

Date: Thursday, December 19, 2019
To: Participating Health Care Providers
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Influenza-Like Illness (ILI) Activity

Influenza-like illness (ILI) is defined as fever ($\geq 100^{\circ}\text{F}$ [37.8°C]) and cough and/or sore throat in the absence of a known cause other than influenza. Twelve of the twelve participating healthcare providers in Washoe County reported a total of 200 patients with influenza-like-illness (ILI) for the week ending December 14, 2019 (week 50). The percentage of persons seen with ILI by the twelve providers was 2.8% (200/7177) which is above the regional baseline of 2.4%. By age group, ILI activity was highest among individuals 0-4 years of age (14.1%) and lowest among 65+ years of age (0.9%). During week 49, the percentage of patient visits to Nevada sentinel providers due to ILI was 3.0%. Nationwide during week 49 the percentage of visits to sentinel providers due to ILI was 3.2% which is above the national baseline of 2.4%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.8% to 5.7% during week 49. All regions reported a percentage of outpatient visits for ILI which is equal to or above their region-specific baselines. Nevada is in Region 9.

Figure 1. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County Influenza Surveillance, 2019-2020.

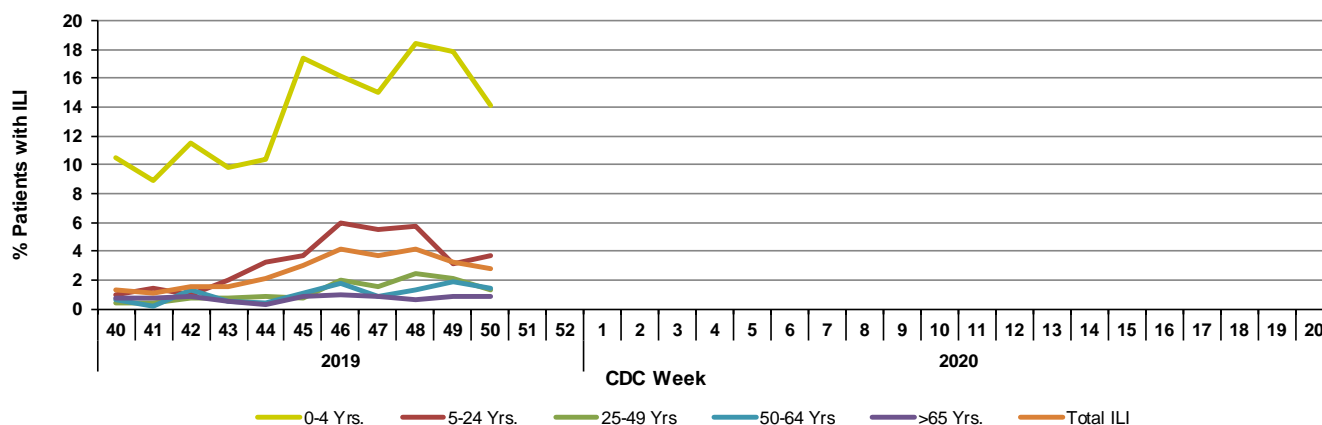
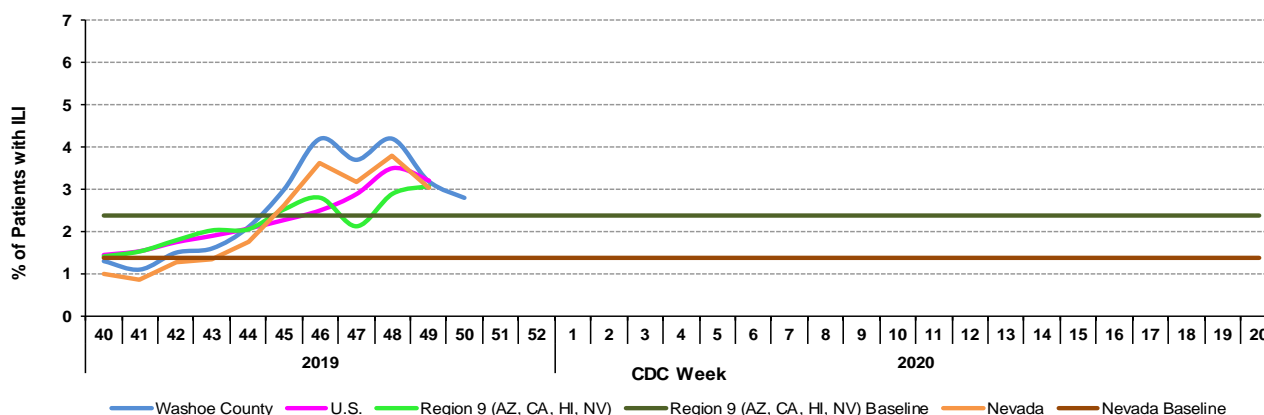
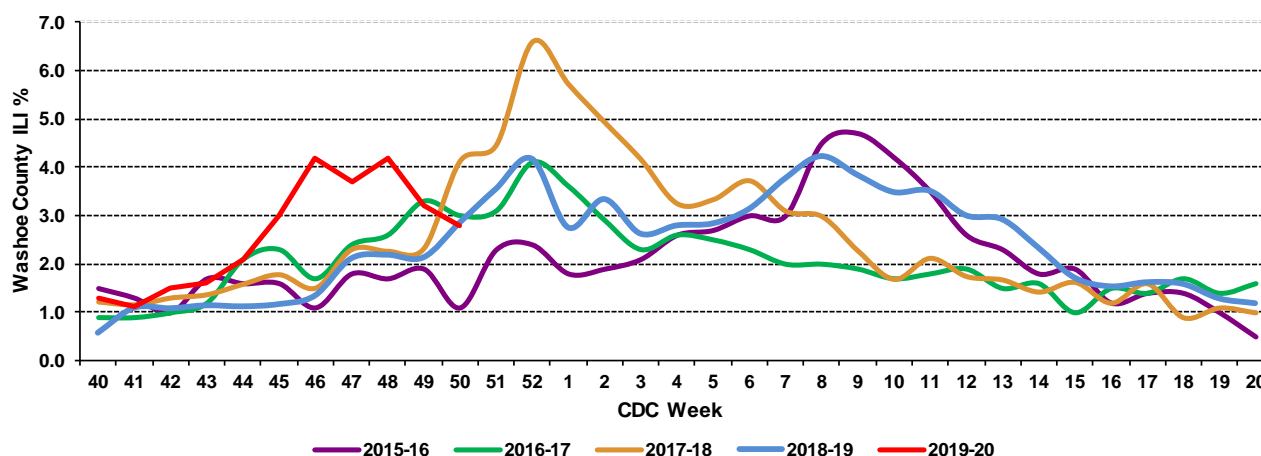


Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County Influenza Surveillance, 2019-2020



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, 2015-2020 Seasons:



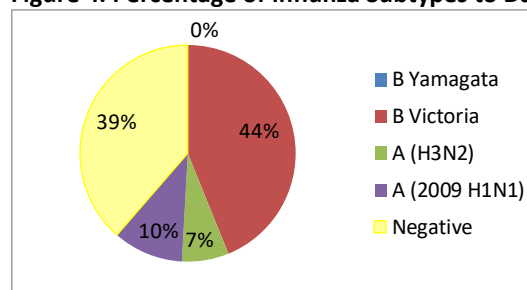
Nevada State Public Health Laboratory (NSPHL) Test Results

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)	4	7%
A (2009 H1N1)	6	10%
B (Yamagata)	0	0%
B (Victoria)	25	44%
Negative	22	39%
Total (All Subtypes)	57	

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 is presented in Figure 6.

