2023-2024 Influenza Surveillance Program
CDC Week #44 Oct. 29, 2023 - Nov. 4, 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: 1.3% **(decrease from 2.1%)**
- Hospitalizations: 1.38 per 100,000 population **(increase from 0.59)**
- Deaths: 0 reported, to date **(no change)**
- Pneumonia, Influenza, and COVID-19 (PIC) Mortality: 7.9% (**increase from 5.7%)**
- Syndromic surveillance: **Increase** in ILI ED and UC visits were observed for Nov. 4th
- Respiratory Syncytial Virus: 23 cases **(increase from 12)**

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

Key Message(s)

- Week 44 national data were unavailable at the time report was published.
- Influenza activity is low locally and nationally but continues to slightly increase locally and 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.
- Influenza hospitalization rates were highest in the >65-year age group.
- Routine annual influenza vaccination is recommended for ALL persons aged 6 months or older, as long as there are no contraindications.

Influenza-like-Illness (ILI)

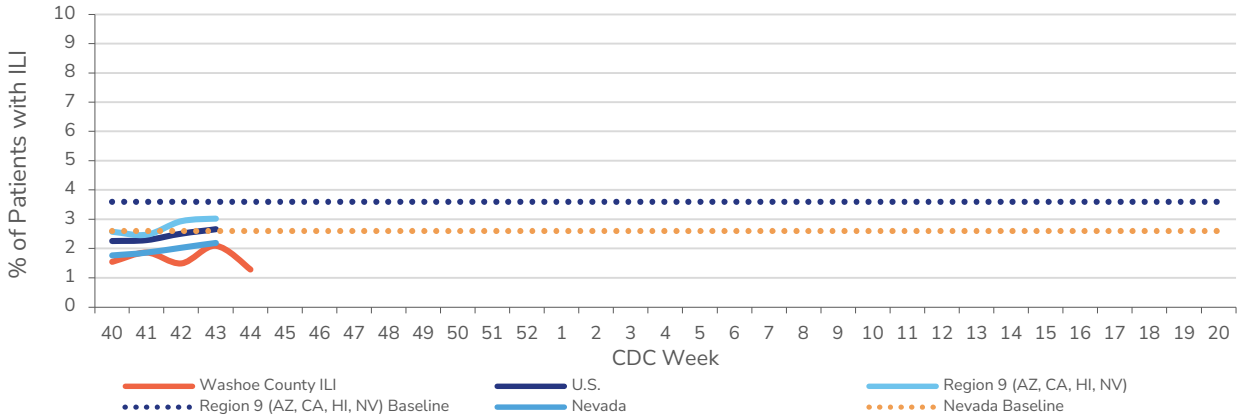
Influenza-like-illness (ILI) is defined as fever (≥ 100°F [37.8°C]) and cough and/or sore throat. ILI data is submitted weekly by inpatient and outpatient health services who have completed the onboarding process to be a sentinel surveillance provider. ILI activity levels use the proportion of outpatient 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., Nevada, Regional data were not available prior to the report being published.
- Washoe County percentage of patients presenting with ILI reported by sentinel providers for the current week was 1.3% **(decrease from 2.1%).**
- The highest proportion of patients presenting with ILI was among the 0–4-year age group at 7.5% **(no change in age group, decrease from 9.6%)**.
- The lowest proportion of patients presenting with ILI was among the >65-year age group at 0.5% **(no change in age group, decrease from 1.2%).**

Figure 1. Outpatient Respiratory Illness Activity Map by State for Week 44, United States, 2023-2024

- Week 44 data unavailable at time of report.

