Public Health 2024-2025 Respiratory Virus Surveillance CDC Week #49 Dec. 1, 2024 - Dec. 7, 2024

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Weekly Summary & Changes from Previous Week *

- Influenza-like-illness (ILI) Activity: 2.7% (increase from 2.5%)
- Influenza Hospitalizations: 2.5 per 100,000 population (increase from 0.8)
- Influenza Deaths: 0 reported from MMWR week 40 to current date
- COVID Cases: 7.8 per 100,000 (no change)
- COVID Deaths: 10 reported from MMWR week 40 to current date
- Respiratory Syncytial Virus (RSV): 9.5 per 100,000 (increase from 3.7)
- Syndromic Surveillance:
 - o Increase in ILI ED and UC visits were observed for Dec. 1st -3rd.
 - Increases in ED and UC Visits were detected for influenza and RSV. No aberrations were detected for COVID-19.

Key Message(s)

- Influenza and RSV activity is increasing while COVID-19 activity is low.
- Washoe County ILI remains below both the Nevada and Region 9 baselines but continues to increase. Nevada, Region 9 and US ILI are all above their respective baselines.
- ILI activity & RSV case rates continue to be highest in the 0–4-year age group.
- The number of weekly influenza hospital admissions has begun to increase.
- Influenza hospitalization rates are highest in the ≥65-year age group.
- The most frequently identified influenza virus types reported by the Nevada State Public Health Laboratory continue to be influenza A.
- COVID-19 deaths have all been among those in the ≥65-year age group.
- There are prescription flu antiviral drugs that can treat flu illness; those should be started as early as possible and are especially important for higher risk patients.
- Routine annual influenza vaccination is <u>still recommended</u> for all persons aged 6 months or older, as long as there are no contraindications

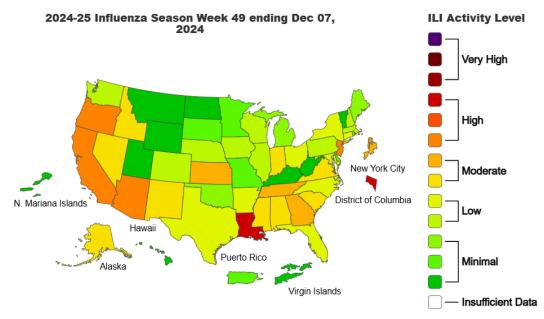
^{*}For definition and specifics on metrics summarized, please refer to corresponding sections.

Influenza-like-Illness (ILI)

Influenza-like-illness (ILI) is defined as fever (≥ 100°F [37.8°C]) and cough and/or sore throat. ILI data is submitted weekly by inpatient and outpatient health services who have completed the onboarding process to be a sentinel surveillance provider. ILI activity levels use the proportion of outpatient visits to healthcare providers for respiratory illness, not laboratory confirmed influenza. ILI activity may capture patient visits due to other respiratory pathogens that cause similar symptoms to influenza.

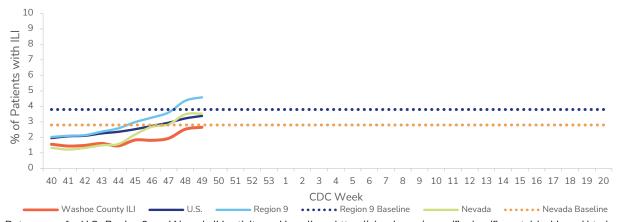
- Out of 14 sentinel providers, 14 reported data for this CDC week.
- U.S. percentage of patients presenting with ILI was 3.4% (increase from 3.2%).
- Region 9 percentage of patients presenting with ILI was 4.6% (increase from 4.4%), which is ABOVE the regional baseline of 3.8%.
- Nevada percentage of patients presenting with ILI was 3.5% (no change), which is ABOVE the state baseline of 2.8%.
- Washoe County percentage of patients presenting with ILI reported by sentinel providers for the current week was 2.7% (increase from 2.5%).
- The highest proportion of patients presenting with ILI was among the 0-4-year age group at 9.2% (no change in age group, increase from 8.8%).
- The lowest proportion of patients presenting with ILI was among the 50-64-year age group at 0.9% (change in age group from ≥65).

