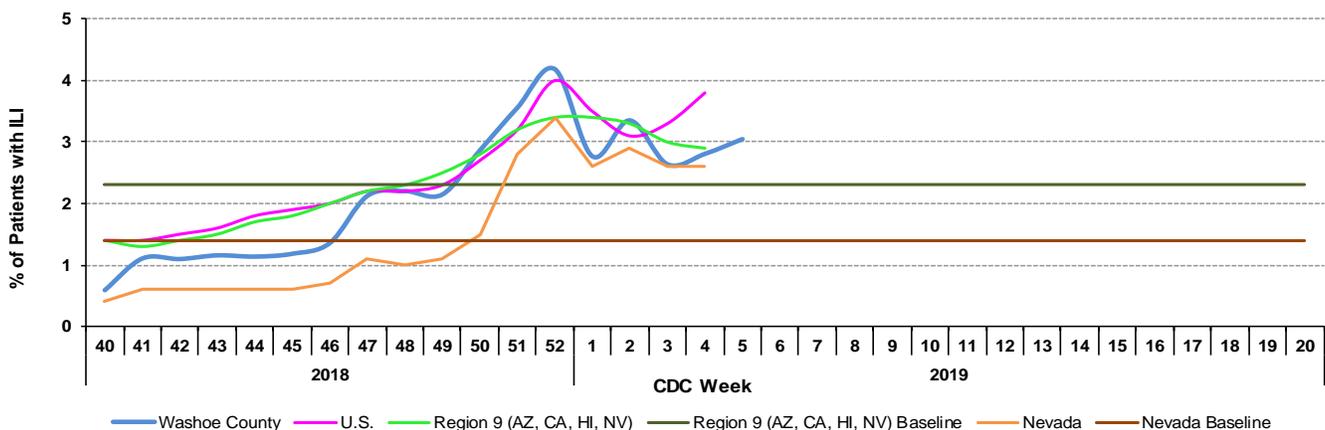
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Eleven of the twelve participating providers in Washoe County reported a total of 191 patients with influenza-like-illness (ILI) for the week ending February 2, 2019 (week 5). The percentage of persons seen with ILI by the eleven providers was 3.0% (191/6266) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (17.5%) and lowest among  $\geq 65$  years (1.2%). During week 4, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.6%. Nationwide during week 4 the percentage of visits to sentinel providers due to ILI was 3.8% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.4% to 6.5%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

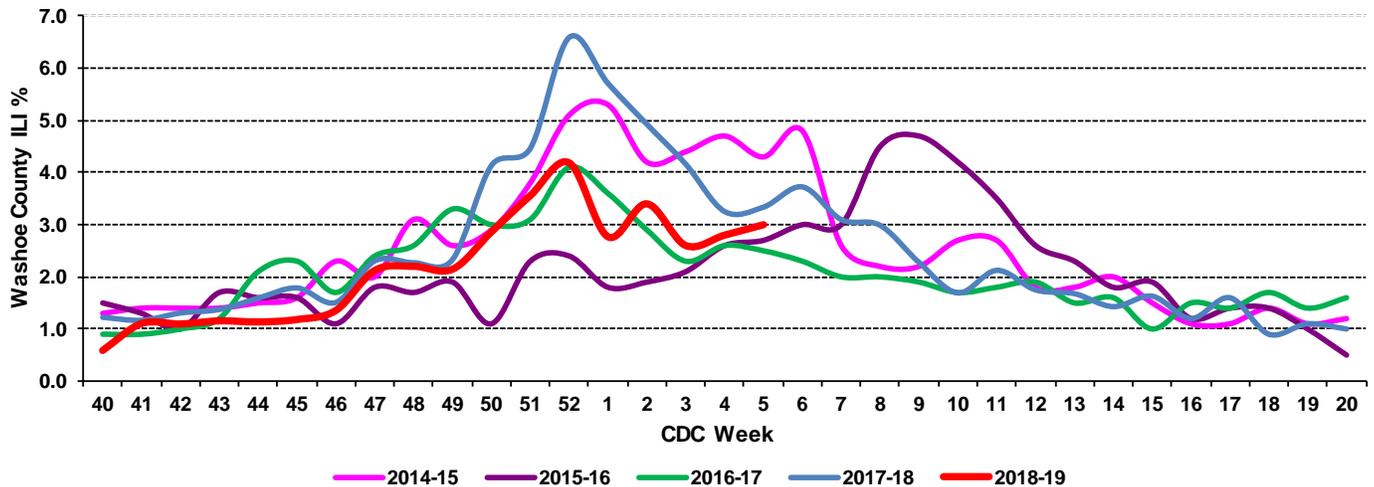


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



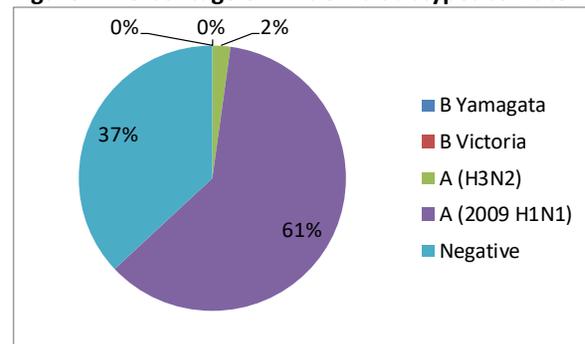
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	1	2%
A (2009 H1N1)	28	61%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	17	37%
Total (All Subtypes)	46	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 5) January 27, 2019 - February 2 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - February 2, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	12	N/A	4	33.3	4	33.3	1	8.3	137	N/A	38	27.7	25	18.2	2	1.5
Influenza A (2009 H1N1)	1	8.3	0	0.0	1	25.0	0	0.0	5	3.6	1	2.6	2	8.0	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza A (not subtyped)	10	83.3	4	100.0	3	75.0	1	100.0	104	75.9	30	78.9	22	88.0	2	100.0
Influenza A (RIDT*)	1	8.3	0	0.0	0	0.0	0	0.0	23	16.8	4	10.5	1	4.0	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	5	3.6	3	7.9	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

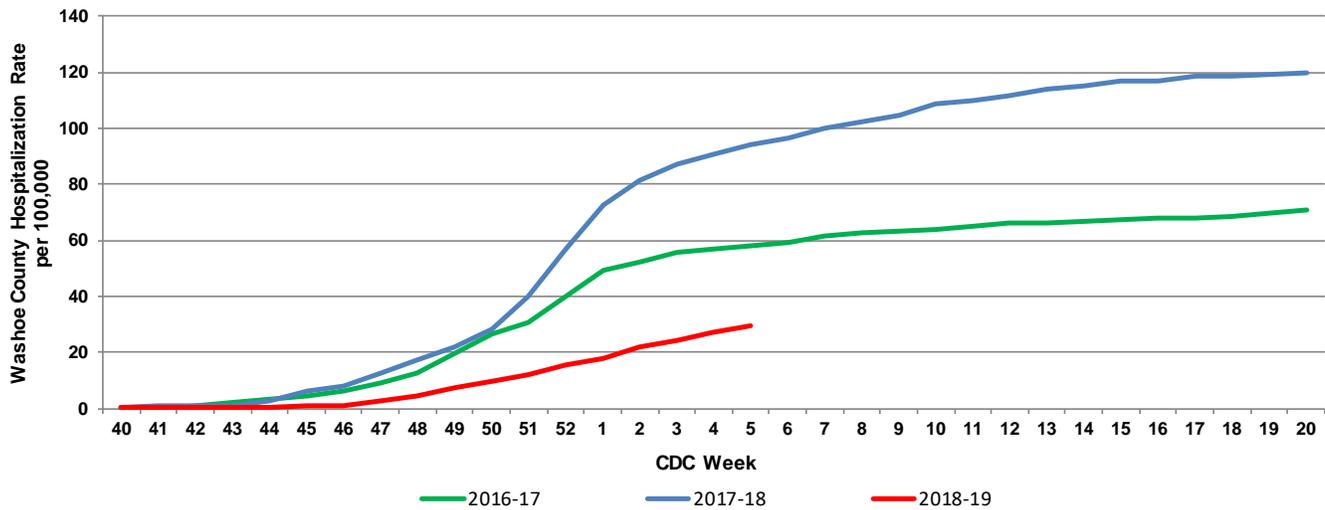
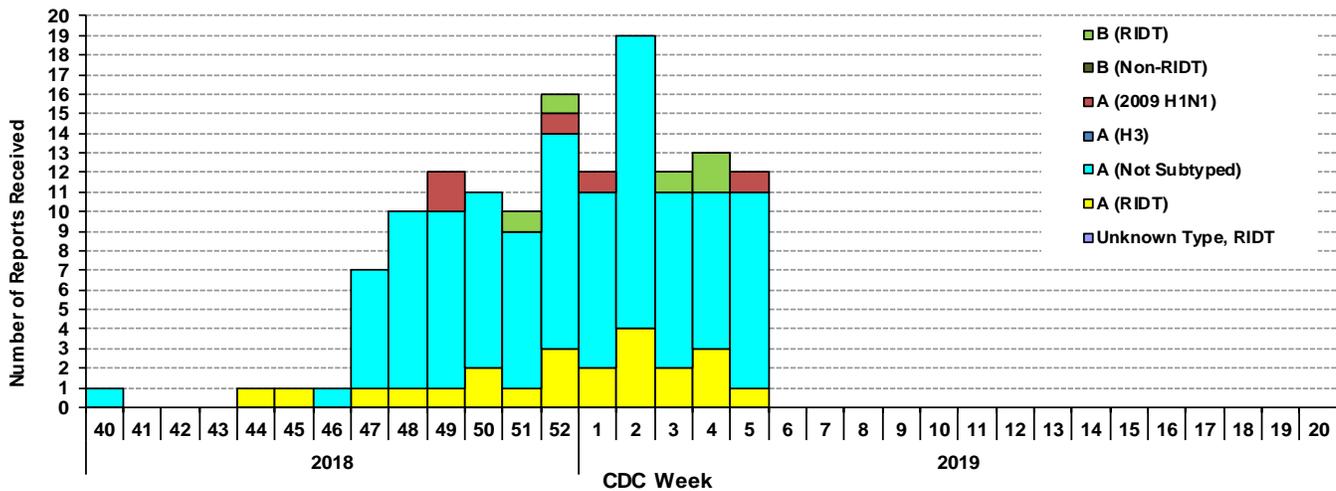


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

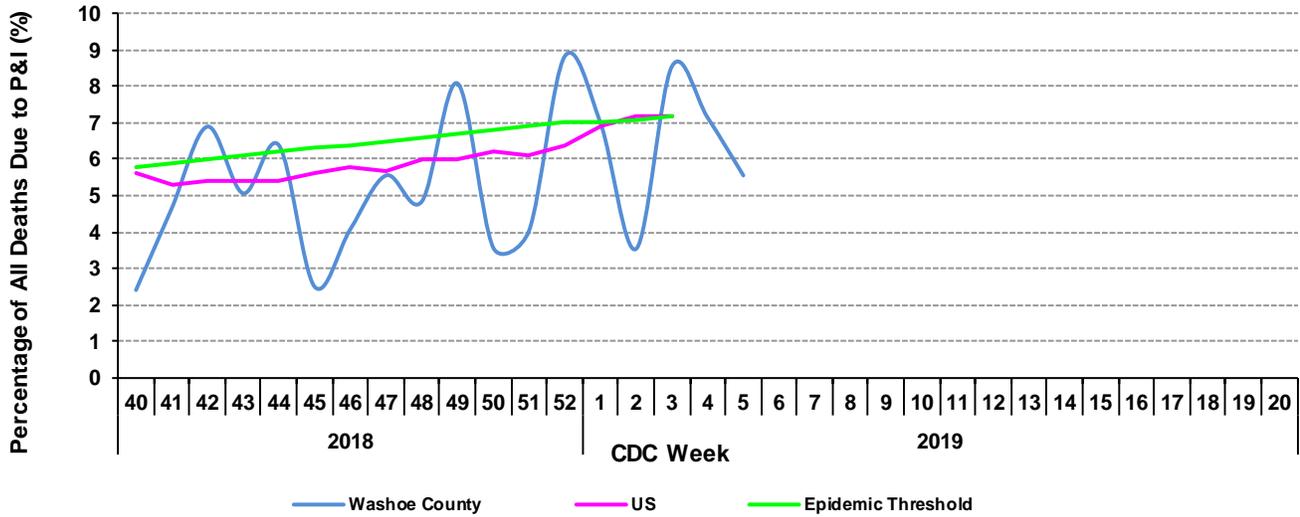
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date three (3) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 5 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 5 was 108. This reflects a P&I ratio of 5.6%. Nationally 7.2% of the deaths occurring during Week 3 were due to P&I. This was at the Week 3 epidemic threshold of 7.2%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 96. This reflects an overall P&I ratio of 5.5% (96/1760).

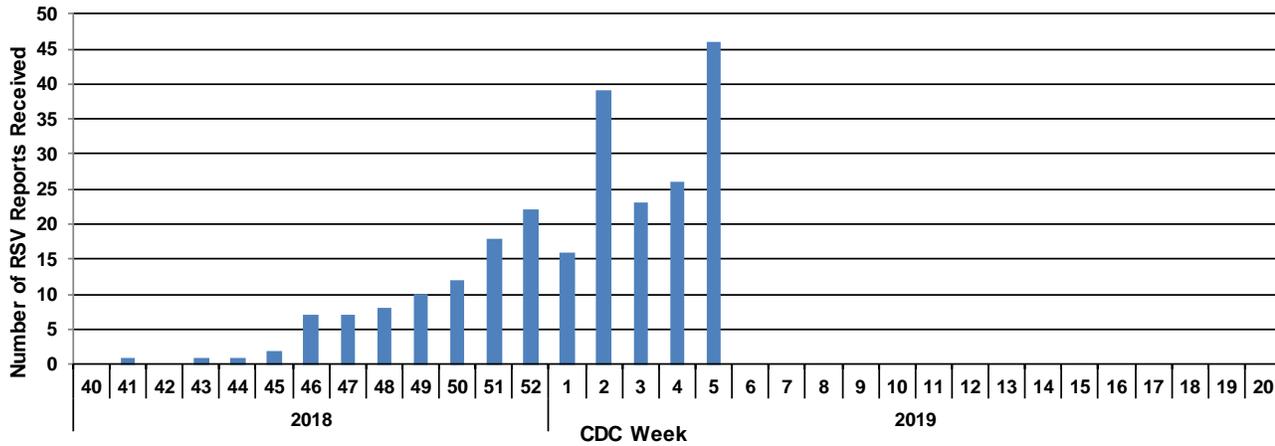
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

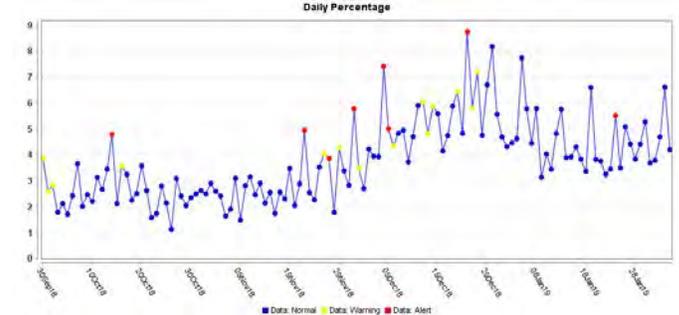


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

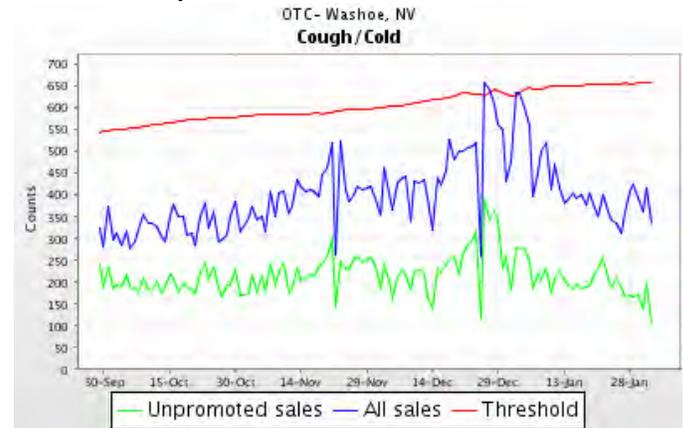
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

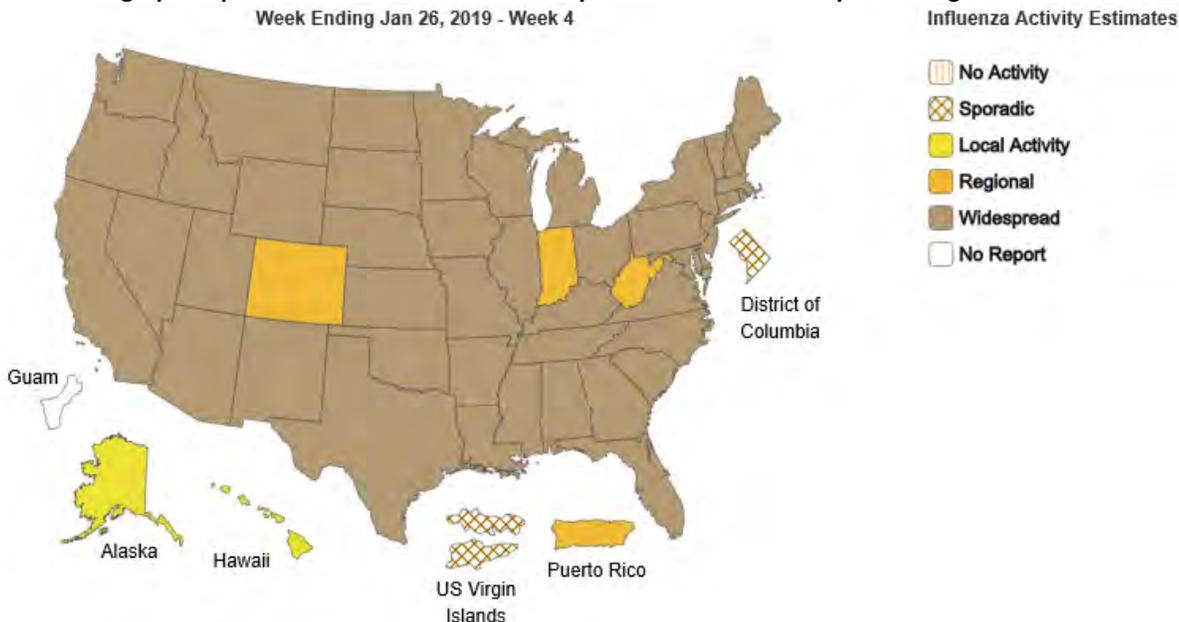


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 4, the following influenza activity was reported:

- Widespread influenza activity was reported by 45 states (Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming).
- Regional influenza activity was reported by Puerto Rico and three states (Colorado, Indiana, and West Virginia).
- Local influenza activity was reported by two states (Alaska and Hawaii).
- Sporadic influenza activity was reported by the District of Columbia and the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

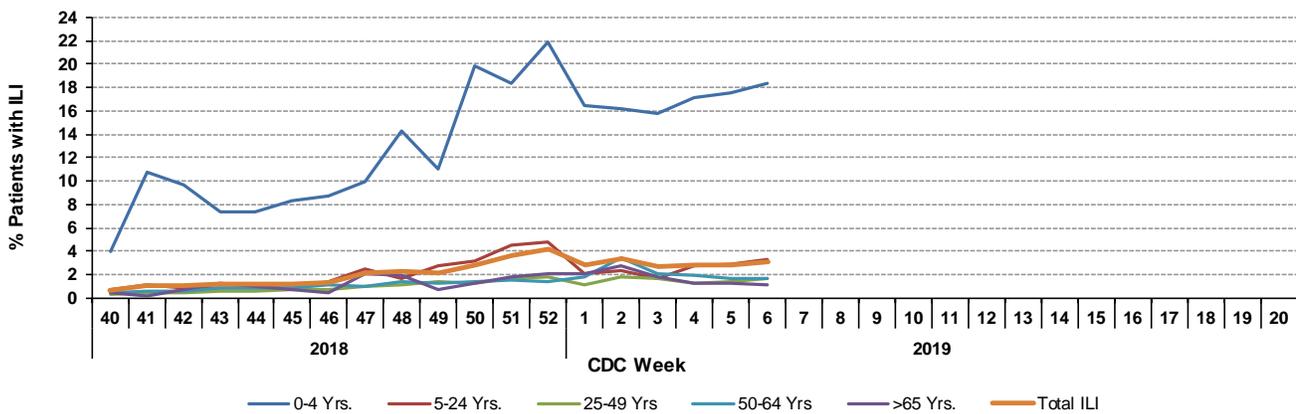
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Friday, February 15, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

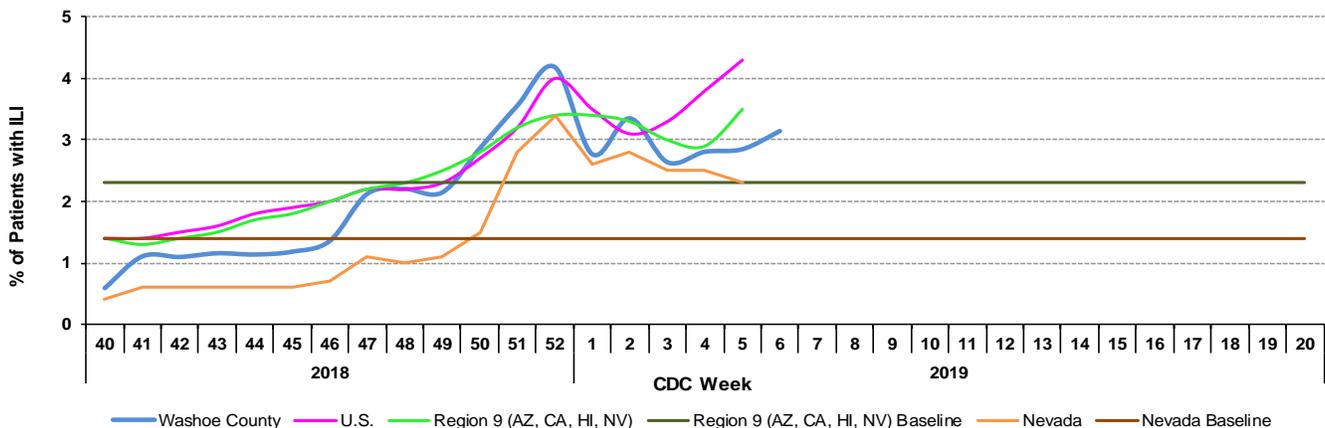
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 223 patients with influenza-like-illness (ILI) for the week ending February 9, 2019 (week 6). The percentage of persons seen with ILI by the twelve providers was 3.1% (223/7088) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (18.4%) and lowest among  $\geq 65$  years (1.2%). During week 5, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.3%. Nationwide during week 5 the percentage of visits to sentinel providers due to ILI was 4.3% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.5% to 7.6%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

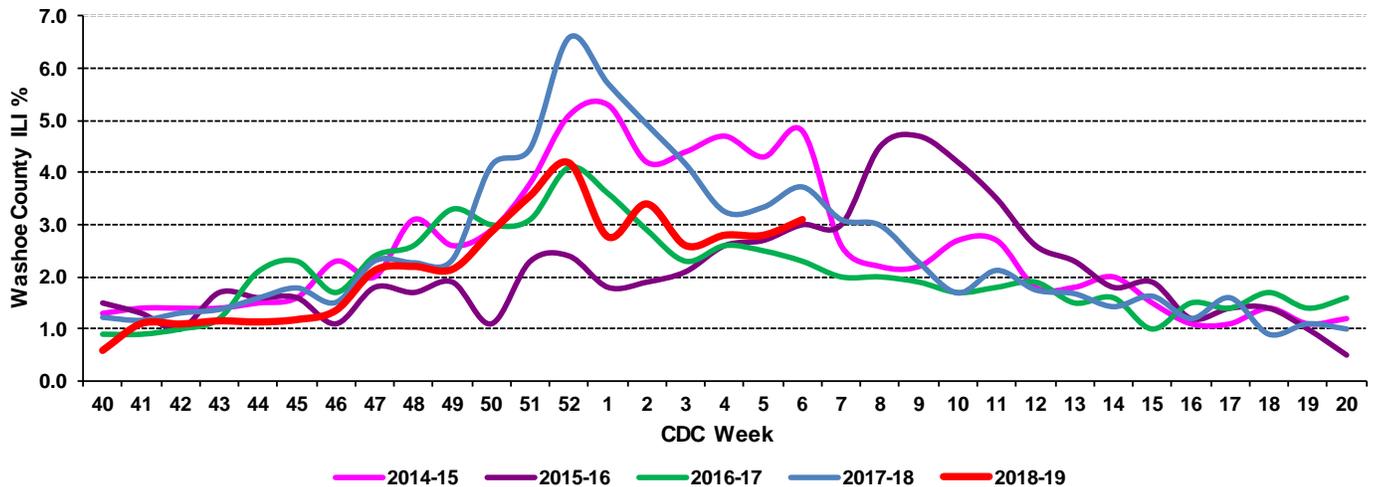


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



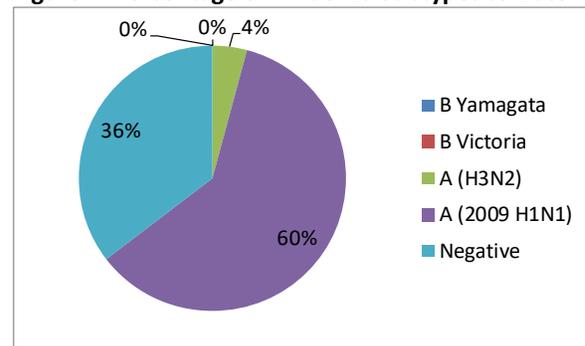
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	2	4%
A (2009 H1N1)	29	60%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	17	36%
Total (All Subtypes)	48	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 6) February 3, 2019 - February 9, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - February 9, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	14	N/A	4	28.6	2	14.3	1	7.1	152	N/A	43	28.3	27	17.8	2	1.3
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	0.0	5	3.3	1	2.3	2	7.4	0	0.0
Influenza A (seasonal H3)	1	7.1	0	0.0	1	50.0	0	0.0	1	0.7	0	0.0	1	3.7	0	0.0
Influenza A (not subtyped)	13	92.9	4	100.0	1	50.0	1	100.0	118	77.6	35	81.4	23	85.2	2	100.0
Influenza A (RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	23	15.1	4	9.3	1	3.7	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	5	3.3	3	7.0	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

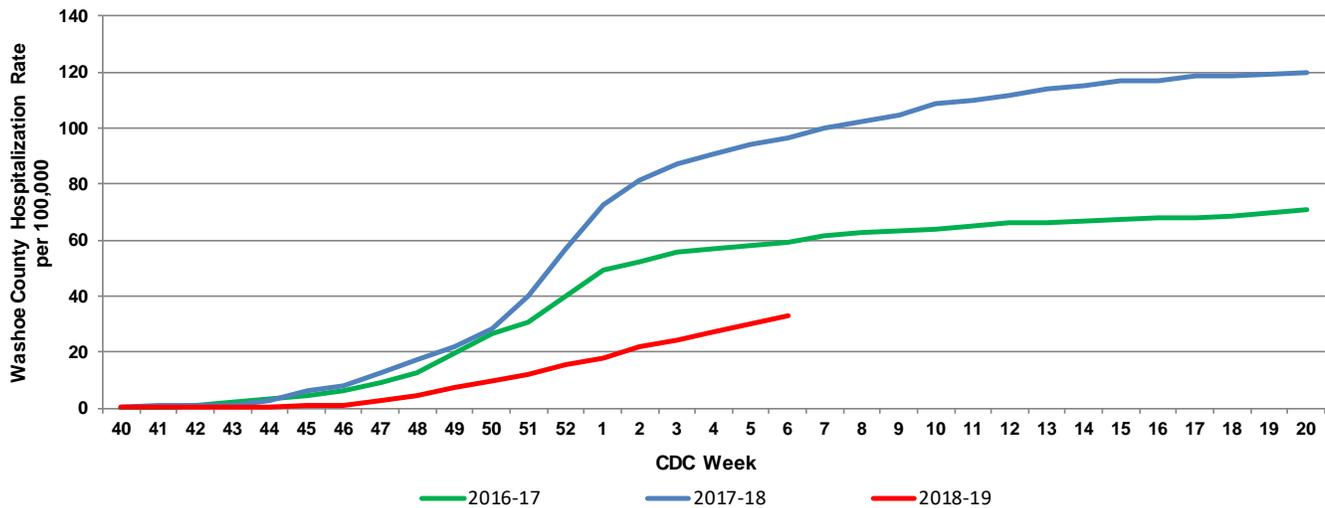
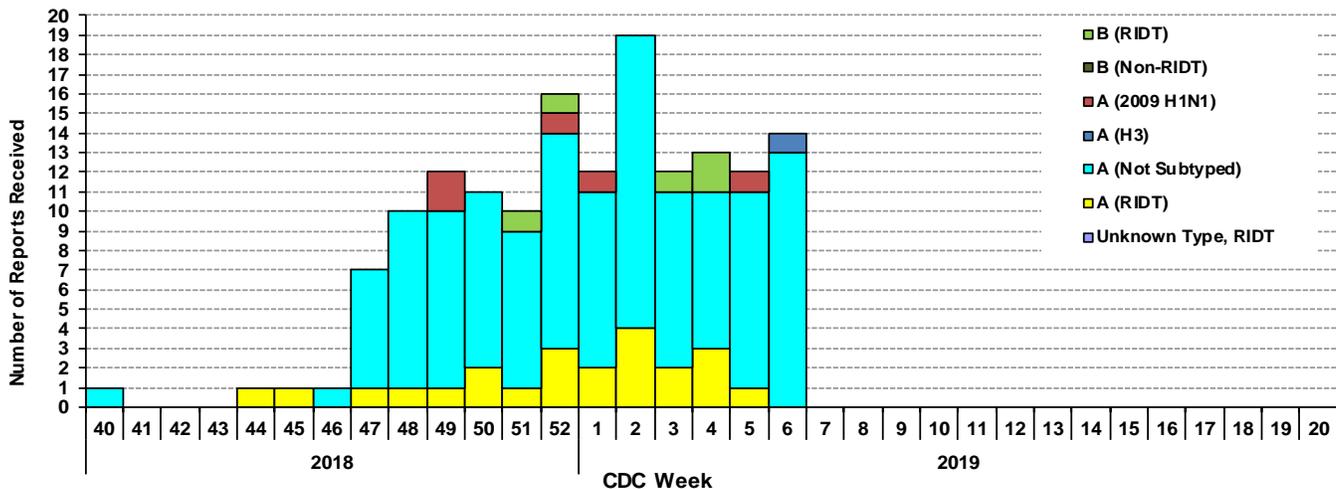


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

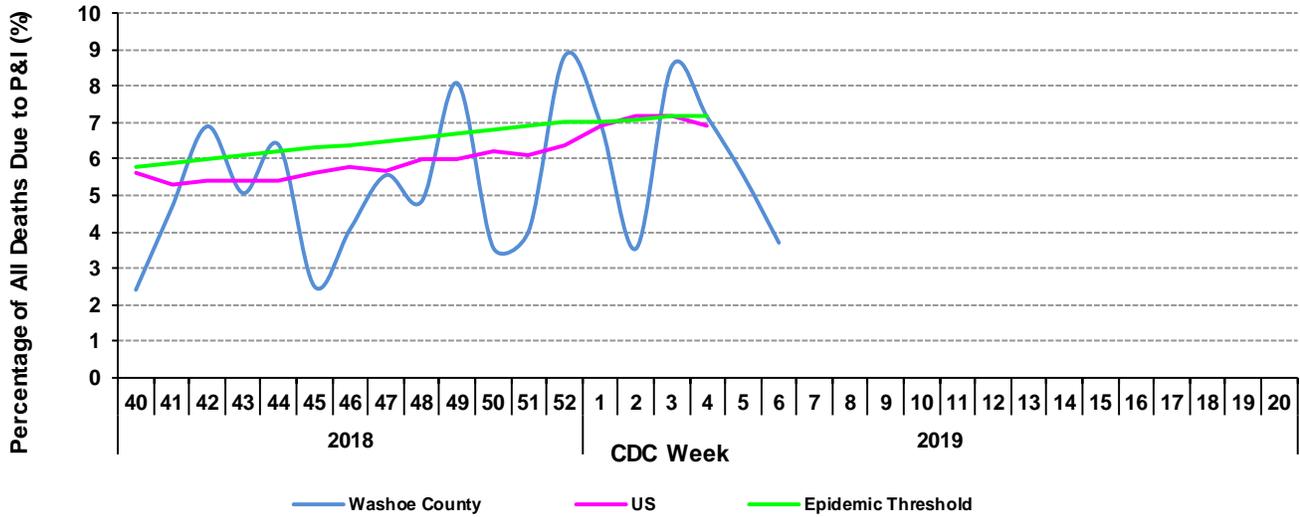
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date four (4) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 6 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 6 was 108. This reflects a P&I ratio of 3.7%. Nationally 6.9% of the deaths occurring during Week 4 were due to P&I. This was below the Week 4 epidemic threshold of 7.2%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 100. This reflects an overall P&I ratio of 5.4% (100/1868).

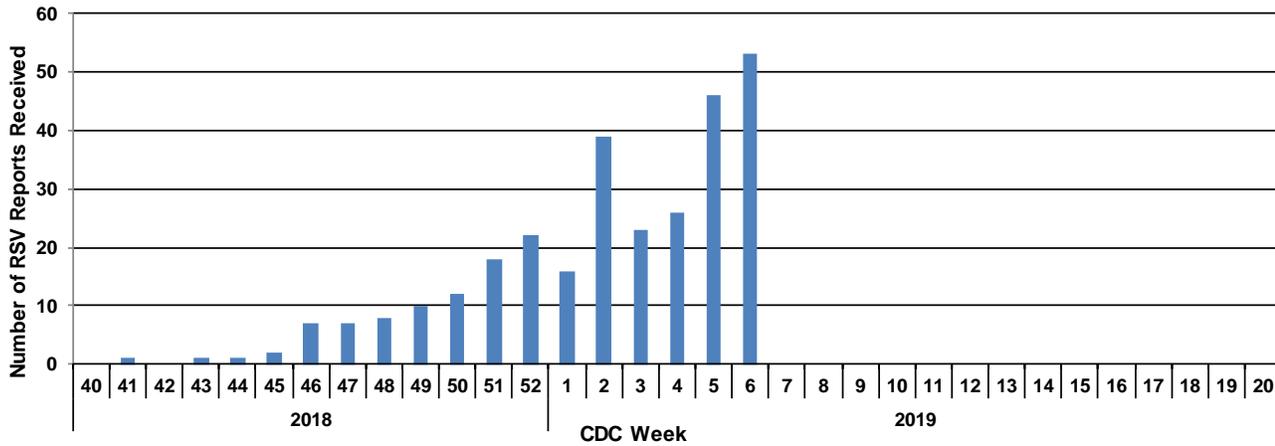
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

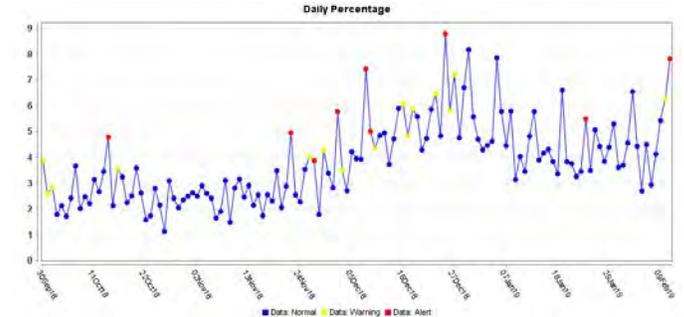


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

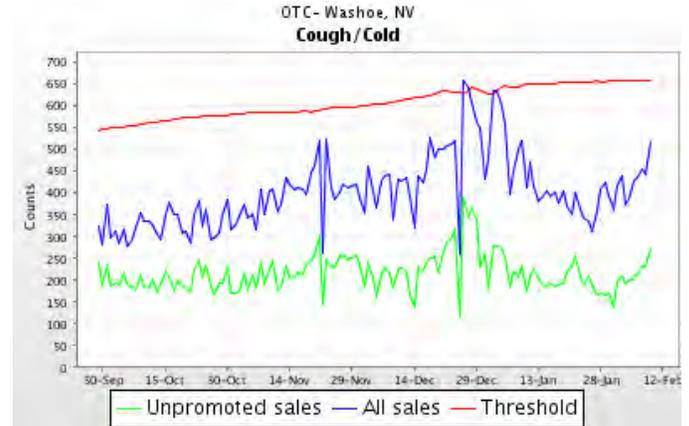
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

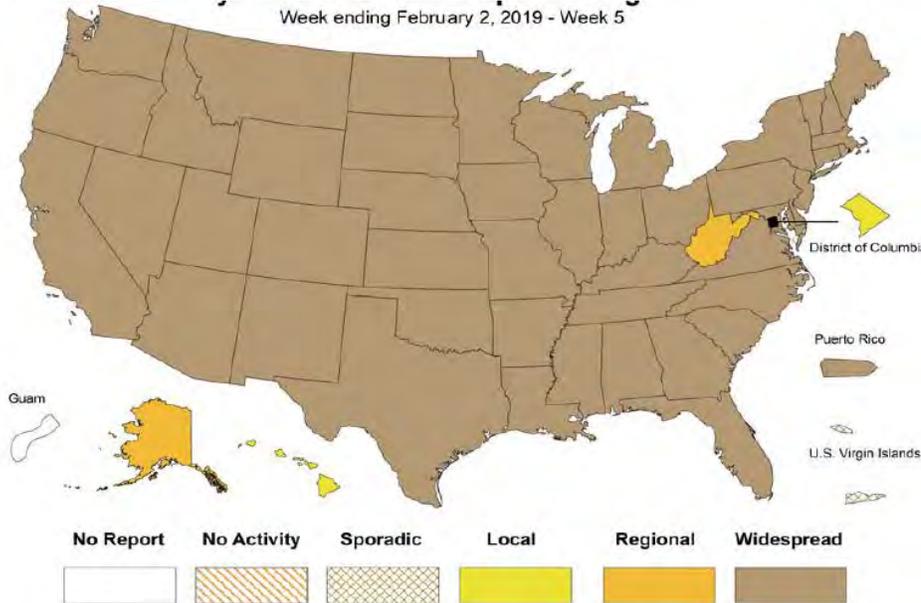


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 5, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 47 states (Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming).
- Regional influenza activity was reported by two states (Alaska and West Virginia).
- Local influenza activity was reported by the District of Columbia and one state (Hawaii).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

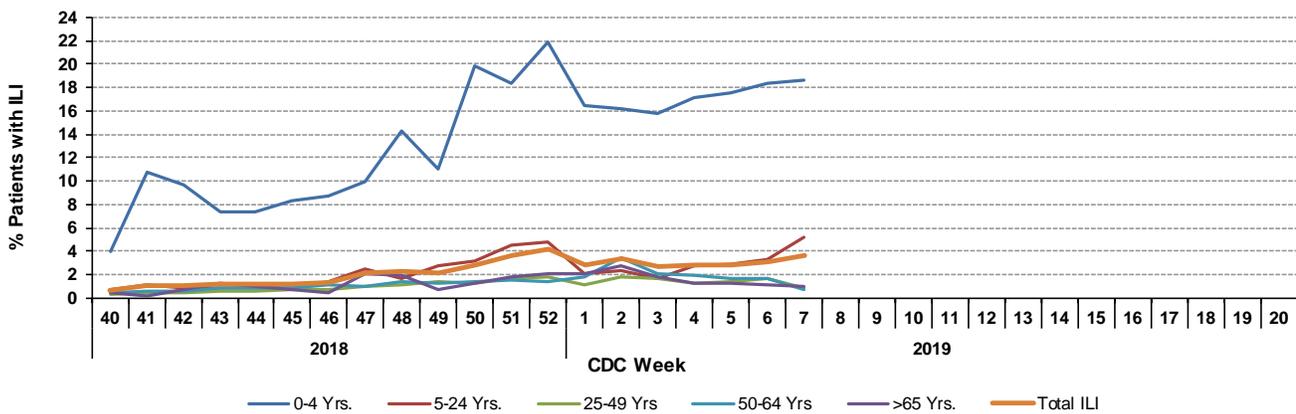
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, February 20, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

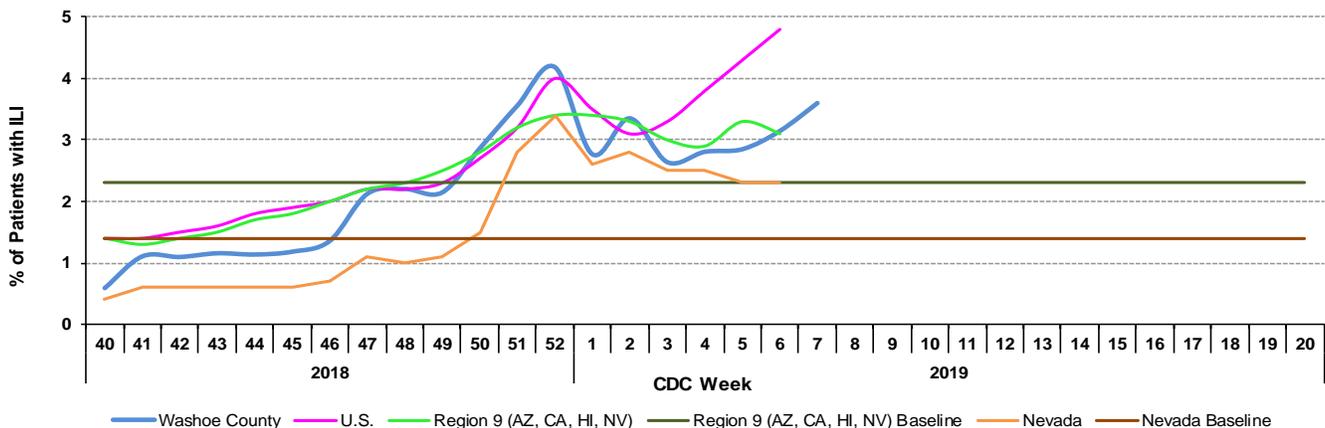
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Eleven of the twelve participating providers in Washoe County reported a total of 247 patients with influenza-like-illness (ILI) for the week ending February 16, 2019 (week 7). The percentage of persons seen with ILI by the eleven providers was 3.6% (247/6860) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (18.6%) and lowest among 50-64 years (0.8%). During week 6, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.3%. Nationwide during week 6 the percentage of visits to sentinel providers due to ILI was 4.8% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.4% to 9.8%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

