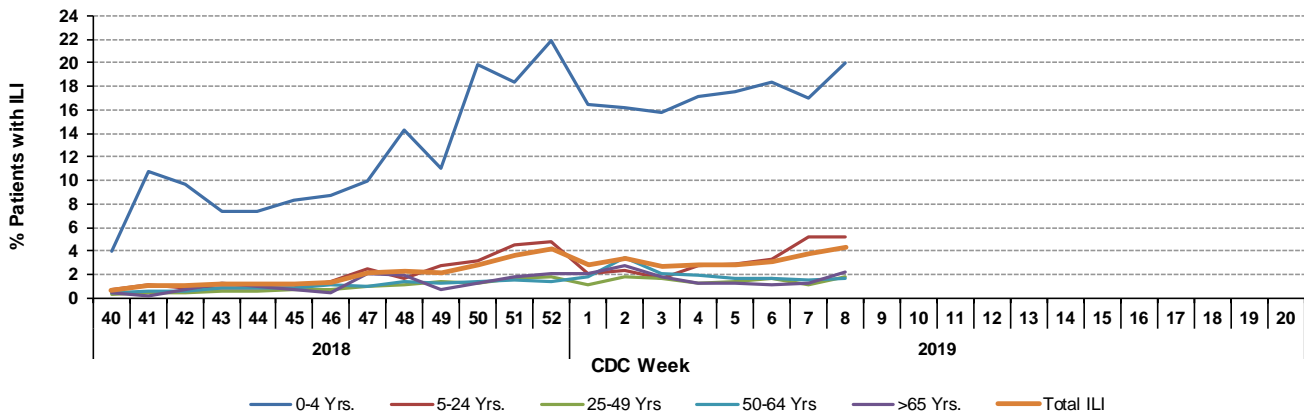


Date: Wednesday, February 27, 2019  
 To: Participating Health Care Providers  
 From: Influenza Surveillance Coordinator:  
 Kerry Chalkley, MPH, Epidemiologist  
 Division of Epidemiology & Public Health Preparedness (EPHP)  
 775-328-2447 [kchalkley@washoecounty.us](mailto:kchalkley@washoecounty.us)

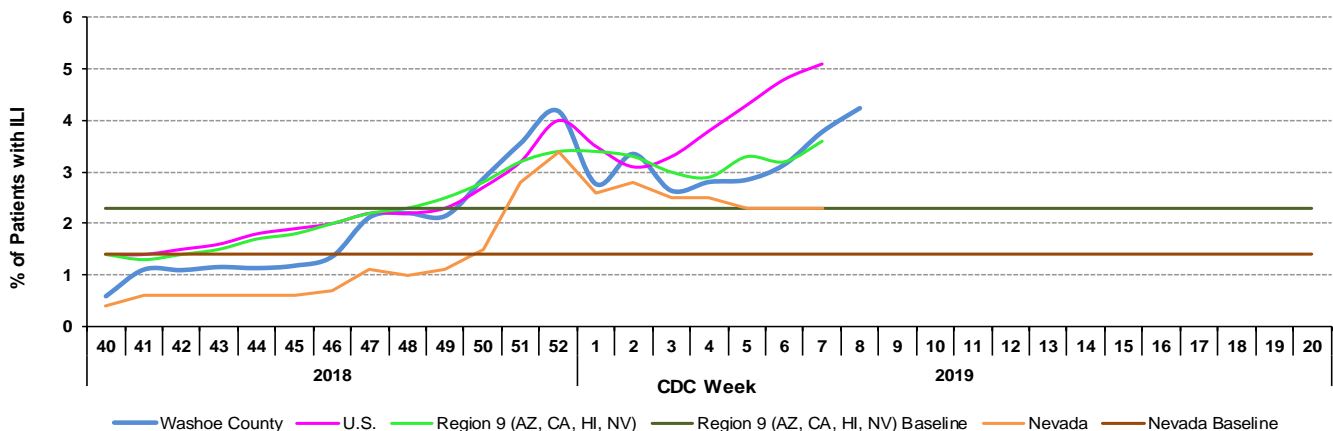
**Influenza-Like Illness (ILI) Activity**