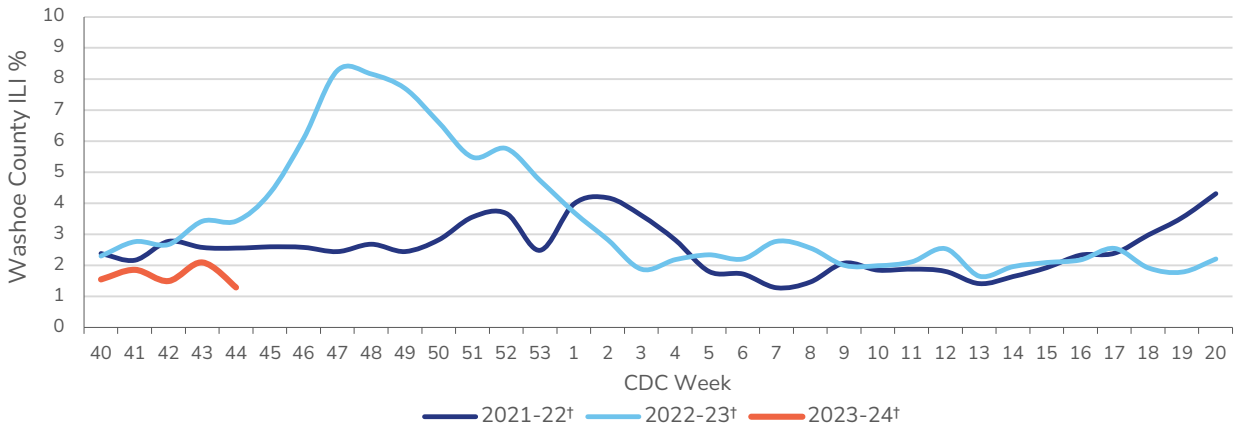
Figure 2. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County, 2023-2024



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
Current week reported data are unavailable for U.S., Nevada, and Region at time of report.

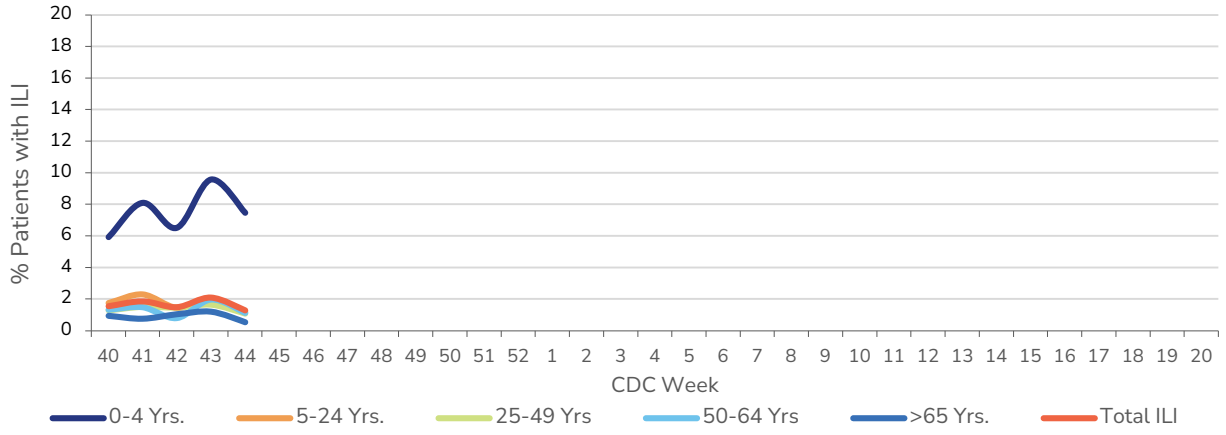
Data presented in this report is preliminary and may be updated in future reports as additional information is received throughout the influenza season.

Figure 3. ILI Activity Reported by Sentinel Providers, Washoe County, 2021-2023 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, 2023-2024



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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.

- No NSPHL specimen results were reported.
- The highest proportion of NSPHL specimens to date have been A (2009 H1N1) at 85.7% of specimens, followed by unsubtyped 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 unsubtyped PCR results.