Figure 1. Outpatient Respiratory Illness Activity Map by State for Week 49, United States, 2024-2025 Season



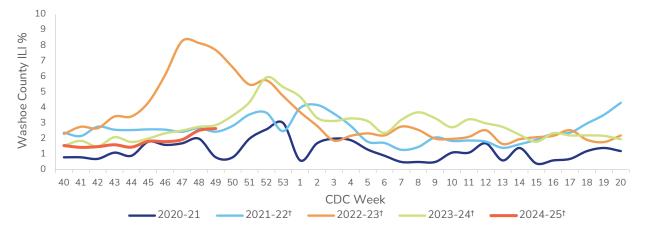
Data Source https://www.cdc.gov/fluview/surveillance/

Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County, 2024-2025 Season



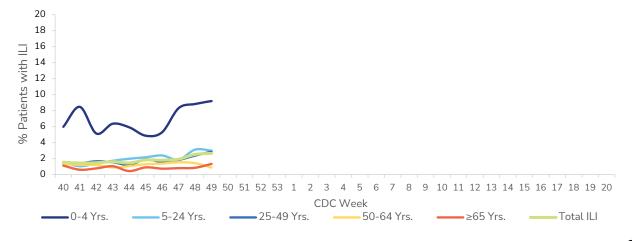
Data source for U.S., Region 9, and Nevada ILI activity and baselines: https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html Region 9 & U.S. data are weighted, Nevada is unweighted. CDC methods: https://www.cdc.gov/fluview/overview/index.html

Figure 3. ILI Activity Reported by Sentinel Providers, Washoe County, 2020-2024 Seasons†



[†] Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Figure 4. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County, 2024-2025 Season



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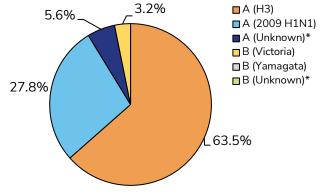
Nevada State Public Health Laboratory (NSPHL) Influenza Test Results

The NSPHL performs influenza subtyping of specimens submitted for surveillance purposes. Specimens are primarily submitted to the NSPHL by sentinel provider sites; however, all typed specimens are included in surveillance, even those not submitted by sentinel providers.

- The highest proportion of NSPHL specimens were A (Unknown) at 100.0% (n=1) of specimens (change from A (2009 H1N1)).
- The highest proportion of NSPHL specimens to date have been A (H3) at 63.5% of specimens, followed by A (2009 H1N1) at 27.8%.

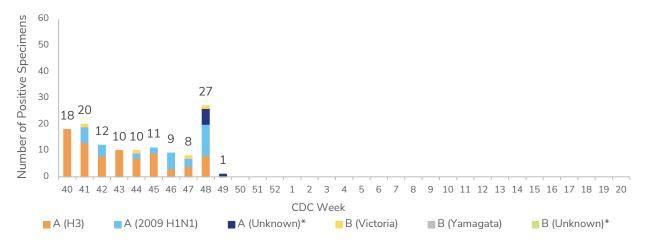
Table 1 & Figure 5. Specimens Submitted to NSPHL for Subtyping to Date, Washoe County, 2024-2025 Season

Influenza	# of	% of Total				
Subtype	Specimens	Specimens				
A (H3)	80	63.5%				
A (2009 H1N1)	35	27.8%				
A (Unknown)*	7	5.6%				
B (Victoria)	4	3.2%				
B (Yamagata)	0	0.0%				
B (Unknown)*	0	0.0%				
Total	126	100%				



^{*}Unknown includes both rapid and unsubtyped PCR results.

Figure 6. Positive Specimens Submitted to NSPHL, Subtyping to Date by Week, Washoe County, 2024-2025 Season



^{*}Unknown includes both rapid and unsubtyped PCR results.

Influenza Hospitalizations

Medical records are reviewed for cases with evidence of a positive influenza test who were hospitalized for greater than or equal to 24 hours. Information on the number of hospitalized cases, the number of hospitalized cases vaccinated, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported. Rates are per 100,000 population.