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.**

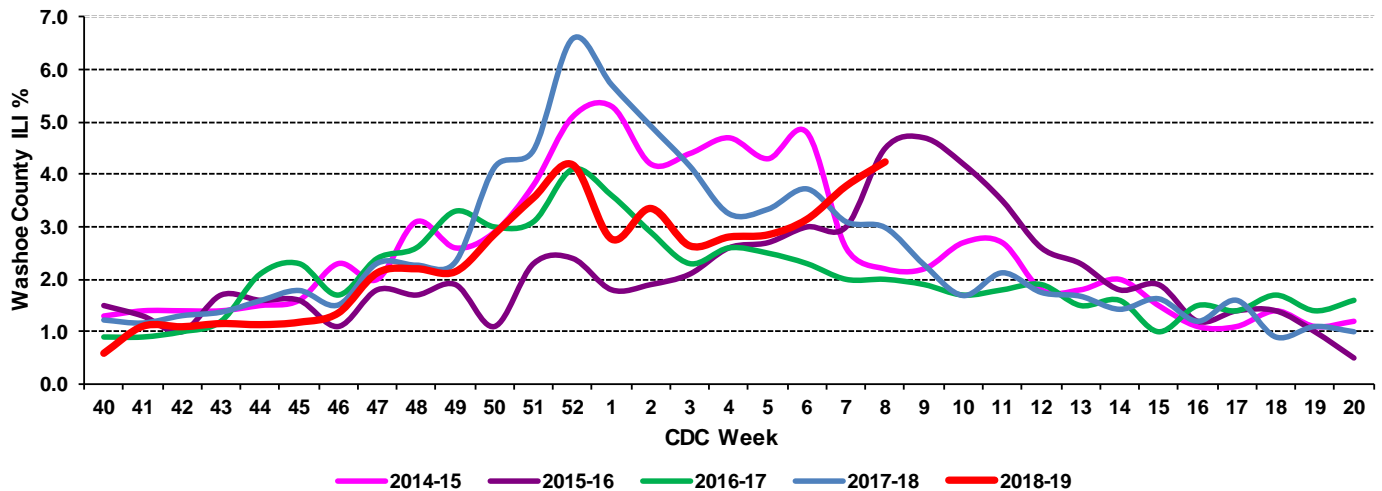


**Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2018-2019**



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:**



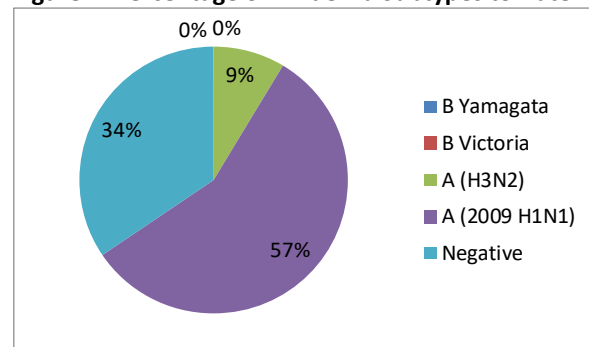
**Nevada State Public Health Laboratory (NSPHL) Test Results**