Table 2. Number of Hospitalized Cases, ICU Cases and Fatalities with Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2019-2020.

#DIV/0! Denominator is zero formula unable to calculate	Current Week (Week 50)								Cumulative for 2019-2020 Influenza Season							
	December 8, 2019 - December 14, 2019								September 29, 2019 - December 14, 2019							
	Hospitalized		Vax [§]		ICU		Death		Hospitalized		Vax [§]		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	10	N/A	3	30.0	3	30.0	0	0.0	96	N/A	18	18.8	26	27.1	1	1.0
Influenza A (2009 H1N1)	0	0.0	0	0.0	0	0.0	0	#DIV/0!	1	1.0	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)	3	30.0	0	0.0	3	100.0	0	#DIV/0!	20	20.8	4	22.2	8	30.8	0	0.0
Influenza A (RIDT*)	1	10.0	0	0.0	0	0.0	0	#DIV/0!	11	11.5	3	16.7	3	11.5	1	100.0
Influenza B (RIDT*)	2	20.0	2	66.7	0	0.0	0	#DIV/0!	6	6.3	3	16.7	1	3.8	0	0.0
Influenza B (non-RIDT**)	4	40.0	1	33.3	0	0.0	0	#DIV/0!	58	60.4	8	44.4	14	53.8	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, 2016-20 Seasons.

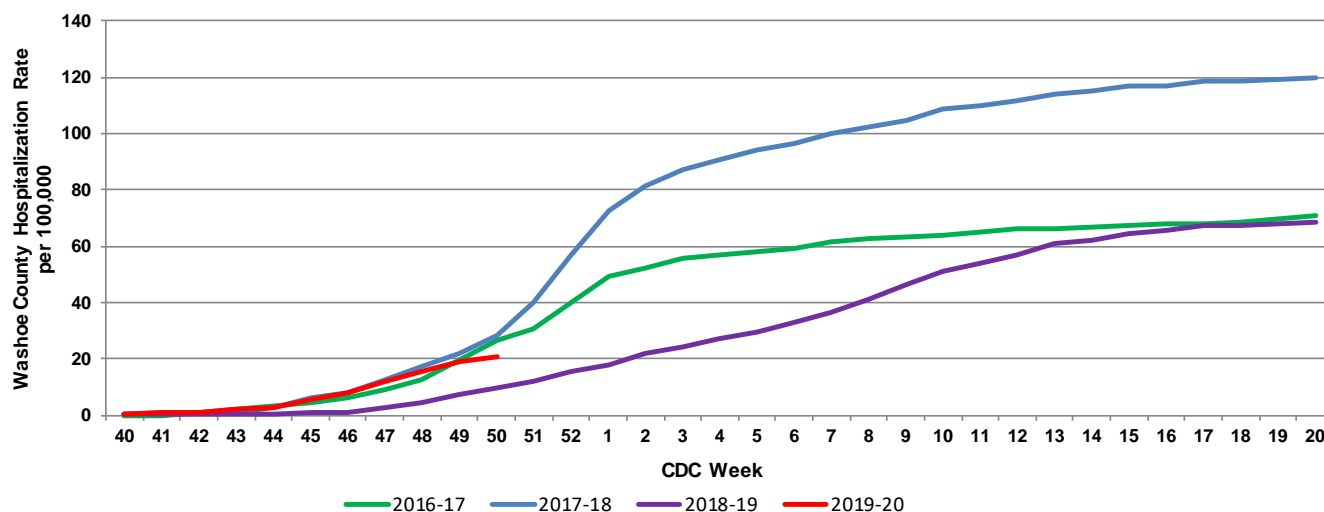
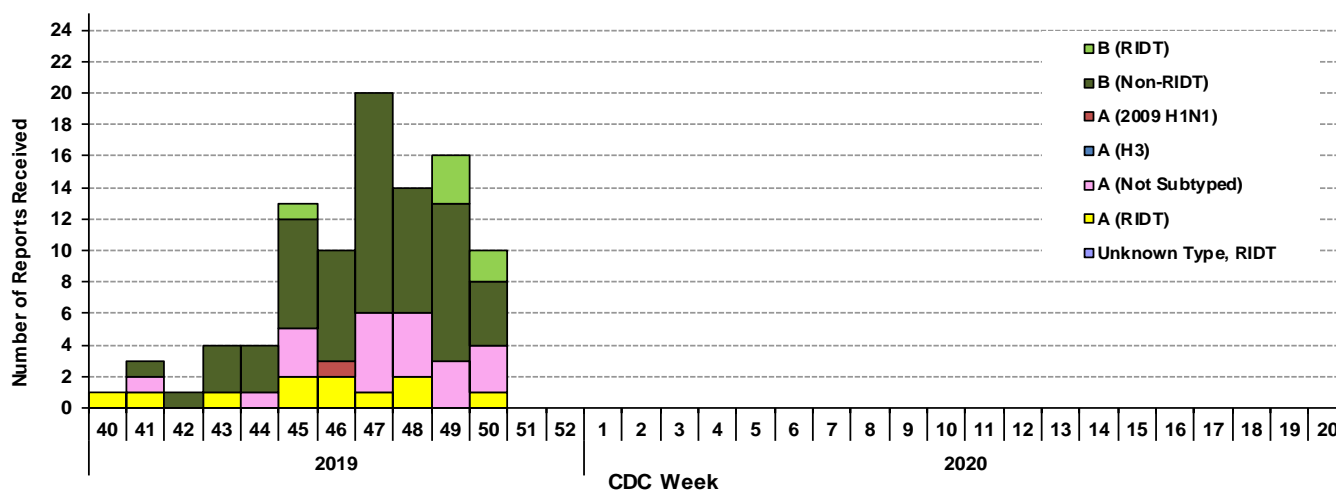