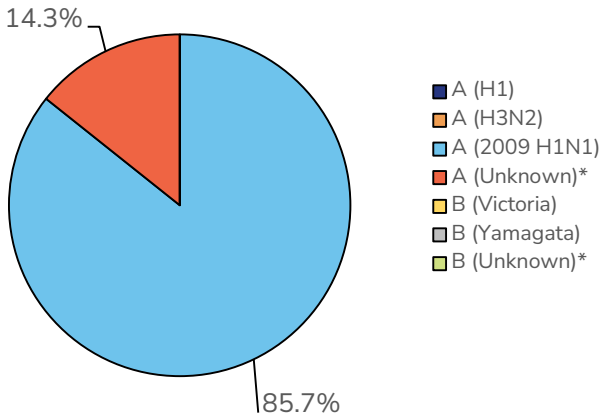
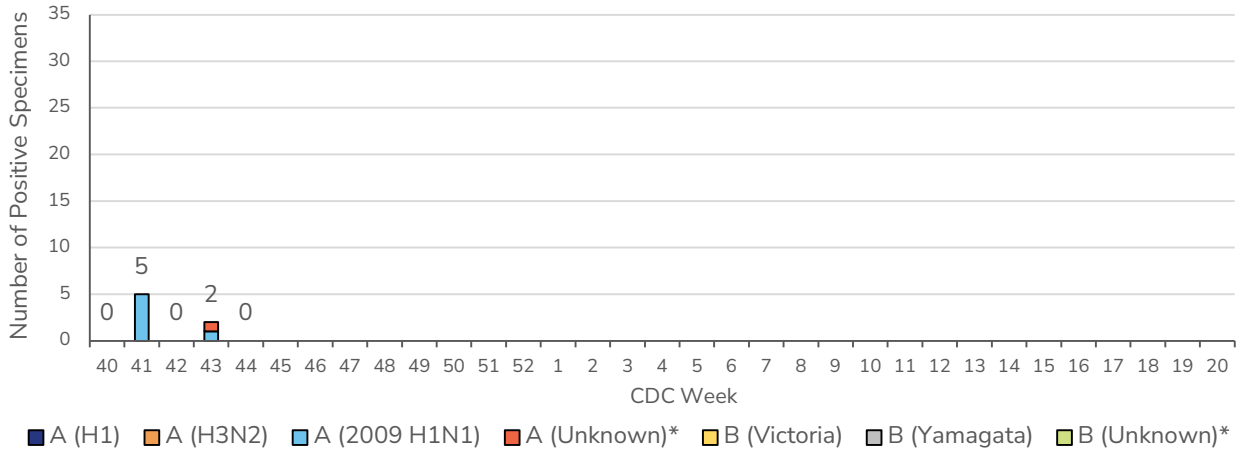


Figure 6. Positive Specimens Submitted to NSPHL, Subtyping to Date by Week, Washoe County, 2023-2024



*Unknown includes both rapid and unsubtyped PCR results.

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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.

- The highest proportion of specimens among hospitalized cases was unsubtyped A at **75%** of specimens**.**
- The highest proportion of specimens among hospitalized cases to date has been unsubtyped A at 85.7% of specimens **(no change in type)**.
- Influenza hospitalization rate per 100,000 population in Washoe County was 1.38 **(increase from 0.59)**.
- The age group with the highest influenza hospitalization rate per 100,000 population in Washoe County was >65-year age group at 4.7 **(no change in age group, increase from 1.2).**