- The highest proportion of specimens among hospitalized cases was A (Unknown) at 92.3% of specimens, followed by A (2009 H1N1) at 7.7%.
- The highest proportion of specimens among hospitalized cases to date has been A (Unknown) at 83.3% of specimens, followed by A (2009 H1N1) at 7.1%.
- The influenza weekly hospitalization rate per 100,000 population in Washoe County was 2.5 (increase from 0.8).
- The influenza cumulative hospitalization rate per 100,000 population in Washoe County was 8.2 (increase from 5.6).
- The age group with the highest weekly influenza hospitalization rate per 100,000 population in Washoe County was the ≥65-year age group at 6.9 (no change in age group, increase from 2.3).
- The age group with the highest cumulative influenza hospitalization rate per 100,000 population in Washoe County was the ≥65-year age group at 18.3 (no change in age group, increase from 11.4).

Table 2. Number of Hospitalized Cases with Lab-Confirmed Influenza by Vaccination, ICU, and Death Status, Washoe County, 2024-2025 Season

	Current Week (Week 49)						Cumulative for 2024-2025 Influenza Season									
	December 1, 2024 - December 7, 2024						September 29, 2024 - December 7, 2024									
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	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	13	N/A	3	23	2	15	0	0	42	N/A	5	12	3	7	0	0
Influenza A (H3)	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0
Influenza A (2009 H1N1)	1	8	0	0	0	0	0	0	3	7	0	0	0	0	0	0
Influenza A (Unknown)*	12	92	3	100	2	100	0	0	35	83	5	100	3	100	0	0
Influenza B (Victoria)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza B (Yamagata)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza B (Unknown)*	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0
Influenza Unknown Type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

^{*}Unknown includes both rapid and unsubtyped PCR results.

 $\S Vaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine <math>\ge 2$ weeks prior to illness onset.

Figure 7. Influenza Positive Tests Among Hospitalized Cases by Week Reported, Washoe County, 2024-2025 Season

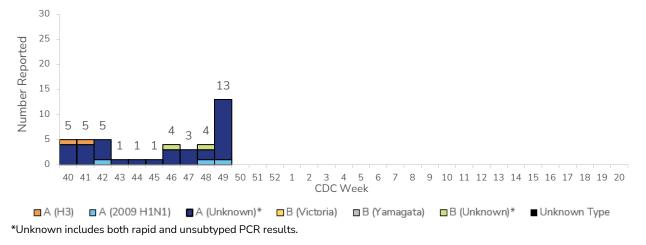
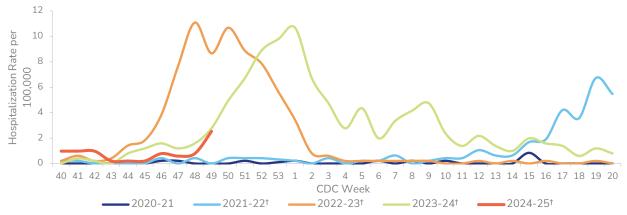
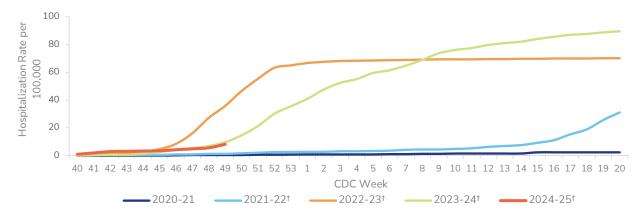


Figure 8. Influenza Weekly Hospitalization Rate per 100,000 Population, Washoe County, 2020-2024 Seasons†



[†] Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Figure 9. Influenza Cumulative Hospitalization Rate per 100,000 Population, Washoe County, 2020-2024 Seasons[†]



 $^{^\}dagger$ Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Figure 10. Influenza Weekly Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2024-2025 Season

