

NORTHERN NEVADA
Public Health 2023-2024 Influenza Surveillance Program
CDC Week #43 Oct. 22, 2023 – Oct. 28, 2023

Division of Epidemiology & Public Health Preparedness (EPHP) 775-328-2447

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Weekly Summary & Changes from Previous Week *

- Influenza-like-illness (ILI) activity: 2.2% **(increase from 1.5%)**
- Hospitalizations: 0.59 per 100,000 population **(no change)**
- Deaths: 0 reported, to date **(no change)**
- Pneumonia, Influenza, and COVID-19 (PIC) Mortality: 5.7% **(decrease from 9.8%)**
- Syndromic surveillance: No aberrations detected.
- Respiratory Syncytial Virus: 12 cases **(increase from 6)**

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

Key Message(s)

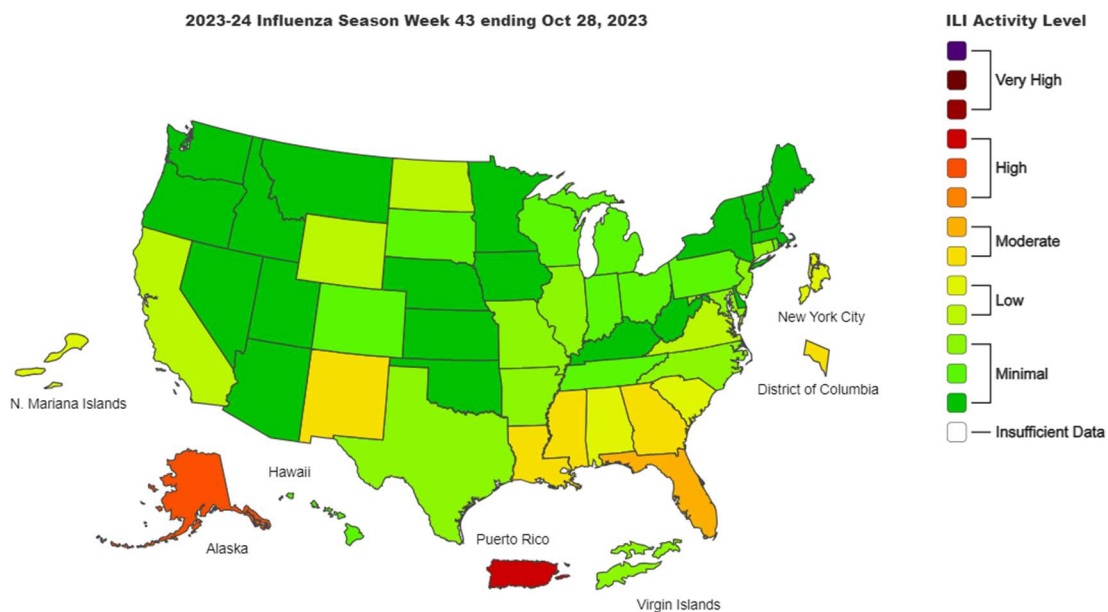
- Influenza activity is low locally and nationally, but there continues to be slight increases in most parts of the country.
- Washoe County ILI remained below both the Nevada and Region 9 baselines.
- ILI activity is highest in the 0–4-year age group.
- The most frequently identified influenza virus type reported by public health laboratories locally and nationally continues to be influenza A(H1N1).
- Influenza vaccination is recommended for ALL persons aged 6 months or older (as long as there are no contraindications).

Influenza-like-illness (ILI)

Influenza-like-illness (ILI) is defined as fever ($\geq 100^{\circ}\text{F}$ [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.