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

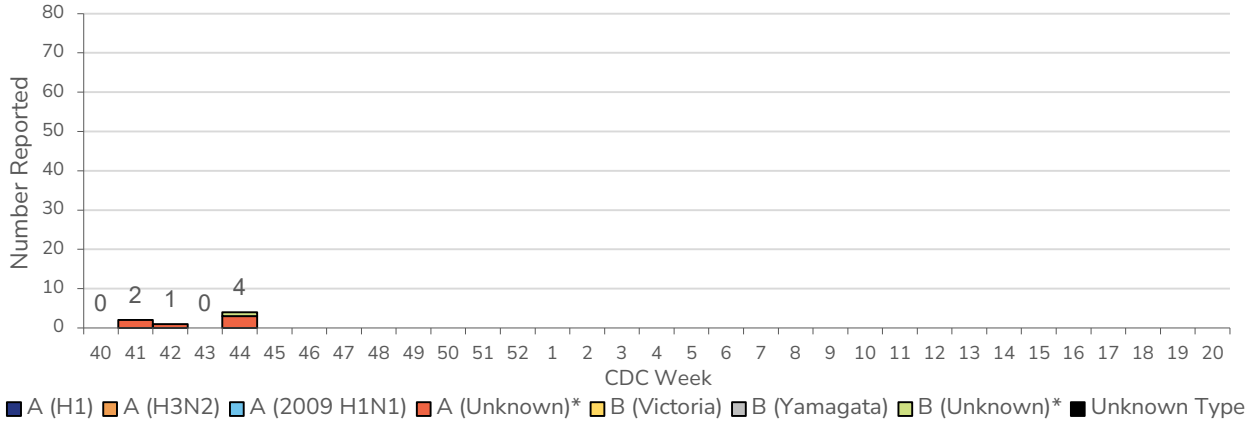
	Current Week (Week 44) October 29, 2023 - November 4, 2023								Cumulative for 2023-2024 Influenza Season October 1, 2023 - November 4, 2023							
	Hosp.		Vax§		ICU		Death		Hosp.		Vax§		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	**4**	**N/A**	**2**	**50**	**0**	**0**	**0**	**0**	**7**	**N/A**	**2**	**29**	**1**	**14**	**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)*	3	75	2	100	0	0	0	0	6	86	2	100	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)*	1	25	0	0	0	0	0	0	1	14	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 ≥ 2 weeks prior to illness onset.

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

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



*Unknown includes both rapid and unsubtyped PCR results.