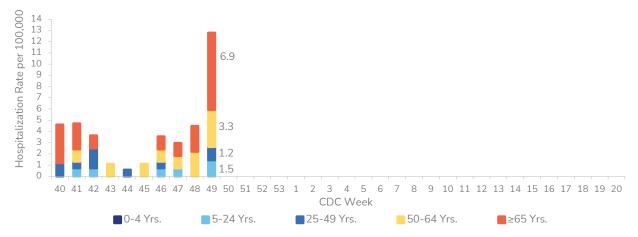
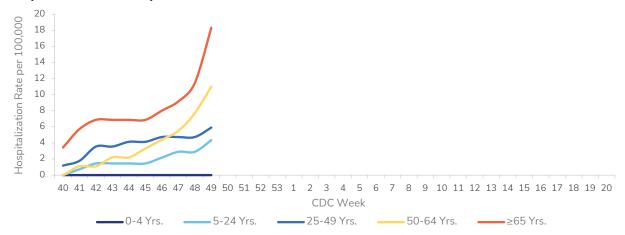


Figure 11. Influenza Cumulative Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2024-2025 Season



Influenza Deaths

For surveillance purposes, 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. Only pediatric deaths are considered reportable. Hospitalization is not required to be considered an influenza-associated death; therefore, counts presented here may be higher than those presented among hospitalized cases.

• To date, 0 influenza-associated deaths have been reported.

Table 3. Cumulative Number of Influenza-Associated Deaths by Age Group & Hospitalization Status, Washoe County, 2024-2025 Season

Age Group	Deaths (Hospitalized)	Deaths (All)
0-4 Yrs.	0	0
5-24 Yrs.	0	0
25-49 Yrs.	0	0
50-64 Yrs.	0	0
≥65 Yrs.	0	0
Total	0	0

COVID-19 Cases, Hospitalizations, & Deaths

COVID-19 is the disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus. Symptoms of COVID-19 include fever, chills, rigors, myalgia, headache, sore throat, nausea or vomiting, diarrhea, fatigue, congestion or runny nose, cough, shortness of breath, difficulty breathing, olfactory and taste disorder, confusion or change in mental status, persistent pain or pressure in the chest, pale, gray, or blue colored skin, lips, or nail beds, and inability to wake or stay awake. Severe respiratory illness may also present with pneumonia or acute respiratory distress syndrome.

Only laboratory conducted tests are reported to NNPH, no at-home tests are counted in these data. Medical records are reviewed for cases with evidence of a positive SARS-CoV-2 test within 14 days prior to hospitalization who were hospitalized for greater than or equal to 24 hours. Deaths due to COVID-19 are those for which the investigation confirmed SARS-CoV-2 infection and determined that COVID-19 was the cause of death or contributed to the cause of death, AND/OR the death certificate lists a specific COVID-19 ICD-10 code.

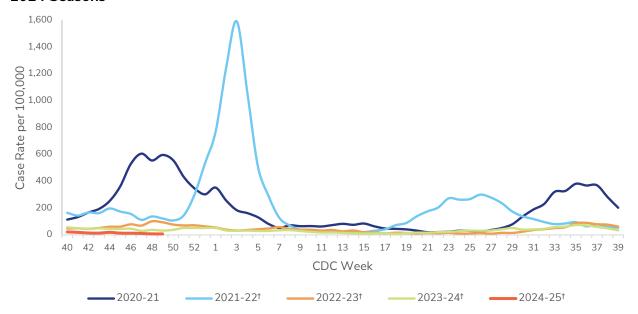
- 40 cases of COVID-19 were reported for the current week (no change).
- The rate of COVID-19 was 7.8 cases per 100,000 (no change).

 The age group with the highest weekly COVID-19 rate per 100,000 population in Washoe County was the ≥65-year age group at 16.0 (no change in age group, decrease from 21.7).