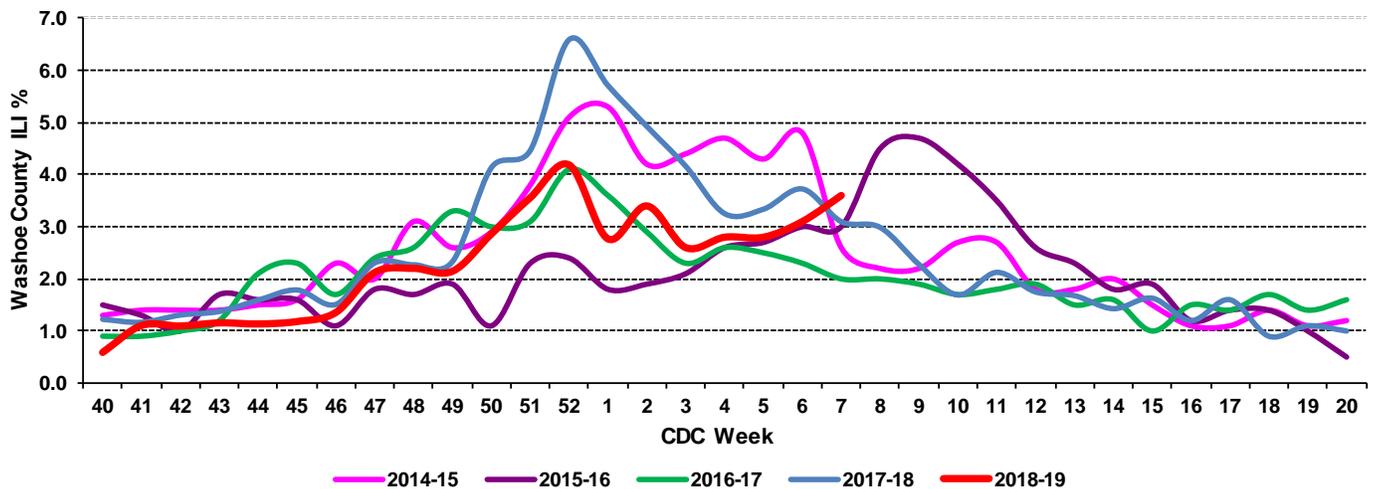


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



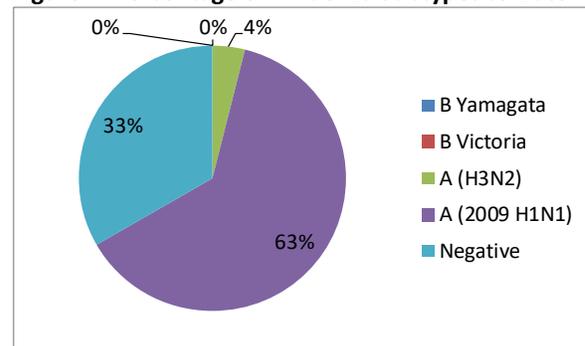
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	2	4%
A (2009 H1N1)	32	63%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	17	33%
Total (All Subtypes)	51	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

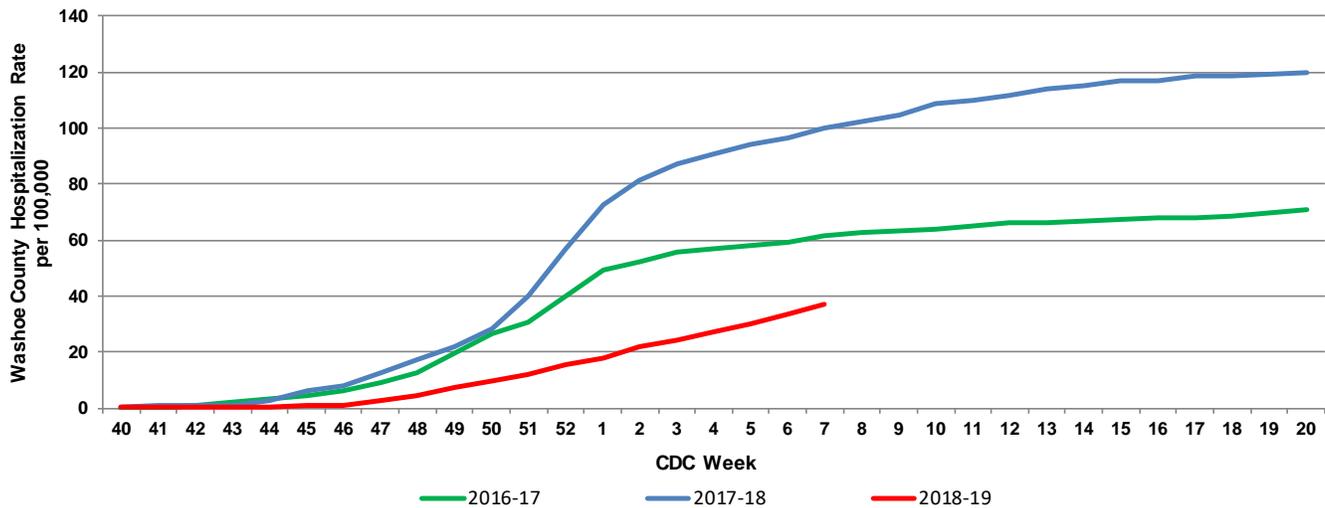
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 7) February 10, 2019 - February 16, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - February 16, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	15	N/A	5	33.3	4	26.7	0	0.0	169	N/A	48	28.4	32	18.9	2	1.2
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	5	3.0	1	2.1	2	6.3	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.6	0	0.0	1	3.1	0	0.0
Influenza A (not subtyped)	13	86.7	5	100.0	4	100.0	0	#DIV/0!	132	78.1	40	83.3	28	87.5	2	100.0
Influenza A (RIDT*)	2	13.3	0	0.0	0	0.0	0	#DIV/0!	26	15.4	4	8.3	1	3.1	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	5	3.0	3	6.3	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

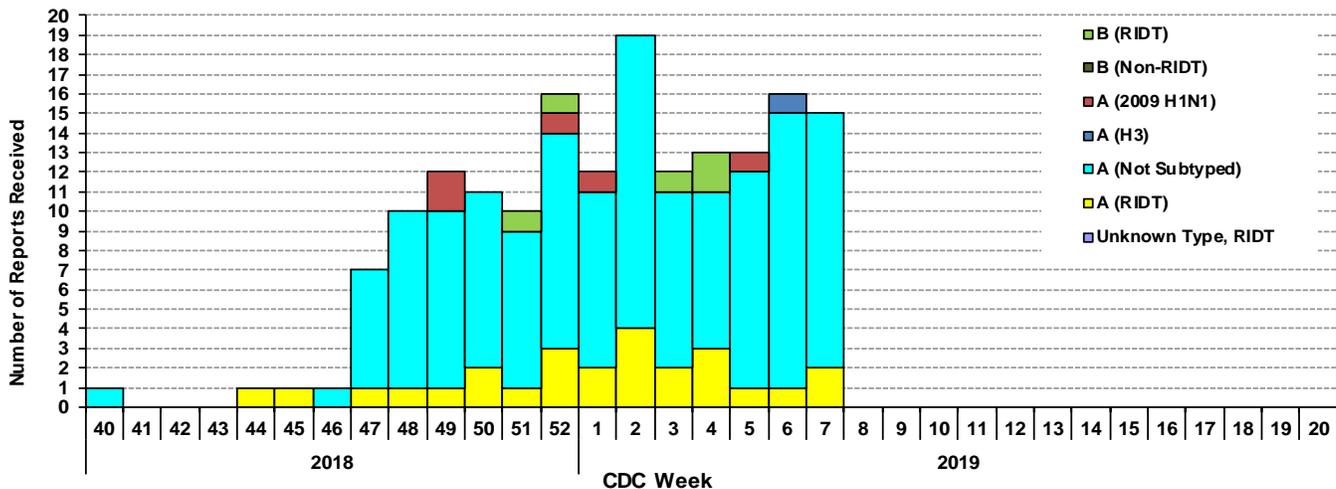
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

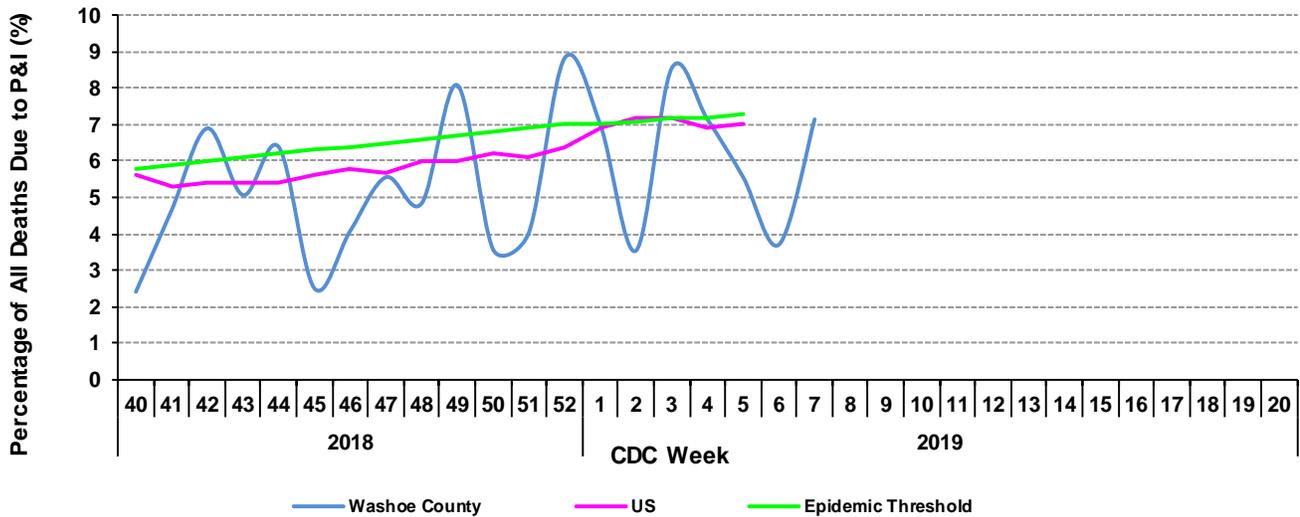
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date four (4) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 7 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 7 was 84. This reflects a P&I ratio of 7.1%. Nationally 7.0% of the deaths occurring during Week 5 were due to P&I. This was below the Week 5 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 106. This reflects an overall P&I ratio of 5.4% (106/1952).

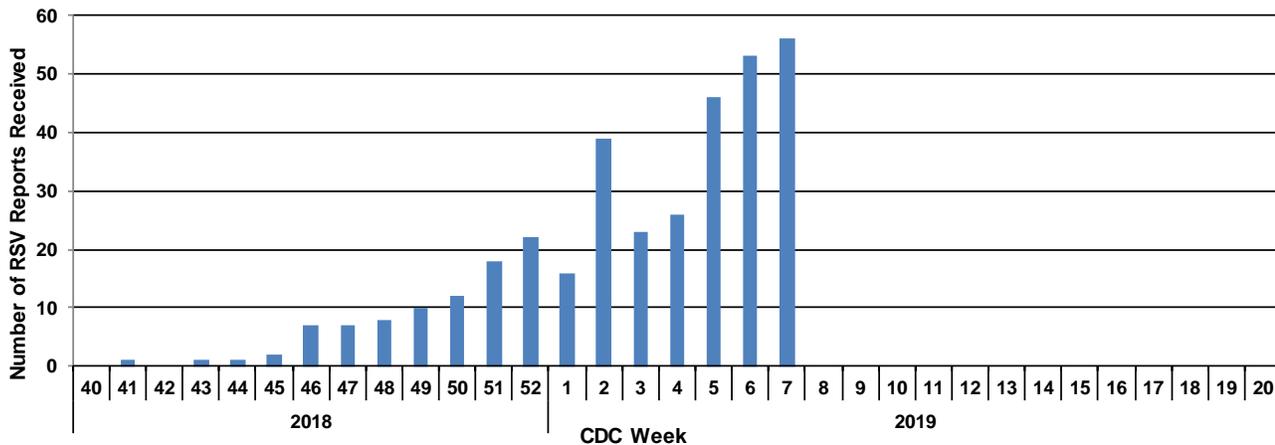
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

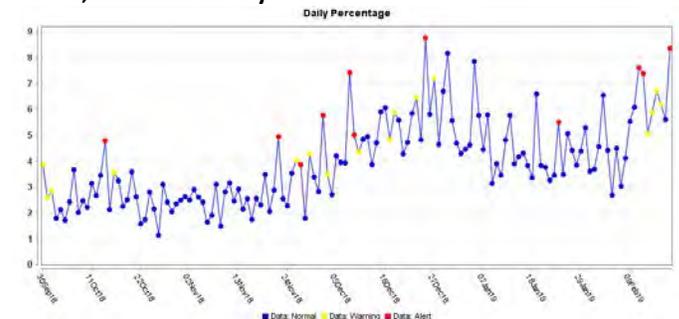


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

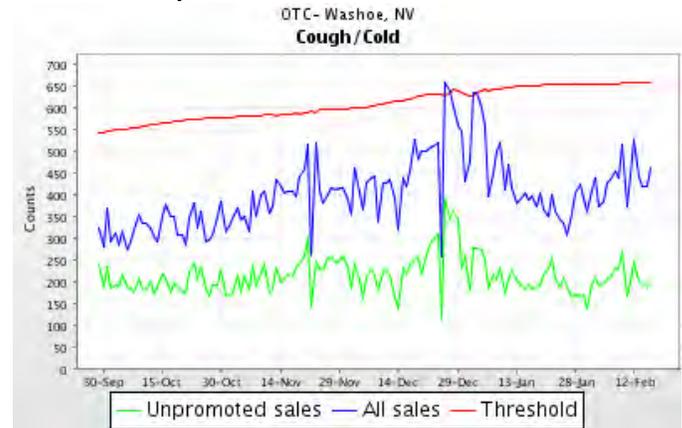
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

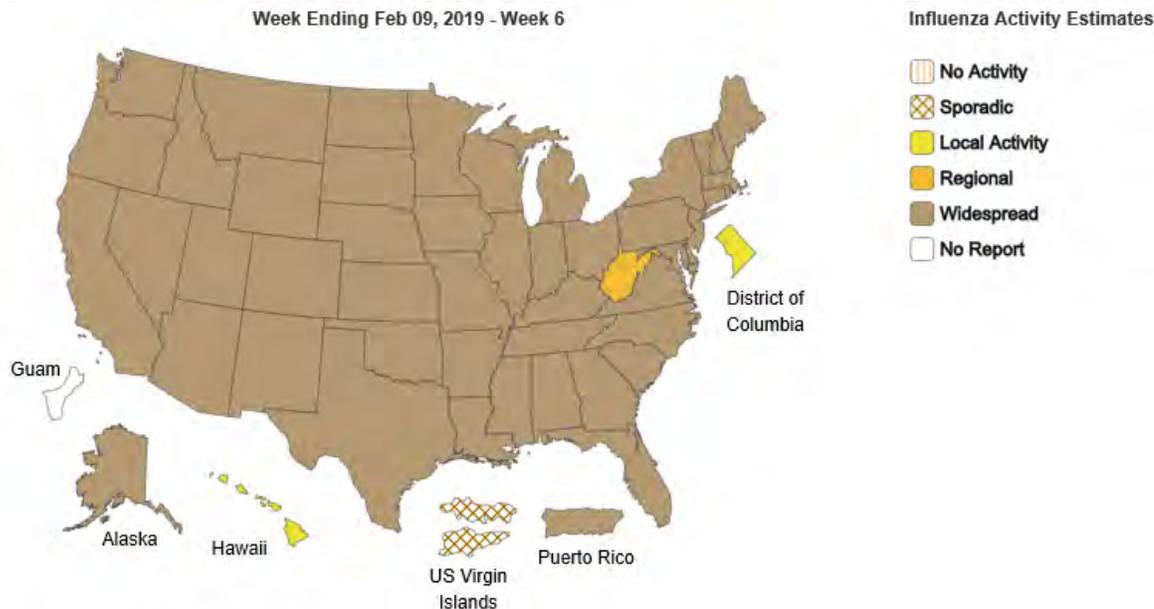


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 6, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 48 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming).
- Regional influenza activity was reported by one state (West Virginia).
- Local influenza activity was reported by the District of Columbia and one state (Hawaii).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

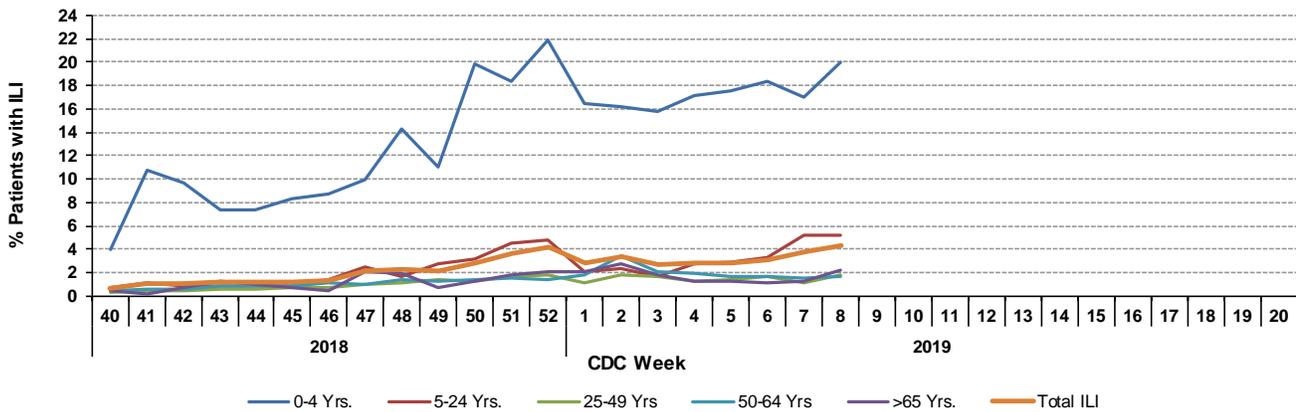
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, February 27, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

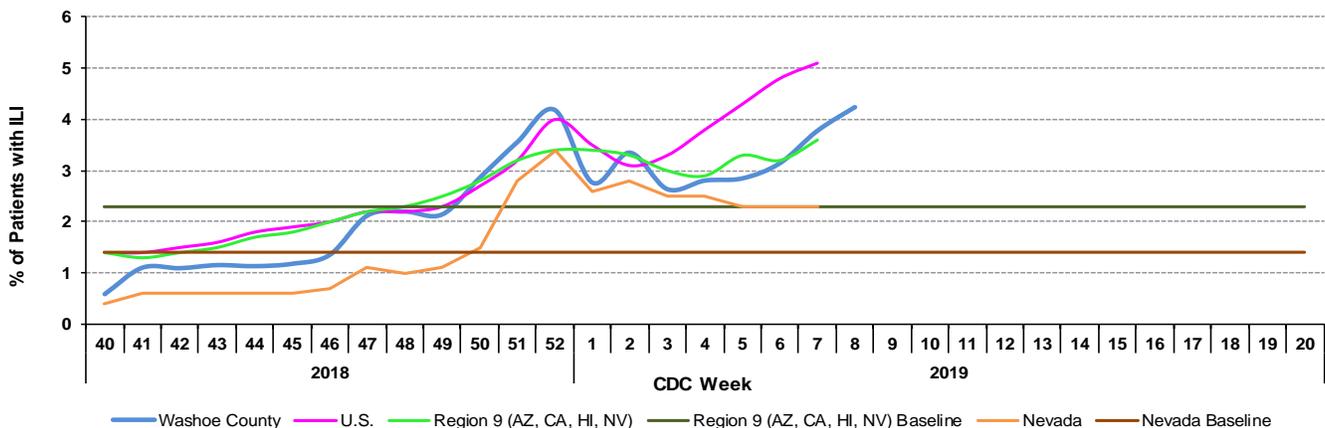
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 312 patients with influenza-like-illness (ILI) for the week ending February 23, 2019 (week 8). The percentage of persons seen with ILI by the twelve providers was 4.2% (312/7357) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (20.0%) and lowest among 50-64 years (1.7%). During week 7, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.3%. Nationwide during week 7 the percentage of visits to sentinel providers due to ILI was 5.1% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.5% to 10.1%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

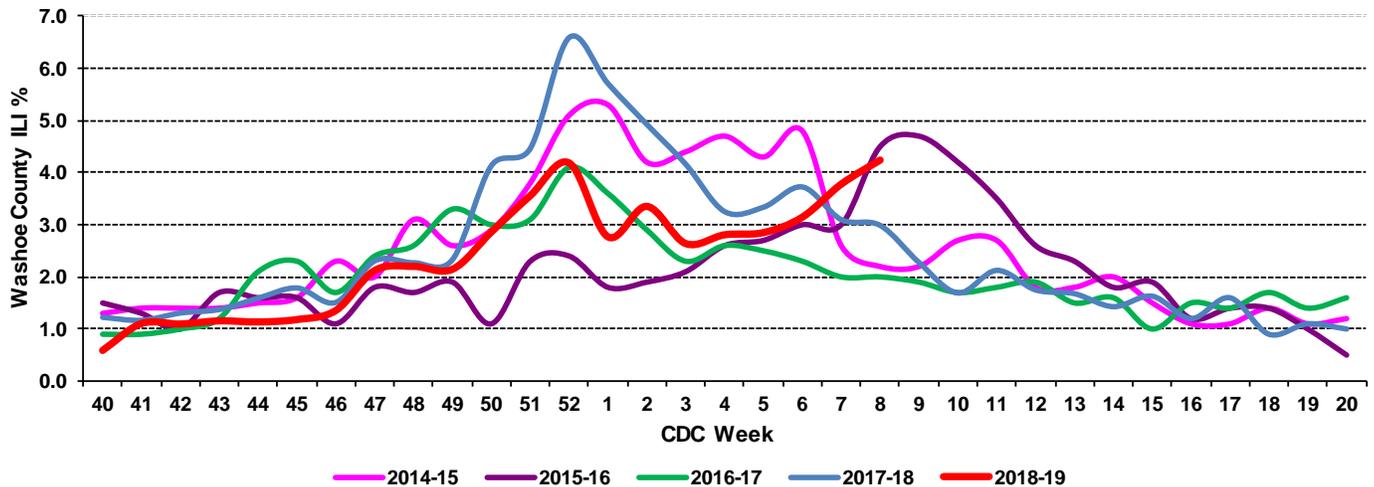


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



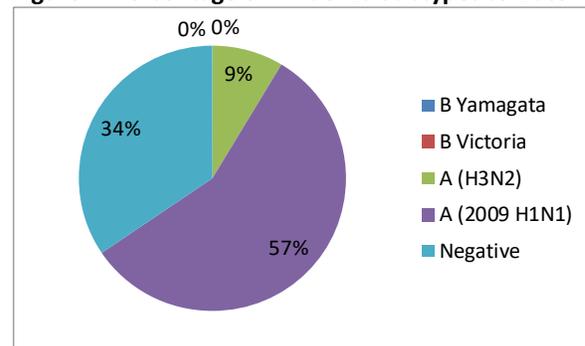
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	5	9%
A (2009 H1N1)	33	57%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	20	34%
Total (All Subtypes)	58	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

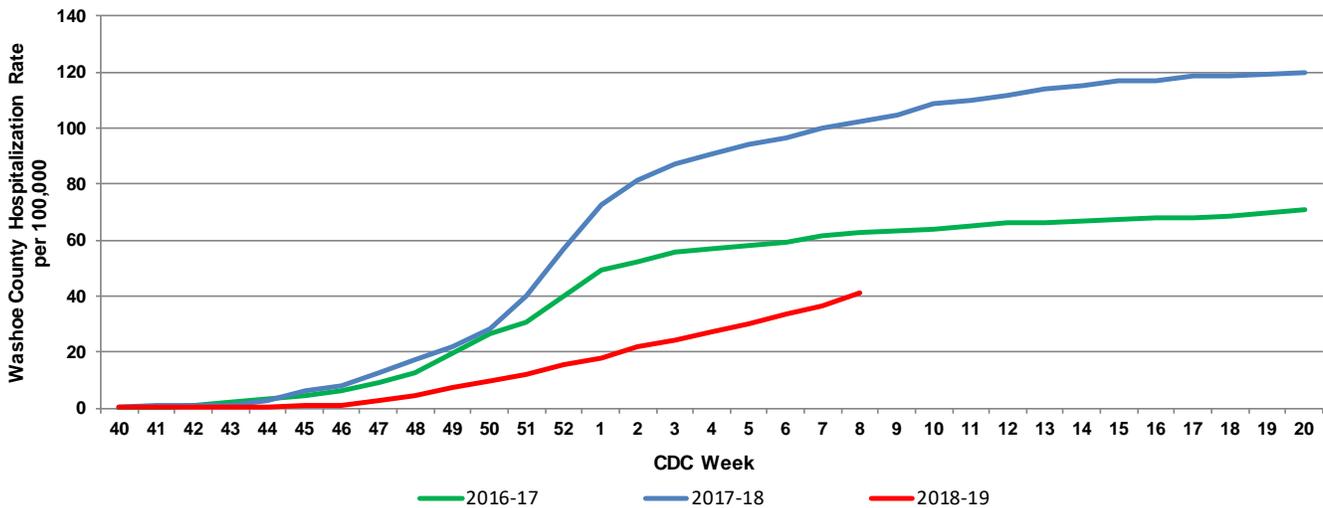
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 8) February 17, 2019 - February 23, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - February 23, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	21	N/A	12	57.1	2	9.5	0	0.0	188	N/A	61	32.4	35	18.6	3	1.6
Influenza A (2009 H1N1)	1	4.8	1	8.3	0	0.0	0	#DIV/0!	6	3.2	2	3.3	2	5.7	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.5	0	0.0	1	2.9	0	0.0
Influenza A (not subtyped)	15	71.4	9	75.0	2	100.0	0	#DIV/0!	146	77.7	50	82.0	31	88.6	3	100.0
Influenza A (RIDT*)	5	23.8	2	16.7	0	0.0	0	#DIV/0!	30	16.0	6	9.8	1	2.9	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	5	2.7	3	4.9	0	0.0	0	0.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

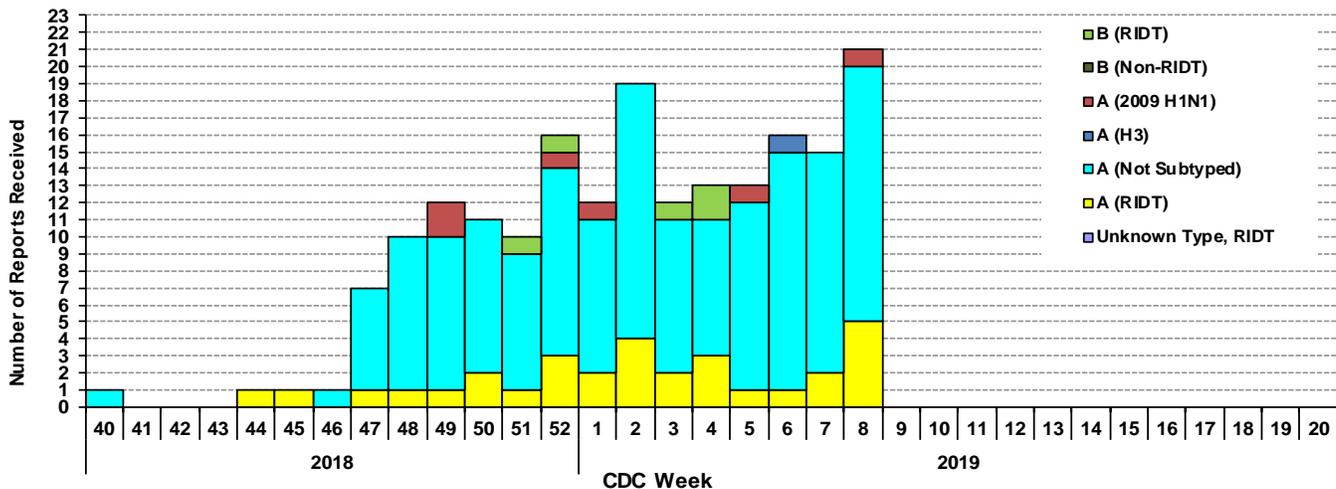
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

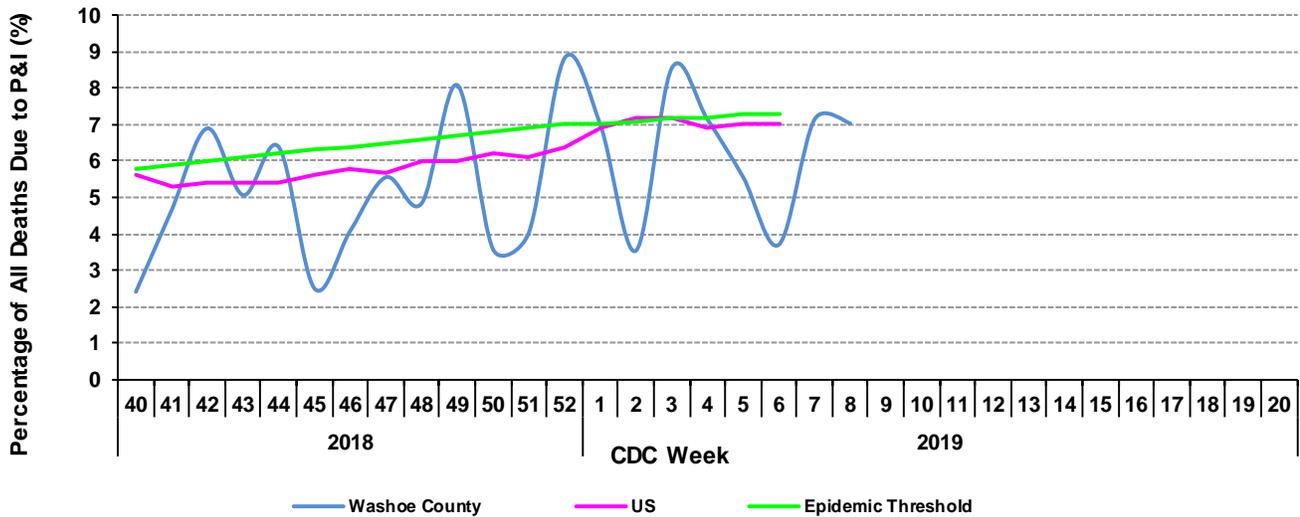
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date four (4) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Nine death certificates were received for week 8 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 8 was 128. This reflects a P&I ratio of 7.0%. Nationally 7.0% of the deaths occurring during Week 6 were due to P&I. This was below the Week 6 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 115. This reflects an overall P&I ratio of 5.5% (115/2080).

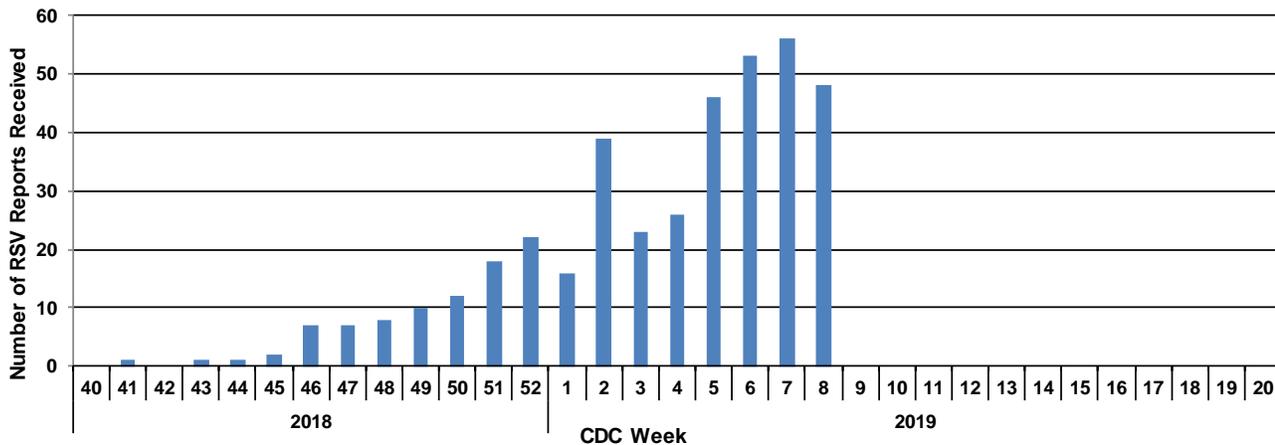
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

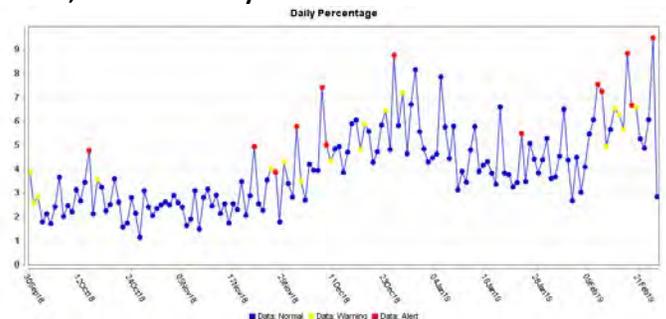


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

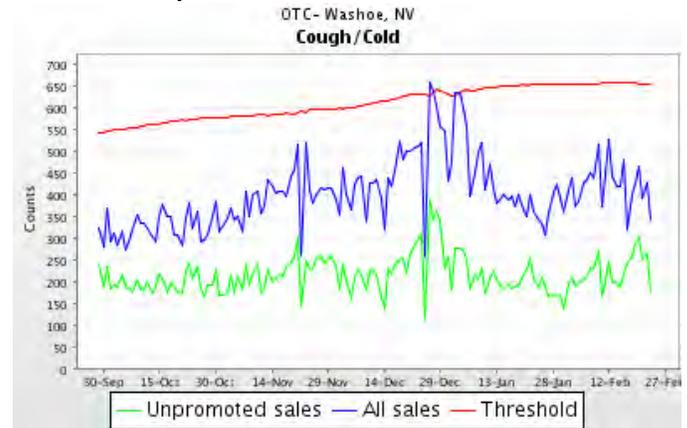
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

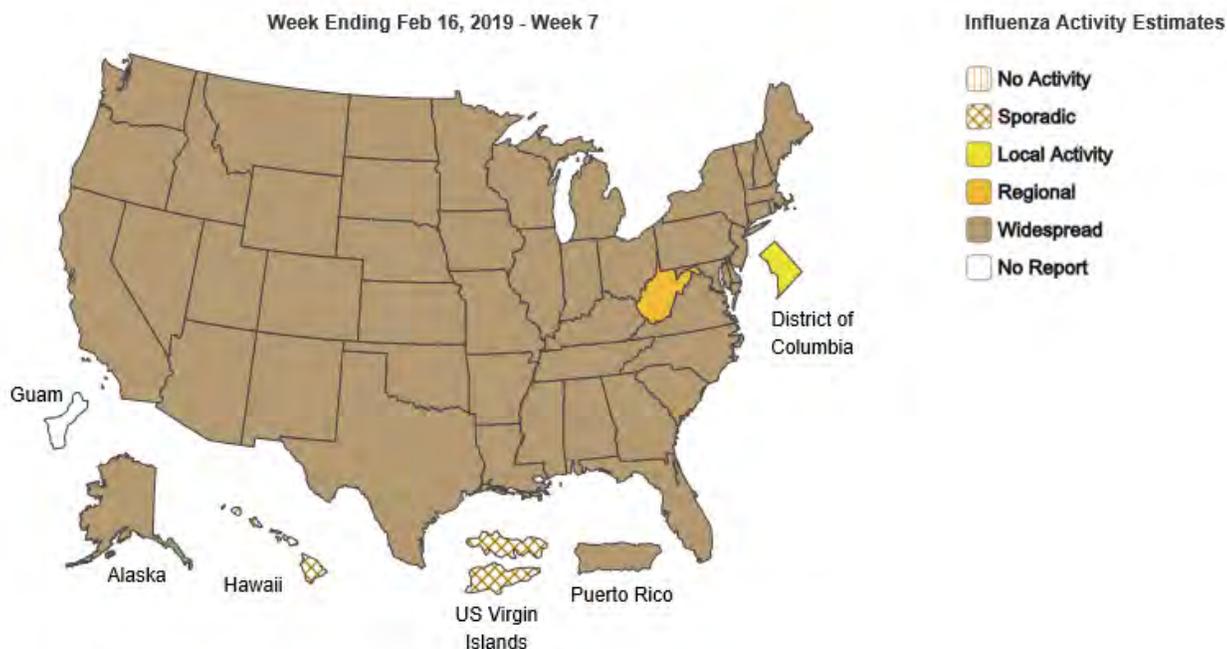


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 7, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 48 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming).
- Regional influenza activity was reported by one state (West Virginia).
- Local influenza activity was reported by the District of Columbia.
- Sporadic influenza activity was reported by the U.S. Virgin Islands and one state (Hawaii).
- Guam did not report

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

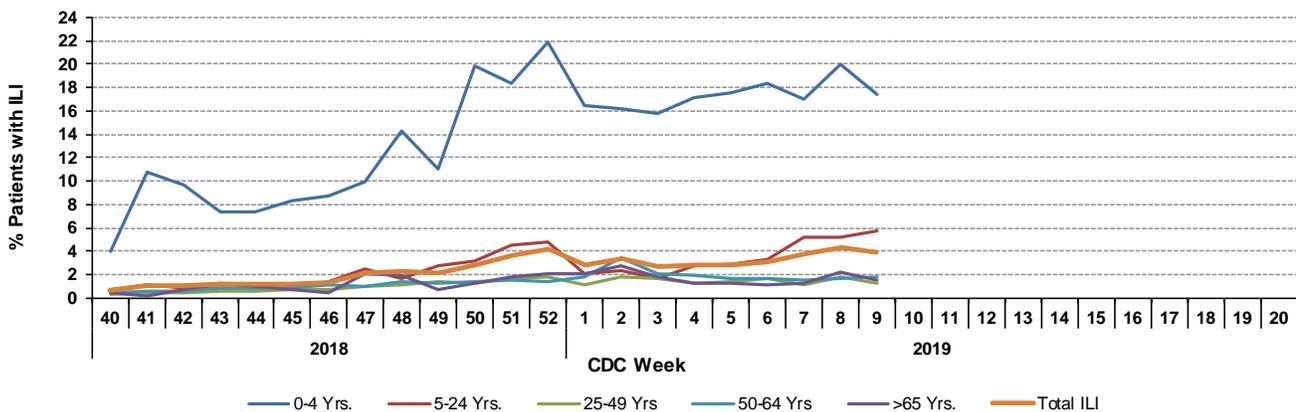
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Thursday, March 7, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

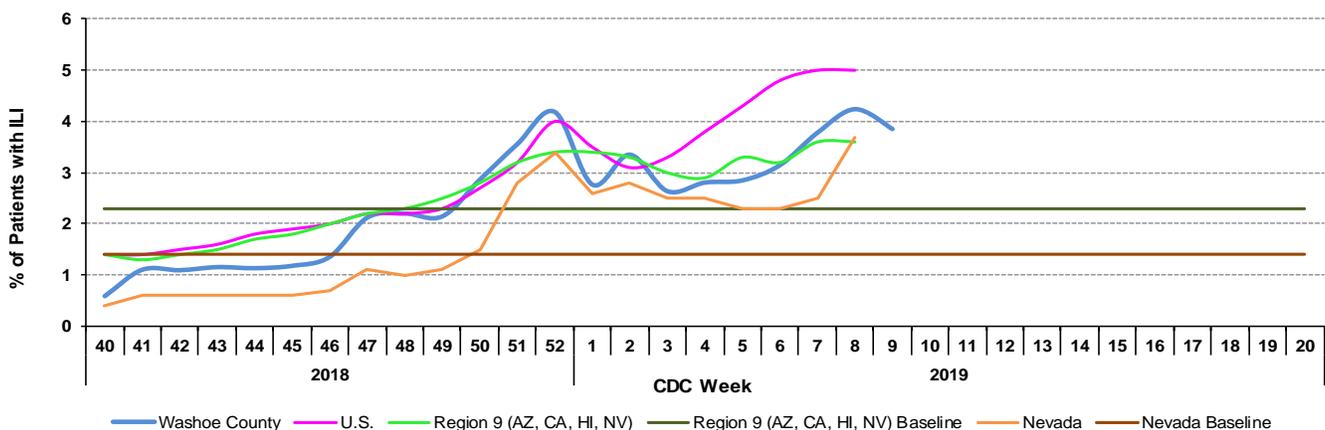
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 289 patients with influenza-like-illness (ILI) for the week ending March 2, 2019 (week 9). The percentage of persons seen with ILI by the twelve providers was 3.9% (289/7499) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (17.4%) and lowest among 25-49 years (1.2%). During week 8, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.7%. Nationwide during week 8 the percentage of visits to sentinel providers due to ILI was 5.0% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 3.0% to 9.4%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