Figure 6. Influenza Positive Tests Among Hospitalized Cases by Week of Report, Washoe County Influenza Surveillance, 2019-2020.



Deaths

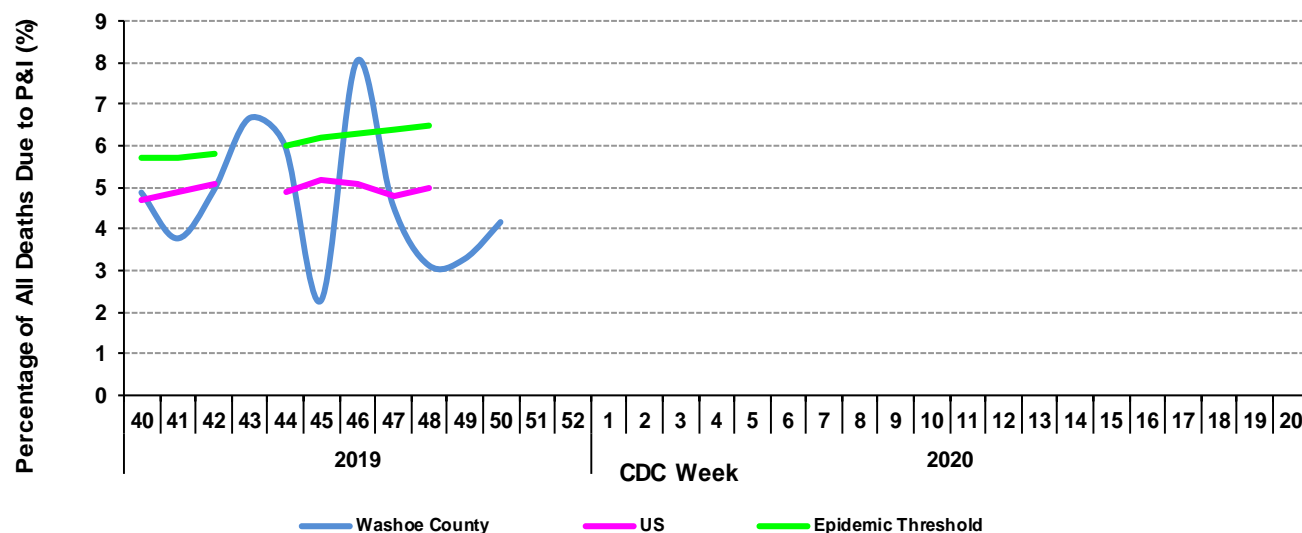
An influenza-associated death is defined as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test with no period of complete recovery between the illness and death. Note that hospitalization is not required to be considered an influenza-associated death; therefore, counts presented below may be higher than those presented among hospitalized cases in Table 2.