Table 4. Number and Rate per 100,000 of COVID-19 Cases by Current Week, Washoe County, 2024-2025 Season

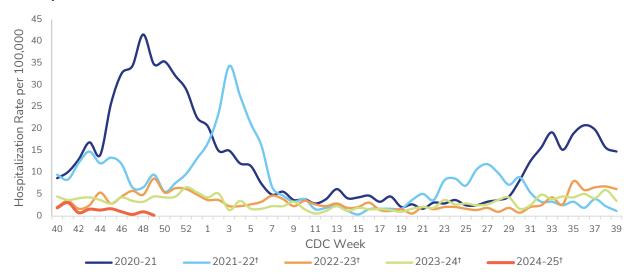
	Current Week (Week 49) December 1, 2024 - December 7, 2024							
Age Group	Count Rate per 100,000							
0-4 Yrs.	2	6.9						
5-24 Yrs.	5	3.6						
25-49 Yrs.	11	6.5						
50-64 Yrs.	8	8.8						
≥65 Yrs.	14	16.0						
Total	40	7.8						

Figure 12. COVID-19 Weekly Case Rate per 100,000 Population, Washoe County, 2020-2024 Seasons[†]



 $^{^\}dagger$ Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Figure 13. COVID-19 Weekly Hospitalization Rate per 100,000 Population, Washoe County, 2020-2024 Seasons[†]



 $^{^\}dagger$ Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Figure 14. COVID-19 Weekly Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2024-2025 Season

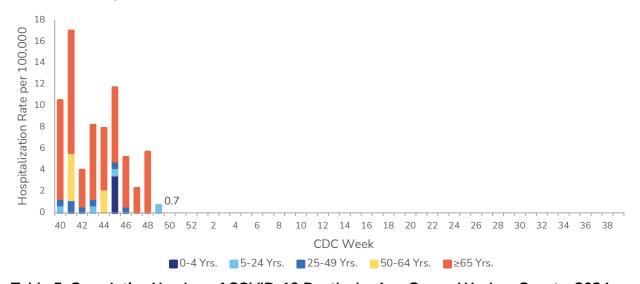


Table 5. Cumulative Number of COVID-19 Deaths by Age Group, Washoe County, 2024-2025 Season

Age Group	Deaths (All)
0-4 Yrs.	0
5-24 Yrs.	0
25-49 Yrs.	0
50-64 Yrs.	0
≥65 Yrs.	10
Total	10

Respiratory Syncytial Virus

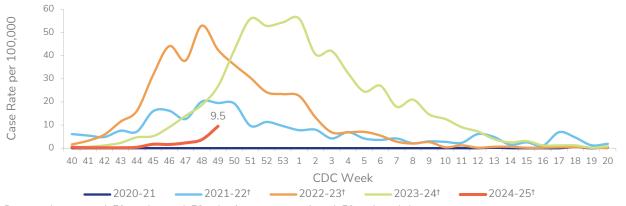
Respiratory Syncytial Virus (RSV) is a common respiratory virus that can present with flu-like signs and symptoms (e.g., fever, coughing, runny nose). RSV, while usually presented with mild symptoms, can be serious, especially for infants and older adults. It is the most common cause of bronchiolitis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

- 49 cases of RSV were reported for the current week (increase from 19).
- The rate of RSV was 9.5 cases per 100,000 (increase from 3.7).
- The age group with the highest weekly RSV rate per 100,000 population in Washoe County was the 0-4-year age group at 72.6 (no change in age group, increase from 41.5).
- The age group with the highest cumulative RSV rate per 100,000 population in Washoe County was the 0-4-year age group at 162.4 (no change in age group, increase from 89.9).

Table 6. Number and Rate per 100,000 of RSV Cases by Current Week and Cumulative for the Season, Washoe County, 2024-2025 Season

	Cur	rent Week (Week 49)	Cumulative for 2024-2025 Influenza Season				
	December	1, 2024 - December 7, 2024	September 29, 2024 - December 7, 2024				
Age Group	Count	Rate per 100,000	Cumulative Count	Cumulative Rate per 100,000			
0-4 Yrs.	21	72.6	47	162.4			
5-24 Yrs.	9	6.5	20	14.5			
25-49 Yrs.	5	3.0	8	4.7			
50-64 Yrs.	9	9.9	12	13.2			
≥65 Yrs.	5	5.7	17	19.5			
Total	49	9.5	104	20.2			

Figure 15. RSV Case Rate per 100,000 Population by Week Reported, Washoe County, 2020-2024 Seasons†