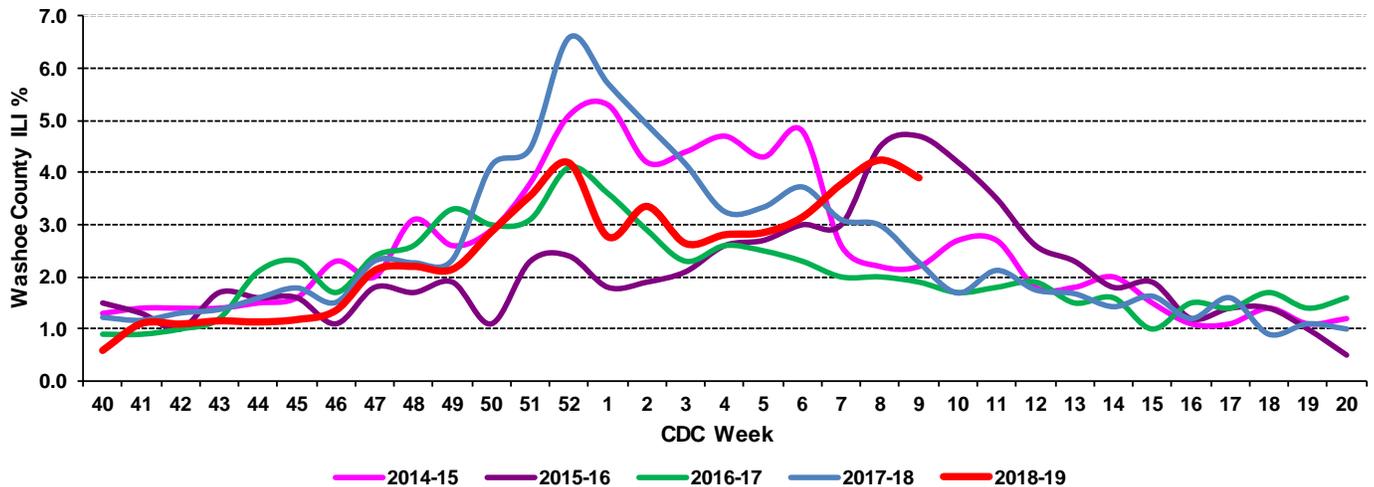


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



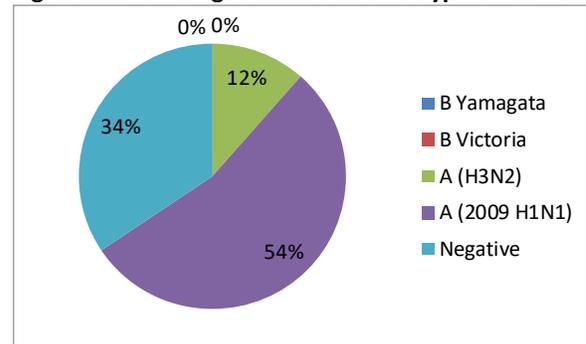
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	7	12%
A (2009 H1N1)	33	54%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	21	34%
Total (All Subtypes)	61	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 9) February 24, 2019 - March 2, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - March 2, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	26	N/A	13	50.0	4	15.4	0	0.0	215	N/A	75	34.9	40	18.6	4	1.9
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.8	2	2.7	2	5.0	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.5	0	0.0	1	2.5	0	0.0
Influenza A (not subtyped)	20	76.9	11	84.6	3	75.0	0	#DIV/0!	166	77.2	61	81.3	35	87.5	3	75.0
Influenza A (RIDT*)	5	19.2	1	7.7	0	0.0	0	#DIV/0!	36	16.7	8	10.7	1	2.5	0	0.0
Influenza B (RIDT*)	1	3.8	1	7.7	1	25.0	0	#DIV/0!	6	2.8	4	5.3	1	2.5	1	25.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

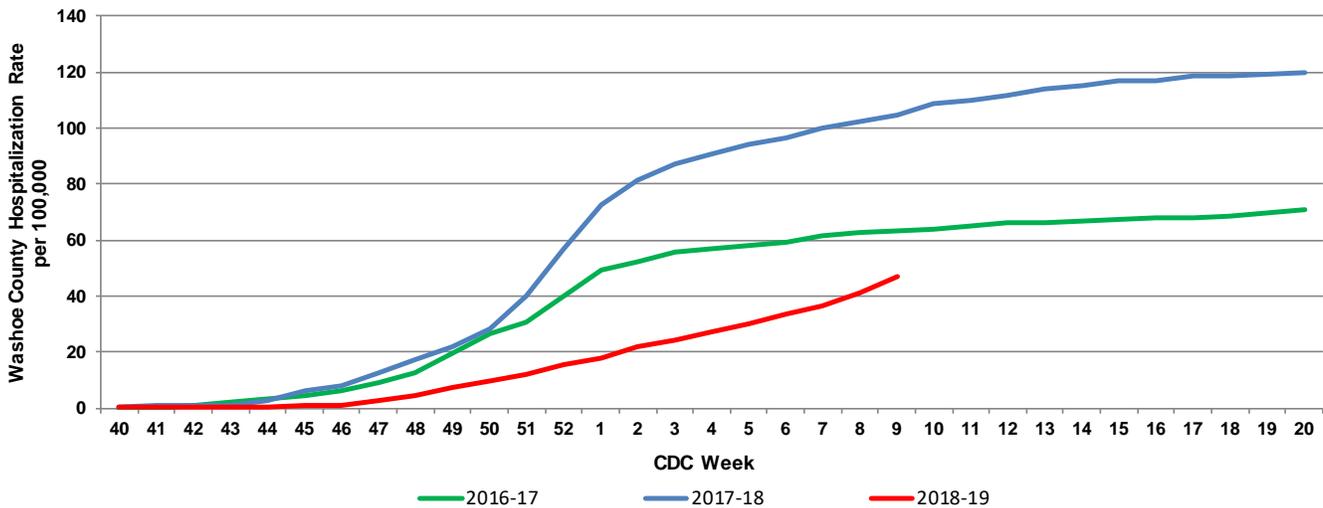
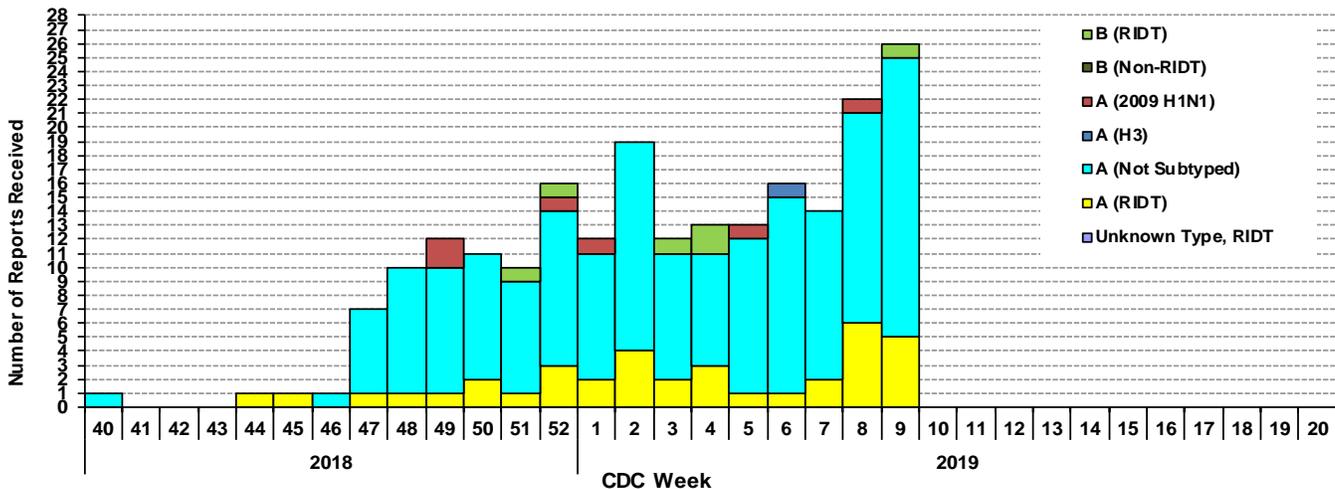


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

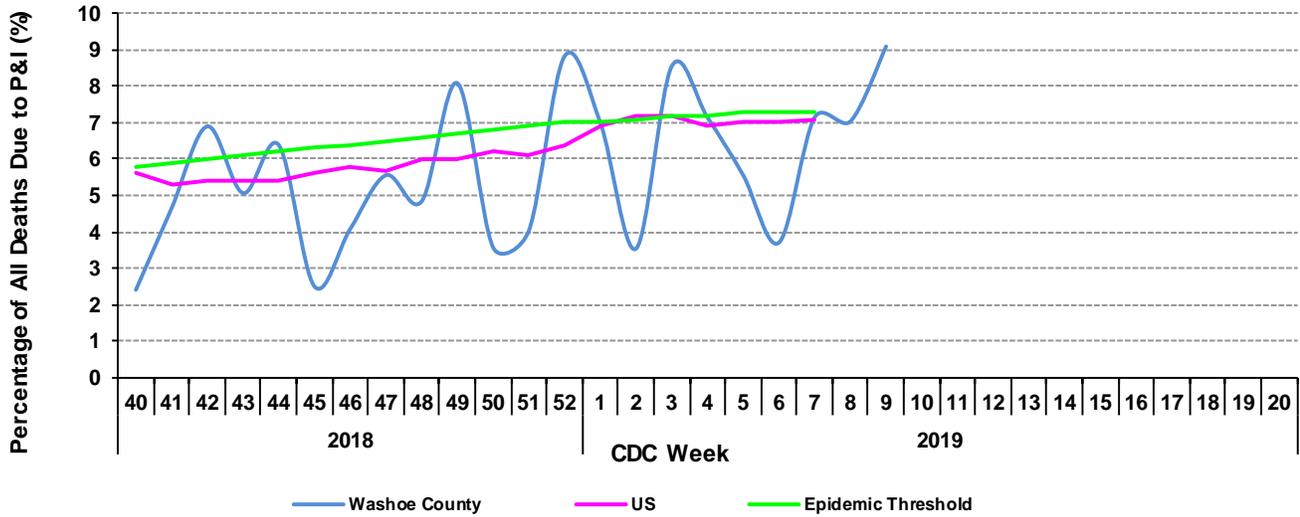
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date five (5) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Twelve death certificates were received for week 9 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 9 was 132. This reflects a P&I ratio of 9.1%. Nationally 7.1% of the deaths occurring during Week 7 were due to P&I. This was below the Week 7 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 127. This reflects an overall P&I ratio of 5.7% (127/2212).

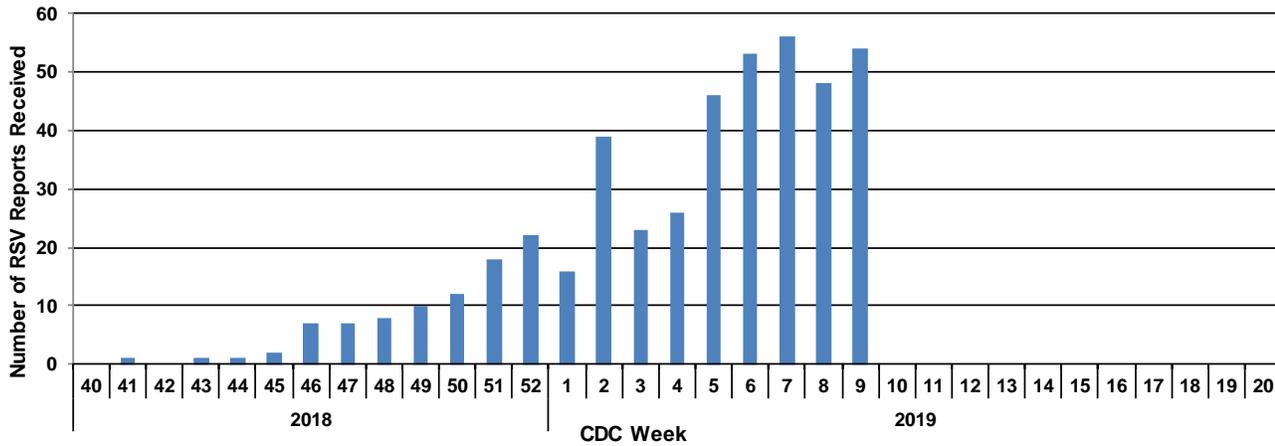
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

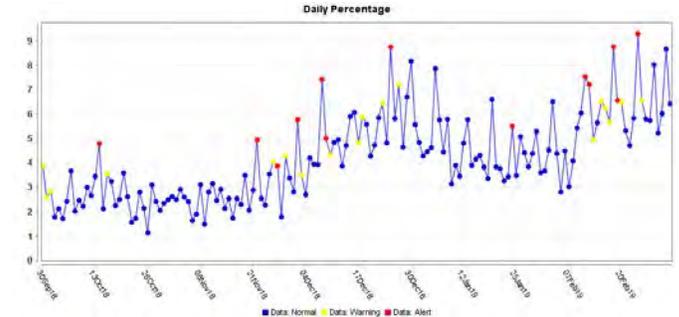


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

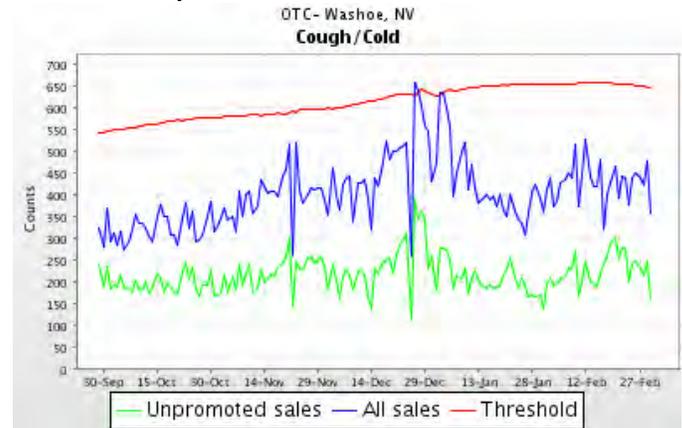
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**



**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 8, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 49 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming).
- Local influenza activity was reported by the District of Columbia and one state (Hawaii).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

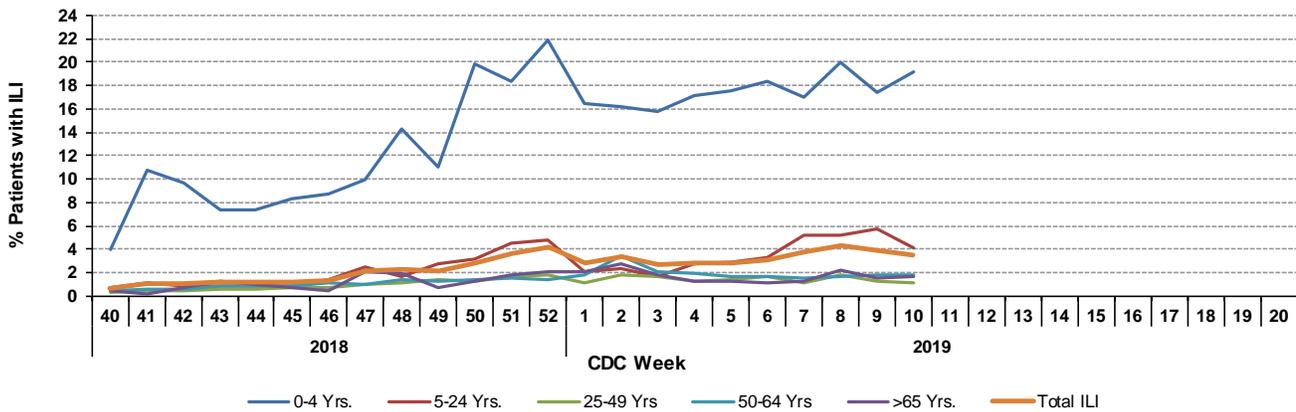
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Thursday, March 14, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

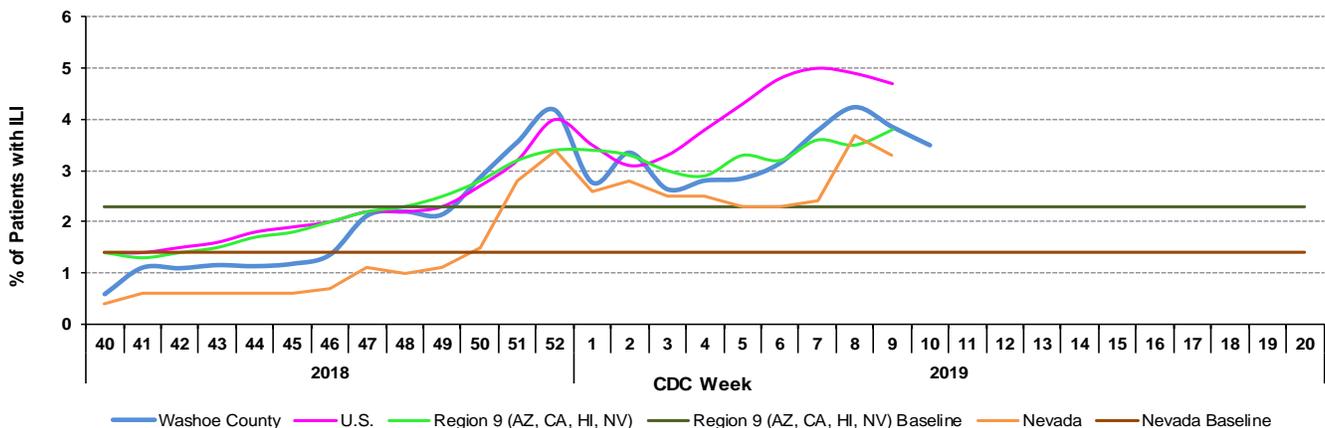
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 266 patients with influenza-like-illness (ILI) for the week ending March 9, 2019 (week 10). The percentage of persons seen with ILI by the twelve providers was 3.5% (266/7605) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (19.2%) and lowest among 25-49 years (1.1%). During week 9, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.3%. Nationwide during week 9 the percentage of visits to sentinel providers due to ILI was 4.7% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 3.3% to 9.3%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

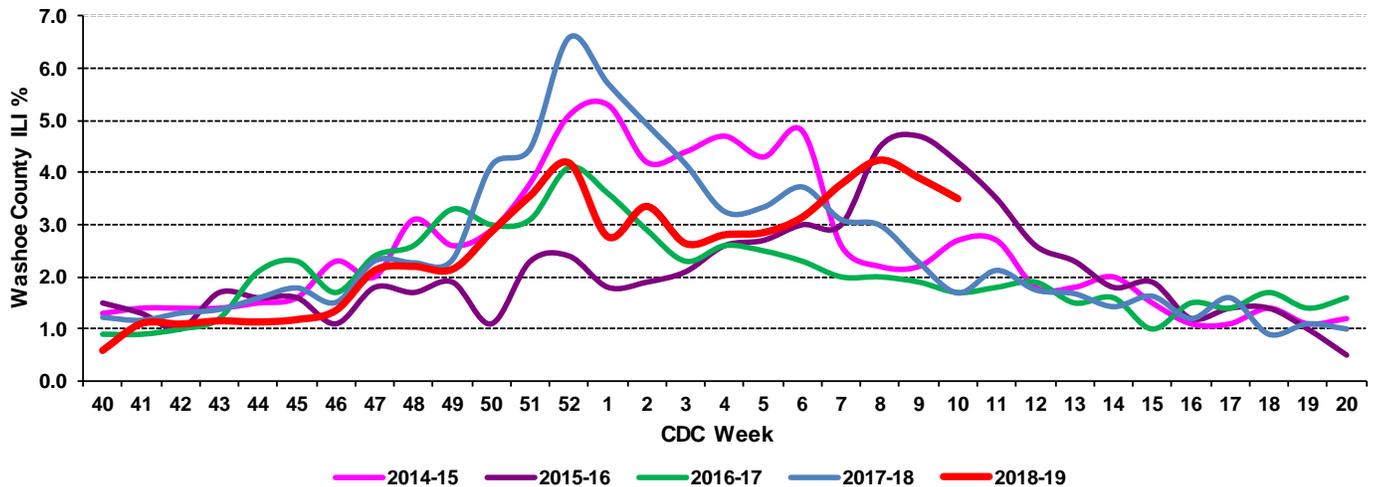


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



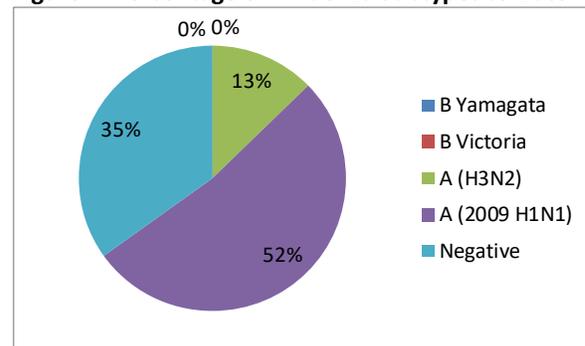
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	8	13%
A (2009 H1N1)	33	52%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	22	35%
Total (All Subtypes)	63	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 10) March 3, 2019 - March 9, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - March 9, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	19	N/A	6	31.6	2	10.5	0	0.0	234	N/A	80	34.2	42	17.9	5	2.1
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.6	2	2.5	2	4.8	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.4	0	0.0	1	2.4	0	0.0
Influenza A (not subtyped)	10	52.6	2	33.3	2	100.0	0	#DIV/0!	176	75.2	63	78.8	37	88.1	4	80.0
Influenza A (RIDT*)	8	42.1	3	50.0	0	0.0	0	#DIV/0!	44	18.8	11	13.8	1	2.4	0	0.0
Influenza B (RIDT*)	1	5.3	1	16.7	0	0.0	0	#DIV/0!	7	3.0	4	5.0	1	2.4	1	20.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

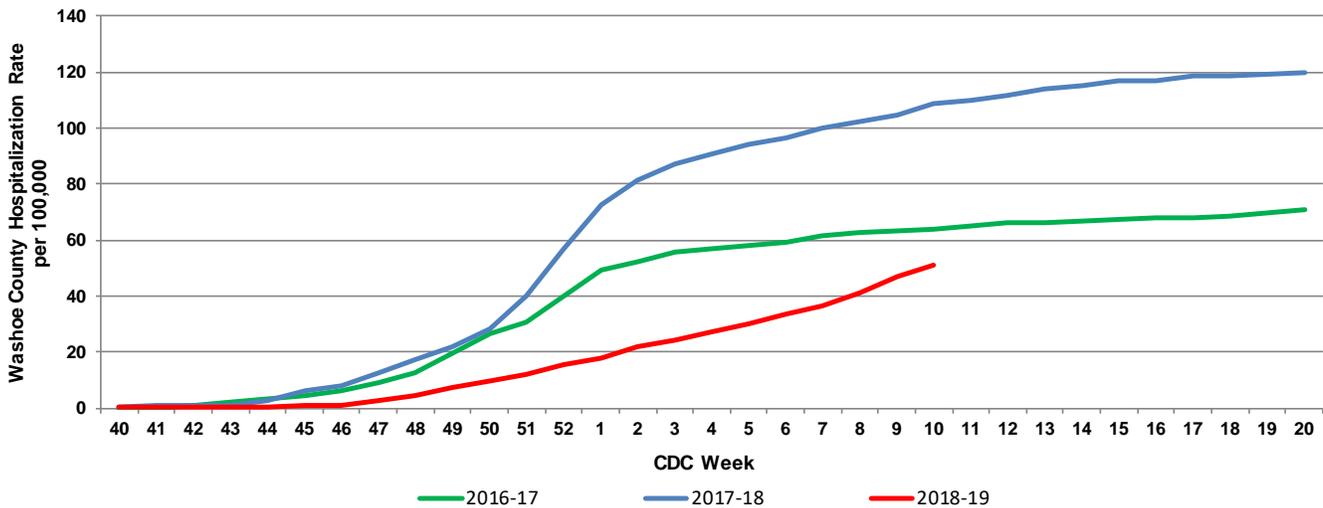
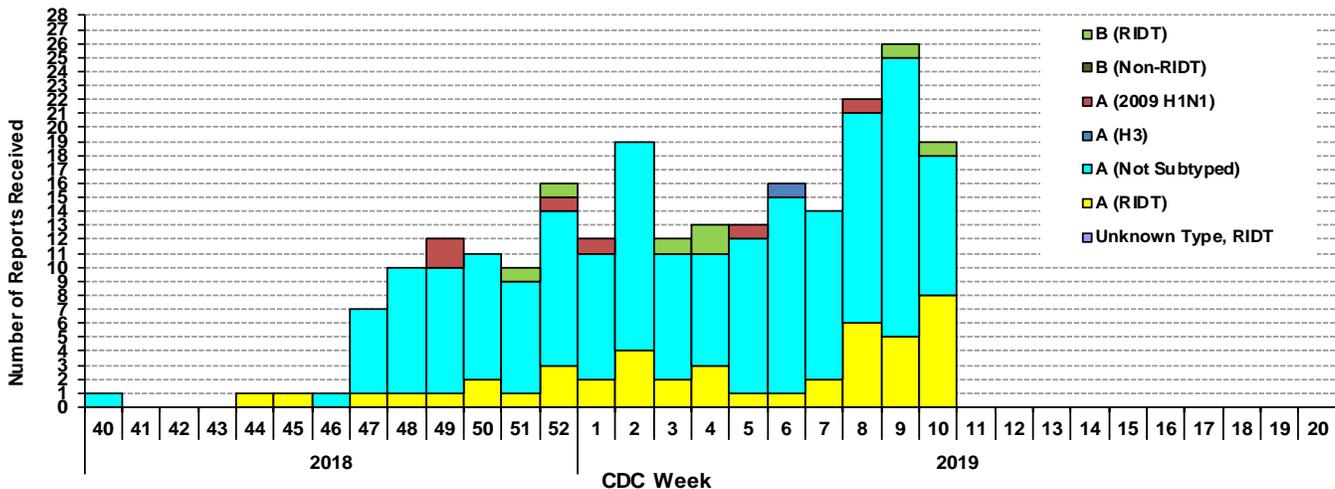


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

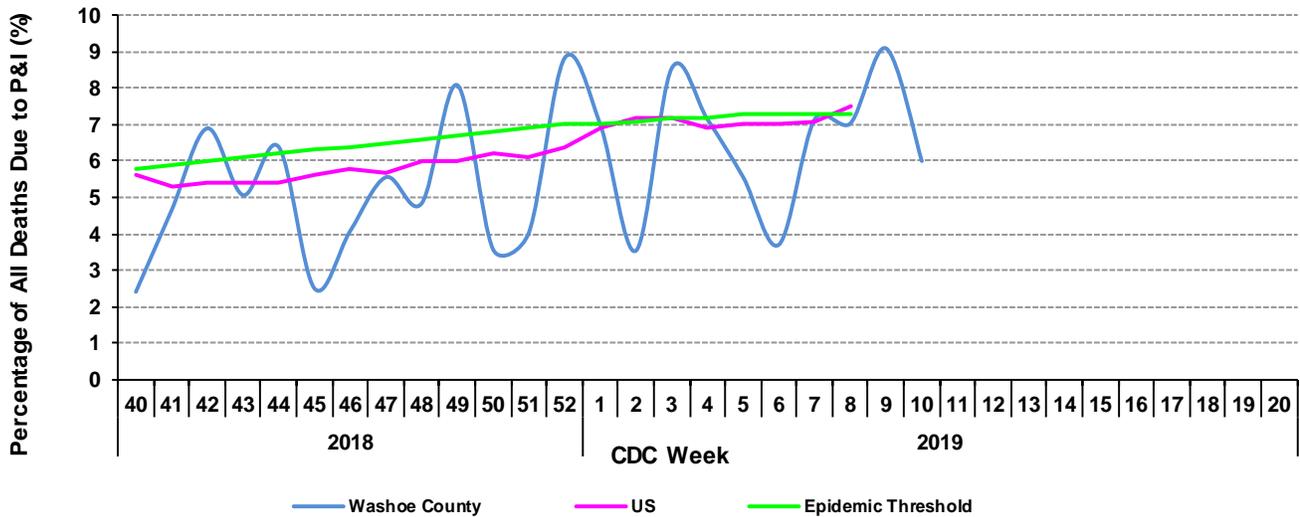
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date six (6) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 10 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 10 was 100. This reflects a P&I ratio of 6.0%. Nationally 7.5% of the deaths occurring during Week 8 were due to P&I. This was above the Week 8 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 133. This reflects an overall P&I ratio of 5.8% (133/2312).

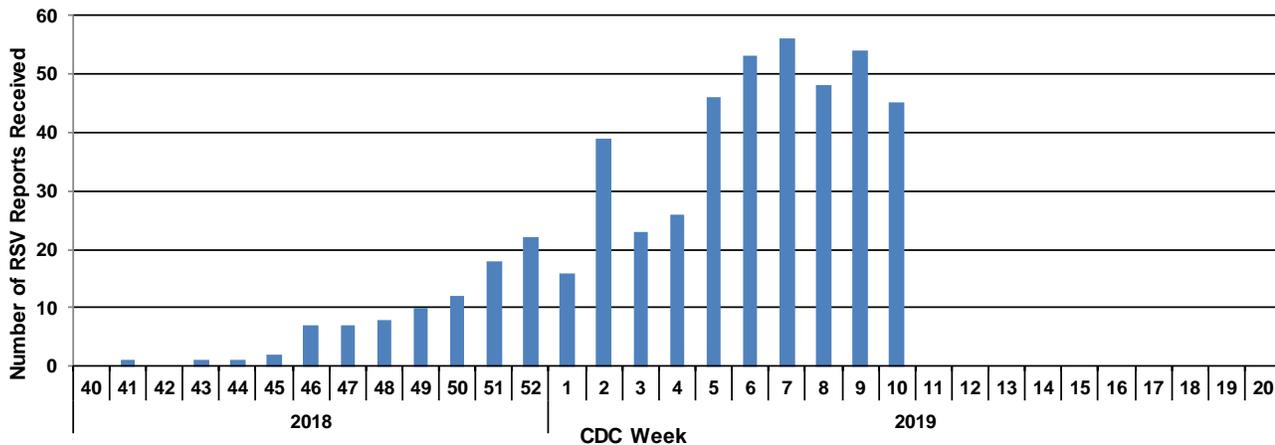
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

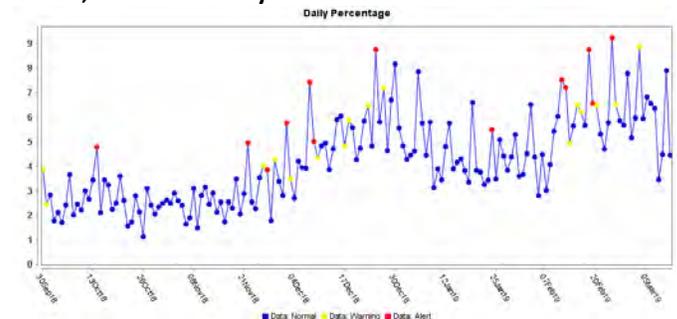


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

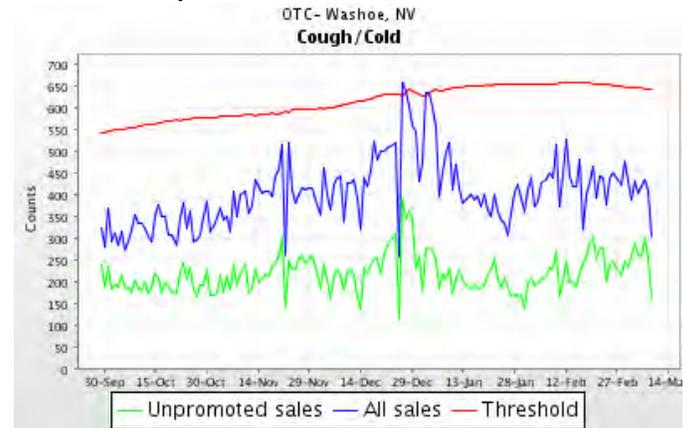
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



### Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

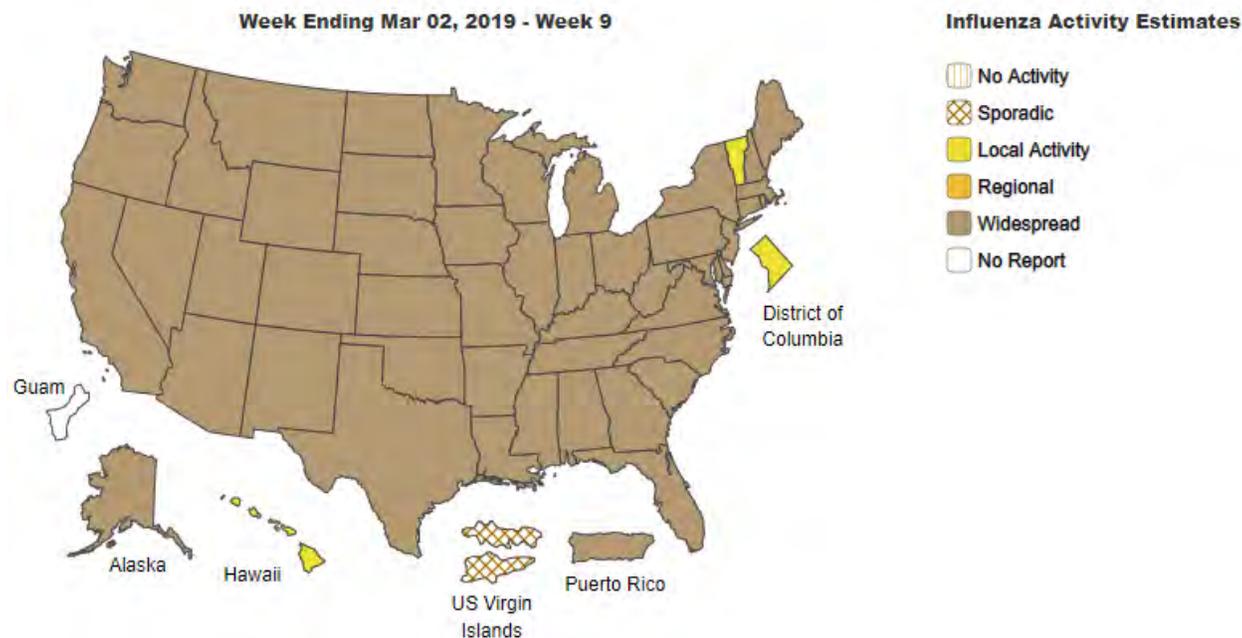


### Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

During week 9, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 48 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin and Wyoming).
- Local influenza activity was reported by the District of Columbia and two states (Hawaii and Vermont).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



### Washoe County Influenza Resources

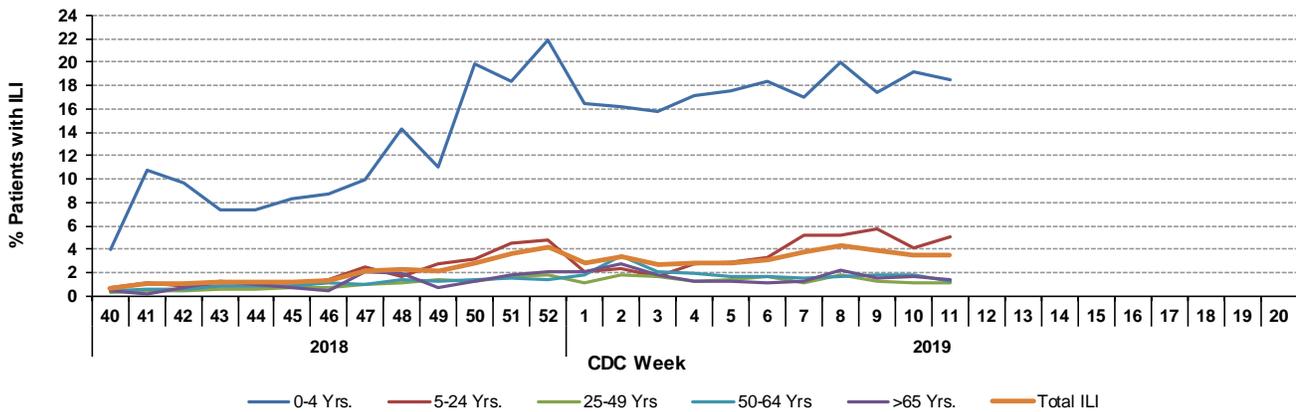
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, March 20, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

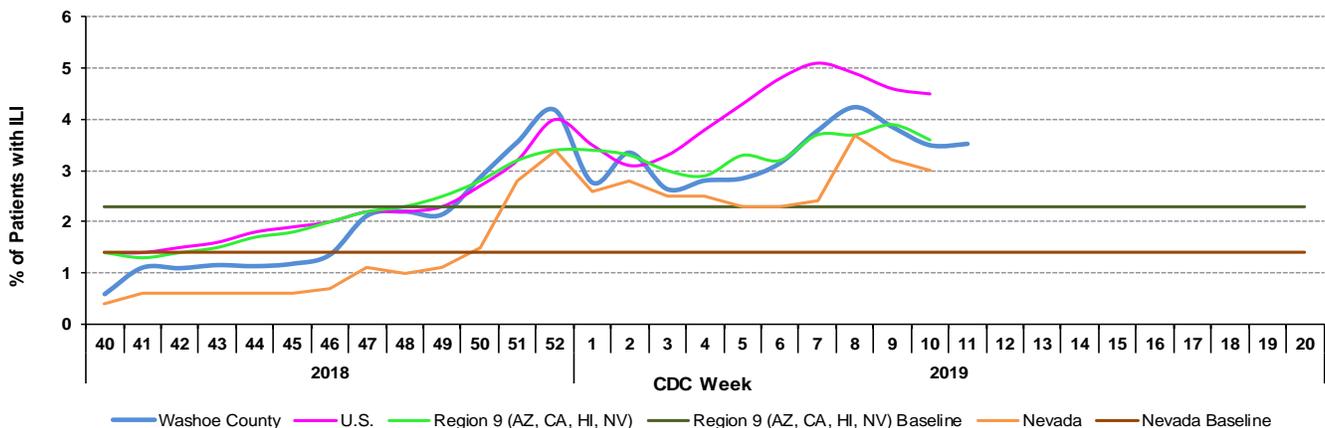
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 260 patients with influenza-like-illness (ILI) for the week ending March 16, 2019 (week 11). The percentage of persons seen with ILI by the twelve providers was 3.5% (260/7377) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (18.5%) and lowest among 25-49 years (1.1%). During week 10, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.0%. Nationwide during week 10 the percentage of visits to sentinel providers due to ILI was 4.5% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 3.0% to 8.5%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

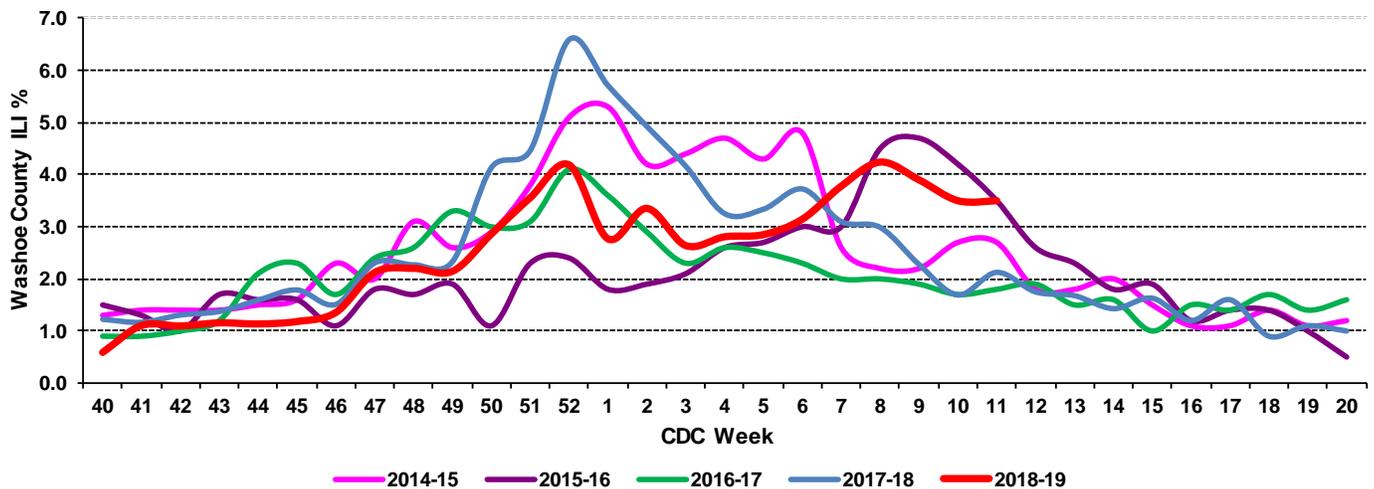


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



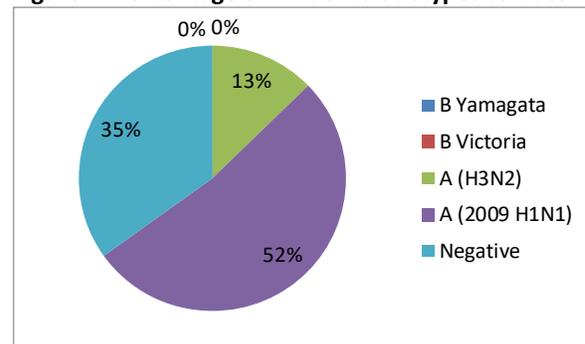
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	8	13%
A (2009 H1N1)	33	52%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	22	35%
Total (All Subtypes)	63	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

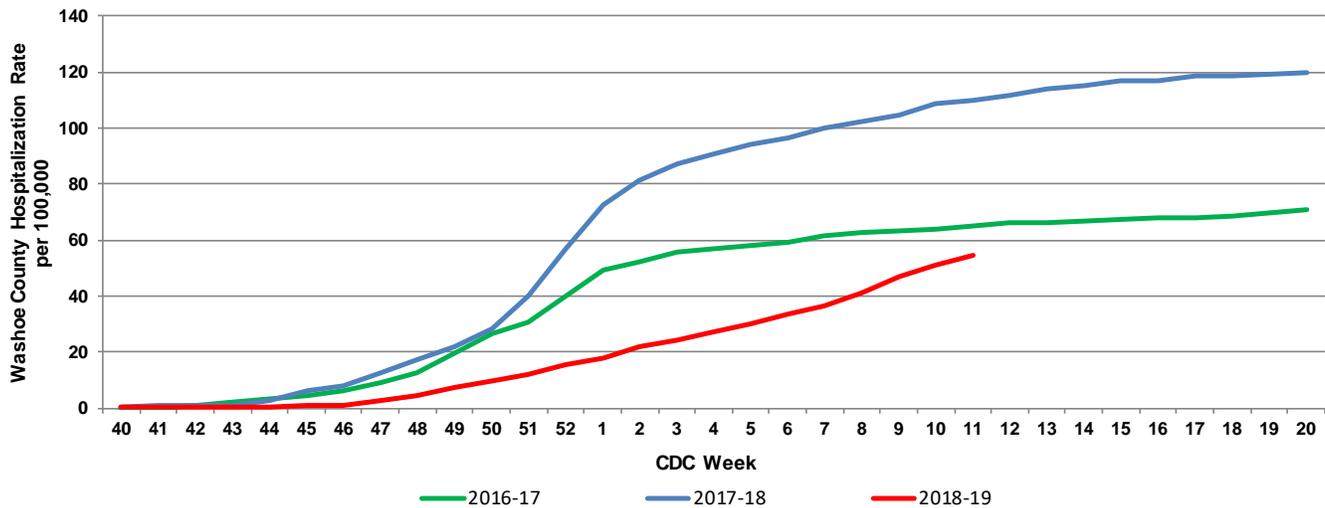
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 11) March 10, 2019 - March 16, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - March 16, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	16	N/A	9	56.3	4	25.0	0	0.0	250	N/A	89	35.6	46	18.4	5	2.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.4	2	2.2	2	4.3	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.4	0	0.0	1	2.2	0	0.0
Influenza A (not subtyped)	13	81.3	7	77.8	4	100.0	0	#DIV/0!	189	75.6	70	78.7	41	89.1	4	80.0
Influenza A (RIDT*)	3	18.8	2	22.2	0	0.0	0	#DIV/0!	47	18.8	13	14.6	1	2.2	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	7	2.8	4	4.5	1	2.2	1	20.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

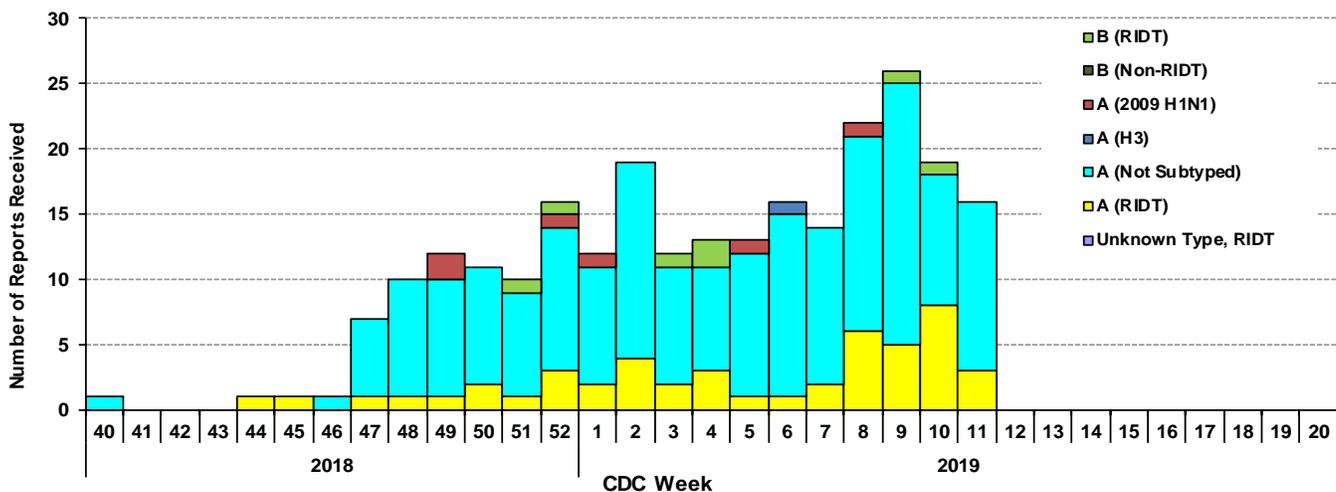
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

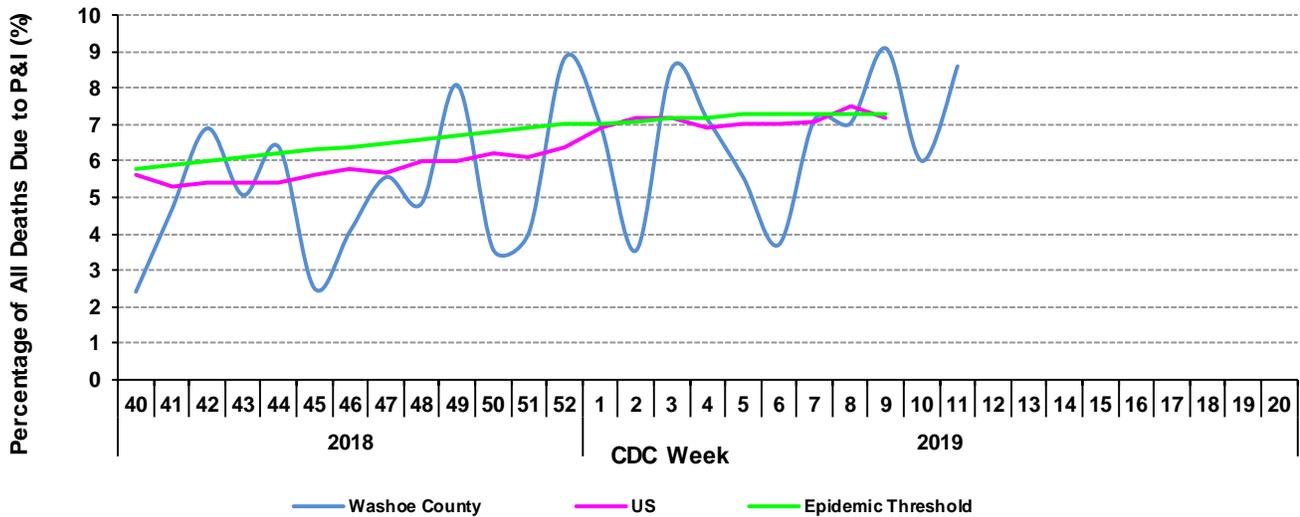
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date six (6) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Eight death certificates were received for week 11 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 11 was 93. This reflects a P&I ratio of 8.6%. Nationally 7.2% of the deaths occurring during Week 9 were due to P&I. This was below the Week 9 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 141. This reflects an overall P&I ratio of 5.9% (141/2405).