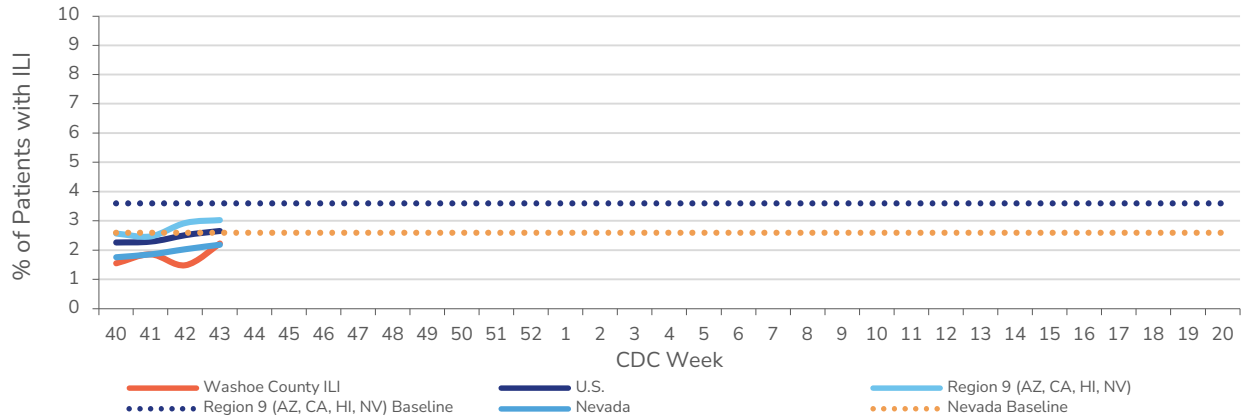
- Out of 14 sentinel providers, 13 reported data for this CDC week.
- U.S. percentage of patients presenting with ILI was 2.7% (**increase from 2.5%**).
- Region 9 percentage of patients presenting with ILI was 3.0% (**increase from 2.9%**), which is **BELOW** the regional baseline of 3.6%.
- Nevada percentage of patients presenting with ILI was 2.2% (**increase from 2.0%**), which is **BELOW** the state baseline of 2.6%.
- Washoe County percentage of patients presenting with ILI reported by sentinel providers for the current week was 2.2% (**increase from 1.5%**).
- The highest proportion of patients presenting with ILI was among the 0–4-year age group at 8.6% (**no change in age group, increase from 6.5%**).
- The lowest proportion of patients presenting with ILI was among the >65-year age group at 1.2% (**change in age group from 50-64-year age group**).

Figure 1. Outpatient Respiratory Illness Activity Map by State for Week 43, United States, 2023-2024



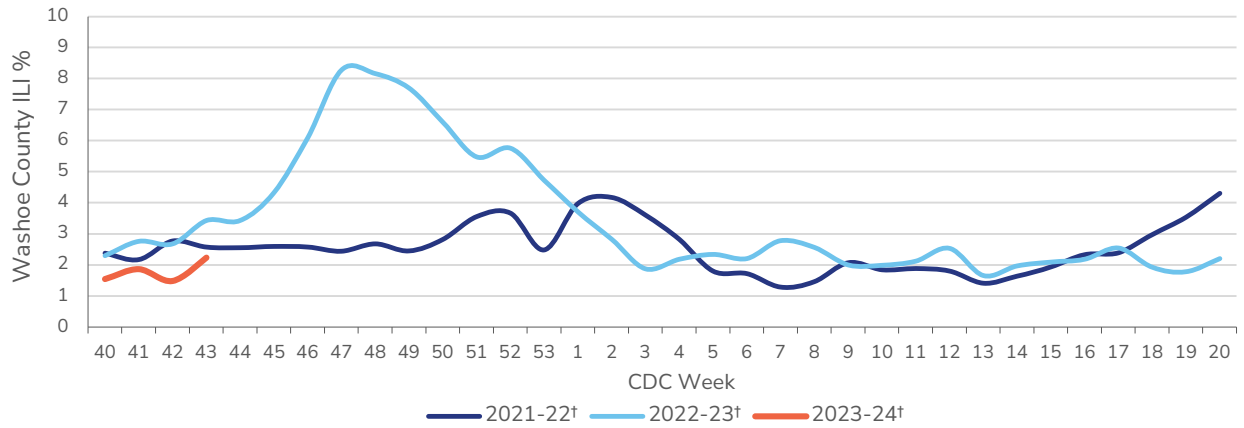
Data Source <https://www.cdc.gov/flu/weekly/index.htm#ILIActivityMap>

Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County, 2023-2024



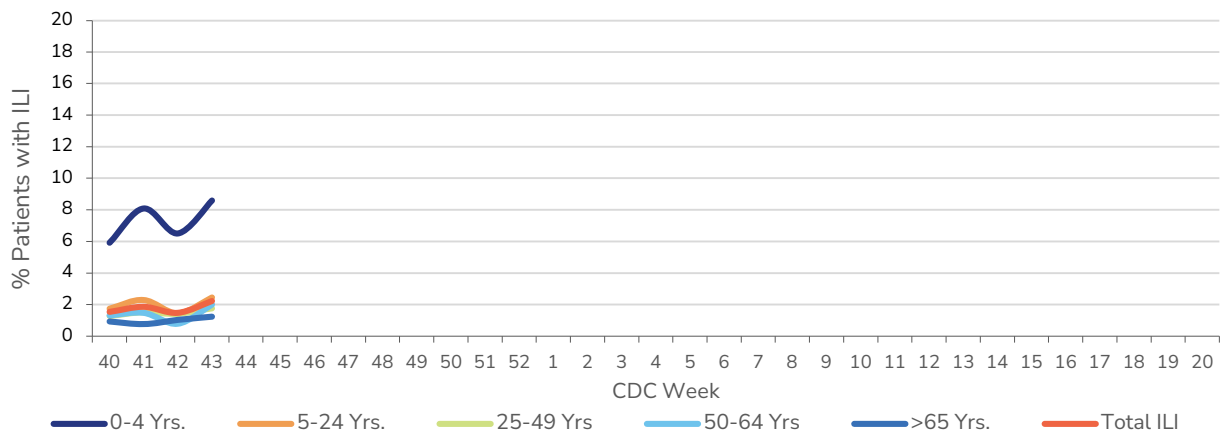
Data source for U.S., Region 9, and Nevada ILI activity and baselines: <https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>. Region 9 & U.S. data are weighted, Nevada is unweighted. CDC methods: <https://www.cdc.gov/flu/weekly/overview.htm#ILINet>

Figure 3. ILI Activity Reported by Sentinel Providers, Washoe County, 2021-2023 Season†



† 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, 2023-2024



Data presented in this report is preliminary and may be updated in future reports as additional information is received throughout the influenza season.

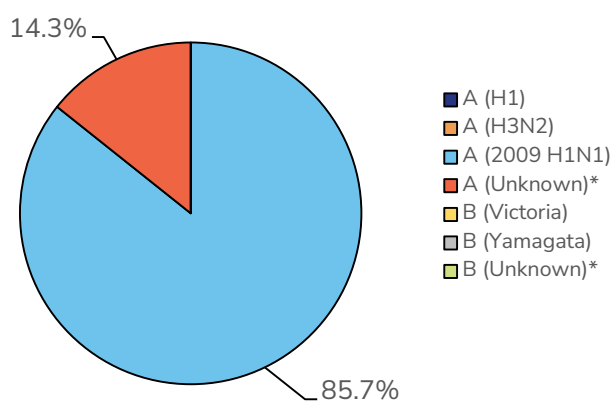
Nevada State Public Health Laboratory (NSPHL) Test Results

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 (2009 H1N1) at 50% (n=1) of specimens and unsubtype A at 50% (n=1) of specimens.
- The highest proportion of NSPHL specimens to date have been A (2009 H1N1) at 85.7% of specimens, followed by unsubtype A at 14.3% of specimens.