To date 1 influenza-associated death has been reported, two additional influenza-associated deaths are currently under investigation.

Pneumonia and Influenza (P&I) Mortality

Five 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 120. This reflects a P&I ratio of 4.2% which is below the epidemic threshold set by CDC for week 48 at 6.5%. The national P&I for week 48 was below the epidemic threshold at 5.0%. The total P&I deaths registered to date in Washoe County for the 2019-2020 influenza surveillance season is 49. This reflects an overall P&I ratio of 4.6% (49/1055). National P&I data for Week 43 were not published.

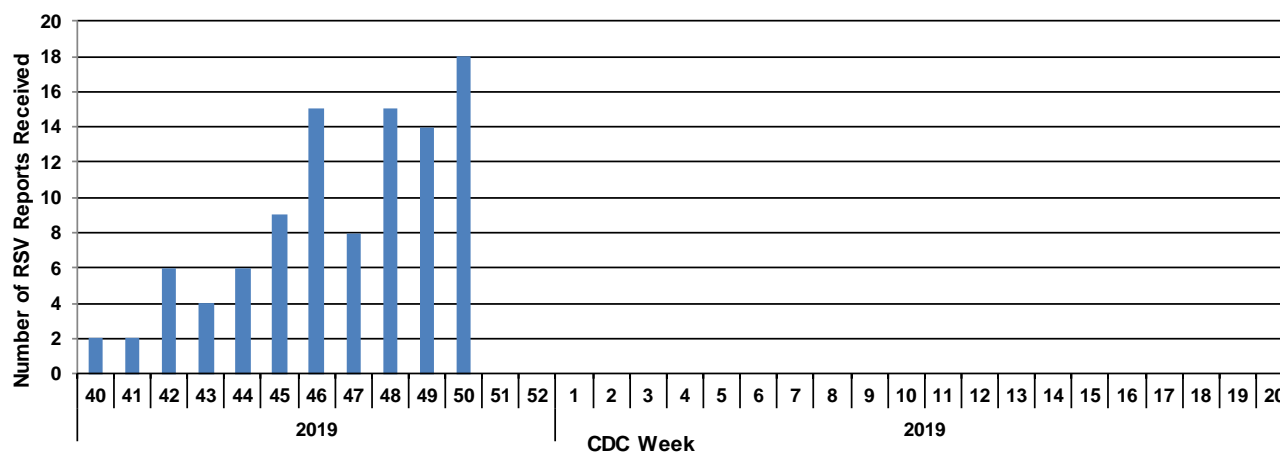
Figure 7. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2019 – 2020.