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.**

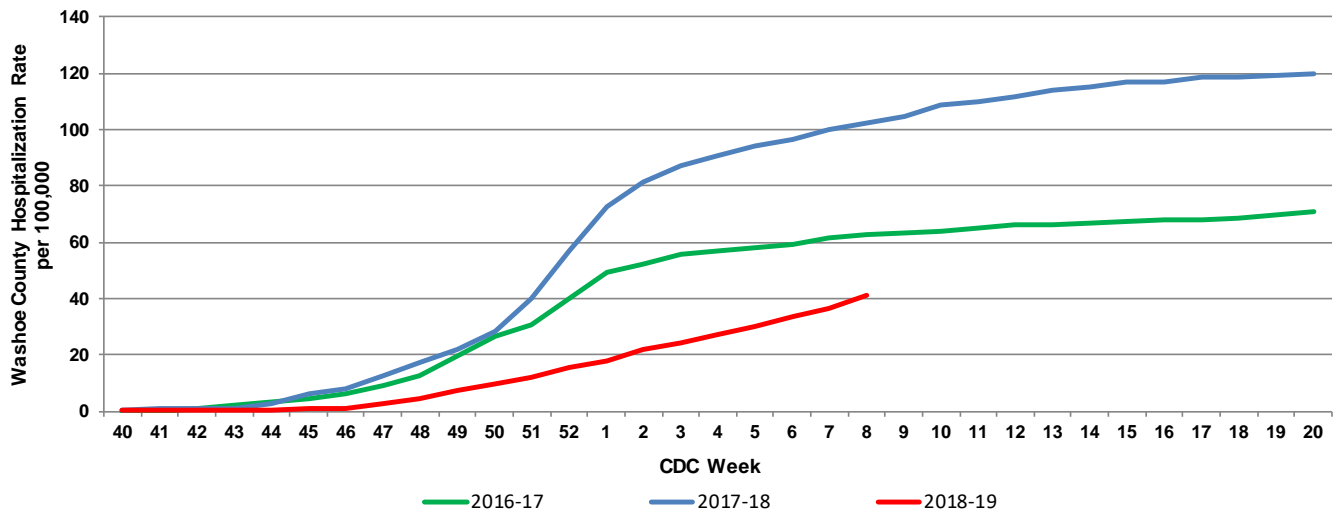
#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 8) February 17, 2019 - February 23, 2019								Cumulative for 2018-2019 Influenza Season September 30, 2018 - February 23, 2019							
	Hospitalized		Vax <sup>§</sup>		ICU		Death		Hospitalized		Vax <sup>§</sup>		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<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

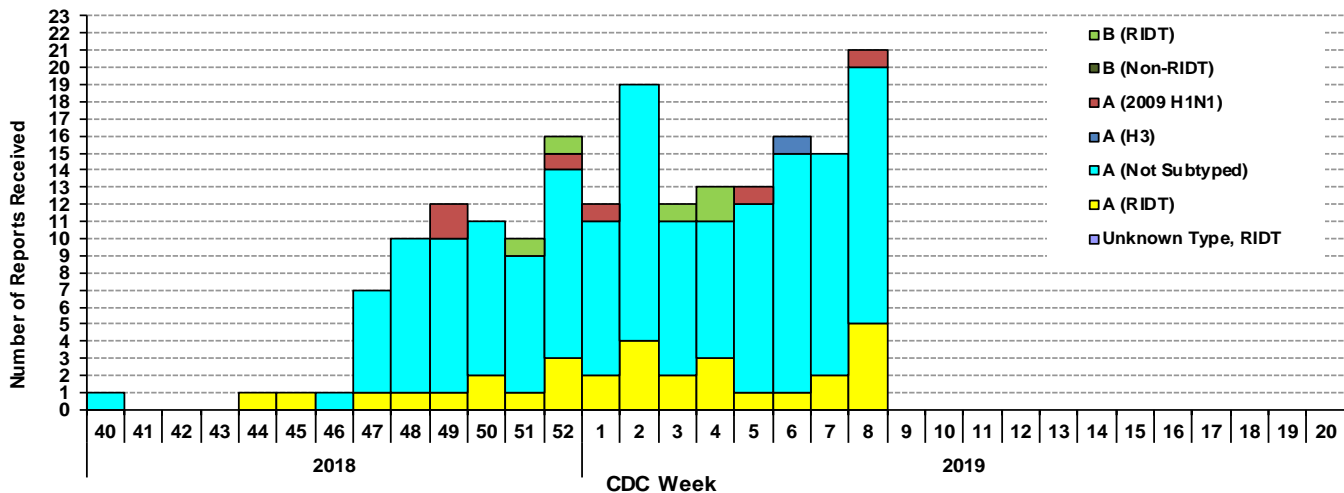
\*\*Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