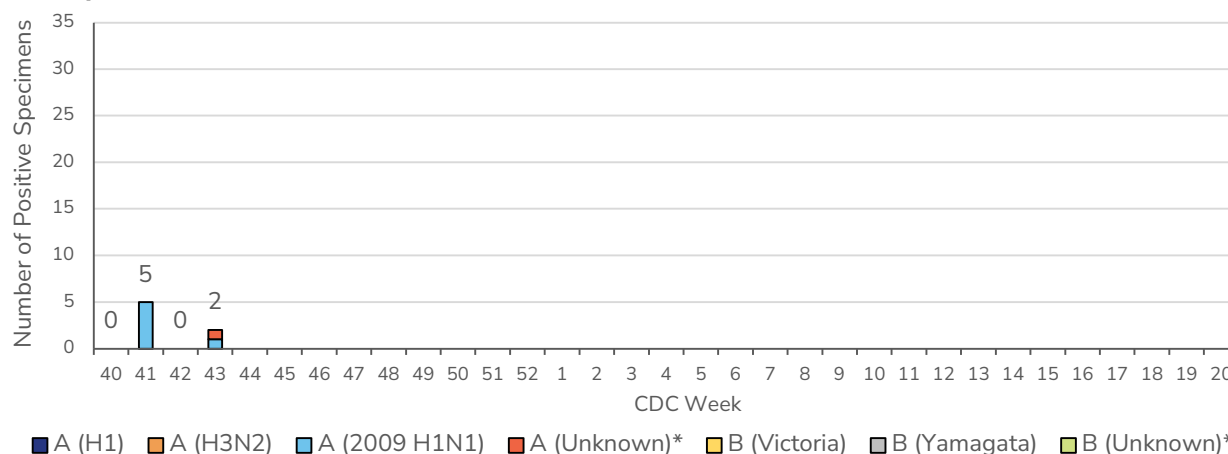
Table 1 & Figure 5. Specimens Submitted to NSPHL for Subtyping to Date, Washoe County, 2023-2024

Influenza Subtype	# of Specimens	% of Total Specimens
A (H1)	0	0.0%
A (H3N2)	0	0.0%
A (2009 H1N1)	6	85.7%
A (Unknown)*	1	14.3%
B (Victoria)	0	0.0%
B (Yamagata)	0	0.0%
B (Unknown)*	0	0.0%
Total	7	100%



*Unknown includes both rapid and unsubtype PCR results.

Figure 6. Positive Specimens Submitted to NSPHL, Subtyping to Date by Week, Washoe County, 2023-2024



*Unknown includes both rapid and unsubtype PCR results.

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 at least two weeks prior to symptom onset, number of intensive care unit (ICU) admissions, and number of deaths among hospitalized cases are reported in Table 2. The seasonal cumulative hospitalization rate per 100,000 population is presented in Figure 8, and by age group in Figure 9.

- No hospitalized cases were reported.
- The highest proportion of specimens among hospitalized cases to date has been unsubtyped A at 100% of specimens **(no change in type)**.
- Influenza hospitalization rate per 100,000 population in Washoe County was 0.59 **(no change)**.
- The age group with the highest influenza hospitalization rate per 100,000 population in Washoe County was >65-year age group at 1.2 **(no change in age group or rate)**.

Table 2. Number of Hospitalized Cases with Lab-Confirmed Influenza by Vaccination, ICU, and Death Status, Washoe County, 2023-2024

	Current Week (Week 43) October 22, 2023 - October 28, 2023								Cumulative for 2023-2024 Influenza Season October 1, 2023 - October 28, 2023							
	Hosp.		Vax [§]		ICU		Death		Hosp.		Vax [§]		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	0	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza A (H1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza A (H3N2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza A (2009 H1N1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza A (Unknown)*	0	0	0	0	0	0	0	0	3	100	0	0	1	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	0	0	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.