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 the 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, 2019-2020



Syndromic Surveillance

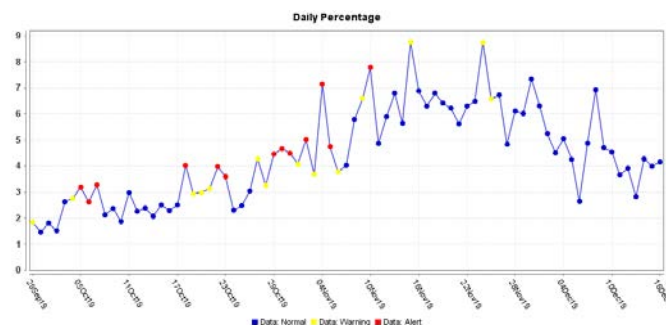
Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits

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)

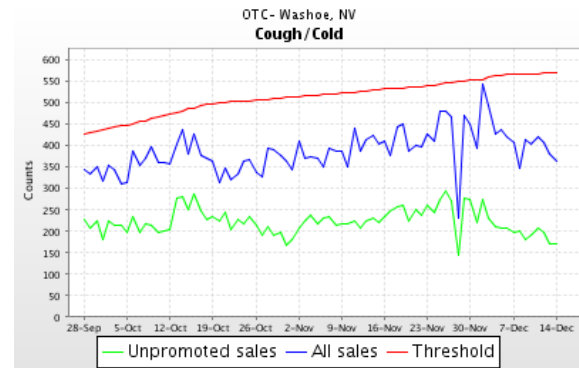
Figure 9. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County



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

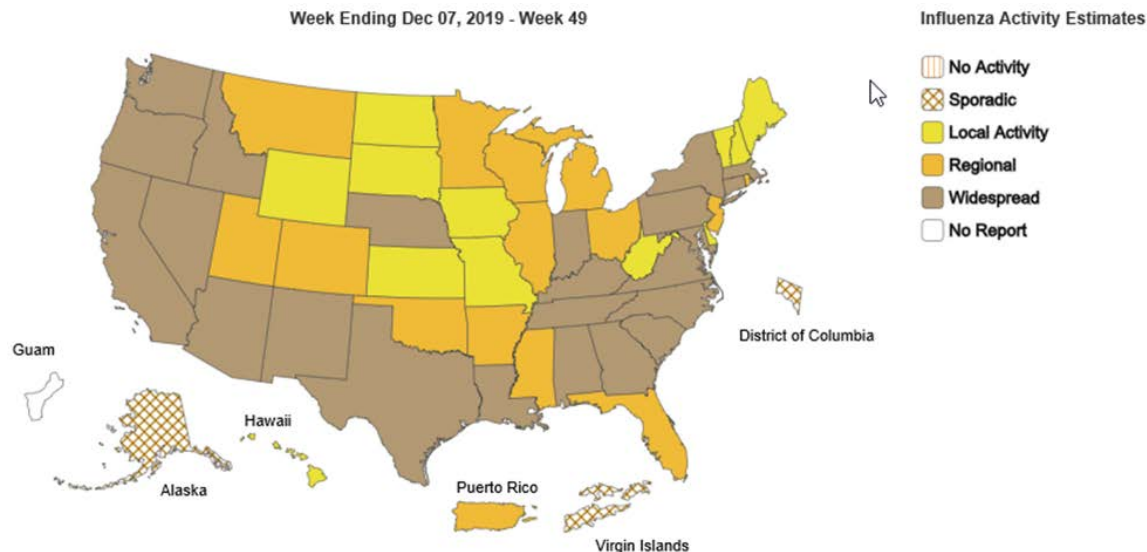


Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

During week 49 the following influenza activity was reported:

- Widespread – 23 states (Alabama, Arizona, California, Connecticut, Georgia, Idaho, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Nebraska, Nevada, New Mexico, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia and Washington)
- Regional – Puerto Rico and 14 states (Arkansas, Colorado, Florida, Illinois, Michigan, Minnesota, Mississippi, Montana, New Jersey, Ohio, Oklahoma, Rhode Island, Utah and Wisconsin)
- Local – 12 states (Delaware, Hawaii, Iowa, Kansas, Maine, Missouri, New Hampshire, North Dakota, South Dakota, Vermont, West Virginia and Wyoming)
- Sporadic – 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: your name (first and last), title, organization, and email address.