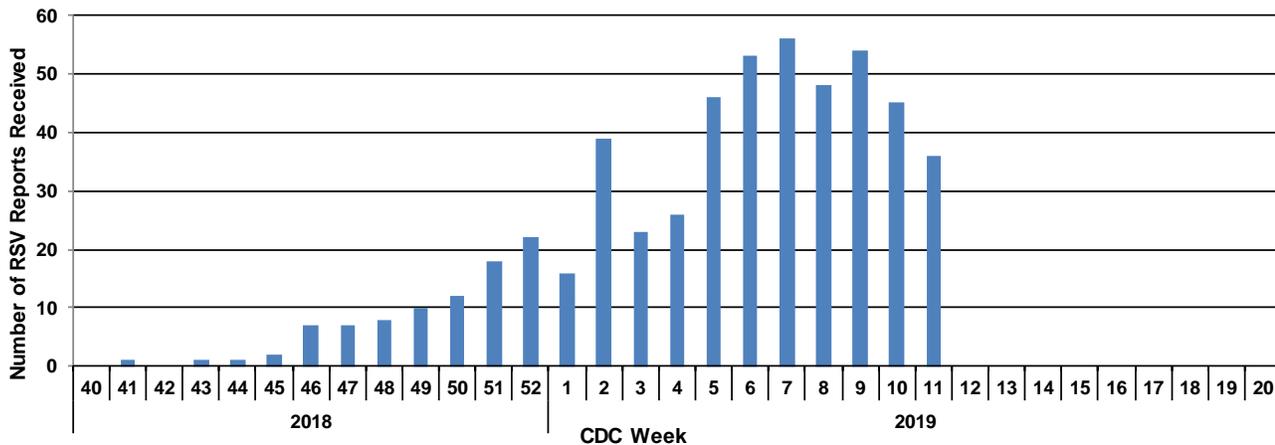
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

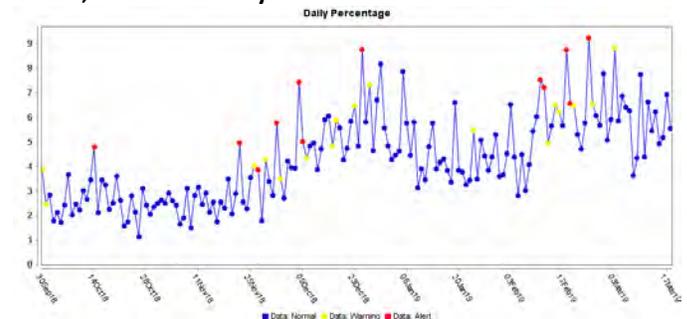


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

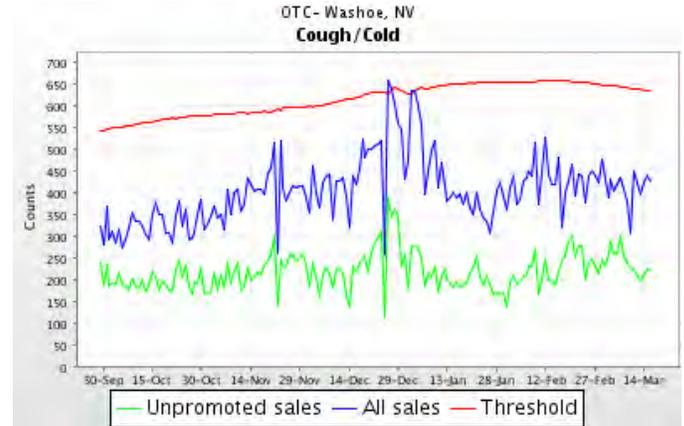
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

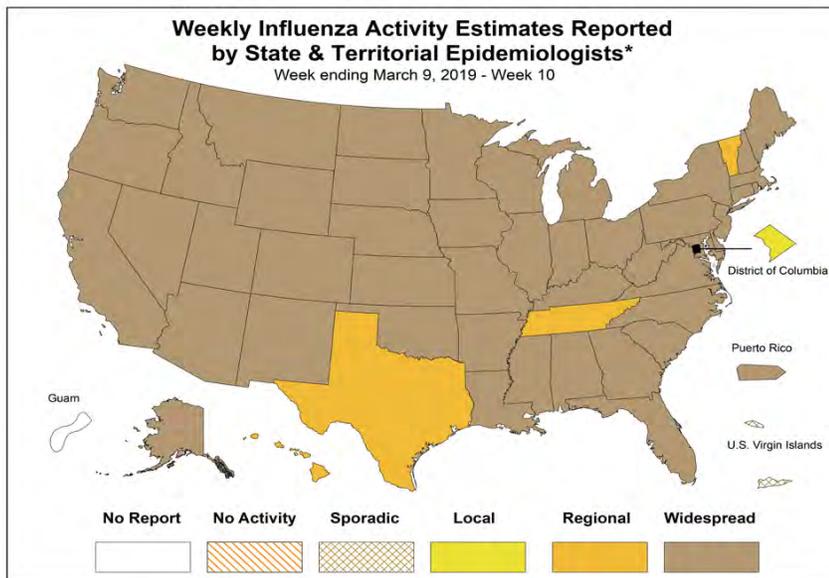


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 10, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 46 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Virginia, Washington, West Virginia, Wisconsin and Wyoming).
- Regional influenza activity was reported by four states (Hawaii, Tennessee, Texas and Vermont).
- Local influenza activity was reported by the District of Columbia.
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



\* This map indicates geographic spread & does not measure the severity of influenza activity

**Washoe County Influenza Resources**

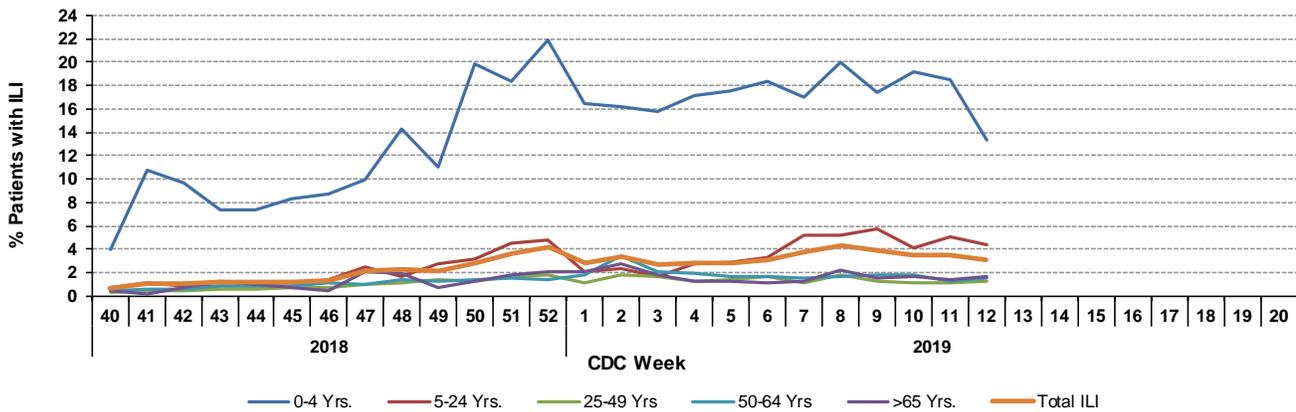
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, March 27, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

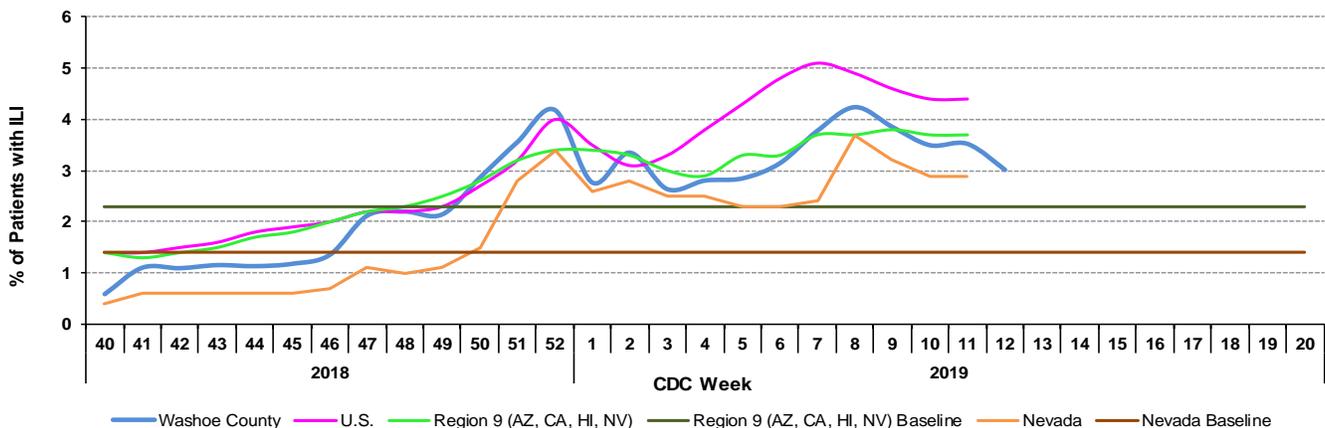
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 212 patients with influenza-like-illness (ILI) for the week ending March 23, 2019 (week 12). The percentage of persons seen with ILI by the twelve providers was 3.0% (212/7026) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (13.3%) and lowest among 25-49 years (1.2%). During week 11, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.9%. Nationwide during week 11 the percentage of visits to sentinel providers due to ILI was 4.4% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 3.1% to 7.7%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

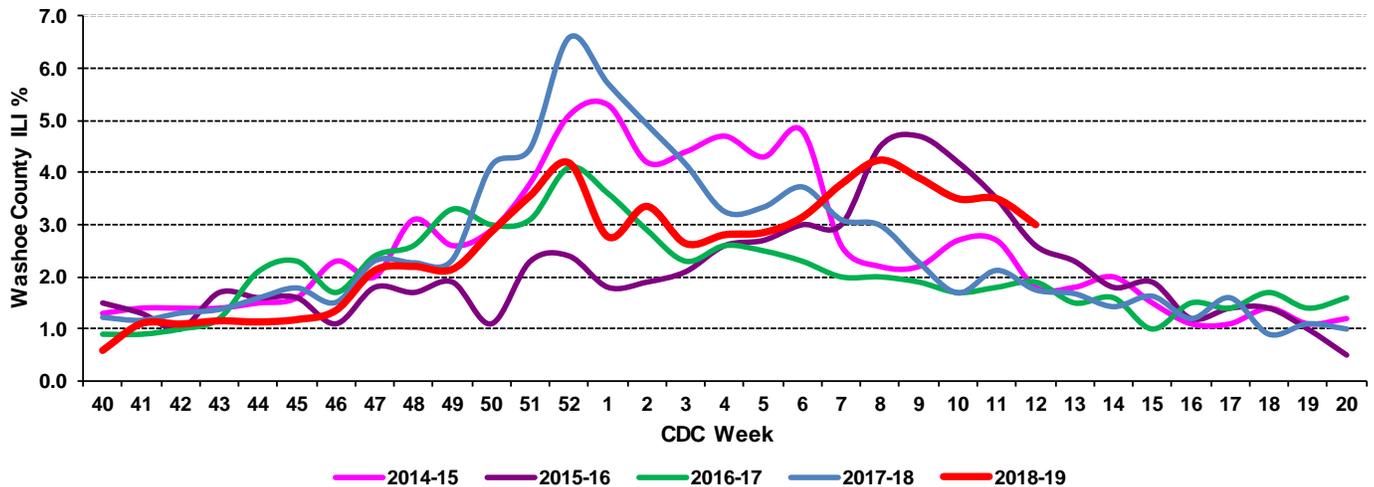


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



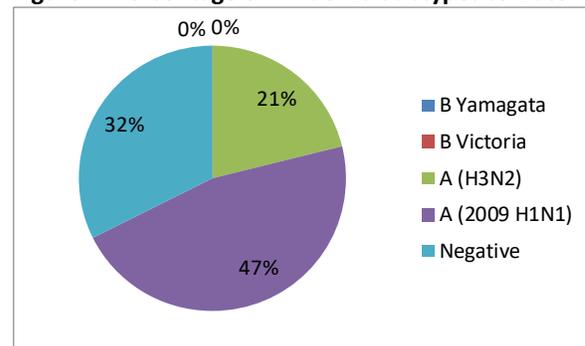
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	15	21%
A (2009 H1N1)	33	47%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	23	32%
Total (All Subtypes)	71	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

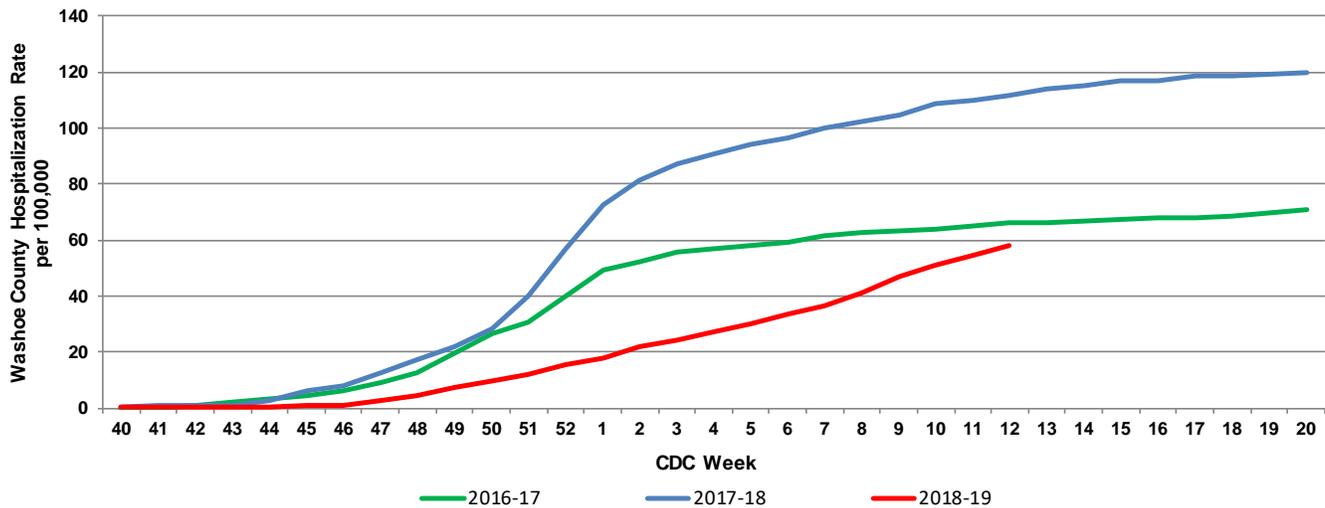
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 12) March 17, 2019 - March 23, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - March 23, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	15	N/A	8	53.3	2	13.3	0	0.0	264	N/A	97	36.7	48	18.2	5	1.9
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.3	2	2.1	2	4.2	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.4	0	0.0	1	2.1	0	0.0
Influenza A (not subtyped)	9	60.0	7	87.5	2	100.0	0	#DIV/0!	197	74.6	77	79.4	43	89.6	4	80.0
Influenza A (RIDT*)	6	40.0	1	12.5	0	0.0	0	#DIV/0!	53	20.1	14	14.4	1	2.1	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	7	2.7	4	4.1	1	2.1	1	20.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

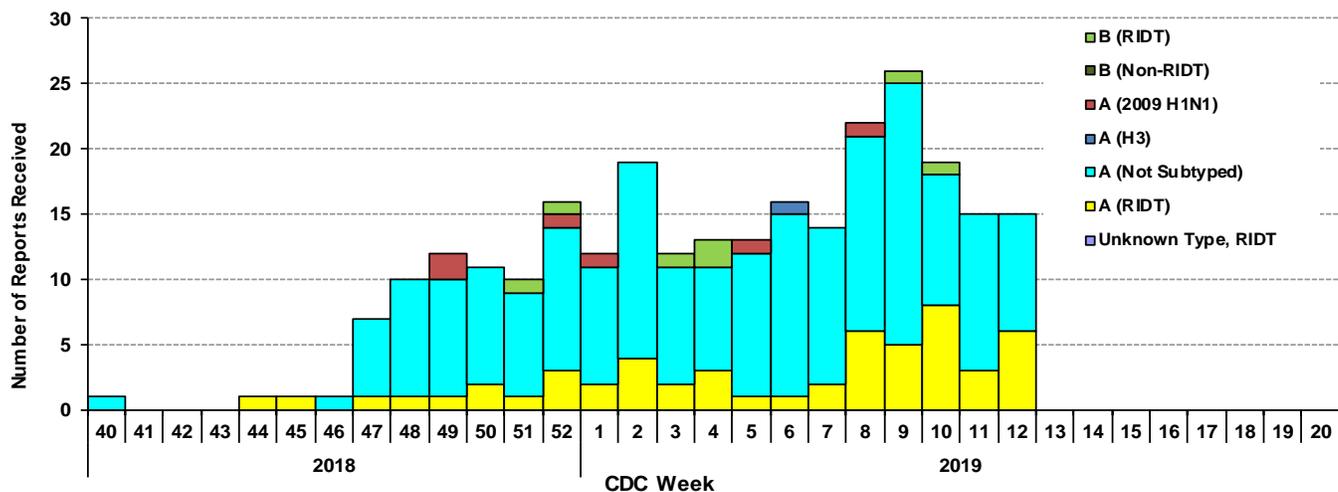
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

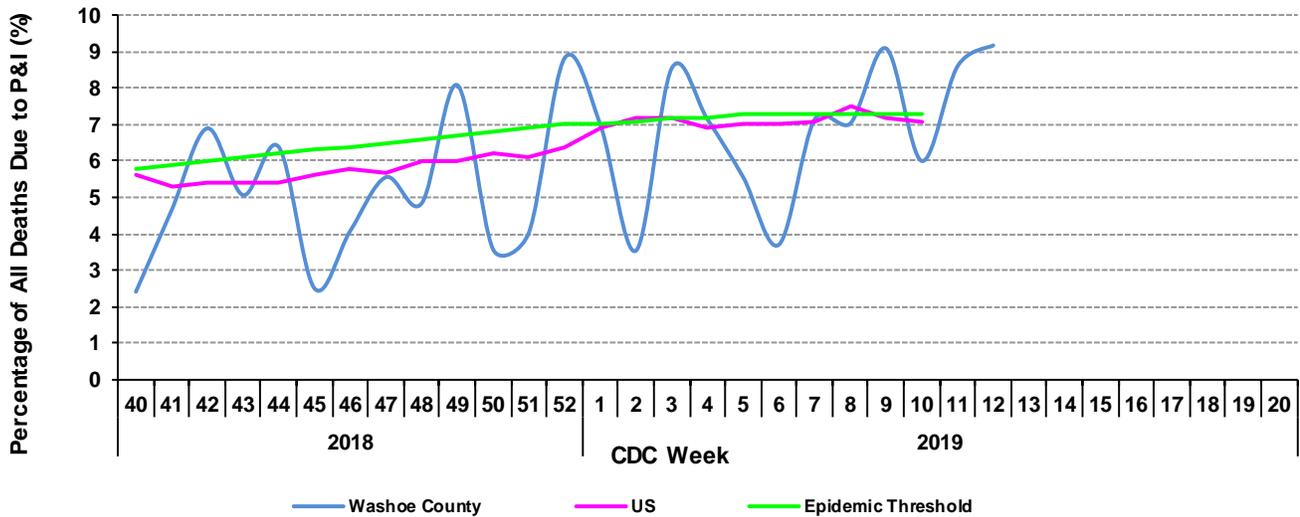
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date six (6) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Ten death certificates were received for week 12 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 12 was 109. This reflects a P&I ratio of 9.2%. Nationally 7.1% of the deaths occurring during Week 10 were due to P&I. This was below the Week 10 epidemic threshold of 7.3%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 151. This reflects an overall P&I ratio of 6.0% (151/2514).

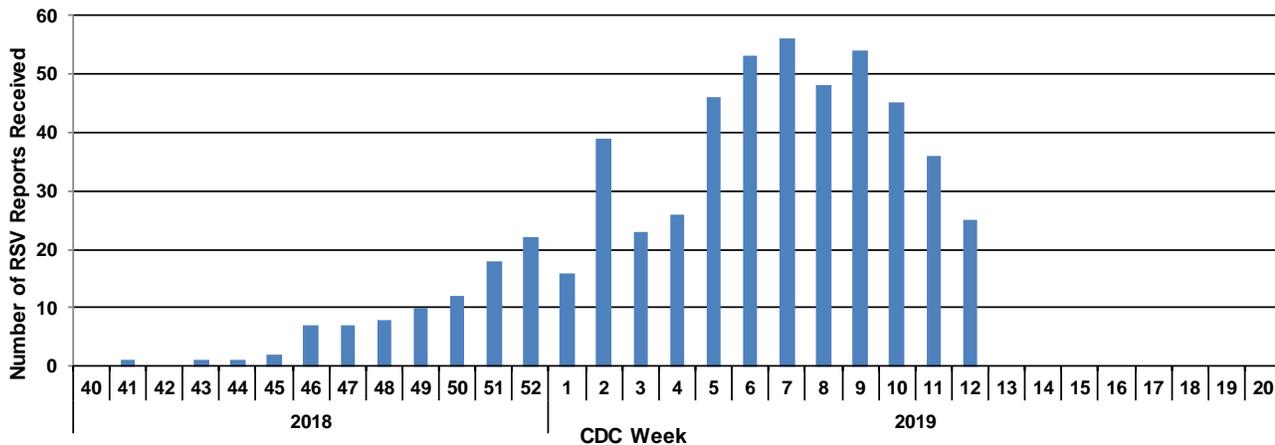
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

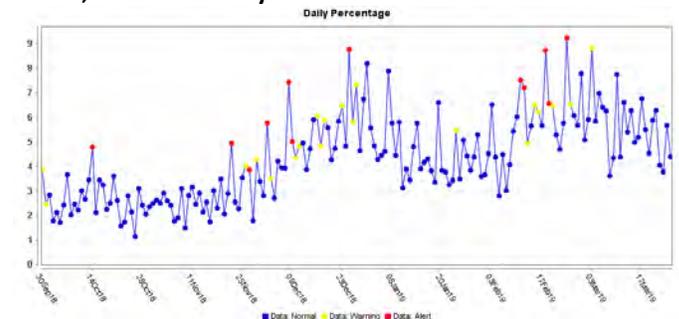


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

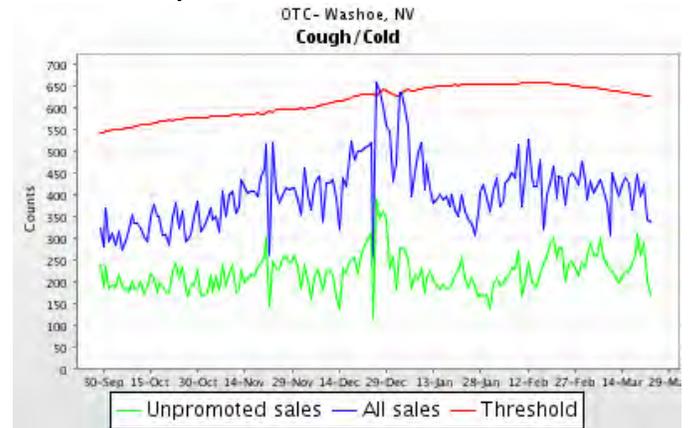
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

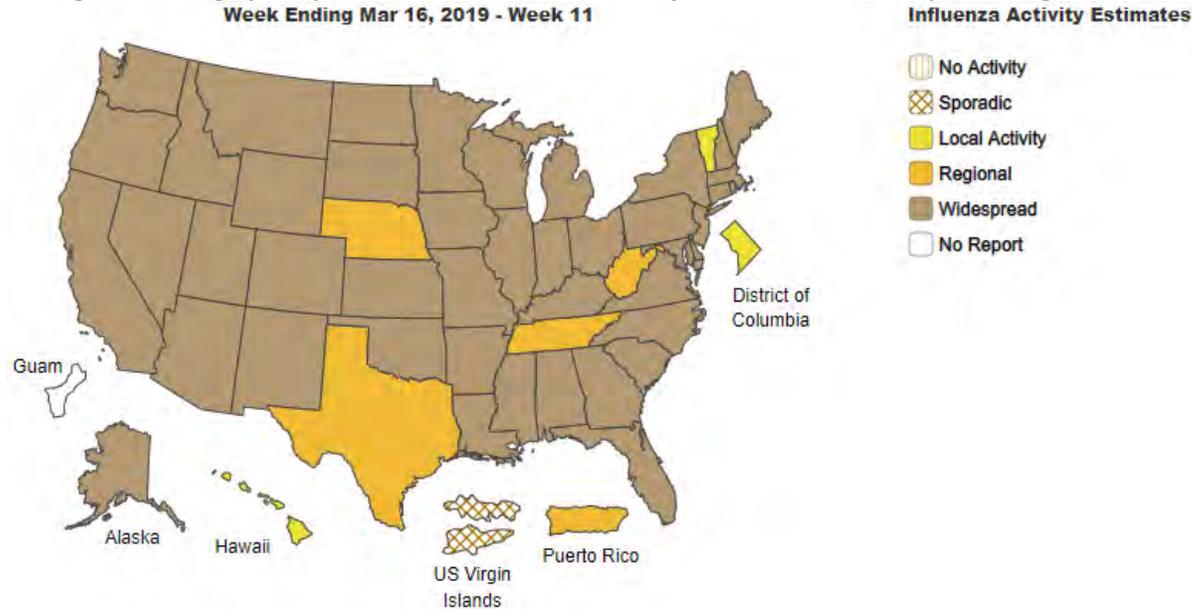


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 11, the following influenza activity was reported:

- Widespread influenza activity was reported by 44 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Virginia, Washington, Wisconsin and Wyoming).
- Regional influenza activity was reported by Puerto Rico and four states (Nebraska, Tennessee, Texas and West Virginia).
- Local influenza activity was reported by the District of Columbia and two states (Hawaii and Vermont).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

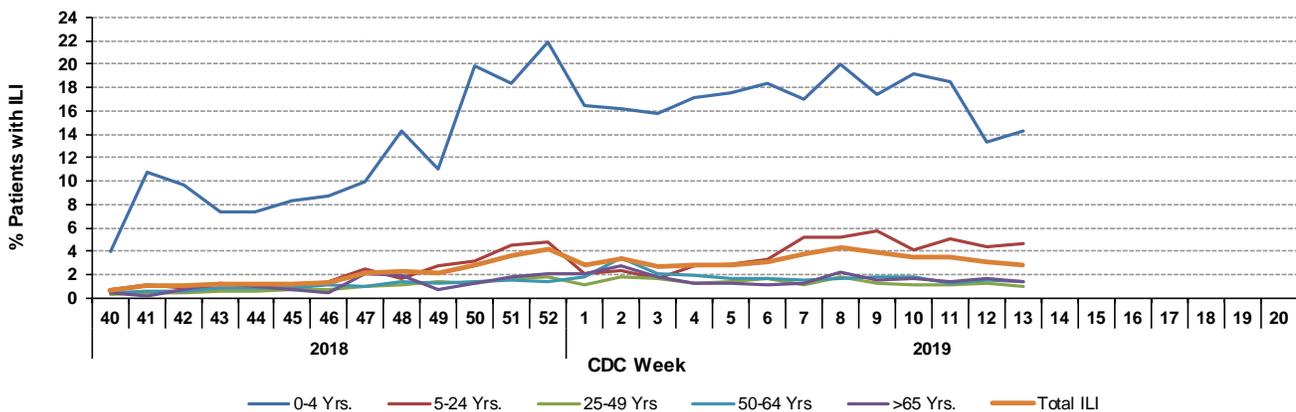
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, April 3, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

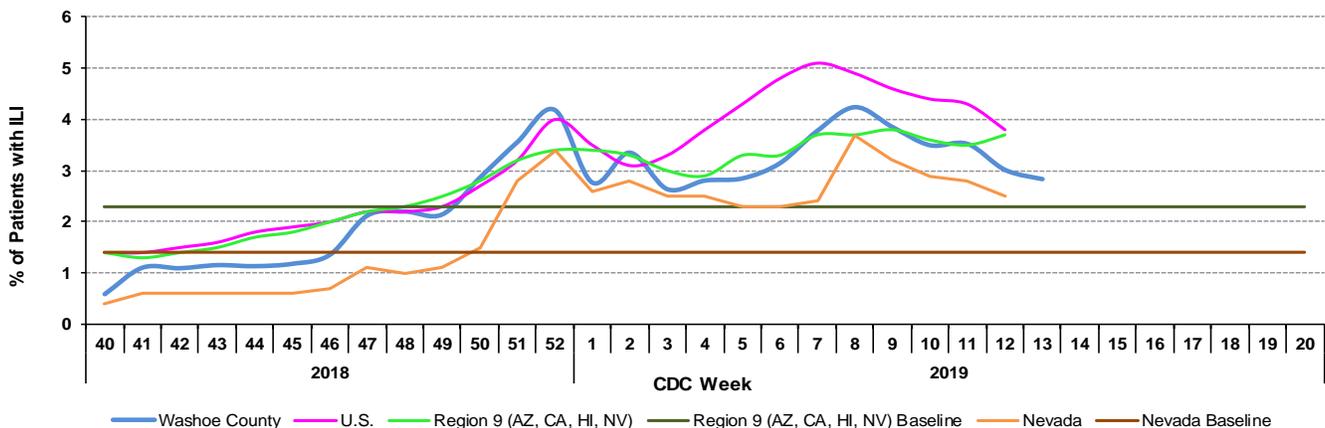
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Ten of the twelve participating providers in Washoe County reported a total of 168 patients with influenza-like-illness (ILI) for the week ending March 30, 2019 (week 13). The percentage of persons seen with ILI by the ten providers was 2.8% (168/5924) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (14.3%) and lowest among 25-49 years (1.0%). During week 12, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.5%. Nationwide during week 12 the percentage of visits to sentinel providers due to ILI was 3.8% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.8% to 5.6%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

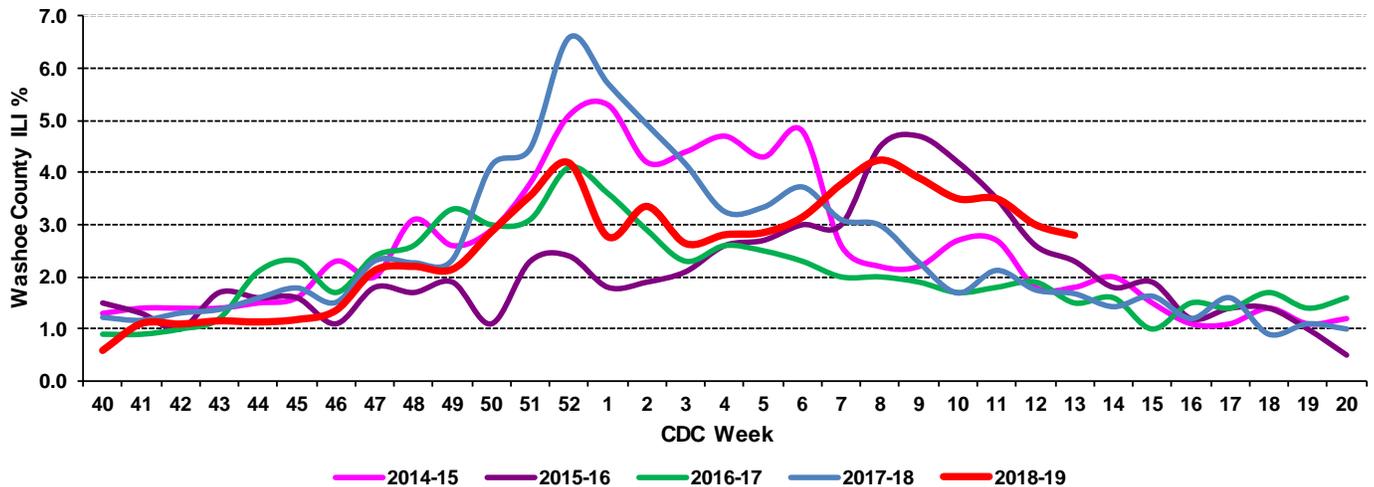


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



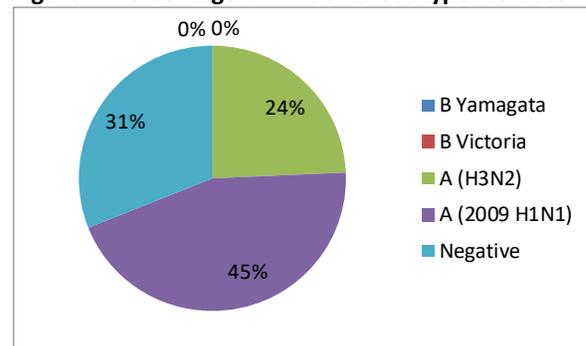
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	18	24%
A (2009 H1N1)	33	45%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	23	31%
Total (All Subtypes)	74	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

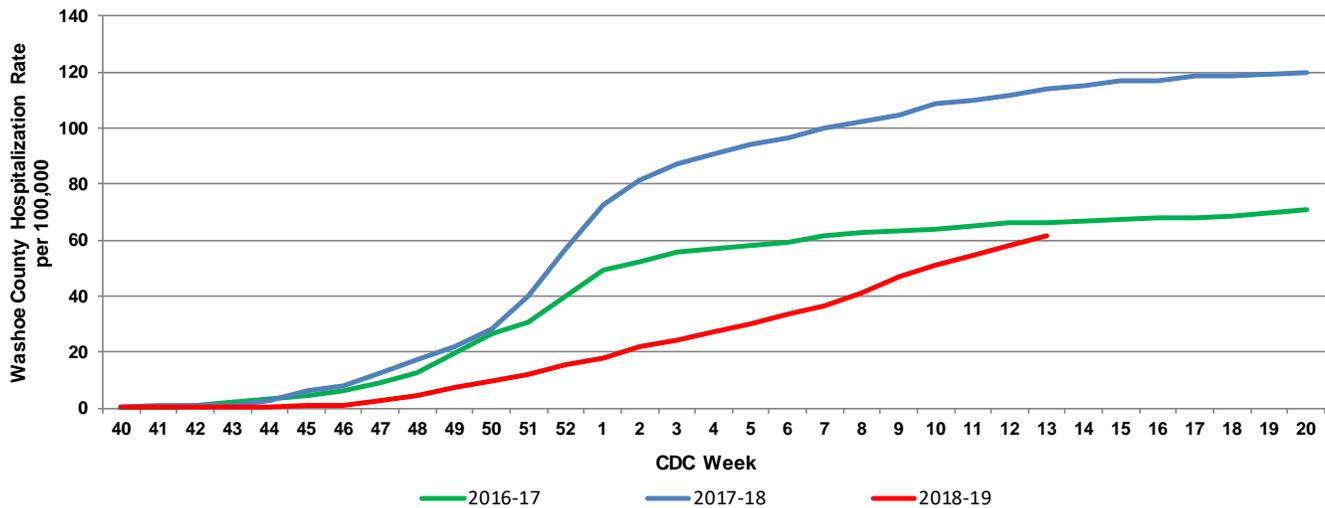
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 13) March 24, 2019 - March 30, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - March 30, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	18	N/A	6	33.3	3	16.7	2	11.1	282	N/A	103	36.5	51	18.1	8	2.8
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	0.0	6	2.1	2	1.9	2	3.9	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	2.0	0	0.0
Influenza A (not subtyped)	16	88.9	5	83.3	3	100.0	2	100.0	213	75.5	82	79.6	46	90.2	7	87.5
Influenza A (RIDT*)	1	5.6	1	16.7	0	0.0	0	0.0	54	19.1	15	14.6	1	2.0	0	0.0
Influenza B (RIDT*)	1	5.6	0	0.0	0	0.0	0	0.0	8	2.8	4	3.9	1	2.0	1	12.5
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

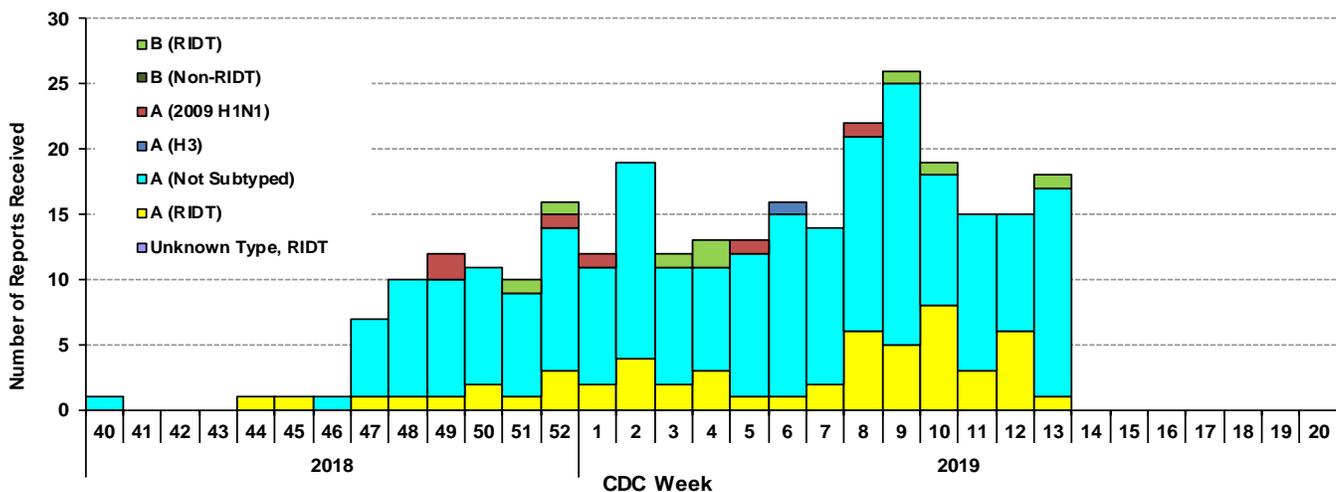
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

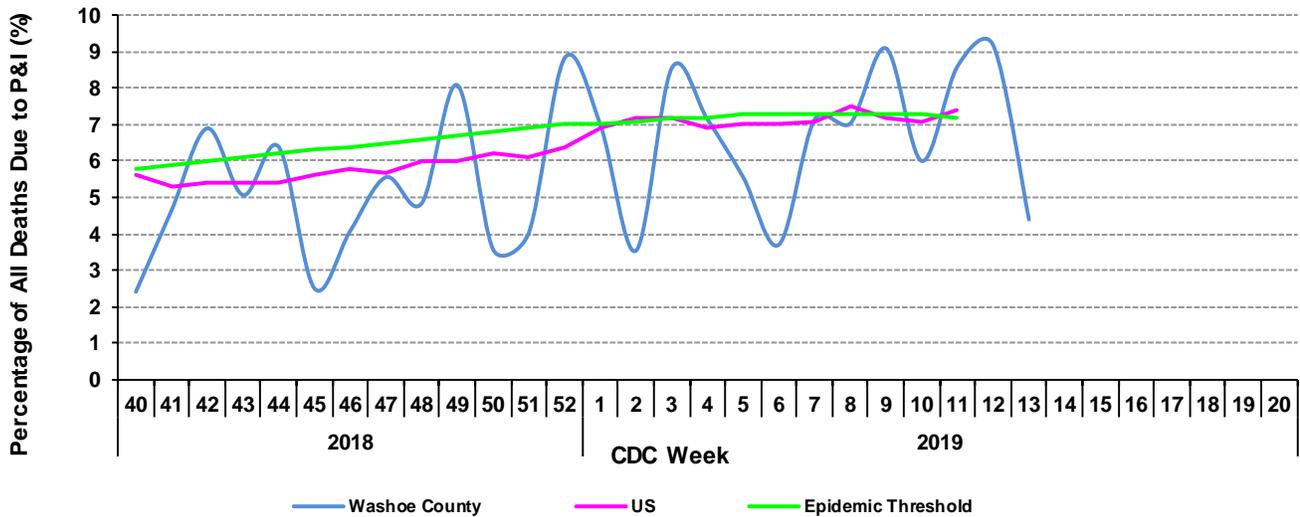
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date nine (9) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Four death certificates were received for week 13 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 13 was 91. This reflects a P&I ratio of 4.4%. Nationally 7.4% of the deaths occurring during Week 11 were due to P&I. This was above the Week 11 epidemic threshold of 7.2%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 155. This reflects an overall P&I ratio of 6.0% (155/2605).