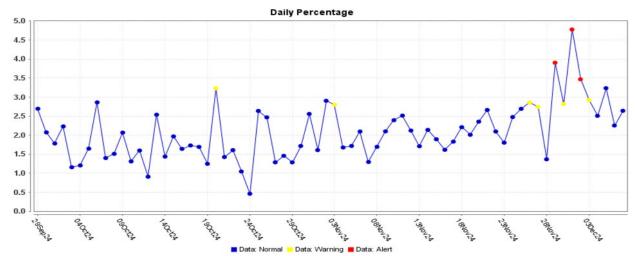
[†] Does not have a week 53, so the week 53 value is an average of week 52 and week 1. Only the current week and highest rate weeks are shown with data labels.

Syndromic Surveillance

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

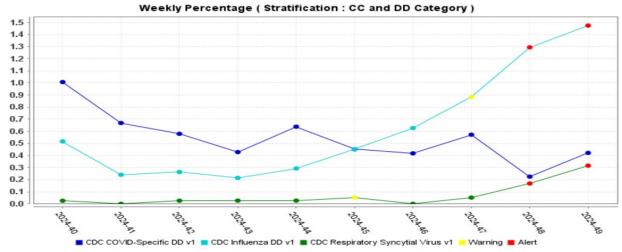
Percentage of patients seen for ILI (i.e., influenza or fever and a cough and/or a sore throat) in EDs and UCs is presented in Figure 16. The overlay depicts ILI syndrome in blue while alerts appear as yellow and/or red dots, indicating an unusually high percentage of ILI visits according to ESSENCE algorithms. Percentage of patients seen for Influenza, COVID-19, and RSV in EDs and UCs is presented in Figure 17. Conditions are defined by discharge diagnosis code (e.g.,ICD-10 codes).

Figure 16. Percentage of ED and UC* Visits for ILI for Weeks 40-49, Washoe County, 2024-2025 Season



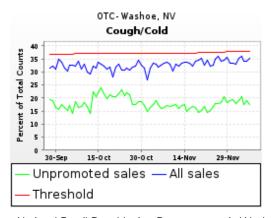
Data source: ESSENCE (National), *13 Emergency Departments/Urgent Cares reporting to ESSENCE.

Figure 17. Percentage of ED and UC* Visits for Influenza, COVID-19, and RSV for Weeks 40-49, Washoe County, 2024-2025 Season



 ${\tt Data\ source: ESSENCE\ (National), *13\ Emergency\ Departments/Urgent\ Cares\ reporting\ to\ ESSENCE.}$

Figure 18. OTC Sales for Cough and/or Cold Remedies for Weeks 40-49, Washoe County, 2024-2025 Season



Data source: National Retail Data Monitor Data coverage in Washoe County

Surveillance Changes 2024-2025 Season

- Rates per 100,000 for hospitalizations and RSV are now calculated and presented in place
 of raw numbers. Both are now the rates depicted in the Weekly Summary & Changes from
 Previous Week.
- Weekly rates per 100,000 for all influenza hospitalizations in Washoe County are given along with age group.
- A figure was added to show percentage of ED and UC Visits for Influenza, COVID-19, and RSV using discharge diagnoses reported by syndromic surveillance ESSENCE data.
- Starting with the 2023-2024 influenza season, Nevada implemented the use of <u>ESSENCE</u> data for ILI data reporting to CDC's <u>ILINet</u>. The number of reporters using ESSENCE for ILI reporting for Washoe County went from 11 to 12 (of 14 total reporters).
- Influenza A (H1) is no longer reported in the NSPHL section as not routinely tested for by NSPHL.
- The pneumonia, influenza, and/or COVID-19 (PIC) death percentages are no longer collected and calculated locally and are not compared to CDC's weekly percentages and "epidemic threshold."
- The RSV section has been updated to now include a table showing weekly and cumulative counts and rates by age groups. The RSV figure now depicts comparative rates by season rather than counts and highlights the lowest, highest, and current week's rates of the current season.
- The COVID section has been created to include laboratory-confirmed case data for SARS-CoV-2 based on labs reported to NNPH. This is a reportable condition in Nevada.