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

Figure 7. Influenza Positive Tests Among Hospitalized Cases by Week Reported, Washoe County, 2023-2024

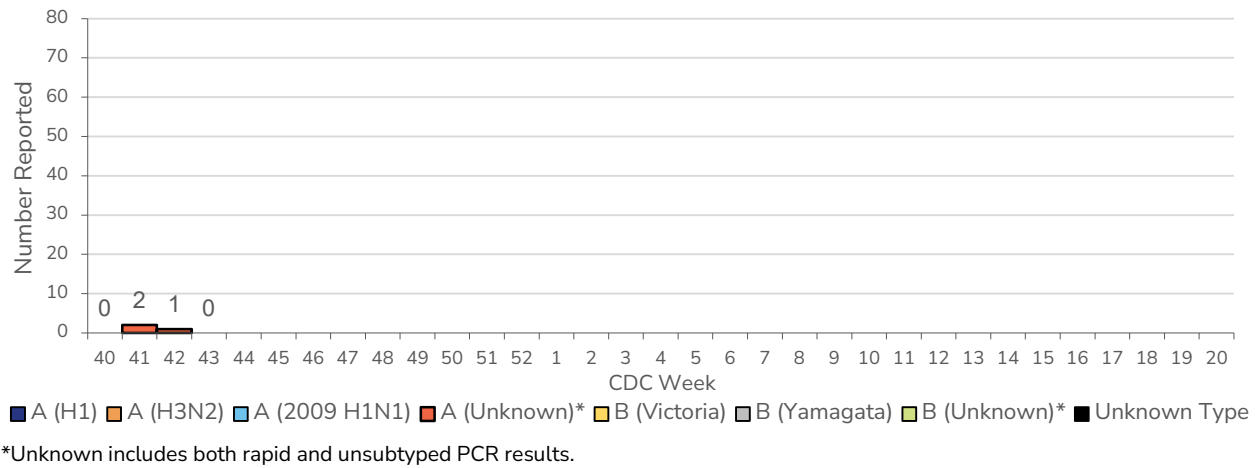
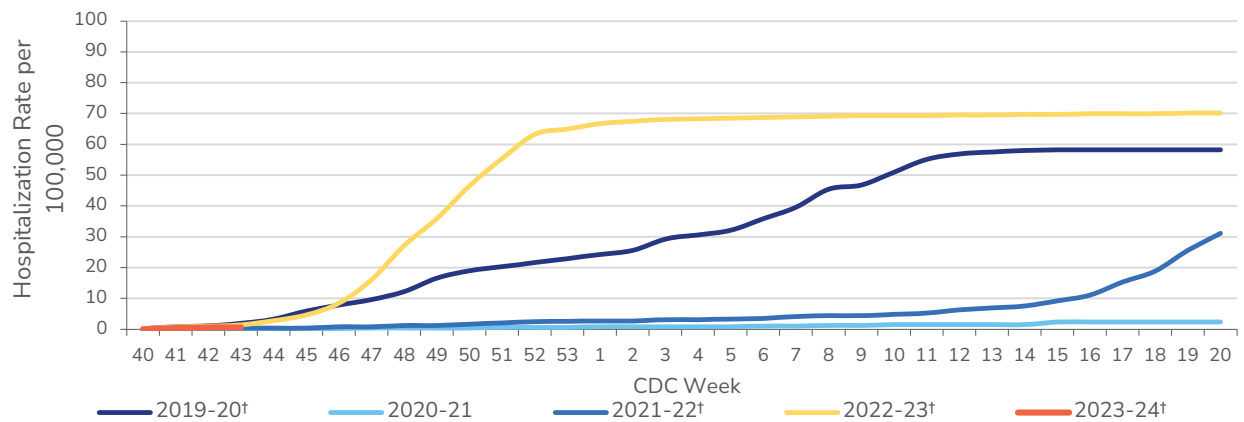
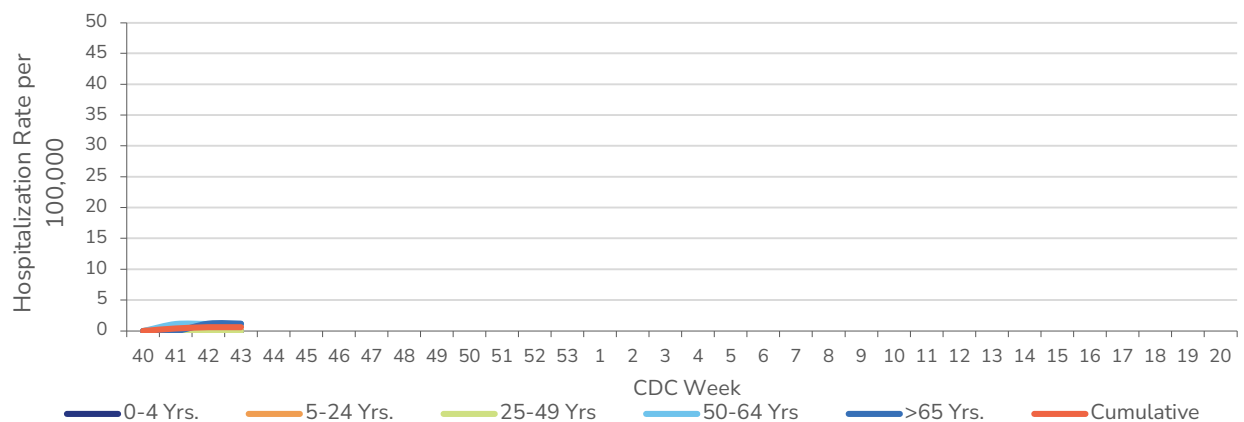