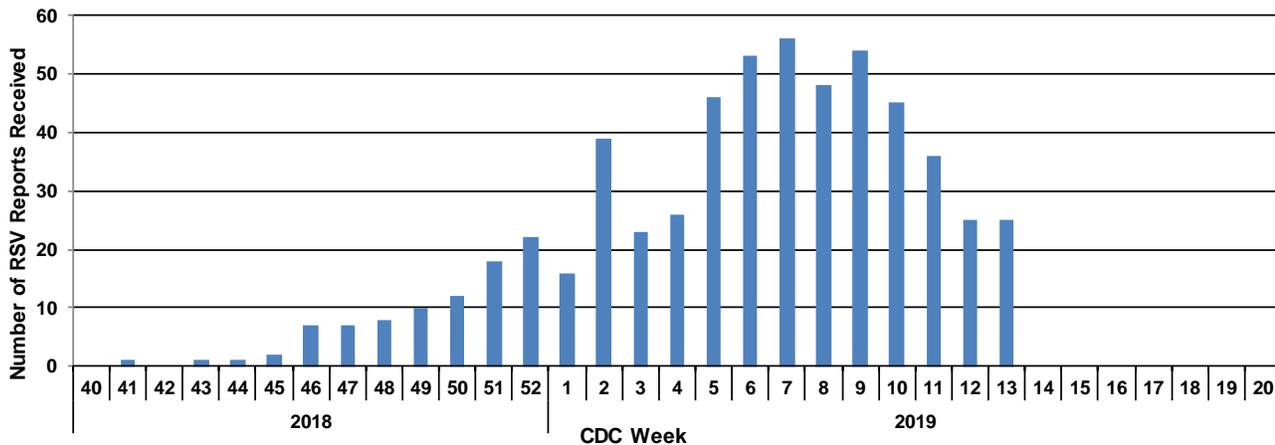
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

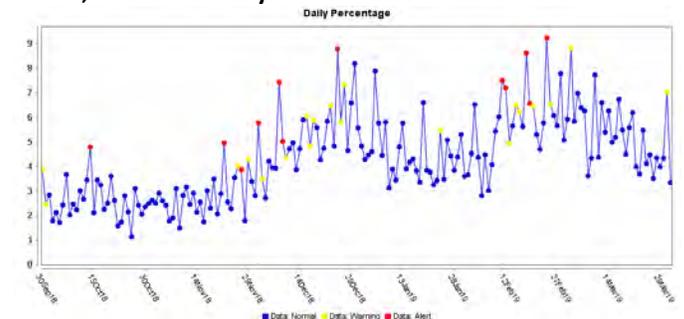


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

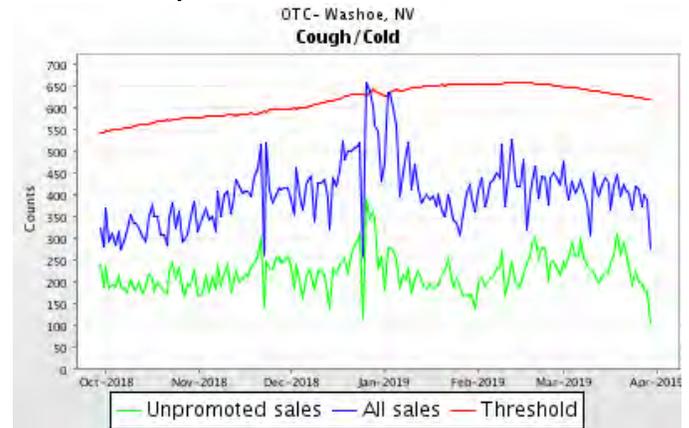
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

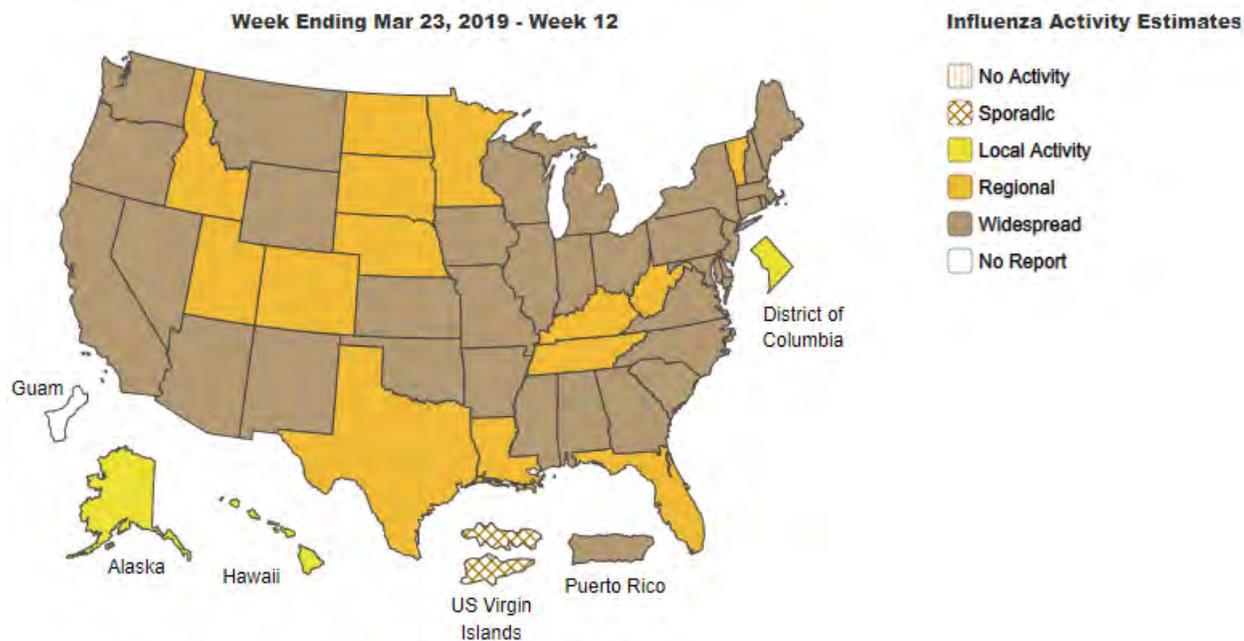


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 12, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 34 states (Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Virginia, Washington, Wisconsin and Wyoming).
- Regional influenza activity was reported by 14 states (Colorado, Florida, Idaho, Kentucky, Louisiana, Minnesota, Nebraska, North Dakota, South Dakota, Tennessee, Texas, Utah, Vermont and West Virginia).
- Local influenza activity was reported by the District of Columbia and two states (Alaska and Hawaii).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

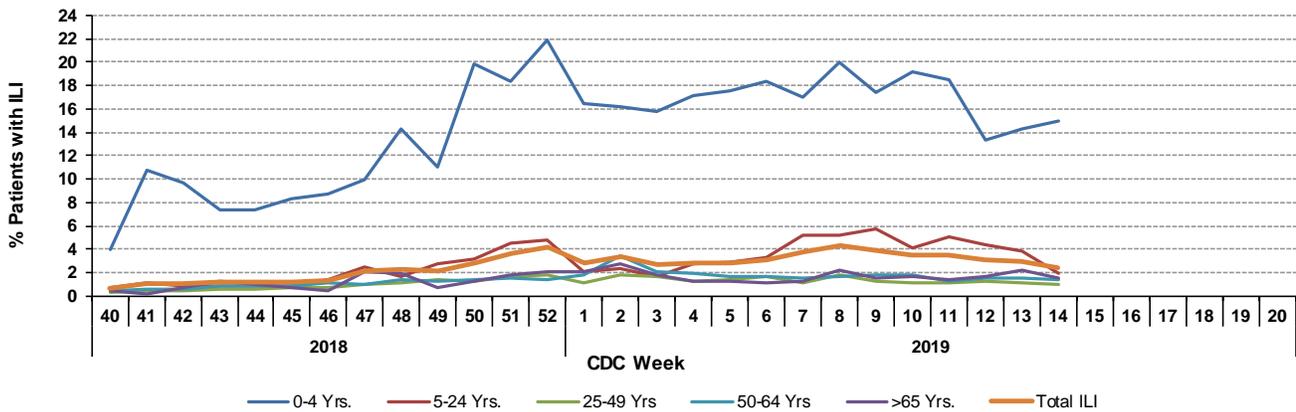
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washocounty.us](mailto:epicenter@washocounty.us): your name (first and last), title, organization, and email address.

Date: Thursday, April 11, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

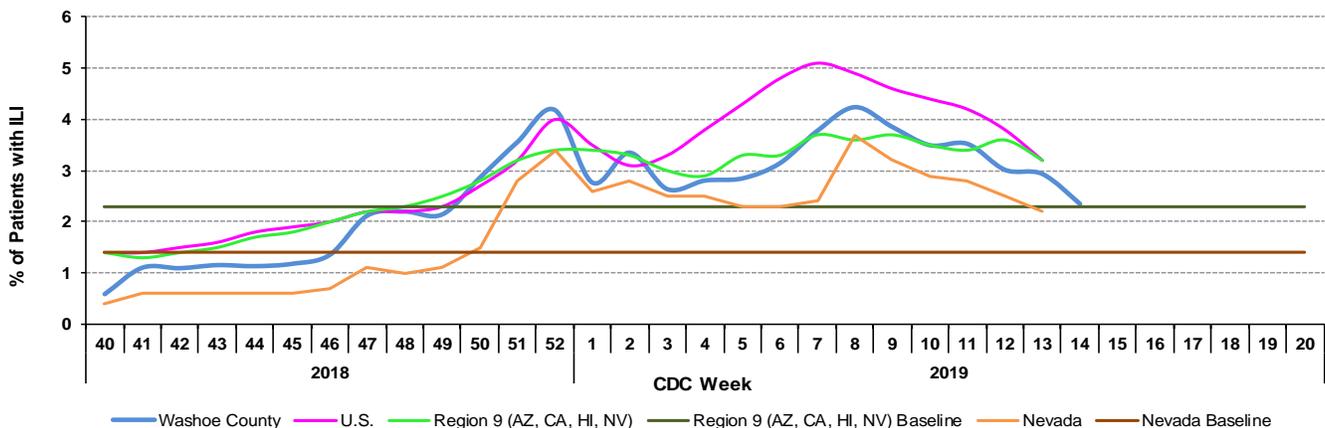
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 162 patients with influenza-like-illness (ILI) for the week ending April 6, 2019 (week 14). The percentage of persons seen with ILI by the twelve providers was 2.4% (162/6888) which is above the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (15.0%) and lowest among 25-49 years (1.0%). During week 13, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.2%. Nationwide during week 13 the percentage of visits to sentinel providers due to ILI was 3.2% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 2.4% to 4.6%. All ten regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline level. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

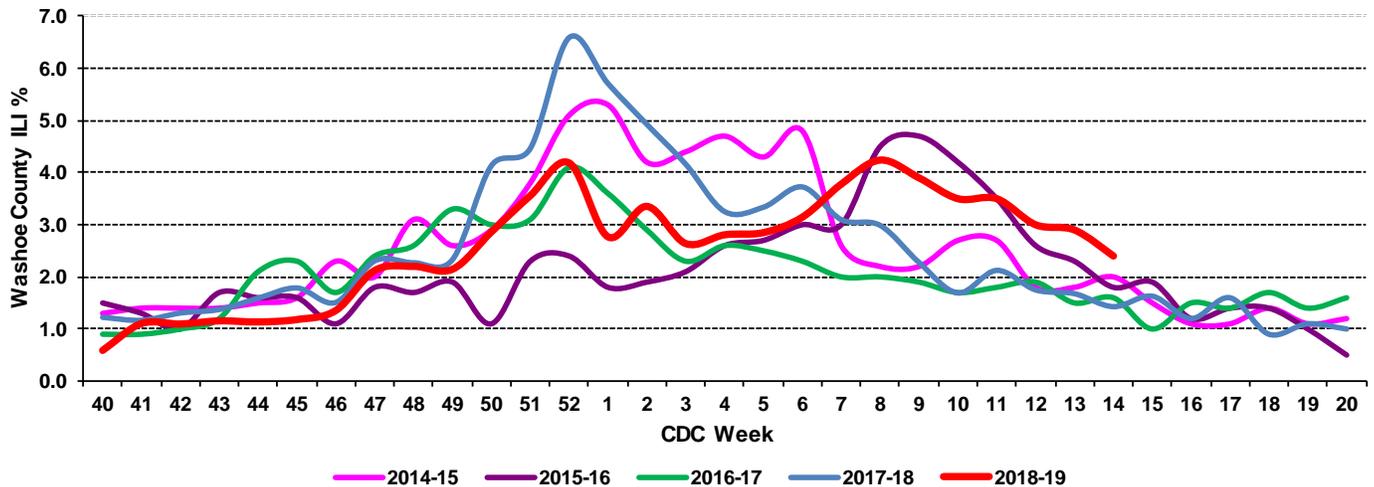


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



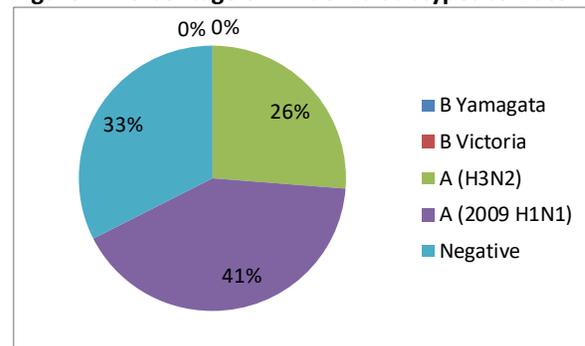
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	21	26%
A (2009 H1N1)	33	41%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	26	33%
Total (All Subtypes)	80	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 14) March 31, 2019 - April 6, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - April 6, 2019							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	6	N/A	2	33.3	1	16.7	0	0.0	288	N/A	105	36.5	52	18.1	8	2.8
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.1	2	1.9	2	3.8	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.3	0	0.0	1	1.9	0	0.0
Influenza A (not subtyped)	5	83.3	1	50.0	1	100.0	0	#DIV/0!	218	75.7	83	79.0	47	90.4	7	87.5
Influenza A (RIDT*)	1	16.7	1	50.0	0	0.0	0	#DIV/0!	55	19.1	16	15.2	1	1.9	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	8	2.8	4	3.8	1	1.9	1	12.5
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

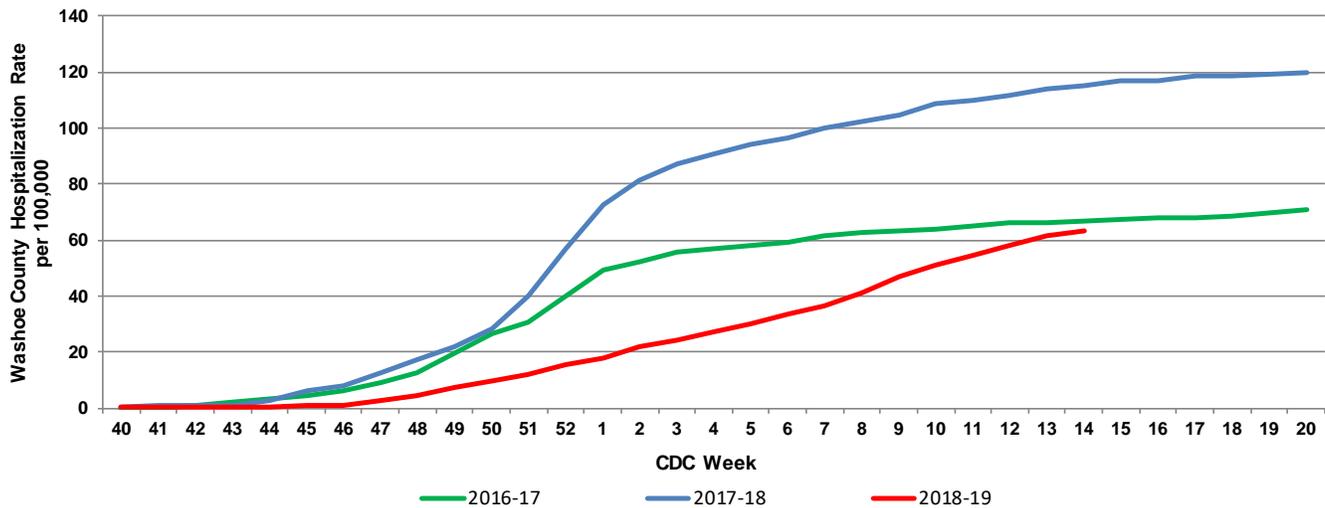
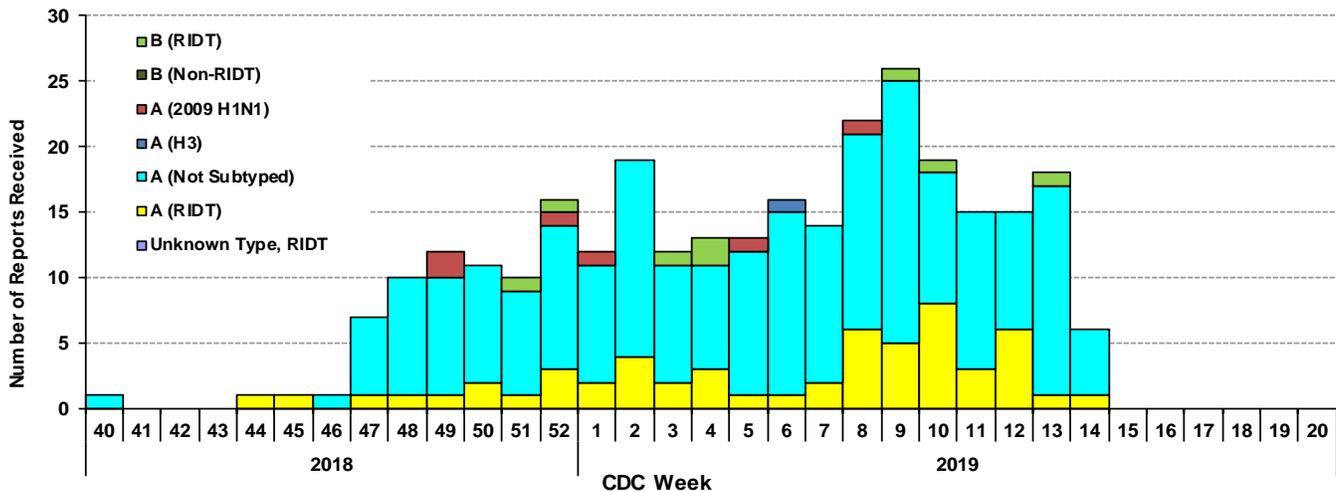


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

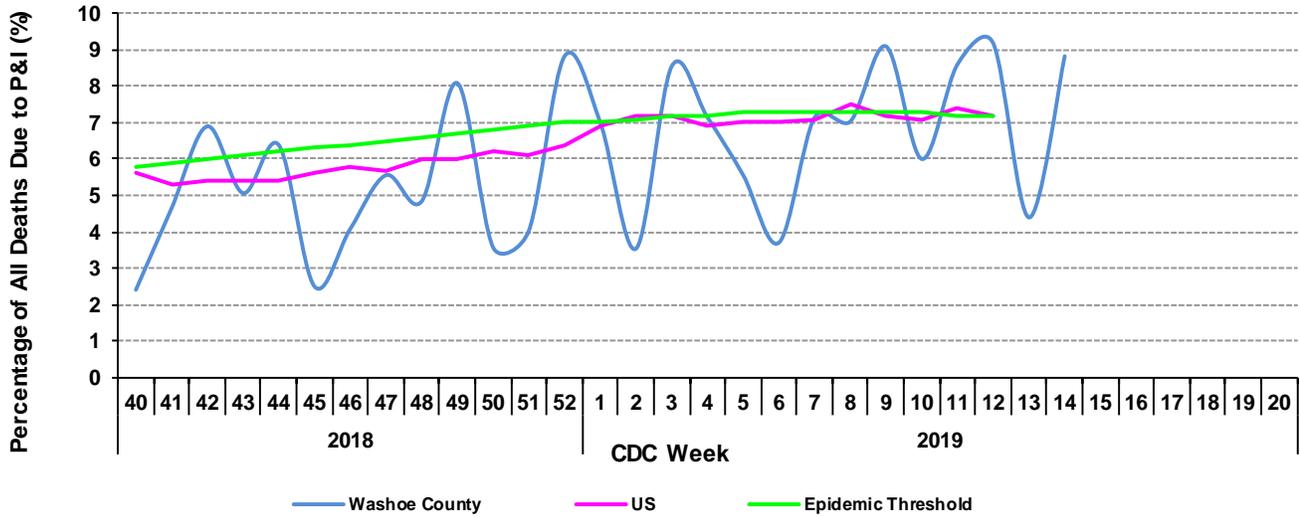
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date nine (9) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Twelve death certificates were received for week 14 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 14 was 136. This reflects a P&I ratio of 8.8%. Nationally 7.2% of the deaths occurring during Week 12 were due to P&I. This was at the Week 12 epidemic threshold of 7.2%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 167. This reflects an overall P&I ratio of 6.1% (167/2741).

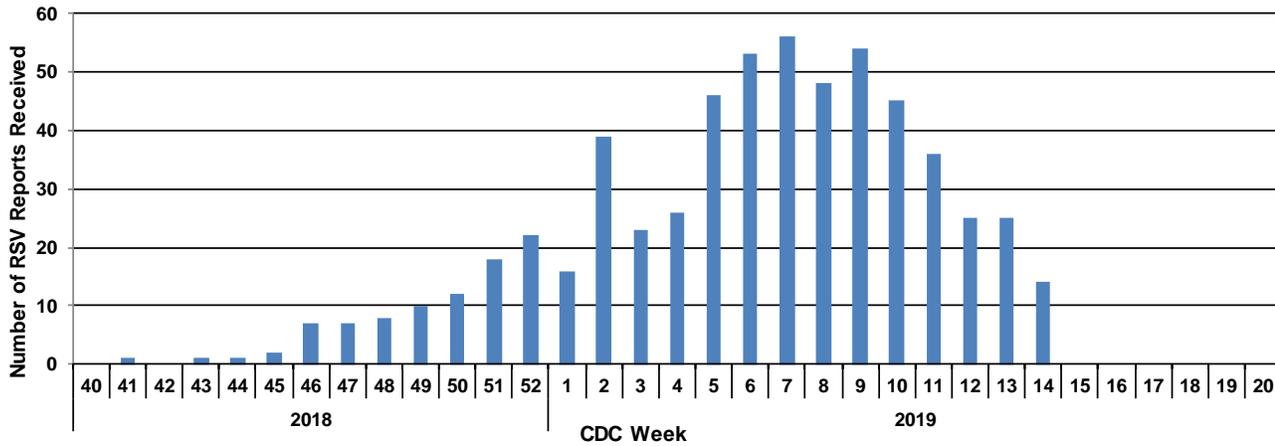
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

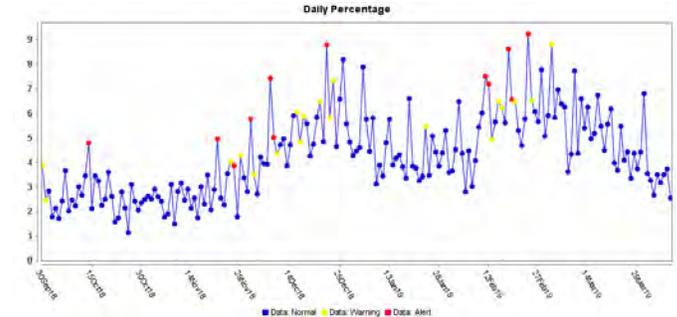


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

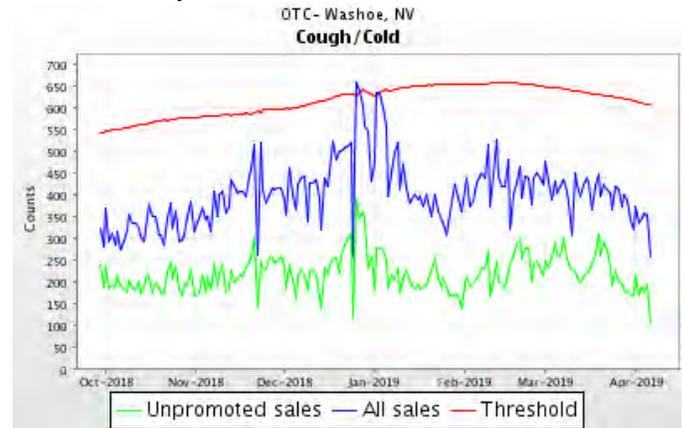
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

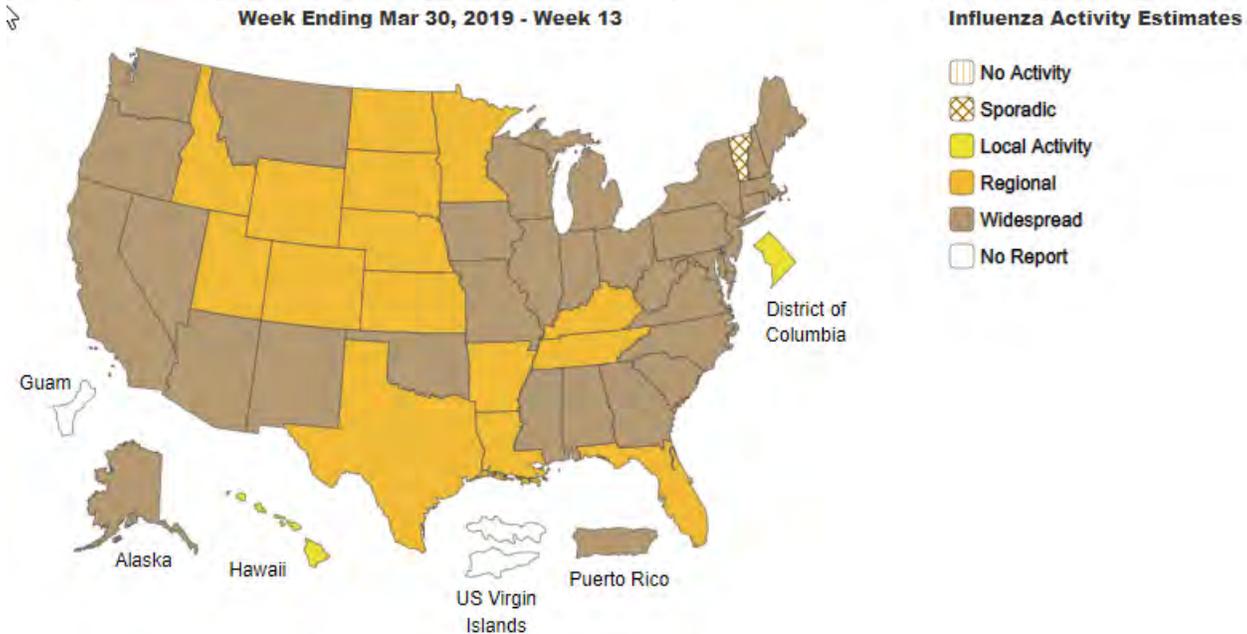


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 13, the following influenza activity was reported:

- Widespread influenza activity was reported by Puerto Rico and 33 states (Alabama, Alaska, Arizona, California, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Virginia, Washington, West Virginia, and Wisconsin).
- Regional influenza activity was reported by 15 states (Arkansas, Colorado, Florida, Idaho, Kansas, Kentucky, Louisiana, Minnesota, Nebraska, North Dakota, South Dakota, Tennessee, Texas, Utah and Wyoming).
- Local influenza activity was reported by the District of Columbia and one state (Hawaii).
- Sporadic influenza activity was reported by one state (Vermont).
- Guam and the U.S. Virgin Islands did not report

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

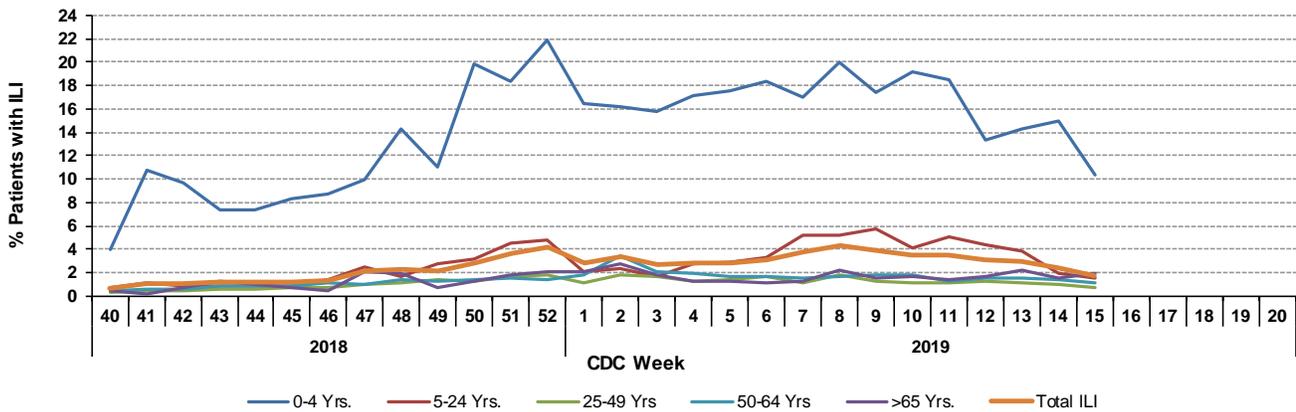
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, April 17, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

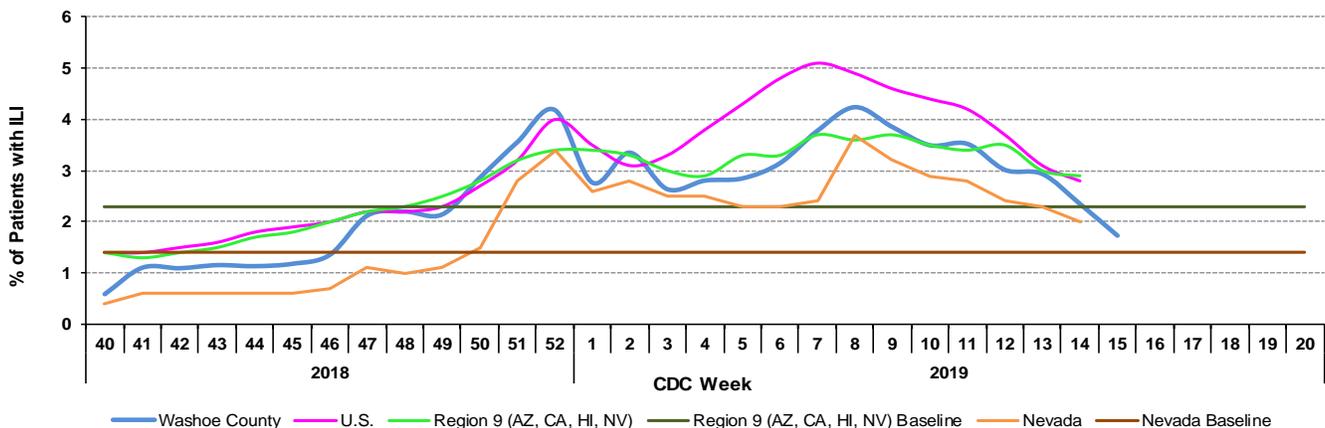
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 123 patients with influenza-like-illness (ILI) for the week ending April 13, 2019 (week 15). The percentage of persons seen with ILI by the twelve providers was 1.7% (123/7102) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (10.3%) and lowest among 25-49 years (0.7%). During week 14, the percentage of patient visits to Nevada sentinel providers due to ILI was 2.0%. Nationwide during week 14 the percentage of visits to sentinel providers due to ILI was 2.8% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.9% to 3.9% during week 14. Nine of 10 regions (Regions 1-5 and 7-10) reported a percentage of outpatient visits for ILI at or above their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

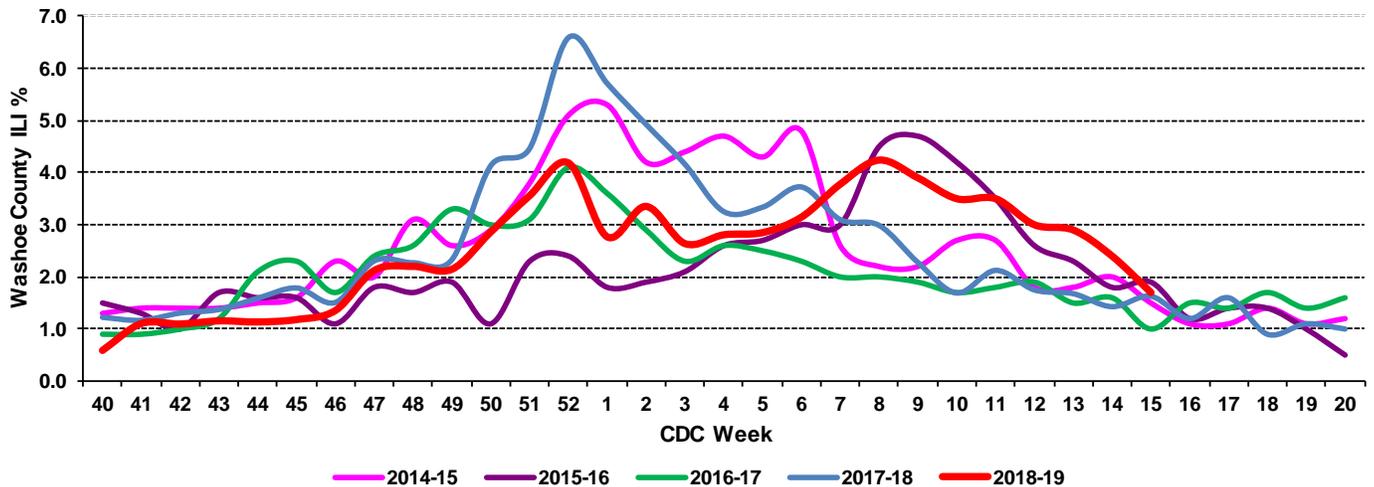


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



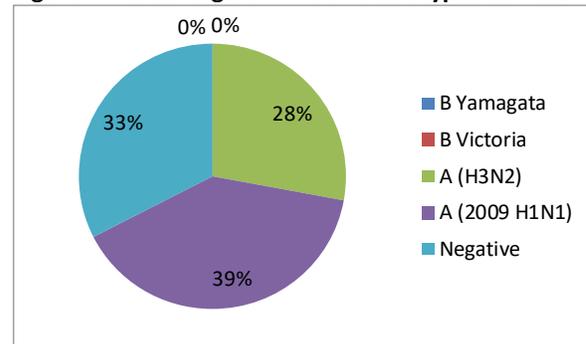
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	24	28%
A (2009 H1N1)	34	39%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	28	33%
Total (All Subtypes)	86	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 15) April 7, 2019 - April 13, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - April 13, 2019							
	Hospitalized		Vax <sup>s</sup>		ICU		Death		Hospitalized		Vax <sup>s</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	9	N/A	6	66.7	2	22.2	0	0.0	295	N/A	112	38.0	54	18.3	8	2.7
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.0	2	1.8	2	3.7	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.3	0	0.0	1	1.9	0	0.0
Influenza A (not subtyped)	7	77.8	4	66.7	2	100.0	0	#DIV/0!	225	76.3	87	77.7	49	90.7	7	87.5
Influenza A (RIDT*)	2	22.2	2	33.3	0	0.0	0	#DIV/0!	55	18.6	19	17.0	1	1.9	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	8	2.7	4	3.6	1	1.9	1	12.5
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

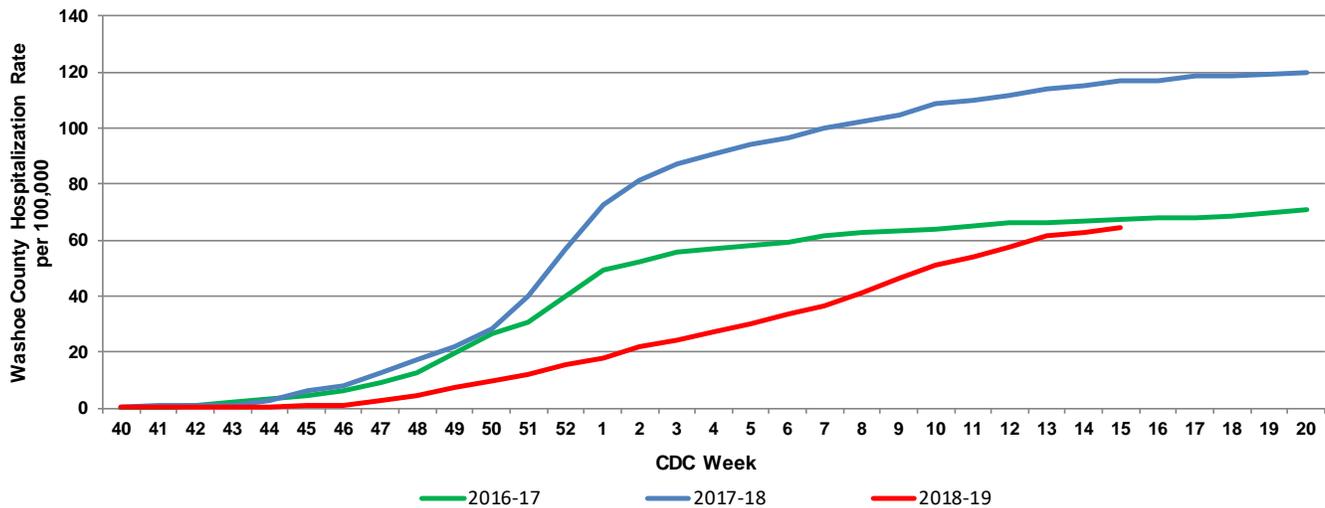
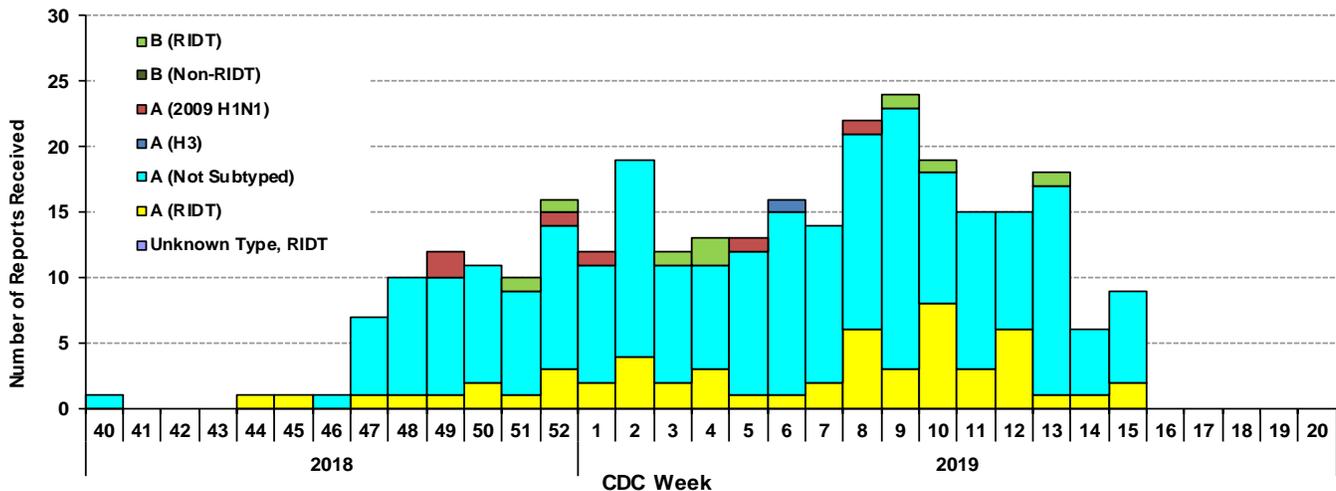


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



### Deaths

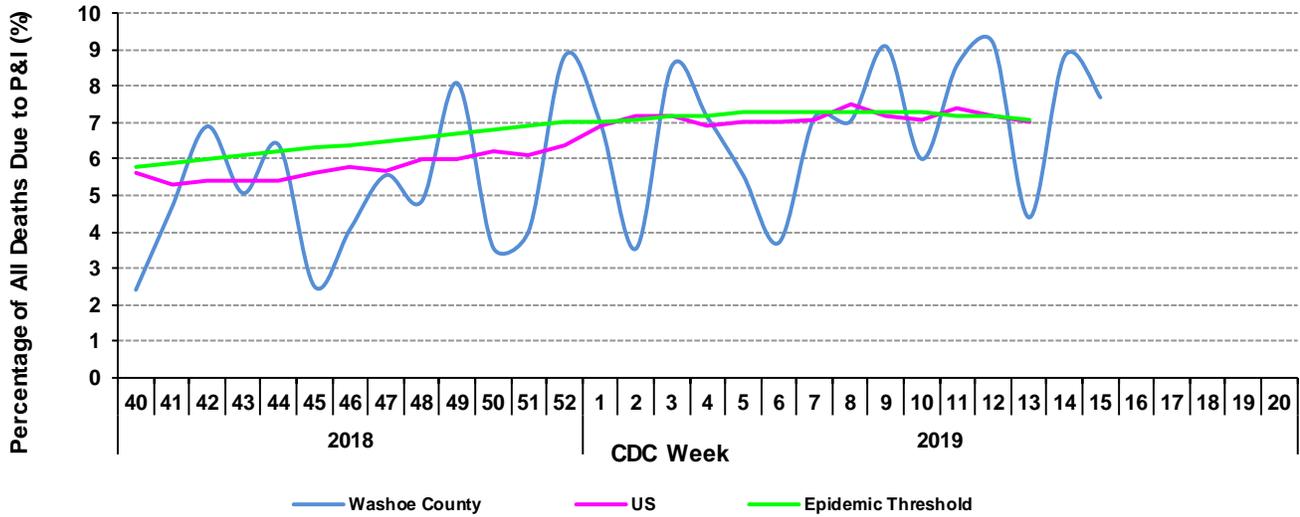
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date nine (9) influenza-associated deaths have been reported.