§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**

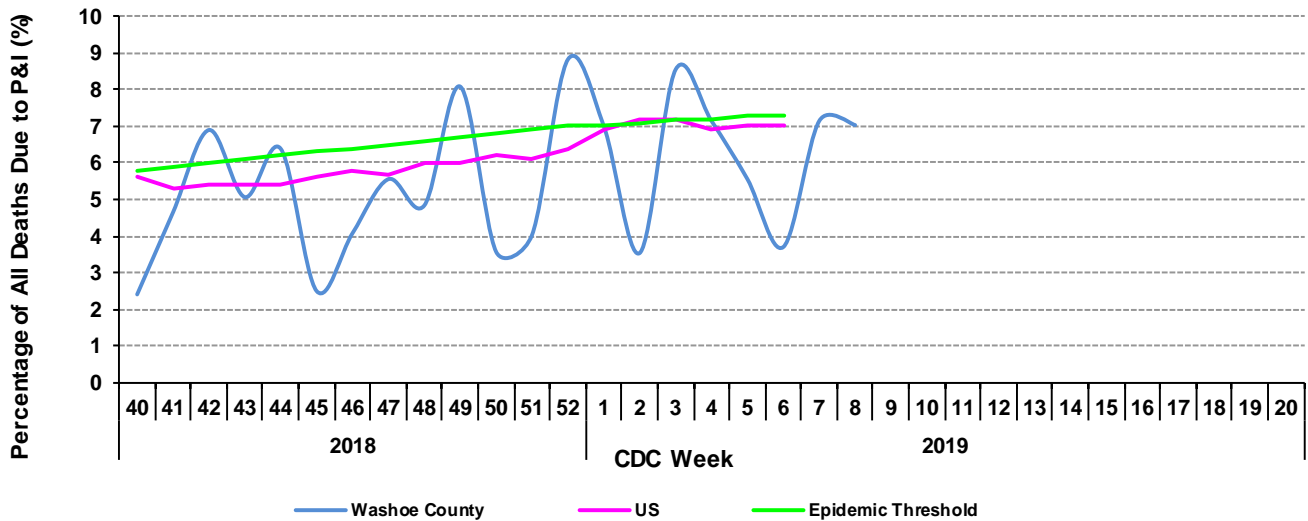
Beginning this season the Nevada Division of Public and Behavioral Health (NDPBH) defined an influenza-associated death as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery 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).

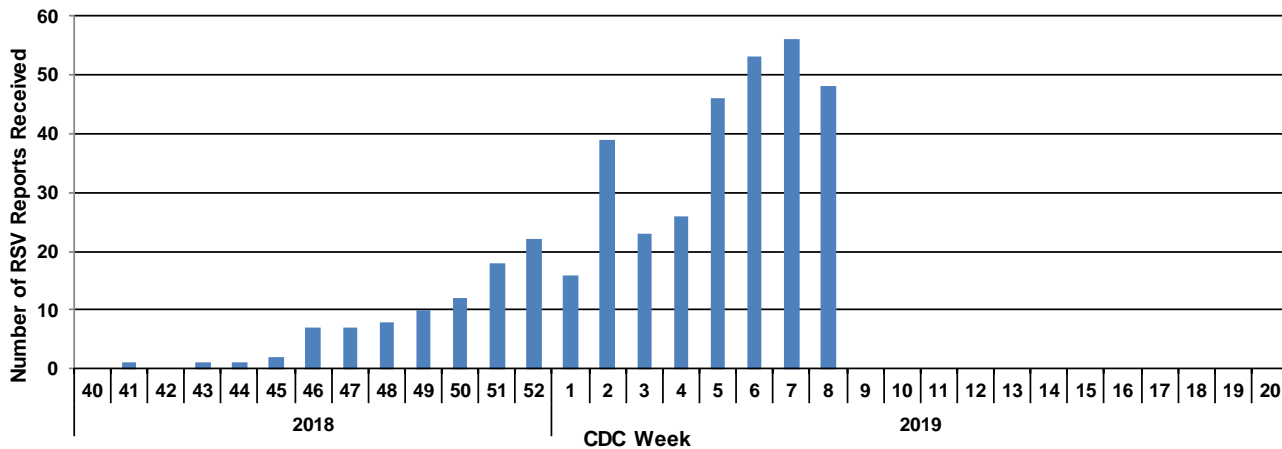
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2018 – 2019.