Figure 8. Influenza Hospitalization Rate per 100,000 Population, Washoe County, 2023-2024



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

Figure 9. Influenza Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2023-2024



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

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. Deaths by hospitalization status are delineated in Table 3.

- To date, 0 influenza-associated deaths have been reported (**no change**).

Table 3. Number of Influenza-Associated Deaths by Age Group & Hospitalization Status, Washoe County, 2023-2024

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

Pneumonia, Influenza, and COVID-19 Mortality

Data from the National Center for Health Statistics Mortality Surveillance are used to determine the percentage of deaths that occurred each week due to pneumonia, influenza, and/or COVID-19 (PIC). Washoe County vital statistic records are reviewed to calculate the percentage of deaths attributed to PIC. Records are pulled based on the CDC week deaths are registered and not date of death.

For the current reporting week:

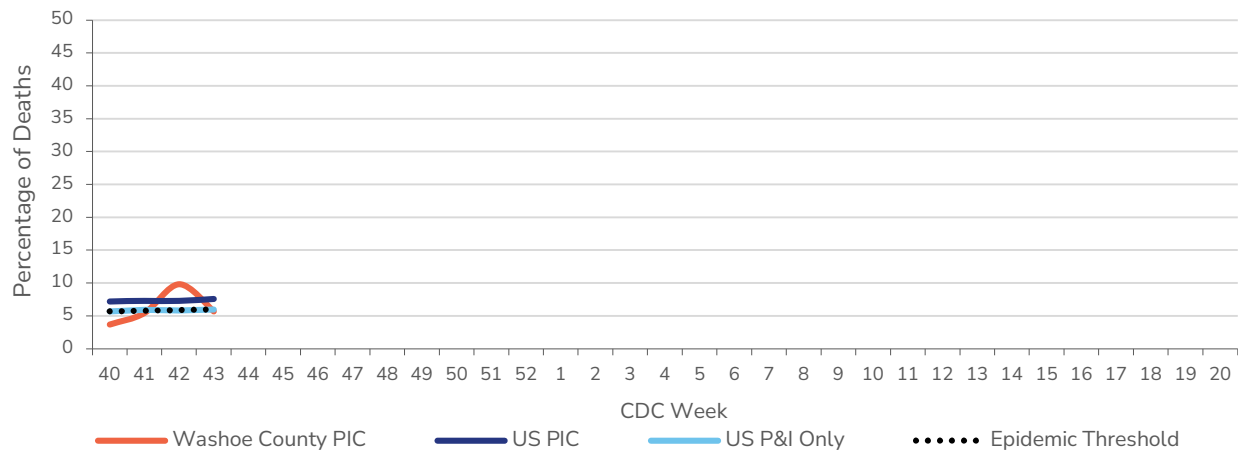
National

- The percentage of deaths due to PIC was 7.6%, which is **ABOVE** the epidemic threshold of 6.0% (**increase from 7.3%**).
- The percentage of deaths due to pneumonia and influenza (P&I) was 6.0% (**increase from 5.8%**).

Washoe County

- The percentage of deaths due to PIC was 5.7% (**decrease from 9.8%**).
- The percentage of PIC deaths that had COVID-19 as a contributing cause was 20% (**decrease from 72.7%**).

Figure 10. Pneumonia, Influenza, and COVID-19 Mortality, Washoe County and the United States, 2023-2024



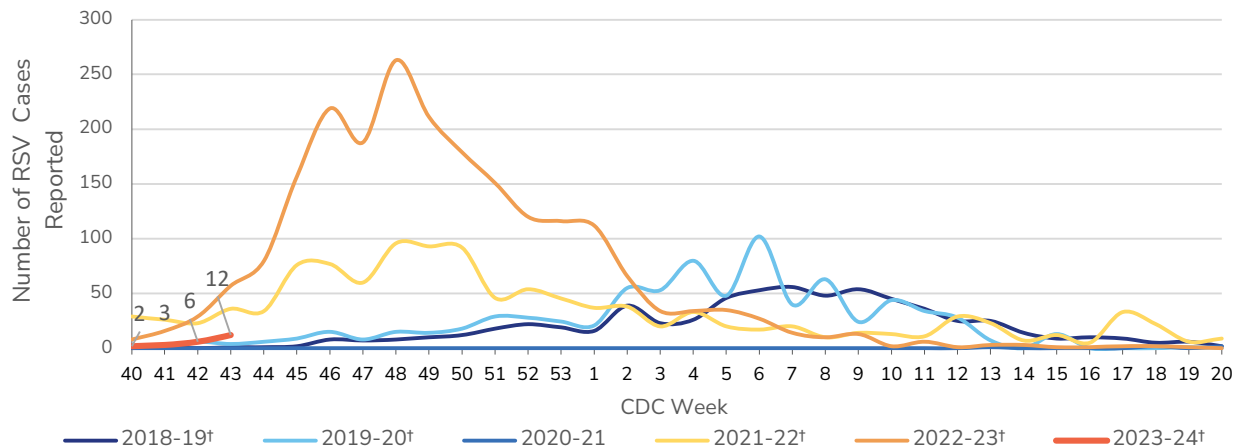
Data sources: National Center for Health Statistics (NCHS) Mortality Surveillance available at <https://www.cdc.gov/flu/weekly/#S2> and Nevada Vital Records.

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.

- 12 cases were reported for the current week (**increase from 6**).

Figure 11. Number of RSV Cases Reported by Week, Washoe County, 2018-2023 Season†