### Pneumonia and Influenza (P&I) Mortality

Eight death certificates were received for week 15 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 15 was 104. This reflects a P&I ratio of 7.7%. Nationally 7.0% of the deaths occurring during Week 13 were due to P&I. This was below the Week 13 epidemic threshold of 7.1%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 175. This reflects an overall P&I ratio of 6.2% (175/2845).

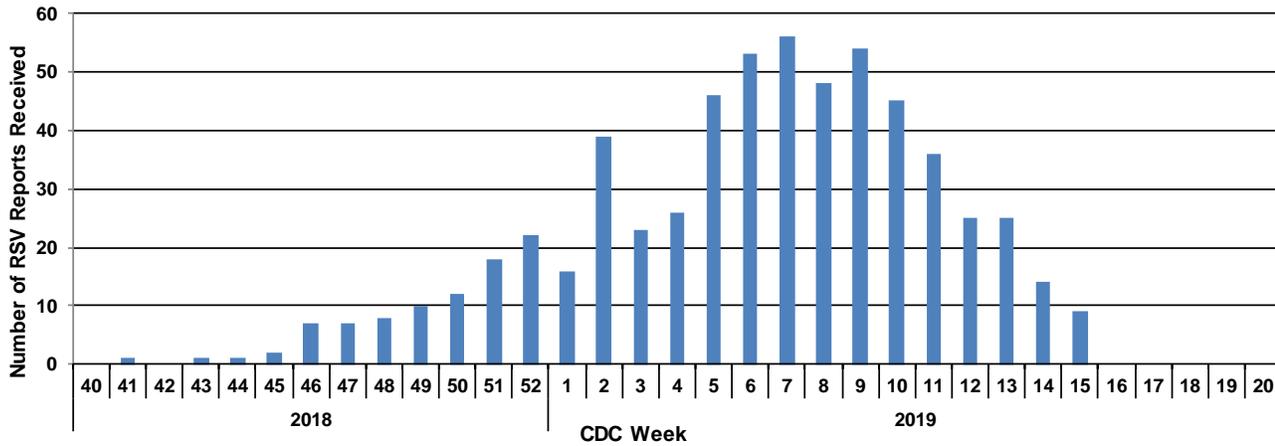
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

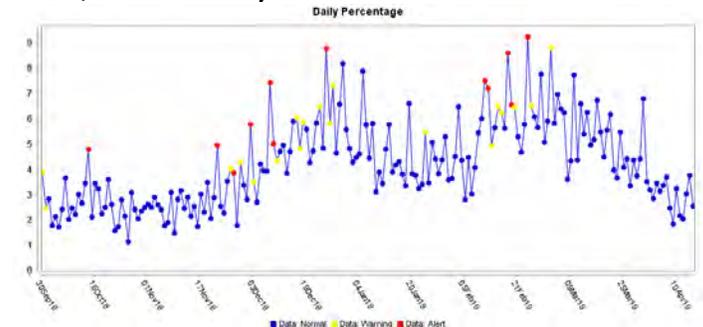


**Syndromic Surveillance**

**Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits**

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

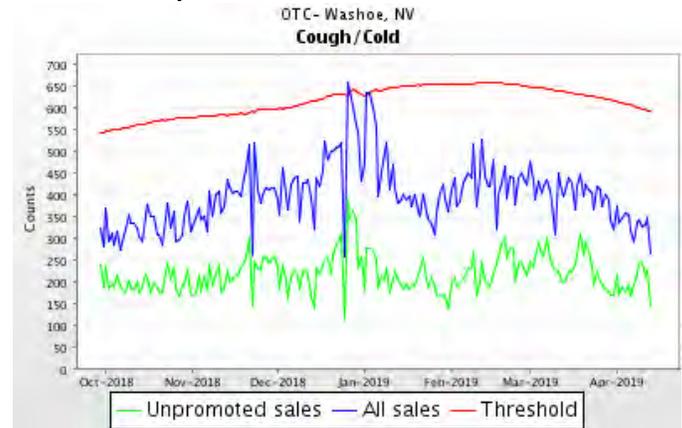
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

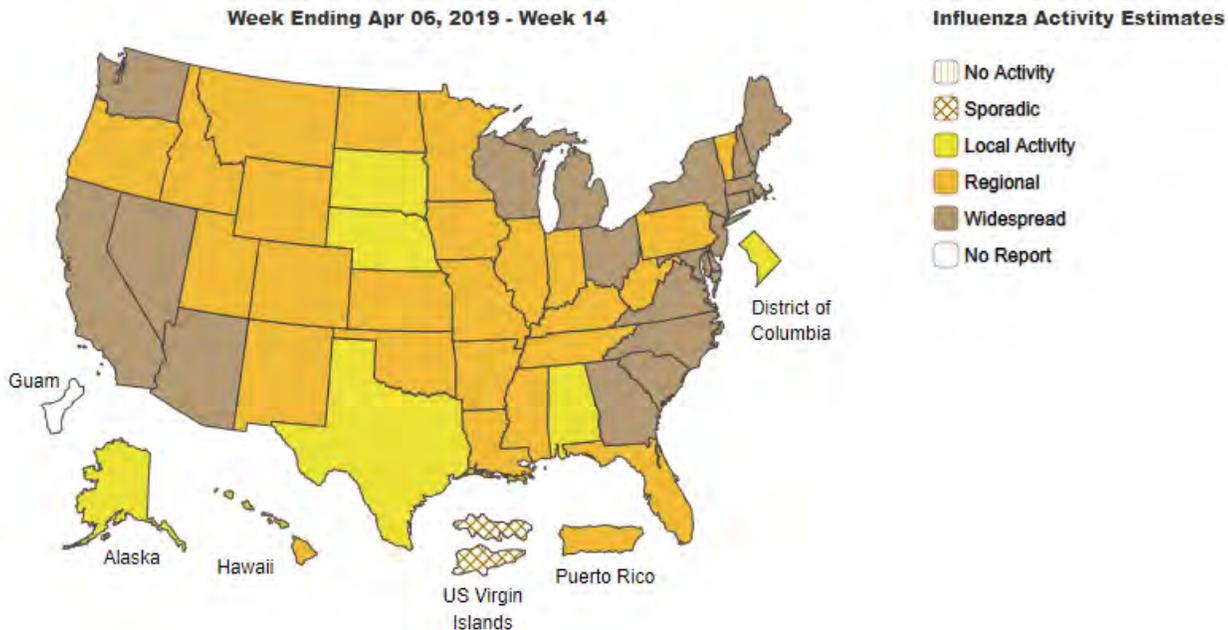


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 14, the following influenza activity was reported:

- Widespread influenza activity was reported by 20 states (Arizona, California, Connecticut, Delaware, Georgia, Maine, Maryland, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Rhode Island, South Carolina, Virginia, Washington and Wisconsin).
- Regional influenza activity was reported by Puerto Rico and 25 states (Arkansas, Colorado, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, New Mexico, North Dakota, Oklahoma, Oregon, Pennsylvania, Tennessee, Utah, Vermont, West Virginia and Wyoming).
- Local influenza activity was reported by the District of Columbia and one state (Hawaii).
- Sporadic influenza activity was reported by the U.S. Virgin Islands.
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

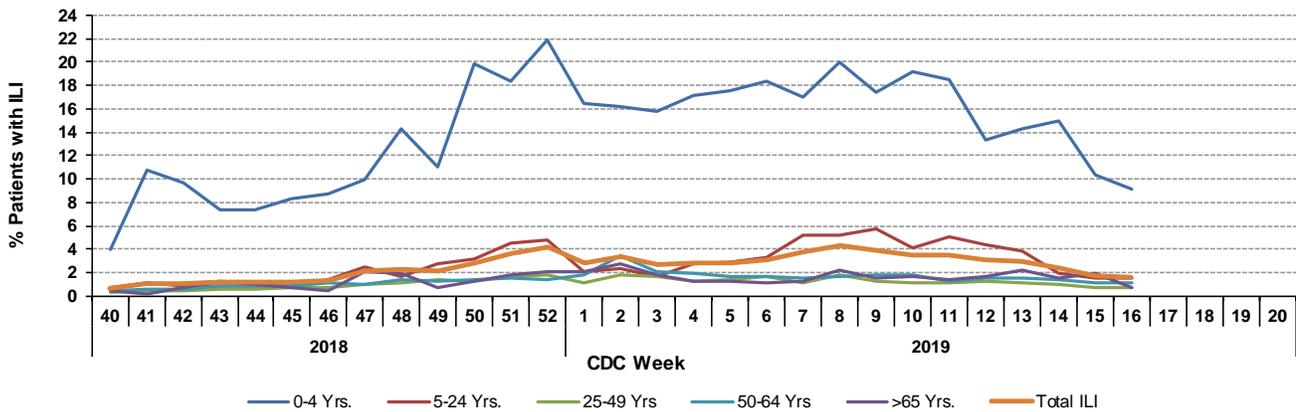
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, April 24, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

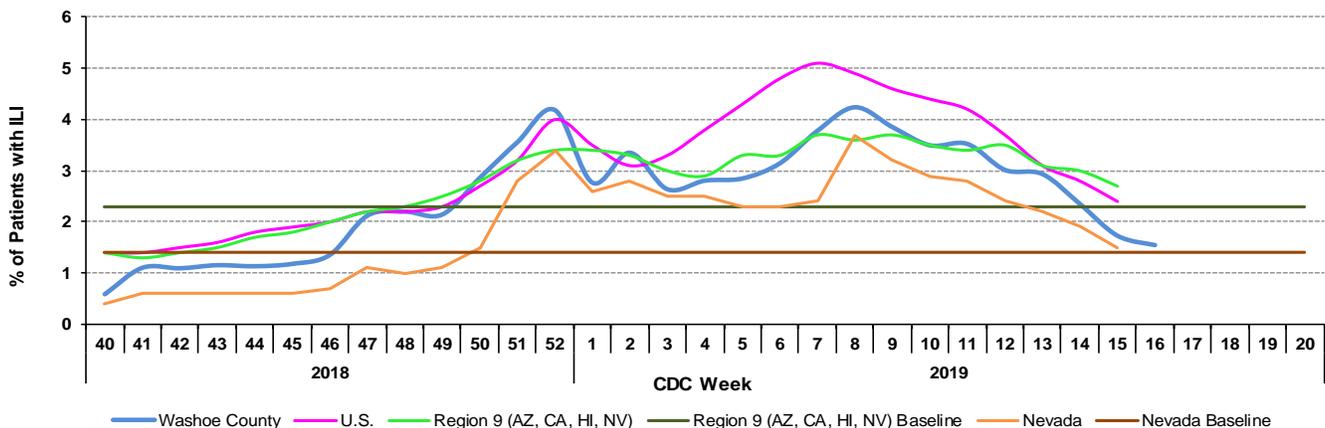
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 110 patients with influenza-like-illness (ILI) for the week ending April 20, 2019 (week 16). The percentage of persons seen with ILI by the twelve providers was 1.5% (110/7102) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (9.1%) and lowest among 25-49 years (0.7%). During week 15, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.5%. Nationwide during week 15 the percentage of visits to sentinel providers due to ILI was 2.4% which is above the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.0% to 3.5% during week 15. Seven of 10 regions (Regions 1, 2, 3, 5 and 7-9) reported a percentage of outpatient visits for ILI at or above their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

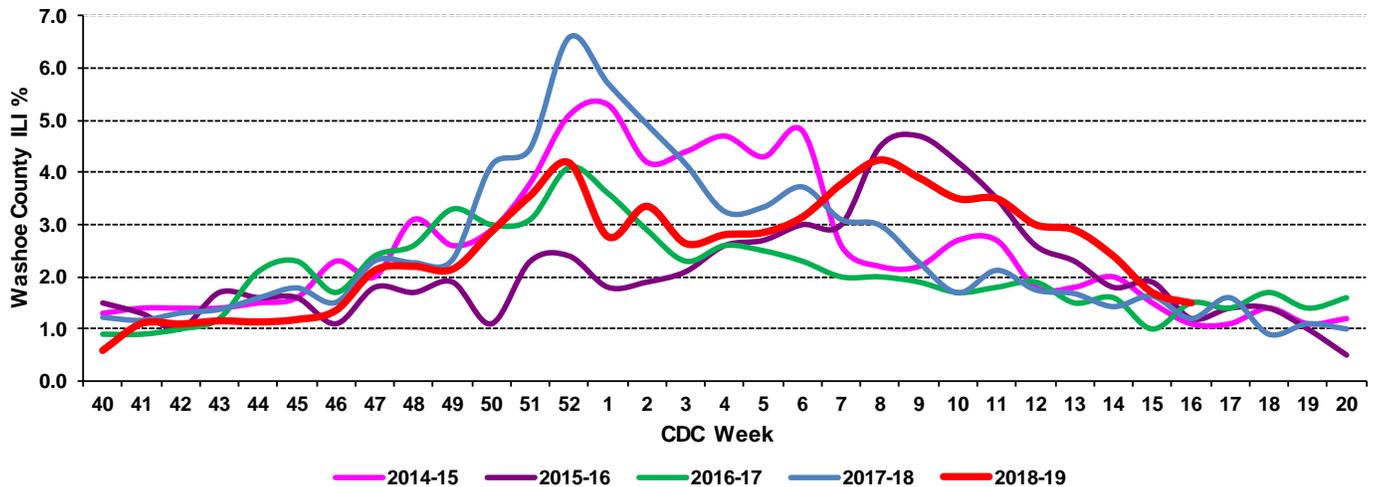


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:



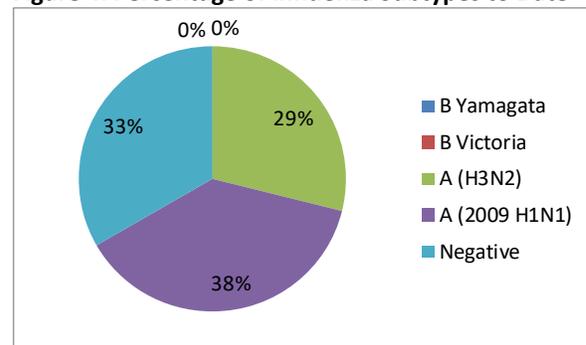
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

Table 1. Specimens Submitted to NSPHL for Subtyping to Date

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	26	29%
A (2009 H1N1)	34	38%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	30	33%
Total (All Subtypes)	90	N/A

Figure 4. Percentage of Influenza Subtypes to Date



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.

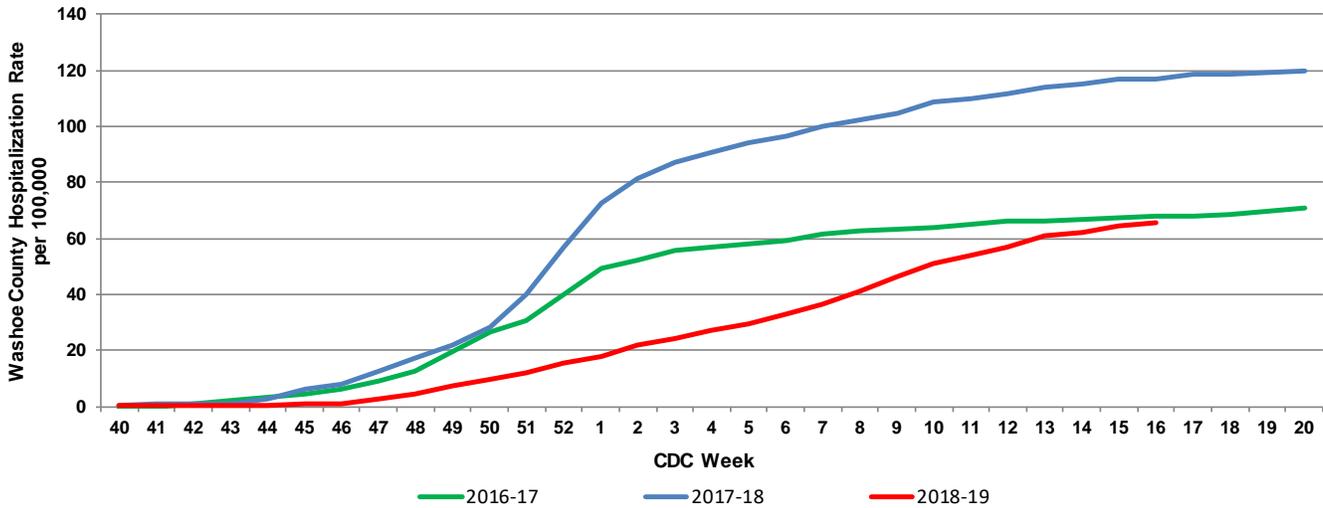
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 16) April 14, 2019 - April 20, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - April 20, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	7	N/A	4	57.1	2	28.6	0	0.0	301	N/A	115	38.2	56	18.6	8	2.7
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	2.0	2	1.7	2	3.6	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	0.3	0	0.0	1	1.8	0	0.0
Influenza A (not subtyped)	7	100.0	4	100.0	2	100.0	0	#DIV/0!	231	76.7	90	78.3	51	91.1	7	87.5
Influenza A (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	55	18.3	19	16.5	1	1.8	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	8	2.7	4	3.5	1	1.8	1	12.5
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

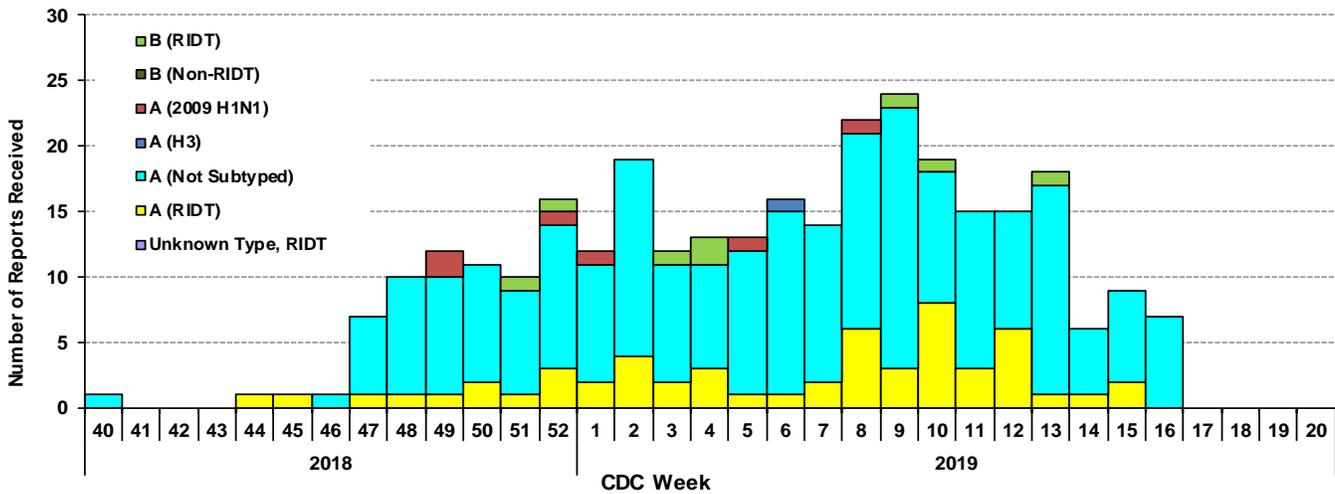
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

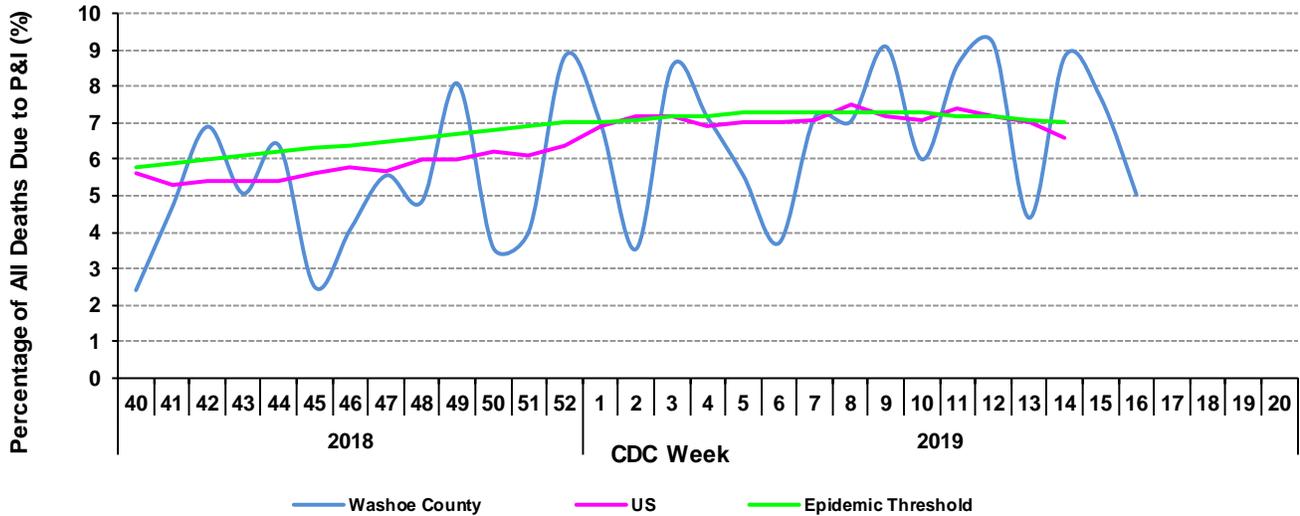
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date ten (10) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Six death certificates were received for week 16 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 16 was 119. This reflects a P&I ratio of 5.0%. Nationally 6.6% of the deaths occurring during Week 14 were due to P&I. This was below the Week 14 epidemic threshold of 7.0%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 181. This reflects an overall P&I ratio of 6.1% (181/2964).

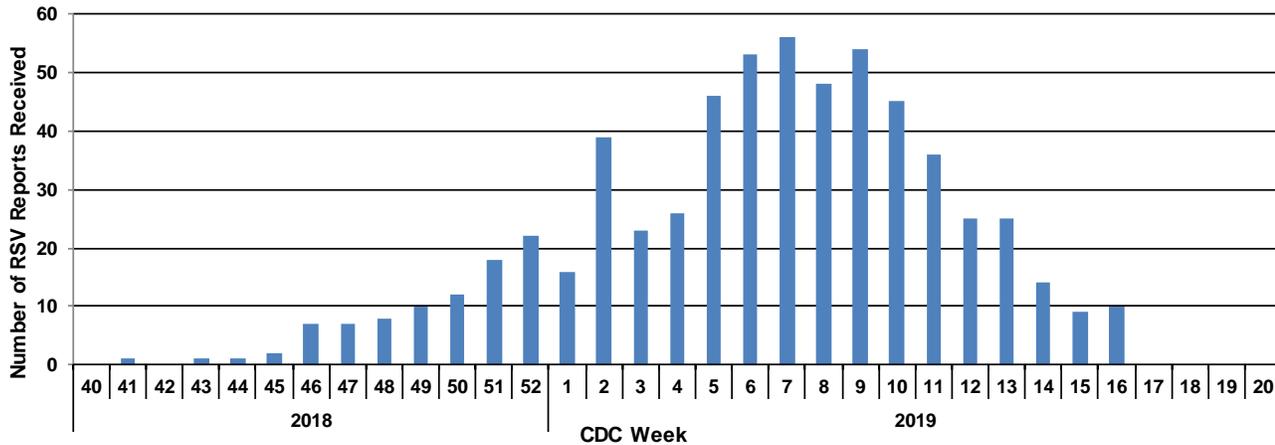
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

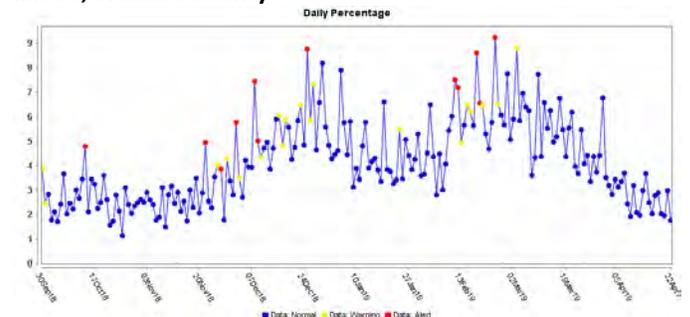


**Syndromic Surveillance**

***Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits***

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

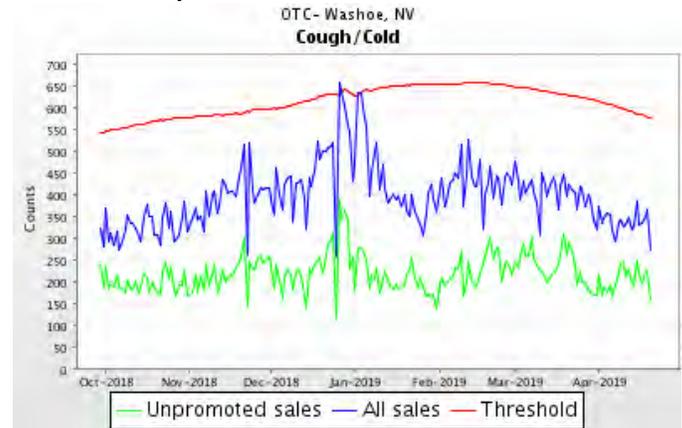
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

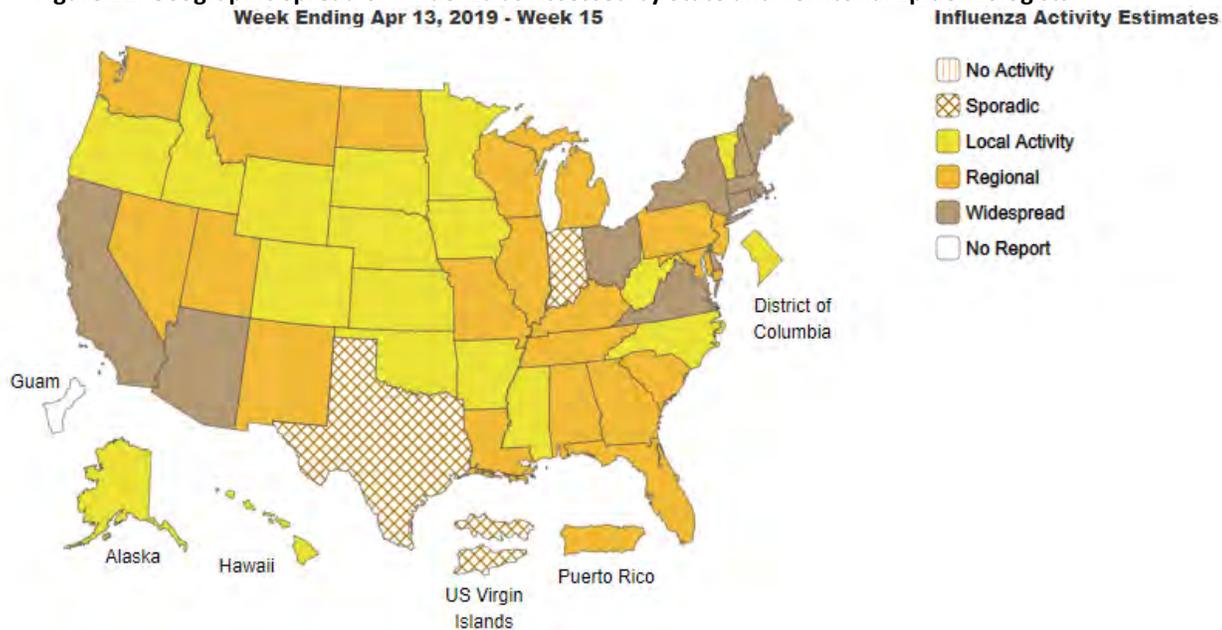


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 15, the following influenza activity was reported:

- Widespread influenza activity was reported by 11 states (Arizona, California, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New York, Ohio, Rhode Island and Virginia).
- Regional influenza activity was reported by Puerto Rico and 20 states (Alabama, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Michigan, Missouri, Montana, Nevada, New Jersey, New Mexico, North Dakota, Pennsylvania, South Carolina, Tennessee, Utah, Washington and Wisconsin).
- Local influenza activity was reported by the District of Columbia and 17 states (Alaska, Arkansas, Colorado, Hawaii, Idaho, Iowa, Kansas, Minnesota, Mississippi, Nebraska, North Carolina, Oklahoma, Oregon, South Dakota, Vermont, West Virginia and Wyoming).
- Sporadic influenza activity was reported by the U.S. Virgin Islands and two states (Indiana and Texas).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists: Week Ending Apr 13, 2019 - Week 15**



**Washoe County Influenza Resoures**

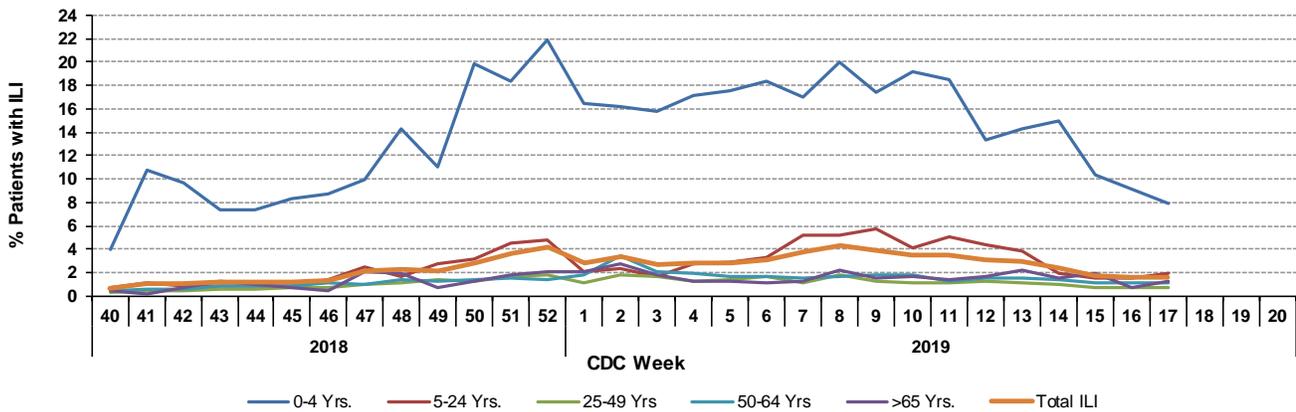
Weekly Washoe County influenza surveillace reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Wednesday, May 1, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

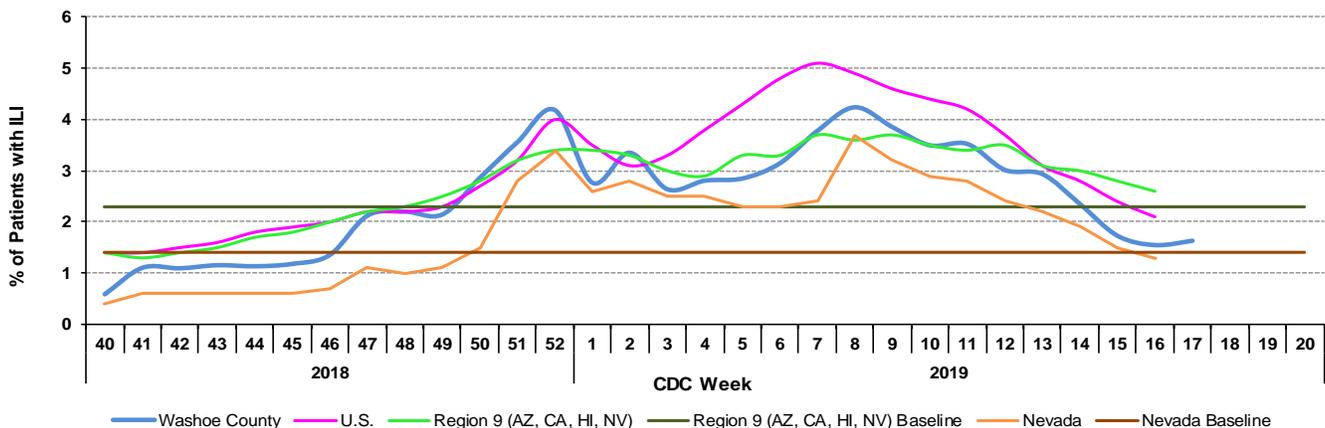
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 111 patients with influenza-like-illness (ILI) for the week ending April 27, 2019 (week 17). The percentage of persons seen with ILI by the twelve providers was 1.6% (111/6794) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (8.0%) and lowest among 25-49 years (0.7%). During week 16, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.3%. Nationwide during week 16 the percentage of visits to sentinel providers due to ILI was 2.1% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.8% to 3.2% during week 16. Four of 10 regions (Regions 1, 2, 8 and 9) reported a percentage of outpatient visits for ILI at or above their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

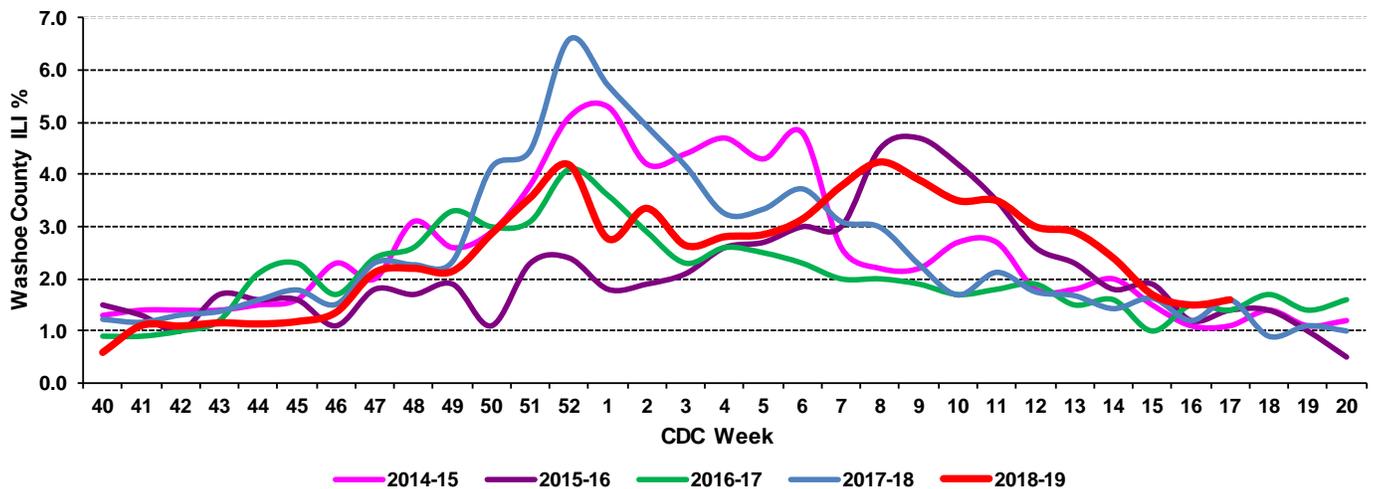


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



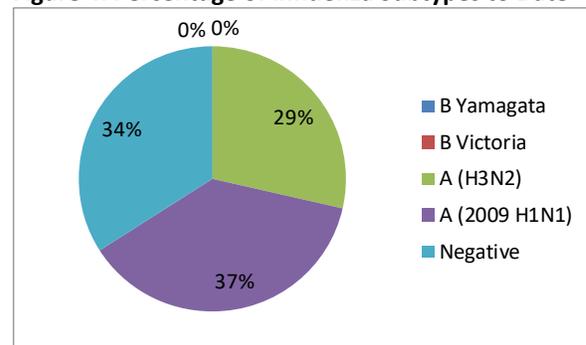
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	26	29%
A (2009 H1N1)	34	37%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	31	34%
Total (All Subtypes)	91	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 6 and influenza positive tests among hospitalized cases are presented in Figure 7.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 17) April 21, 2019 - April 27, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - April 27, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	7	N/A	3	42.9	3	42.9	2	28.6	308	N/A	118	38.3	59	19.2	10	3.2
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	0.0	6	1.9	2	1.7	2	3.4	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	1	1.7	0	0.0
Influenza A (not subtyped)	7	100.0	3	100.0	3	100.0	2	100.0	238	77.3	93	78.8	54	91.5	9	90.0
Influenza A (RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	55	17.9	19	16.1	1	1.7	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	8	2.6	4	3.4	1	1.7	1	10.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

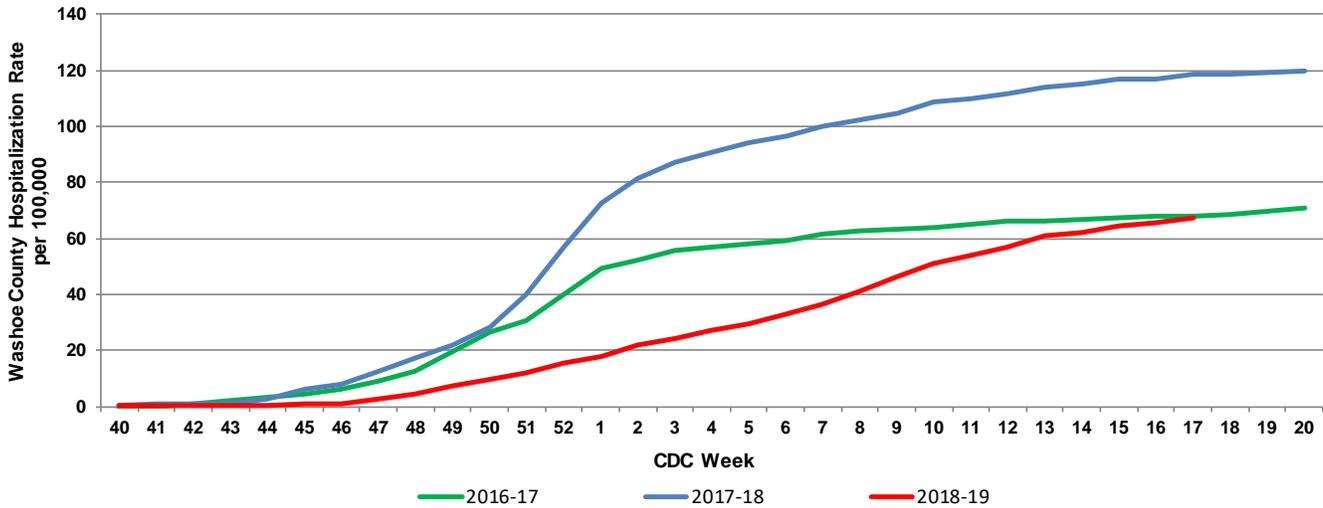
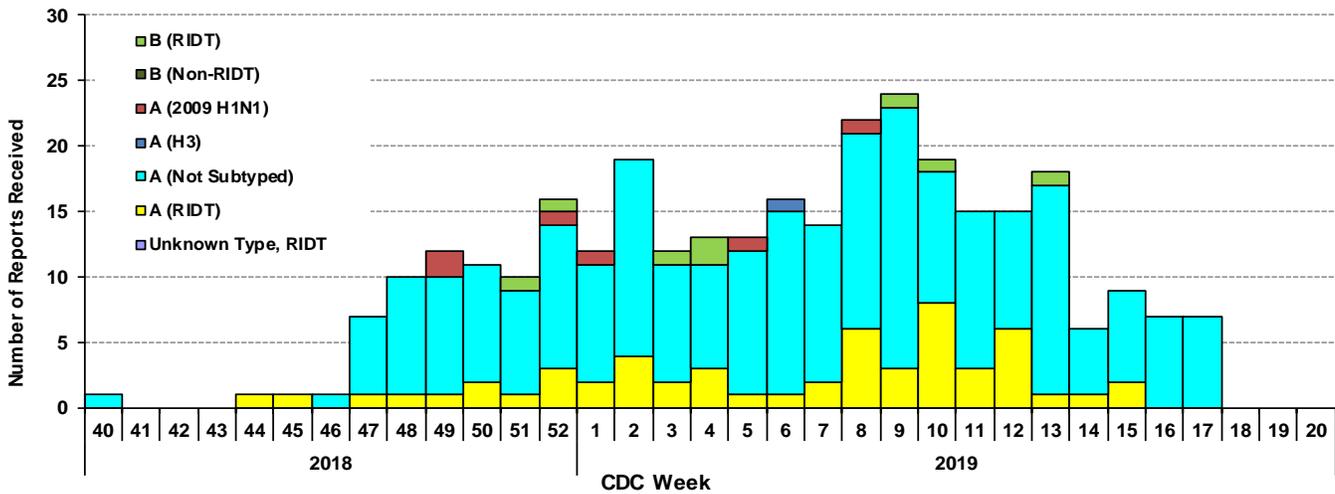


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

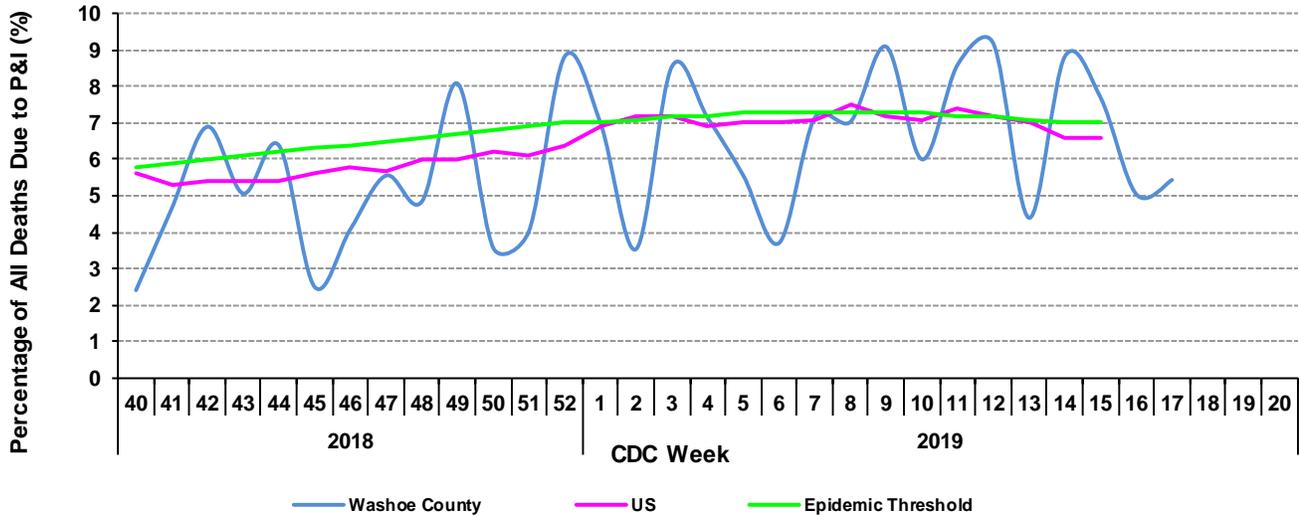
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date twelve (12) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Five death certificates were received for week 17 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 17 was 92. This reflects a P&I ratio of 5.4%. Nationally 6.6% of the deaths occurring during Week 15 were due to P&I. This was below the Week 15 epidemic threshold of 7.0%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 186. This reflects an overall P&I ratio of 6.1% (186/3056).