**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

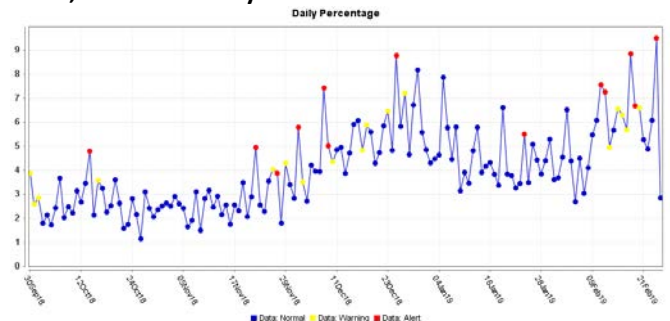


**Syndromic Surveillance**

**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)

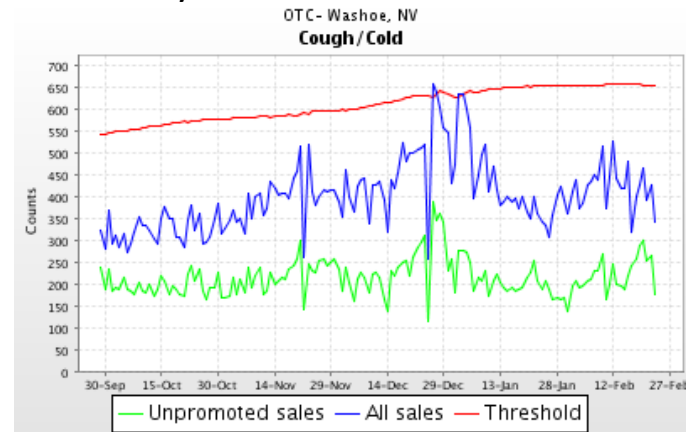
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



### 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**

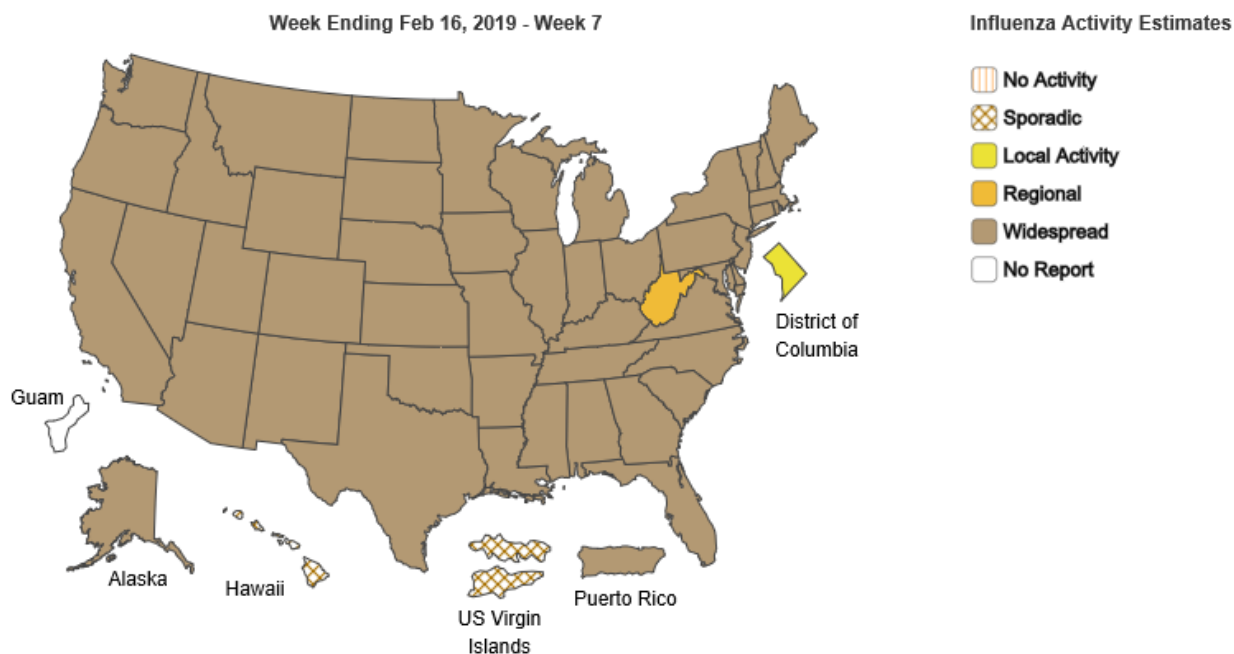


### Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

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.