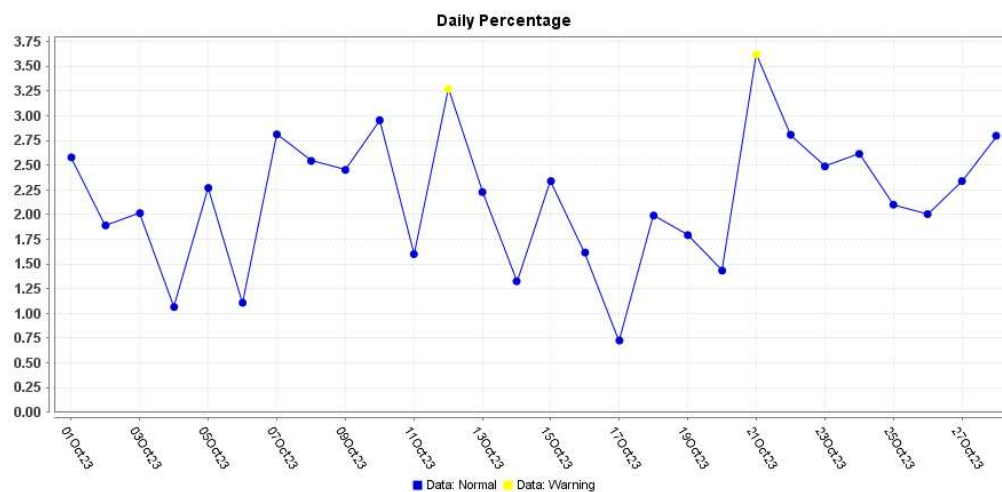
† Does not have a week 53, so the week 53 value is an average of week 52 and week 1.

Syndromic Surveillance

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

Percentage of patients seen for ILI in ED and UC is presented in Figure 12. ILI is defined as influenza or fever and a cough and/or a sore throat. The overlay below depicts ILI syndrome in blue. Alerts appear as yellow and/or red dots, indicating an unusually high percentage of ILI visits according to ESSENCE algorithms.

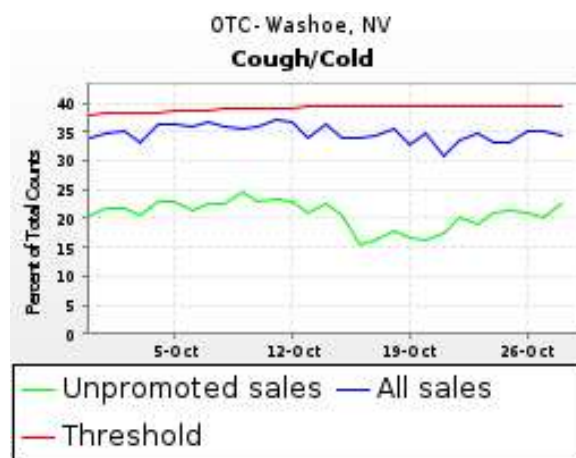
Figure 12. Percentage of ED and UC* Visits for ILI for Weeks 40-43, Washoe County, 2023-2024



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

Over the Counter (OTC) Sales for Cough and/or Cold Remedies

Figure 13. OTC Sales for Cough and/or Cold Remedies for Weeks 40-43, Washoe County, 2023-2024



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

Surveillance Changes 2023-2024 Season

- Starting with the 2023-2024 influenza season, Nevada implemented the use of ESSENCE data for ILI data reporting to CDC's ILINet. As a result, Nevada's baseline (see Figure 2) was recalculated using historical ESSENCE data and the number of reporters for ILI for the state of Nevada went from 32 to 66 (13 to 14 for Washoe County, 11 now reporting using ESSENCE). Figure 3's historical ILI data has been recalculated with ESSENCE data to ensure comparability with the current season. See Influenza-like-illness & Syndromic Surveillance sections of this report for where ESSENCE data is utilized; this data should not be compared to previous reports published in prior seasons.
- Season 2022-2023 Influenza Report's Figure 2 was removed as it showed ILI activity in Washoe County reported by sentinel providers from 2018-2021 using a previous case definition for ILI. It was no longer comparable to the seasons that proceeded 2021.
- Table 3 was added to depict influenza-associated deaths by age group and by hospitalization status.
- One sentinel provider, an urgent care, was re-onboarded. It had previously been a reporter but had been closed during the 2022-2023 season.
- Flu typing has been standardized throughout the report. Influenza A (H1) is reported separately from influenza A (2009 H1N1). Rapids are no longer reported separately, instead are combined with unknown subtypes cumulatively as either influenza A (unknown) or influenza B (unknown).
- Some figures and tables were rearranged within the report.