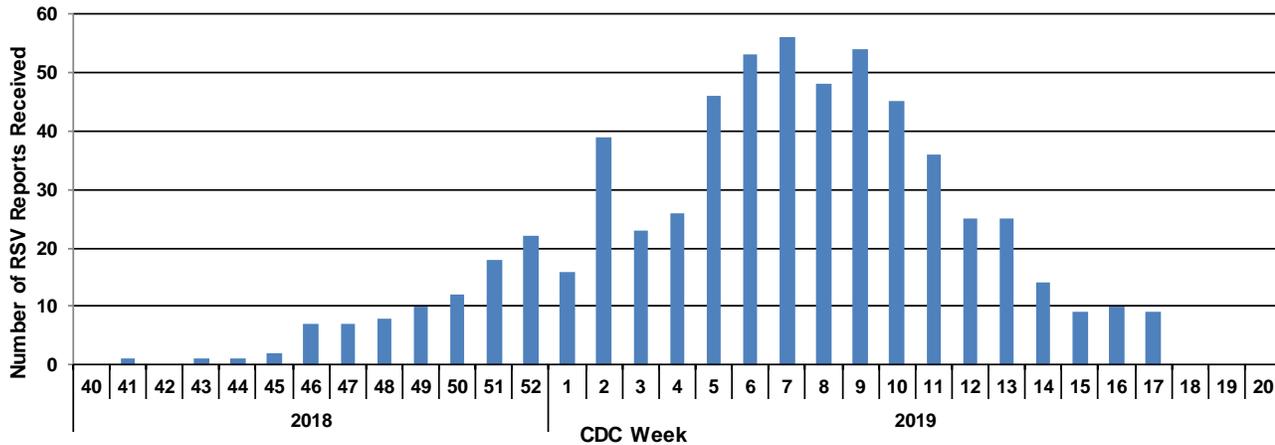
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

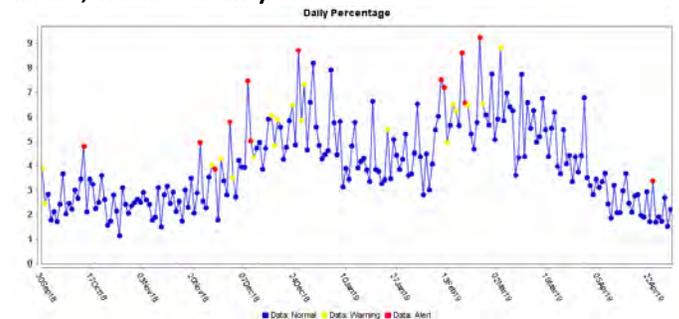


**Syndromic Surveillance**

***Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits***

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

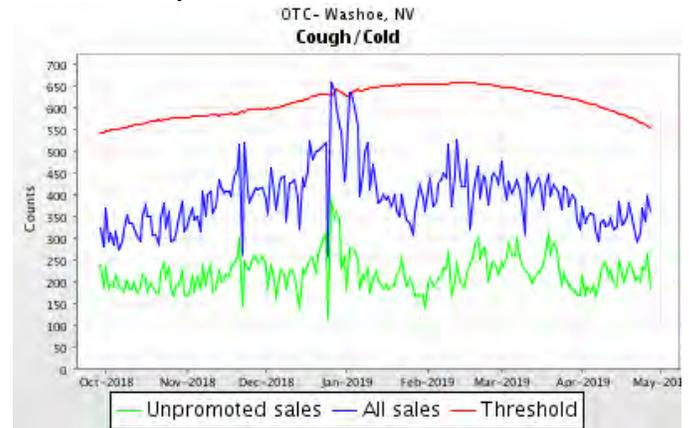
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

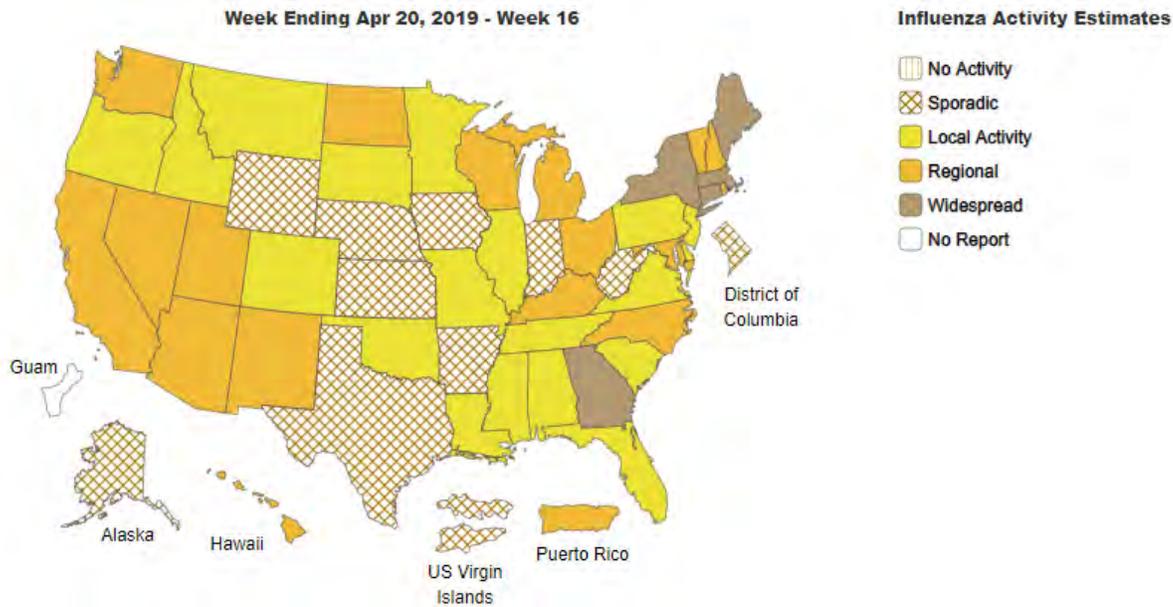


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 16, the following influenza activity was reported:

- Widespread influenza activity was reported by five states (Connecticut, Georgia, Maine, Massachusetts and New York).
- Regional influenza activity was reported by Puerto Rico and 17 states (Arizona, California, Hawaii, Kentucky, Maryland, Michigan, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Rhode Island, Utah, Vermont, Washington and Wisconsin).
- Local influenza activity was reported by 19 states (Alabama, Colorado, Delaware, Florida, Idaho, Illinois, Louisiana, Minnesota, Mississippi, Missouri, Montana, New Jersey, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee and Virginia).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and nine states (Alaska, Arkansas, Indiana, Iowa, Kansas, Nebraska, Texas, West Virginia and Wyoming).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

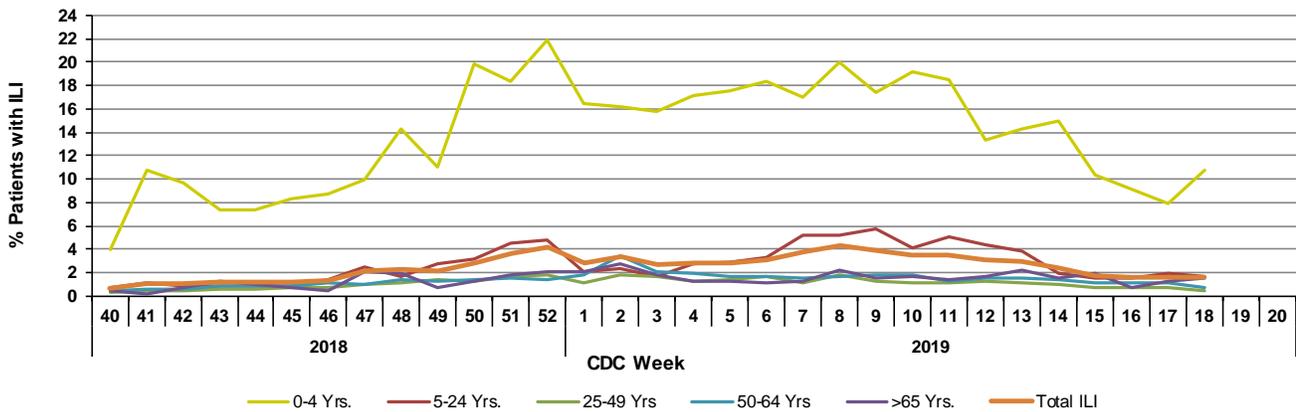
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Friday, August 30, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Alissar Puckett, MPH, CIC, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [apuckett@washoecounty.us](mailto:apuckett@washoecounty.us)

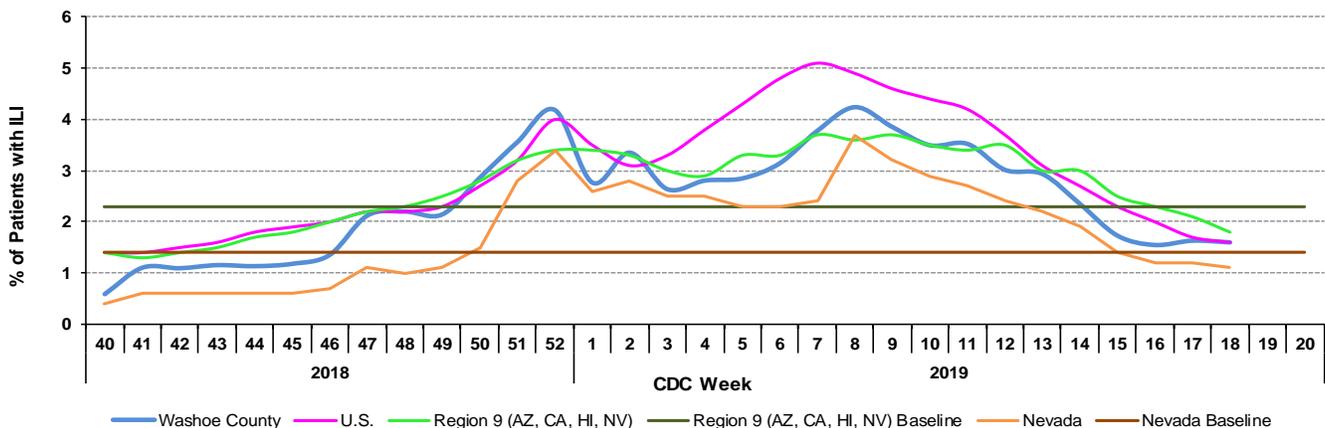
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 109 patients with influenza-like-illness (ILI) for the week ending May 4, 2019 (week 18). The percentage of persons seen with ILI by the twelve providers was 1.6% (109/6848) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (10.8%) and lowest among 25-49 years (0.4%). During week 17, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.2%. Nationwide during week 17 the percentage of visits to sentinel providers due to ILI was 1.7% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.9% to 2.3% during week 18. One of 10 regions (Region 8) reported a percentage of outpatient visits for ILI at their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

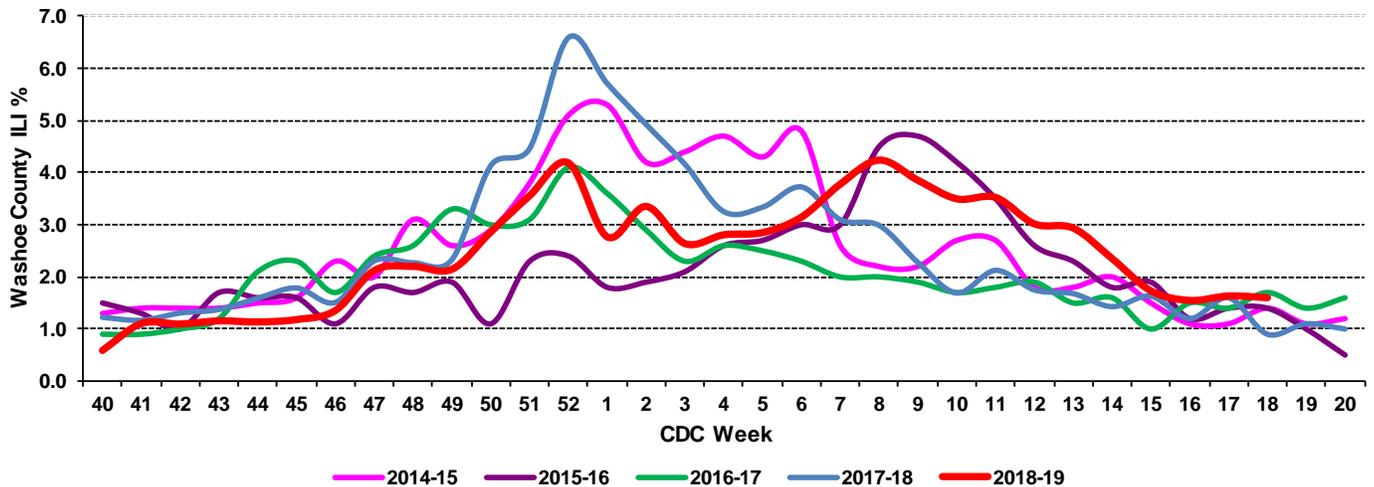


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



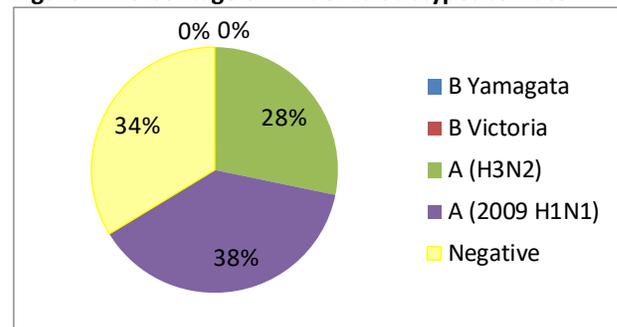
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	26	28%
A (2009 H1N1)	35	38%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	31	34%
Total (All Subtypes)	92	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 5 and influenza positive tests among hospitalized cases are presented in Figure 6.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

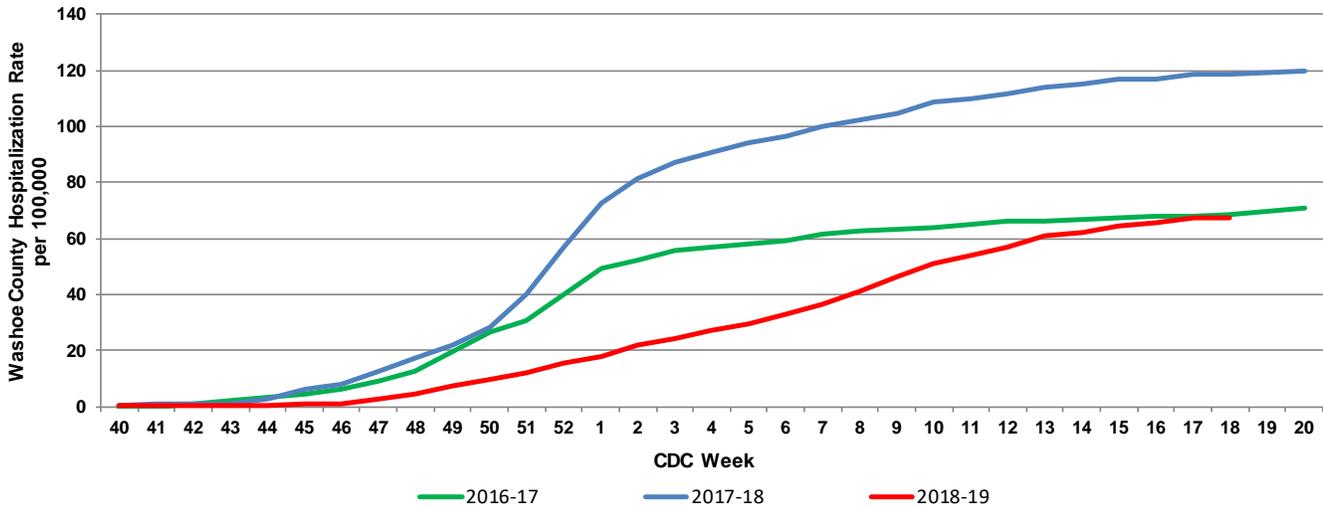
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 18) April 28, 2019 - May 4, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - May 4, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	0	N/A	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	308	N/A	118	38.3	59	19.2	10	3.2
Influenza A (2009 H1N1)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	6	1.9	2	1.7	2	3.4	0	0.0
Influenza A (seasonal H3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	1	0.3	0	0.0	1	1.7	0	0.0
Influenza A (not subtyped)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	238	77.3	93	78.8	54	91.5	9	90.0
Influenza A (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	55	17.9	19	16.1	1	1.7	0	0.0
Influenza B (RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	8	2.6	4	3.4	1	1.7	1	10.0
Influenza B (non-RIDT**)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

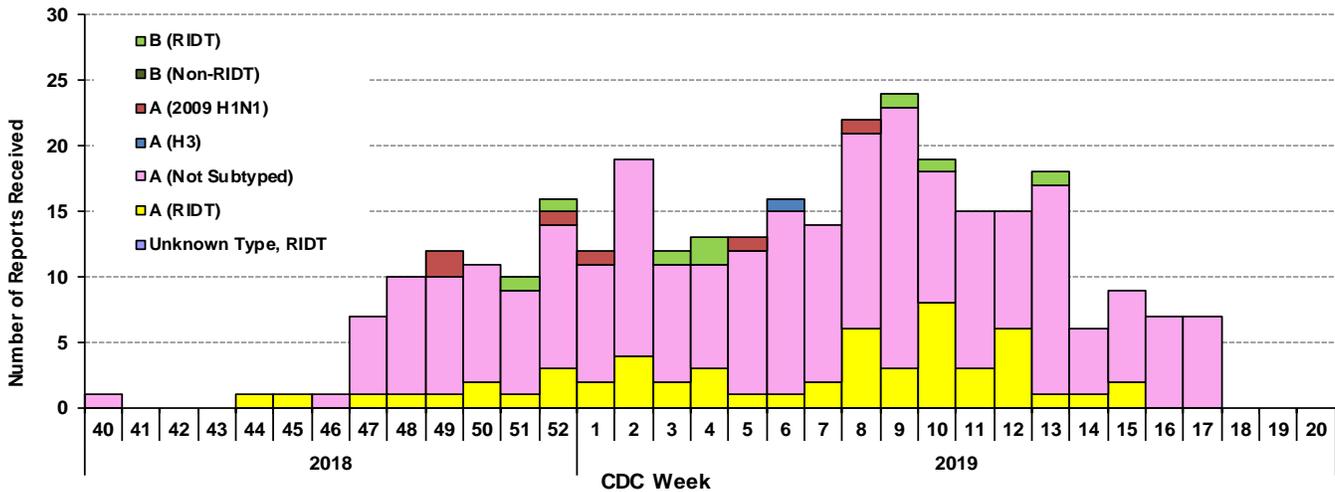
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

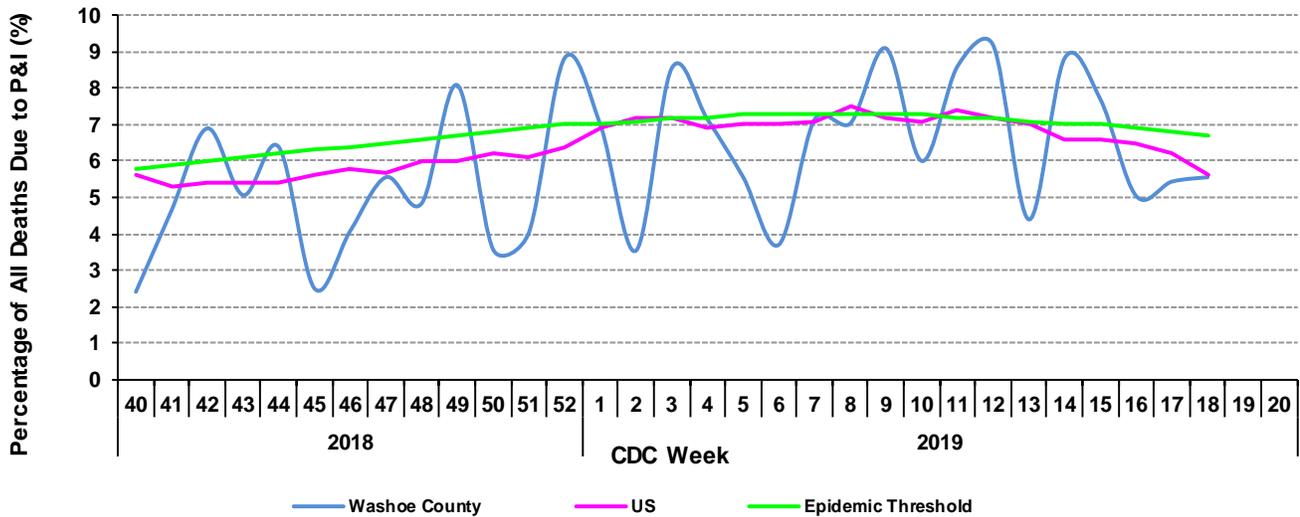
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date twelve (12) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Seven death certificates were received for week 18 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 18 was 90. This reflects a P&I ratio of 5.5%. Nationally 6.0% of the deaths occurring during week 17 were due to P&I. This was below the week 17 epidemic threshold of 6.8%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 191. This reflects an overall P&I ratio of 6.1% (191/3146).

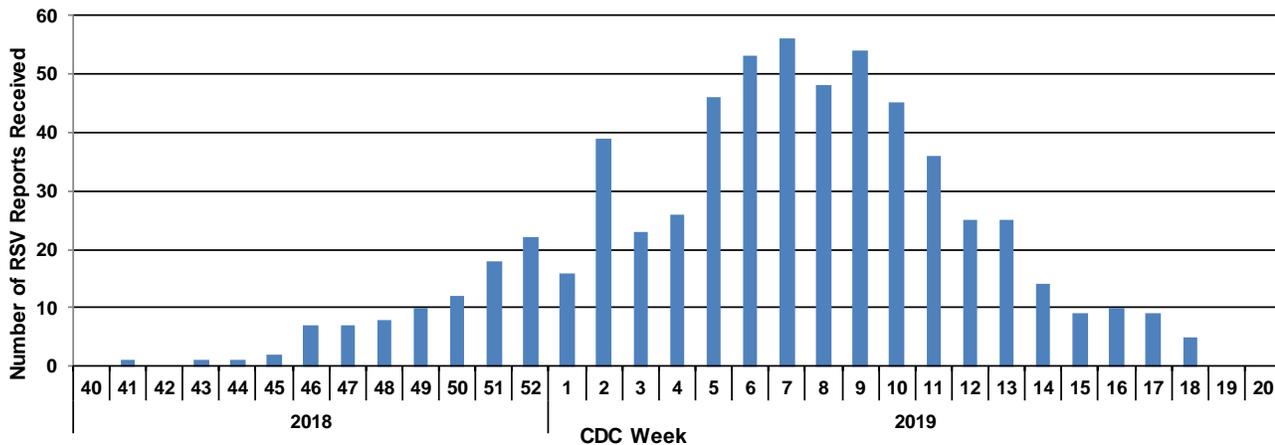
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019

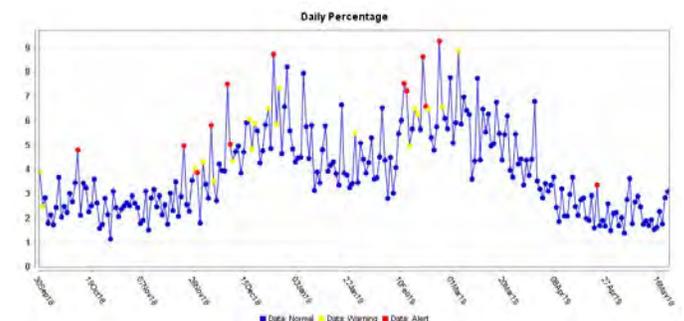


**Syndromic Surveillance**

***Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits***

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

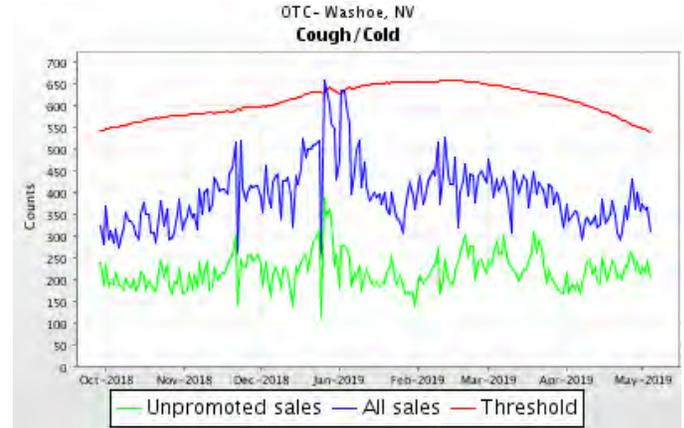
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children). (Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

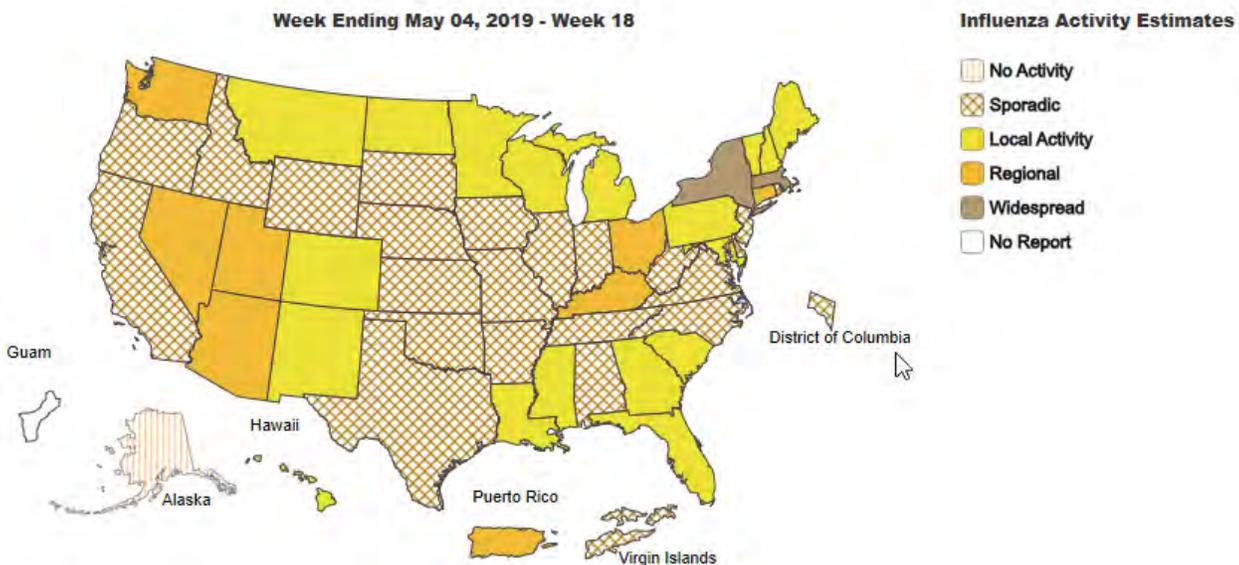


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 18, the following influenza activity was reported:

- Widespread influenza activity was reported by two states (Massachusetts and New York).
- Regional influenza activity was reported by Puerto Rico and seven states (Arizona, Connecticut, Kentucky, Nevada, Ohio, Utah and Washington).
- Local influenza activity was reported by 18 states (Colorado, Florida, Georgia, Hawaii, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Montana, New Hampshire, New Mexico, North Dakota, Pennsylvania, South Carolina, Vermont and Wisconsin).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and 22 states (Alabama, Arkansas, California, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, New Jersey, North Carolina, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Virginia, West Virginia and Wyoming).
- No activity was reported by one state (Alaska).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



### **Washoe County Influenza Resources**

Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.



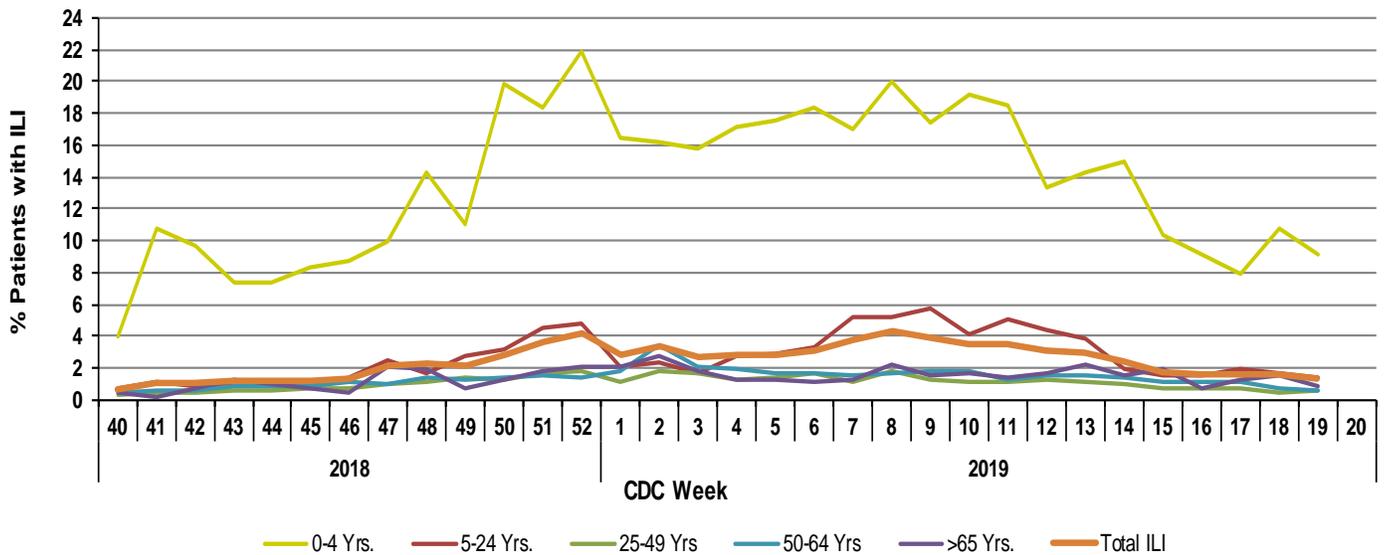
**Washoe County Health District  
2018-2019 Influenza Surveillance Program Weekly Report  
CDC Week #19: May 5, 2019 – May 11, 2019**

Date: Friday, September 13, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Alissar Puckett, MPH, CIC, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [apuckett@washoecounty.us](mailto:apuckett@washoecounty.us)

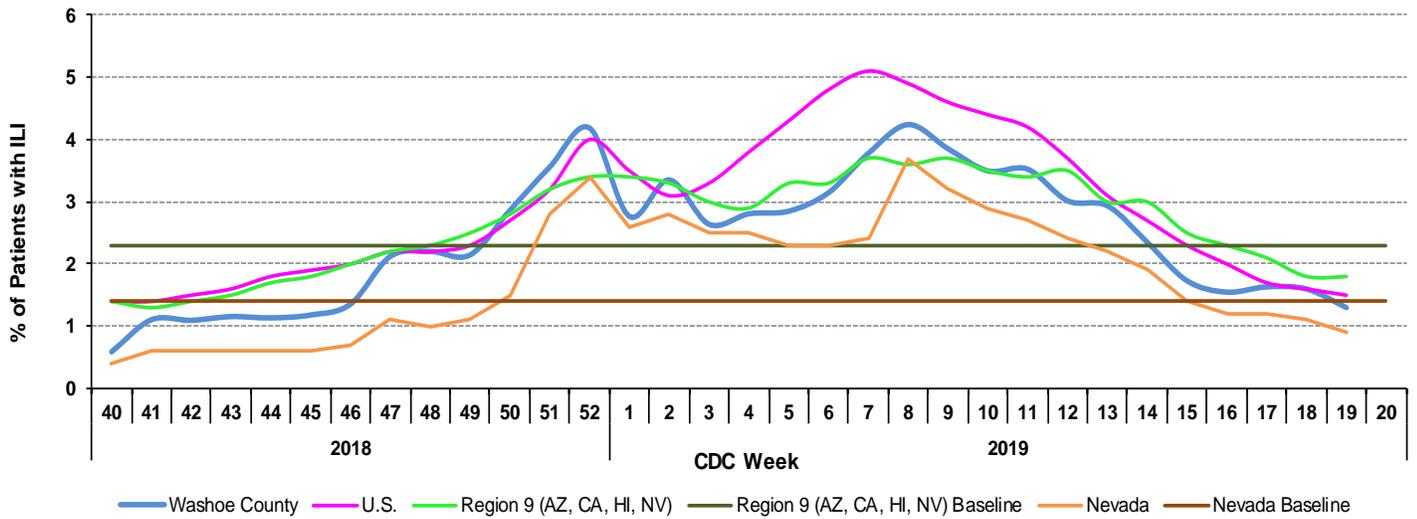
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 88 patients with influenza-like-illness (ILI) for the week ending May 11, 2019 (week 19). The percentage of persons seen with ILI by the twelve providers was 1.3% (88/6701) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (9.1%) and lowest among 25-49 years (0.5%). During week 18, the percentage of patient visits to Nevada sentinel providers due to ILI was 1.1%. Nationwide during week 18 the percentage of visits to sentinel providers due to ILI was 1.6% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 2.2% during week 19. All regions reported a percentage of outpatient visits for ILI below their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

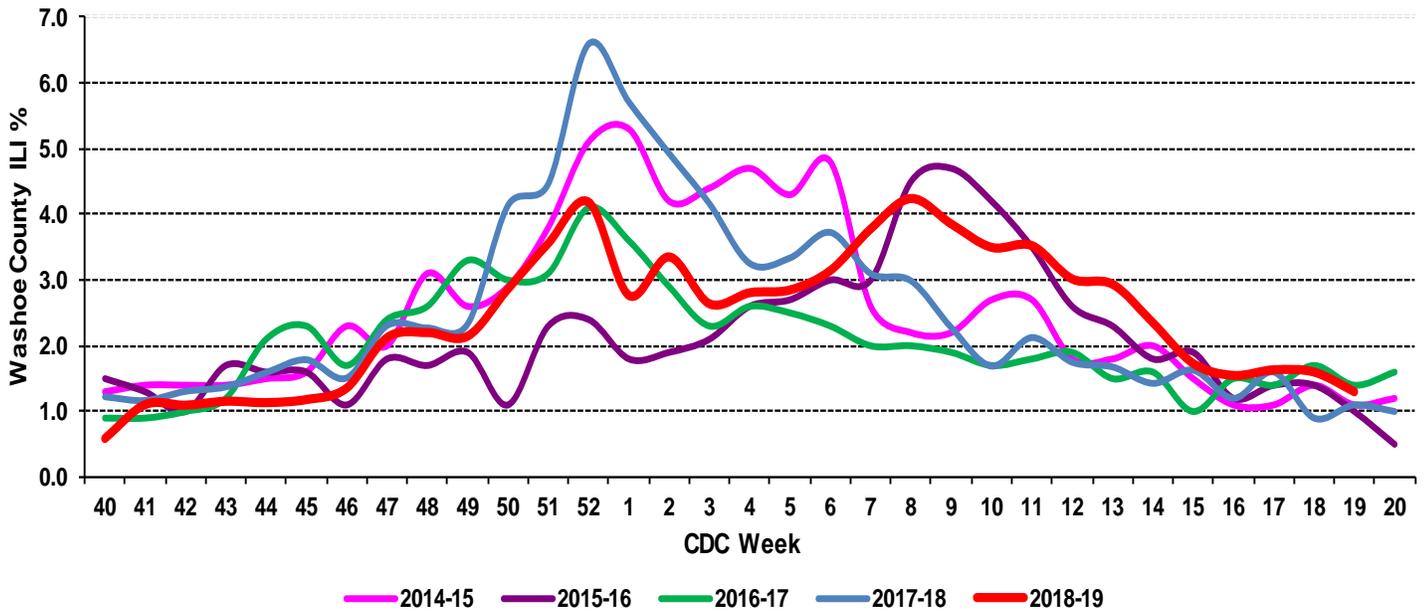


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.  
 \*\*Nevada and Region 9 baselines calculated for 2018-2019

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



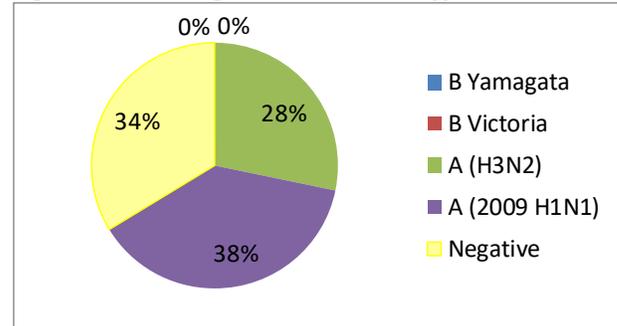
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	26	28%
A (2009 H1N1)	35	38%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	31	34%
Total (All Subtypes)	92	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 5 and influenza positive tests among hospitalized cases are presented in Figure 6.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 19) May 5, 2019 - May 11, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - May 11, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	3	N/A	1	33.3	1	33.3	0	0.0	311	N/A	119	38.3	60	19.3	10	3.2
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	1.9	2	1.7	2	3.3	0	0.0
Influenza A (seasonal H3)	1	33.3	1	100.0	0	0.0	0	#DIV/0!	2	0.6	1	0.8	1	1.7	0	0.0
Influenza A (not subtyped)	1	33.3	0	0.0	1	100.0	0	#DIV/0!	239	76.8	93	78.2	55	91.7	9	90.0
Influenza A (RIDT*)	1	33.3	0	0.0	0	0.0	0	#DIV/0!	56	18.0	19	16.0	1	1.7	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	8	2.6	4	3.4	1	1.7	1	10.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA /IFA staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.

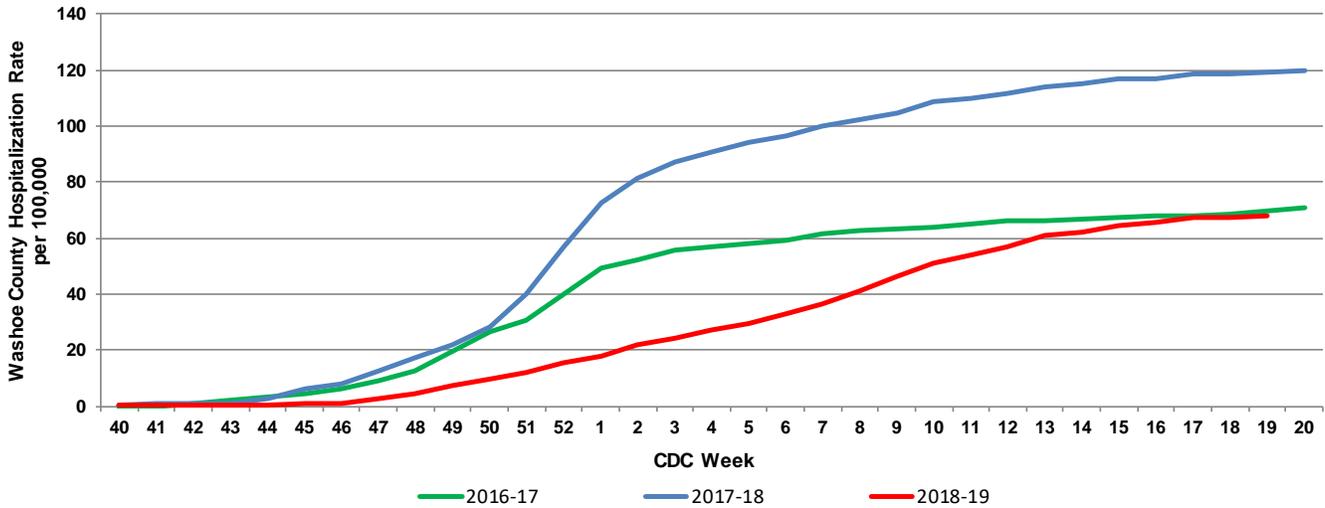
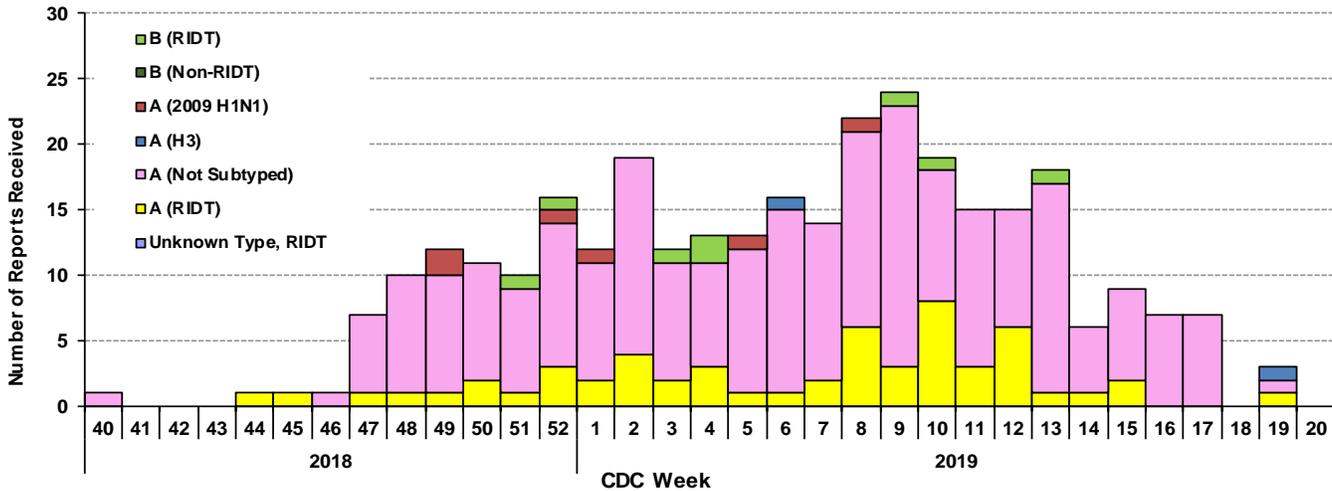


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.



**Deaths**

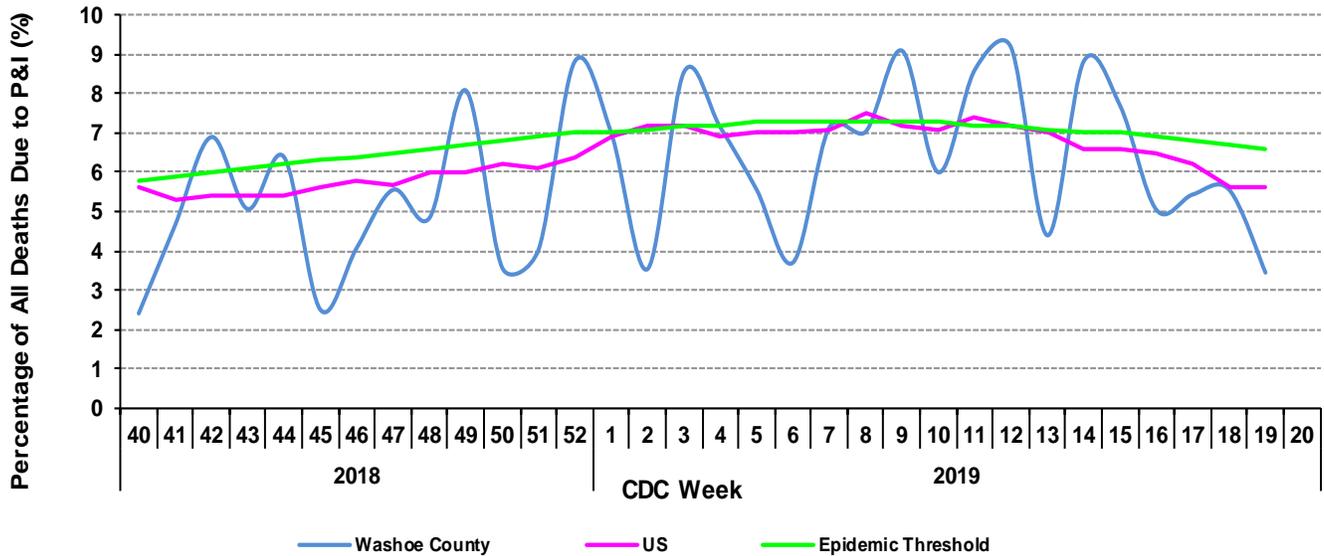
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date thirteen (13) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Three death certificates were received for week 19 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 19 was 87. This reflects a P&I ratio of 3.4%. Nationally 5.6% of the deaths occurring during week 18 were due to P&I. This was below the week 18 epidemic threshold of 6.7%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 194. This reflects an overall P&I ratio of 6.0% (194/3233).

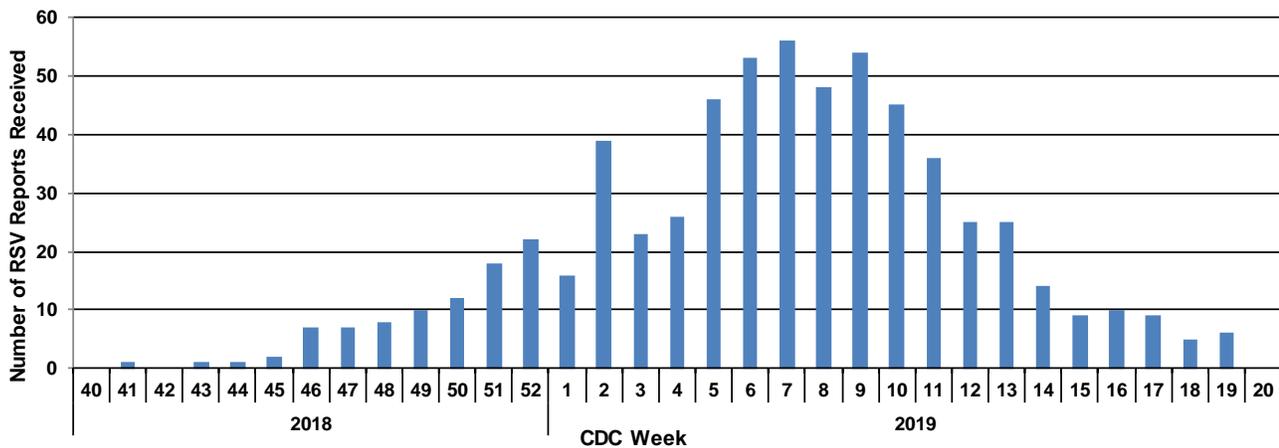
**Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.**



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is the most common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

**Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019**

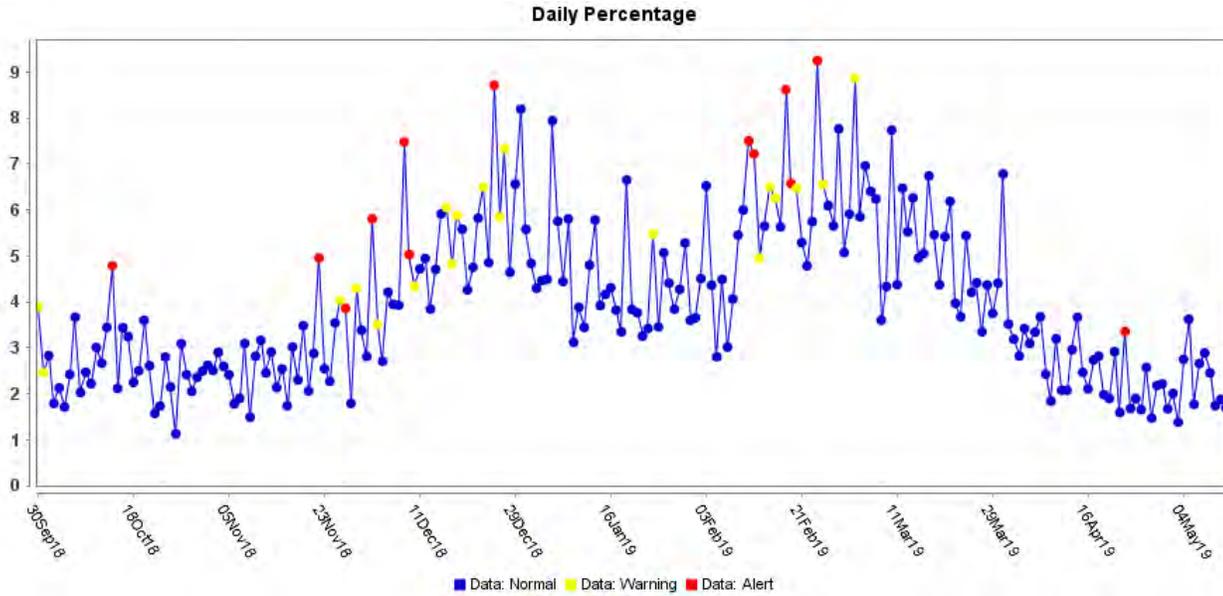


**Syndromic Surveillance**

***Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits***

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

**Figure 9. Percentage of ED and UC Visits for Influenza Like Illness, Washoe County**

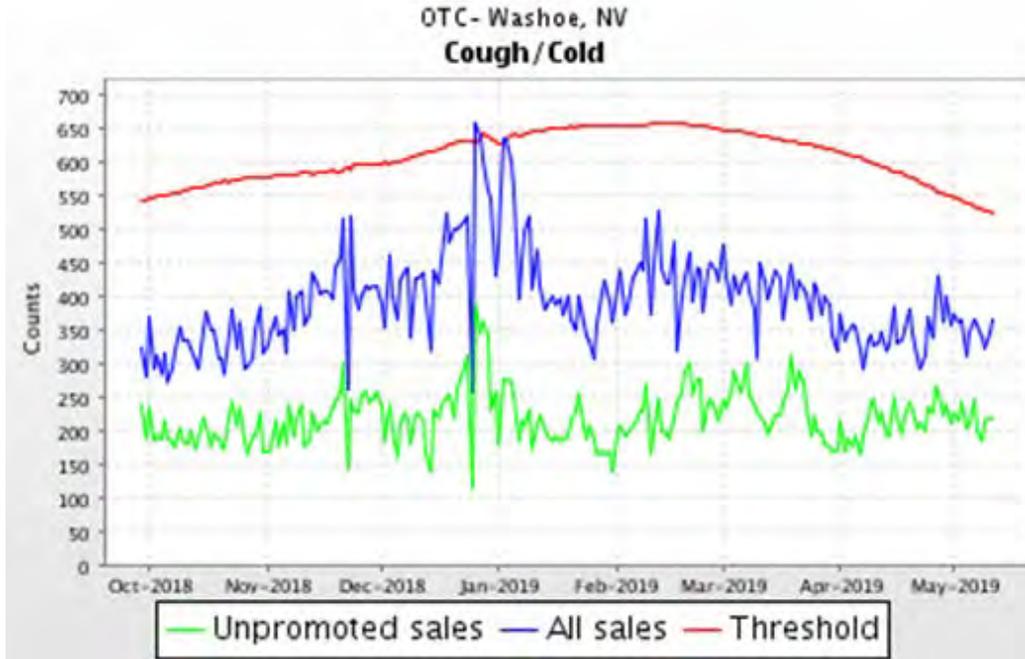


Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children).

(Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

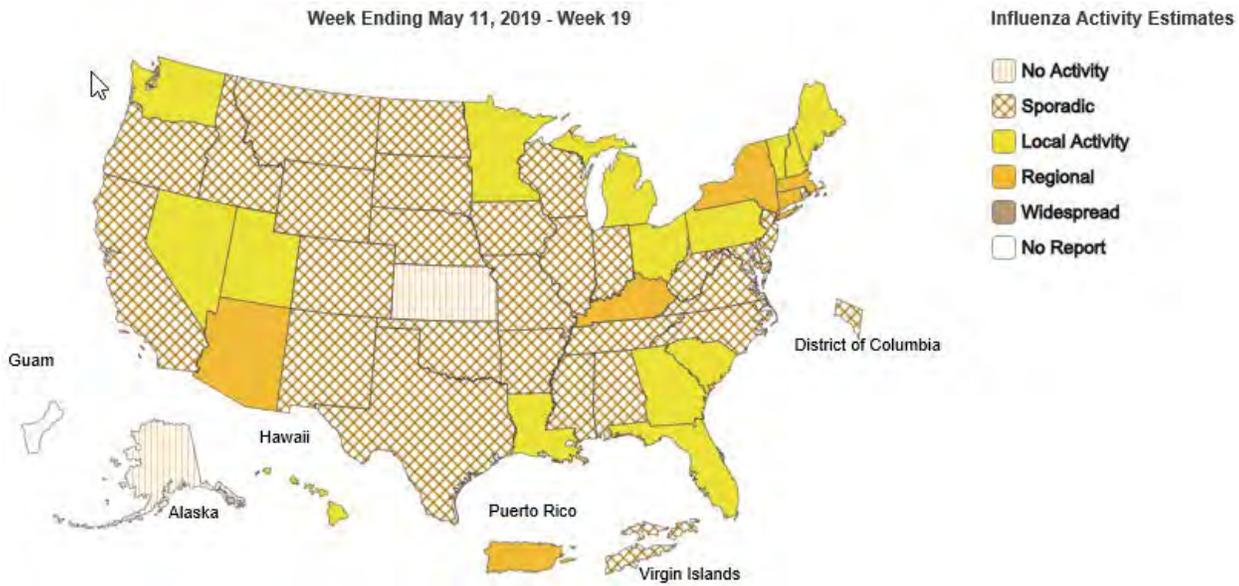


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 19, the following influenza activity was reported:

- Regional influenza activity was reported by Puerto Rico and four states (Arizona, Connecticut, Massachusetts and New York).
- Regional influenza activity was reported by Puerto Rico and seven states (Arizona, Connecticut, Kentucky, Nevada, Ohio, Utah and Washington).
- Local influenza activity was reported by 16 states (Florida, Georgia, Hawaii, Kentucky, Louisiana, Maine, Michigan, Minnesota, Nevada, New Hampshire, Ohio, Pennsylvania, South Carolina, Utah, Vermont and Washington).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and 28 states (Alabama, Arkansas, California, Colorado, Delaware, Idaho, Illinois, Indiana, Iowa, Maryland, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Virginia, West Virginia, Wisconsin and Wyoming).
- No activity was reported by two states (Alaska and Kansas).
- Guam did not report.

**Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:**



**Washoe County Influenza Resources**

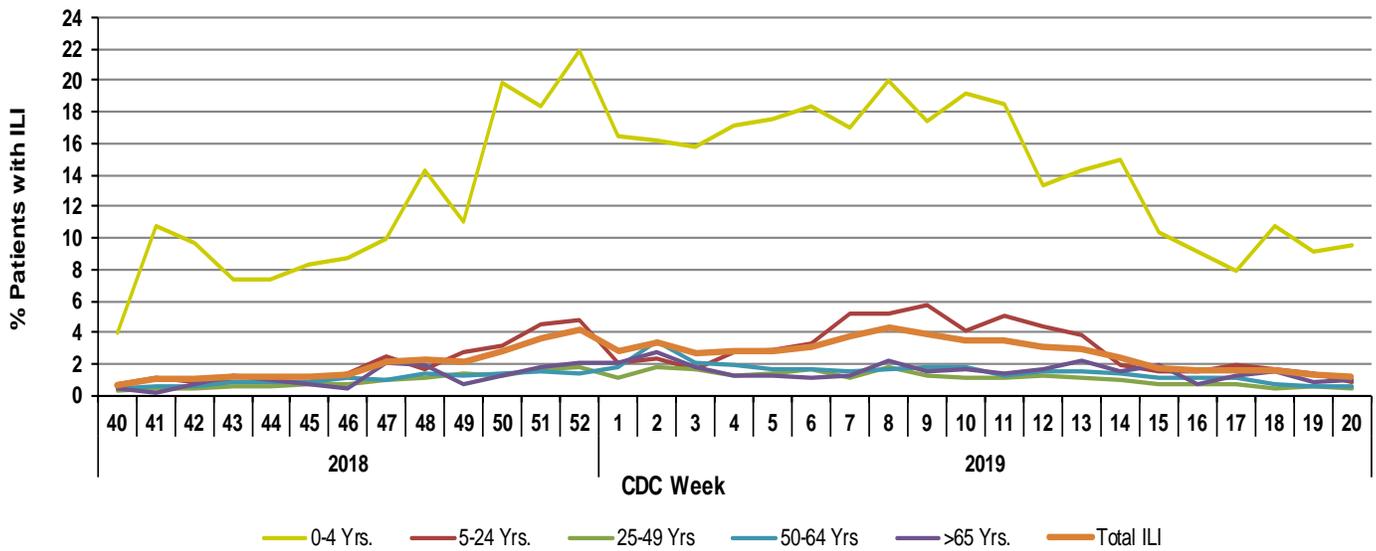
Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.

Date: Friday, September 13, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Alissar Puckett, MPH, CIC, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [apuckett@washoecounty.us](mailto:apuckett@washoecounty.us)

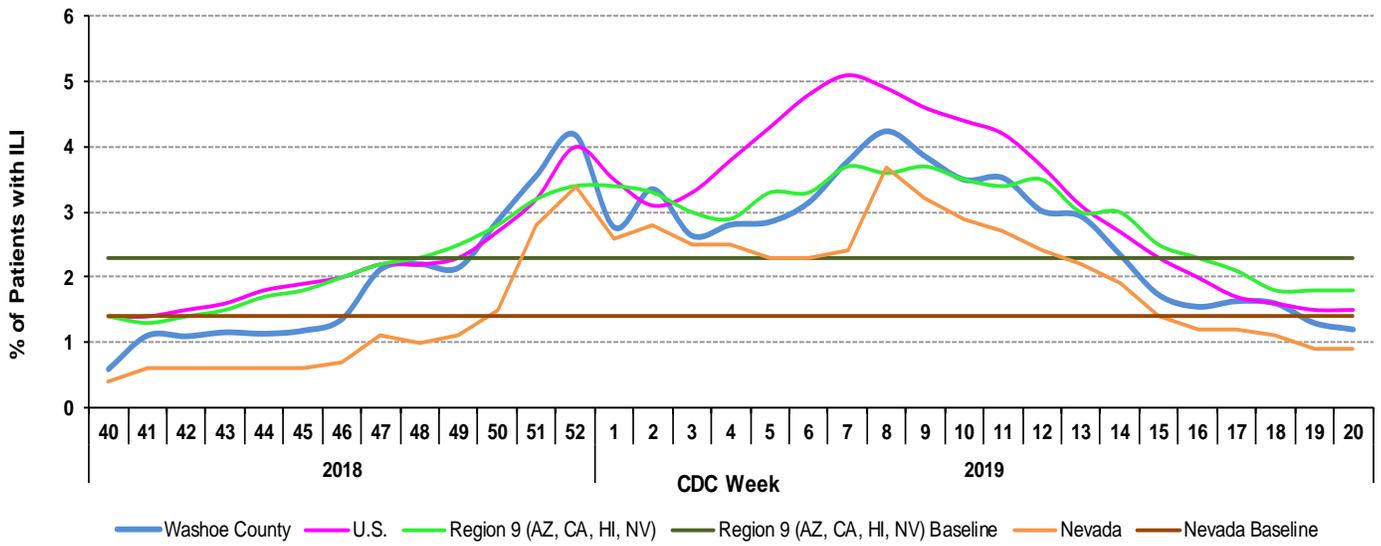
**Influenza-Like Illness (ILI) Activity**

Influenza-like illness (ILI) is defined as fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating providers in Washoe County reported a total of 78 patients with influenza-like-illness (ILI) for the week ending May 18, 2019 (week 20). The percentage of persons seen with ILI by the twelve providers was 1.2% (78/6646) which is below the regional baseline of 2.3%. By age group, ILI activity was highest among 0-4 years (9.6%) and lowest among 25-49 years (0.4%). During week 20, the percentage of patient visits to Nevada sentinel providers due to ILI was 0.9%. Nationwide during week 20 the percentage of visits to sentinel providers due to ILI was 1.5% which is below the national baseline of 2.2%. On a regional level, the percentage of outpatient visits for ILI ranged from 0.6% to 2.4% during week 20. All regions reported a percentage of outpatient visits for ILI below their region-specific baseline. Nevada is in Region 9.

**Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2018-2019.**

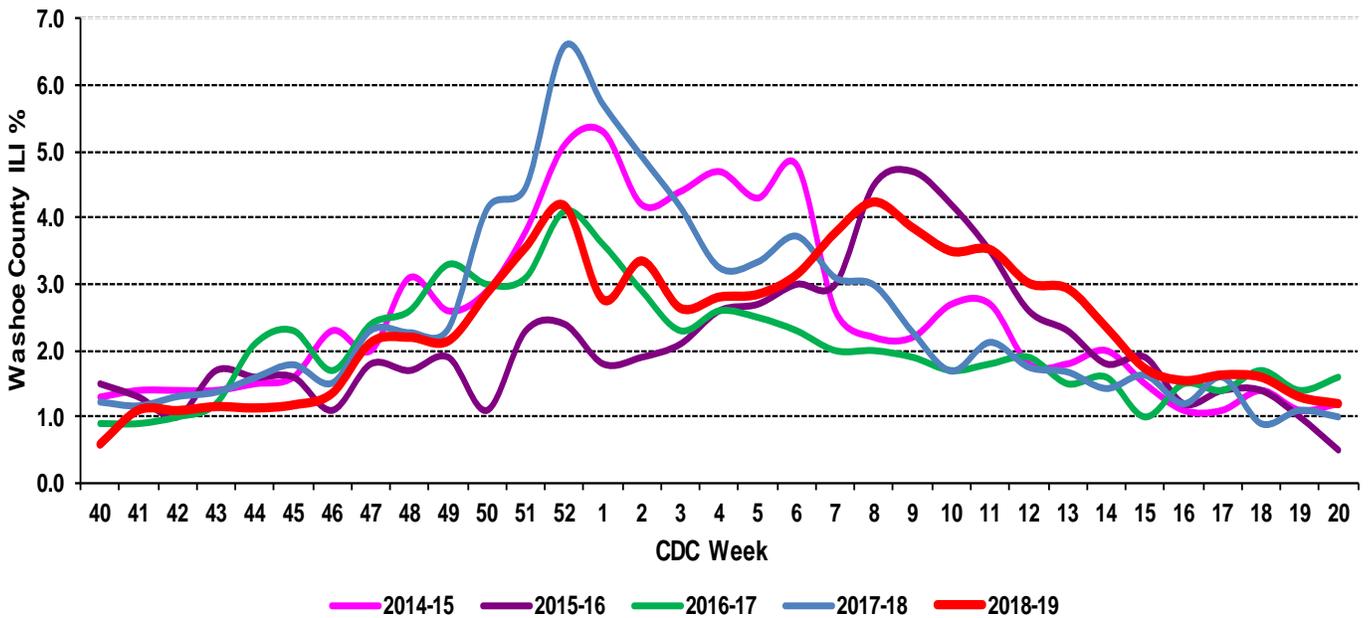


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Interactive, <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.  
 \*\*Nevada and Region 9 baselines calculated for 2018-2019

**Figure 3. Washoe County ILI Activity Reported by Sentinel Providers, 2014-2019 Seasons:**



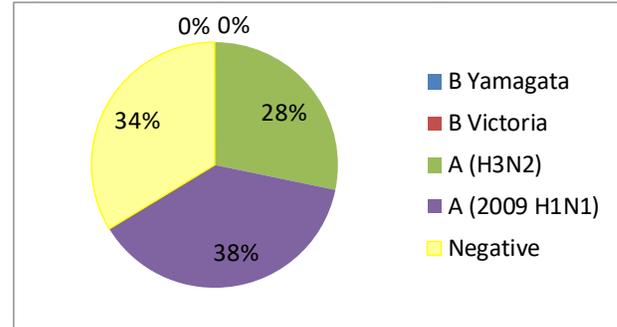
**Nevada State Public Health Laboratory (NSPHL) Test Results**

The NSPHL performs influenza subtyping. Specimens are primarily submitted to the NSPHL from sentinel provider sites.

**Table 1. Specimens Submitted to NSPHL for Subtyping to Date**

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	26	28%
A (2009 H1N1)	35	38%
B (Yamagata)	0	0
B (Victoria)	0	0
Negative	31	34%
Total (All Subtypes)	92	N/A

**Figure 4. Percentage of Influenza Subtypes to Date**



**Hospitalizations**

Medical records are reviewed to the extent possible for all cases hospitalized for ≥24 hours. Information on the number of hospitalized cases, the number of hospitalized cases that were vaccinated ≥2 weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported below in Table 2. A cumulative hospitalization rate per 100,000 is presented in Figure 5 and influenza positive tests among hospitalized cases are presented in Figure 6.

**Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2018-2019.**

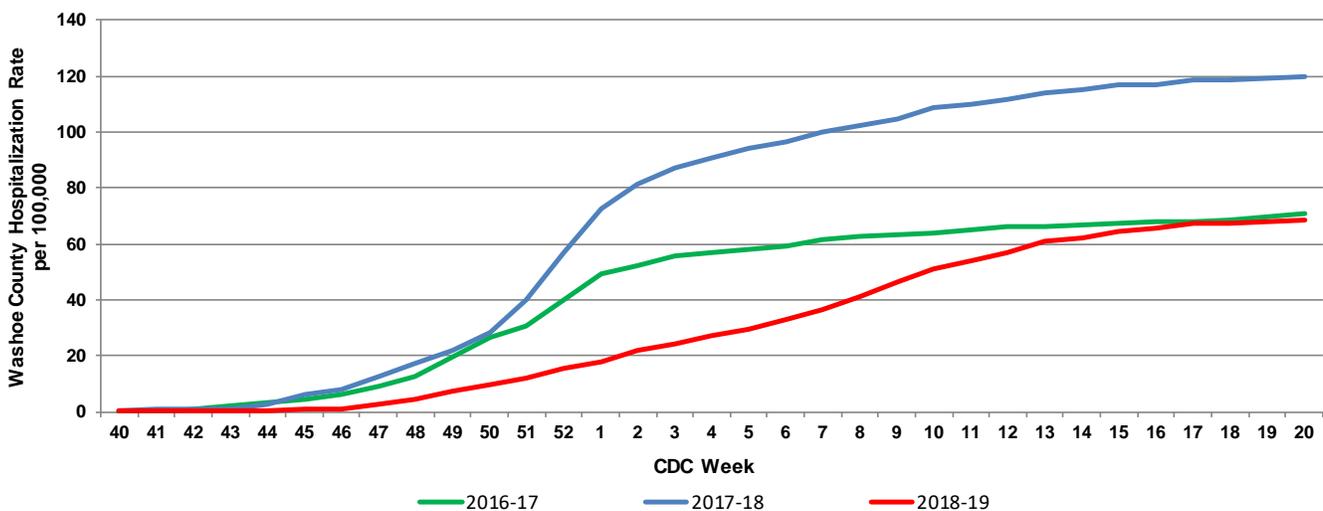
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 20) May 12, 2019 - May 18, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - May 18, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total # of cases reported</b>	2	N/A	1	50.0	1	50.0	0	0.0	313	N/A	120	38.3	61	19.5	10	3.2
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	6	1.9	2	1.7	2	3.3	0	0.0
Influenza A (seasonal H3)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	2	0.6	1	0.8	1	1.6	0	0.0
Influenza A (not subtyped)	1	50.0	1	100.0	0	0.0	0	#DIV/0!	240	76.7	94	78.3	55	90.2	9	90.0
Influenza A (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	56	17.9	19	15.8	1	1.6	0	0.0
Influenza B (RIDT*)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	8	2.6	4	3.3	1	1.6	1	10.0
Influenza B (non-RIDT**)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	0	0.0	0	0.0	0	0.0	0	0.0
Influenza (unknown type, RIDT*)	1	50.0	0	0.0	1	100.0	0	#DIV/0!	1	0.3	0	0.0	1	1.6	0	0.0

\*RIDT: \*Rapid Influenza Diagnostic Test

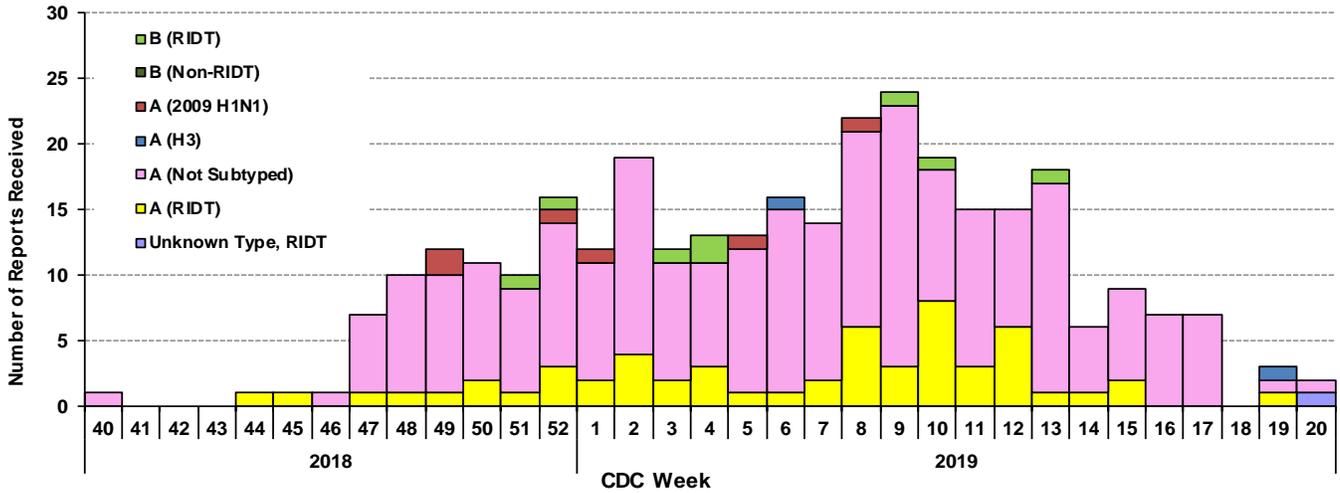
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA /IFA staining, or rapid molecular assay.

§Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

**Figure 5. Washoe County Hospitalization Rate per 100,000 Population, 2016-19 Seasons.**



**Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2018-2019.**



**Deaths**

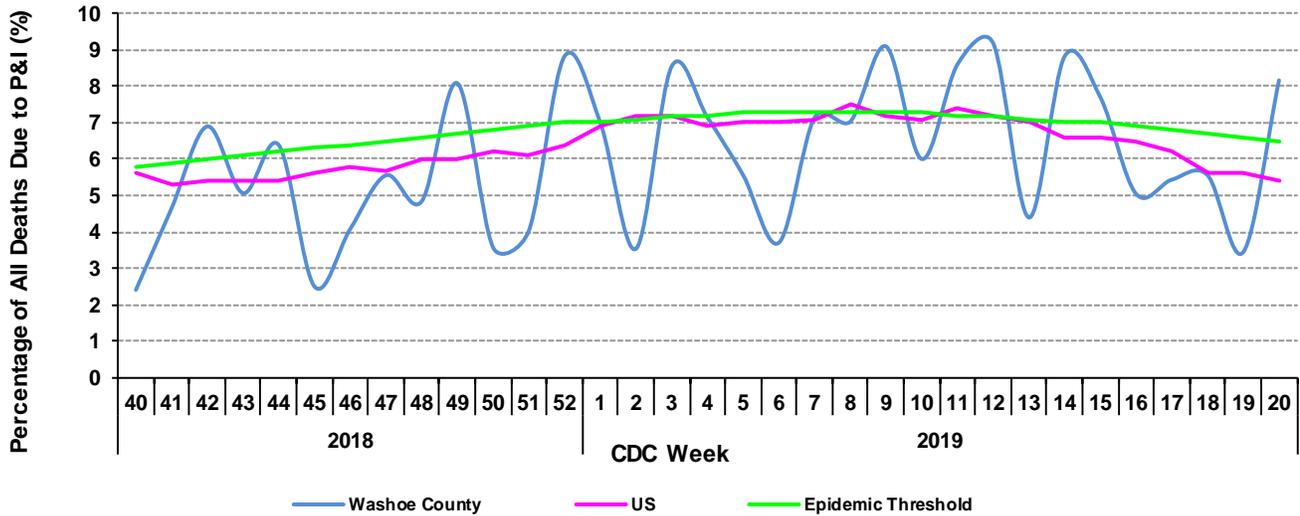
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. In previous seasons the Washoe County Health District (WCHD) counted a death as attributable to influenza only if influenza was listed as a cause of death on the death certificate. However, beginning this season WCHD is adopting the NDPBH definition to improve surveillance across Nevada jurisdictions. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date thirteen (13) influenza-associated deaths have been reported.

**Pneumonia and Influenza (P&I) Mortality**

Eight death certificates were received for week 20 listing pneumonia (P) or influenza (I) as a factor contributing to the cause of death. The total number of deaths submitted for week 20 was 98. This reflects a P&I ratio of 8.2%. Nationally 5.6% of the deaths occurring during week 19 were due to P&I. This was below the week 19 epidemic threshold of 6.6%. The total P&I deaths registered to date in Washoe County for the 2018-2019 influenza surveillance season is 202. This reflects an overall P&I ratio of 6.1% (202/3331).

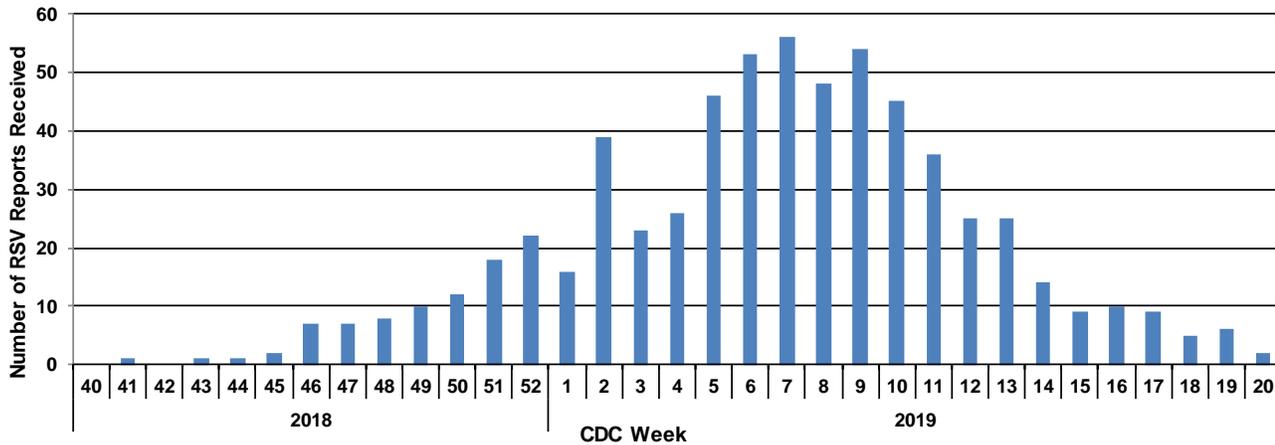
**Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.**



**Respiratory Syncytial Virus (RSV) Surveillance**

Respiratory Syncytial Virus (RSV) is the most common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV can be serious, especially for infants and older adults, and is most common cause of bronchiolitis and pneumonia in children younger than 1 year of age. RSV is a reportable condition in Nevada.

**Figure 8. Number of RSV Cases, Washoe County Communicable Disease Surveillance, 2018-2019**

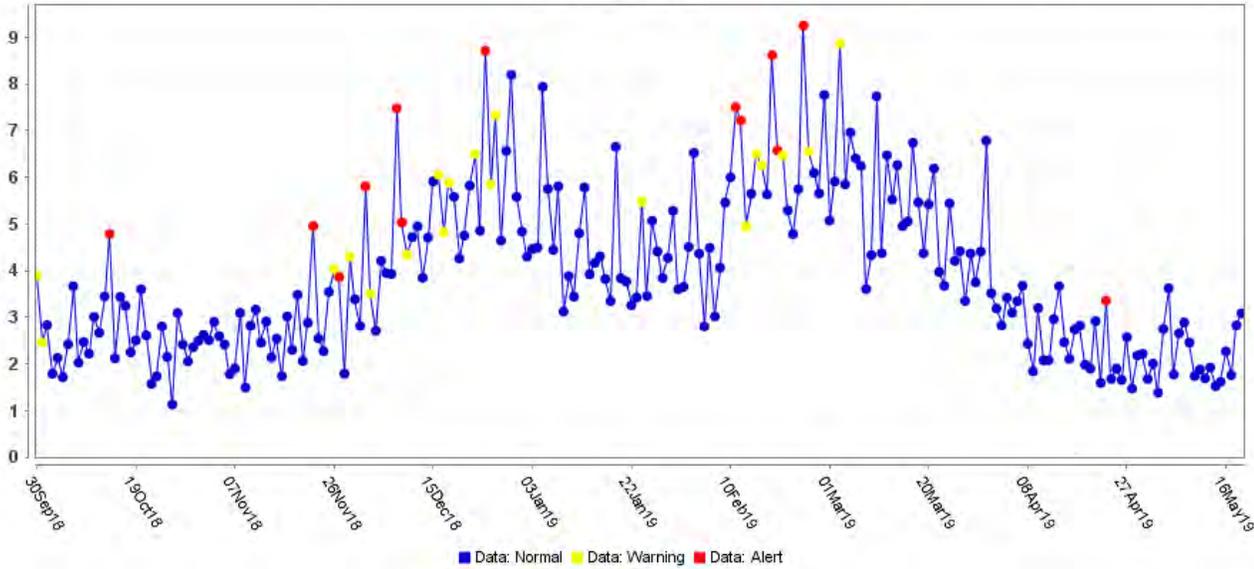


**Syndromic Surveillance**

***Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits***

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms. (Data source: ESSENCE)

**Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County**  
**Daily Percentage**

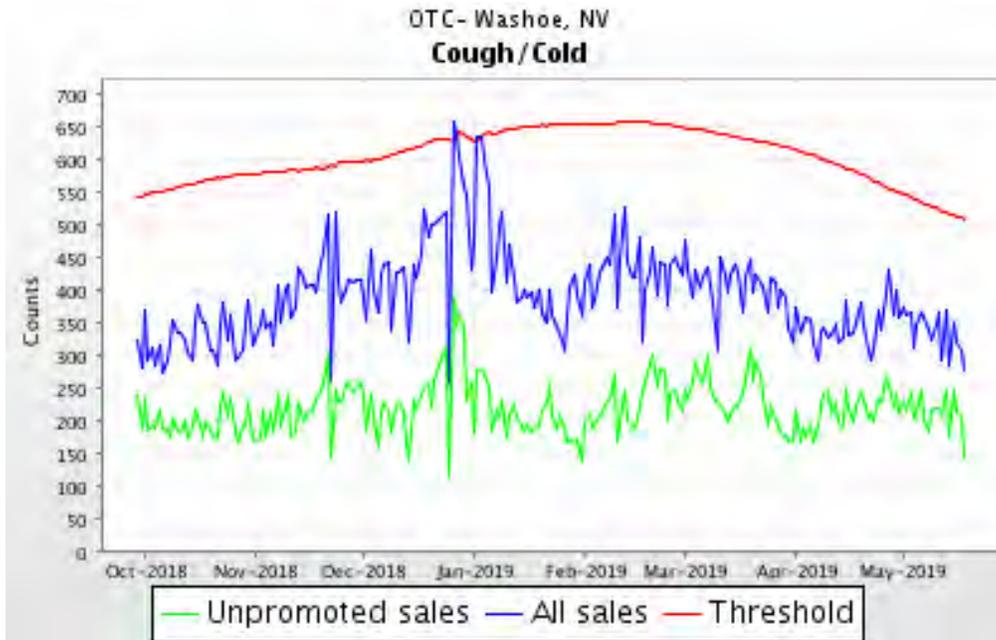


Over-the-Counter (OTC) sales for cough and/or cold remedies.

This includes: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children).

(Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)

**Figure 10. OTC sales for cough and/or cold remedies, Washoe County**

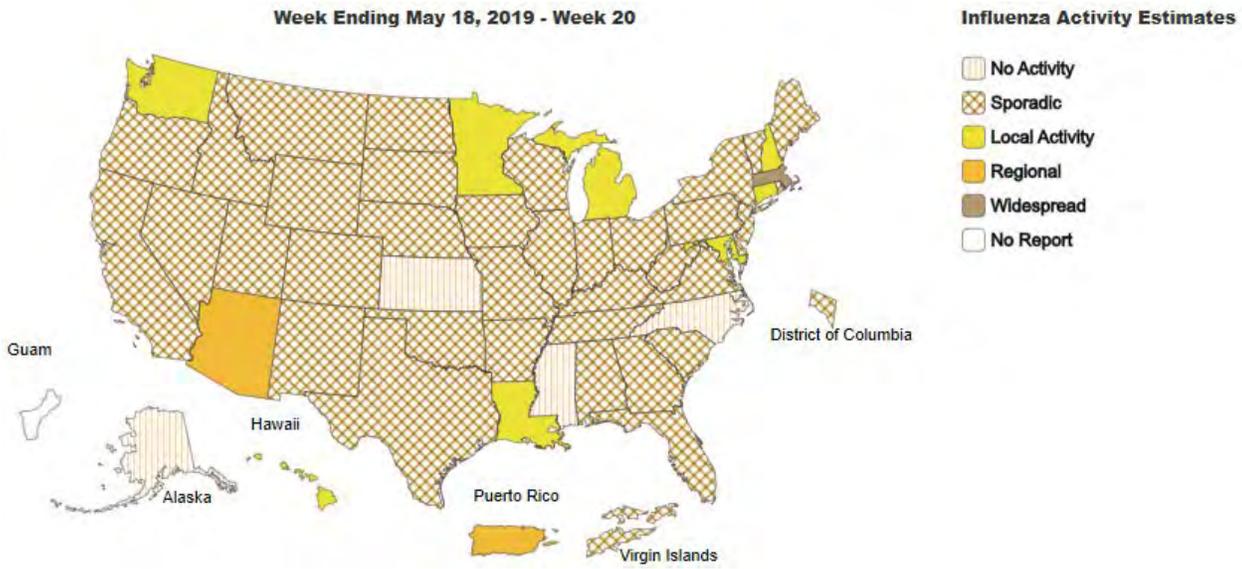


**Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists**

During week 20, the following influenza activity was reported:

- Widespread influenza activity was reported by one state (Massachusetts).
- Regional influenza activity was reported by Puerto Rico and one state (Arizona).
- Local influenza activity was reported by 8 states (Connecticut, Hawaii, Louisiana, Maryland, Michigan, Minnesota, New Hampshire and Washington).
- Sporadic influenza activity was reported by the District of Columbia, the U.S. Virgin Islands and 36 states (Alabama, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin and Wyoming).
- No activity was reported by four states (Alaska, Kansas, Mississippi and North Carolina).
- Guam did not report

Figure 11. Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists:



**Washoe County Influenza Resources**

Weekly Washoe County influenza surveillance reports are available at <http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to [epicenter@washoecounty.us](mailto:epicenter@washoecounty.us): your name (first and last), title, organization, and email address.