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

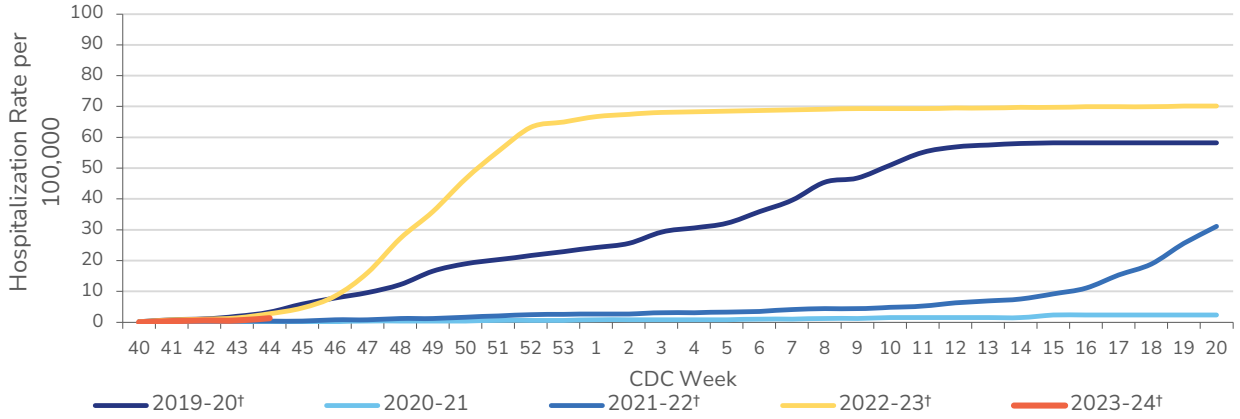


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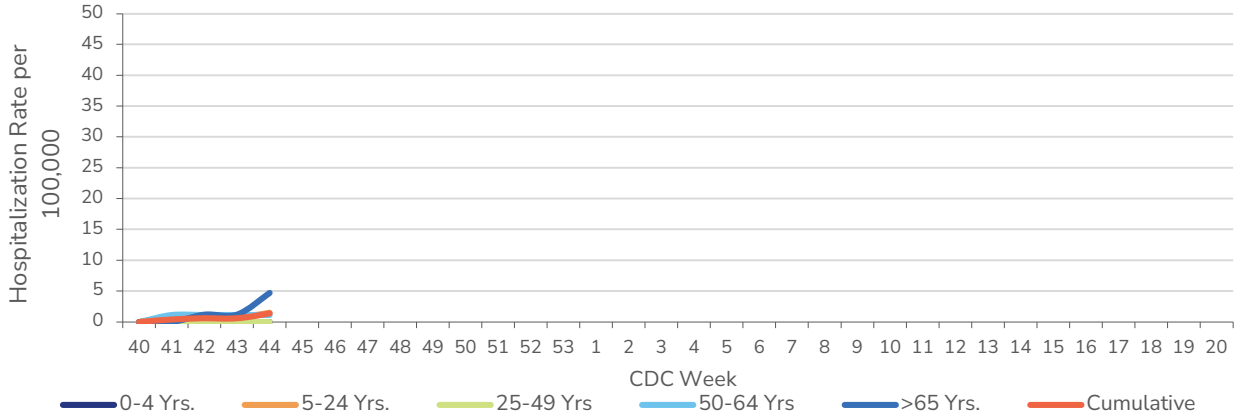
Figure 9. Influenza Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2023-2024



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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

- National data were unavailable at time of publishing.

Washoe County

- The percentage of deaths due to PIC was 7.9% (**increase from 5.7%).**
- The percentage of PIC deaths that had COVID-19 as a contributing cause was 45.5% (**increase from 20%).**

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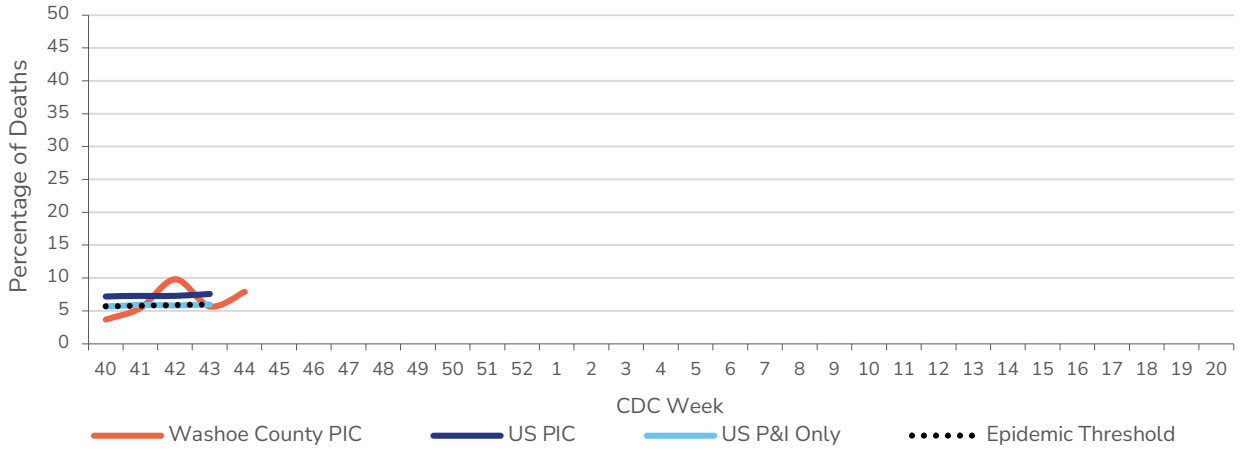
Figure 10. Pneumonia, Influenza, and COVID-19 Mortality, Washoe County and the United States, 2023-2024



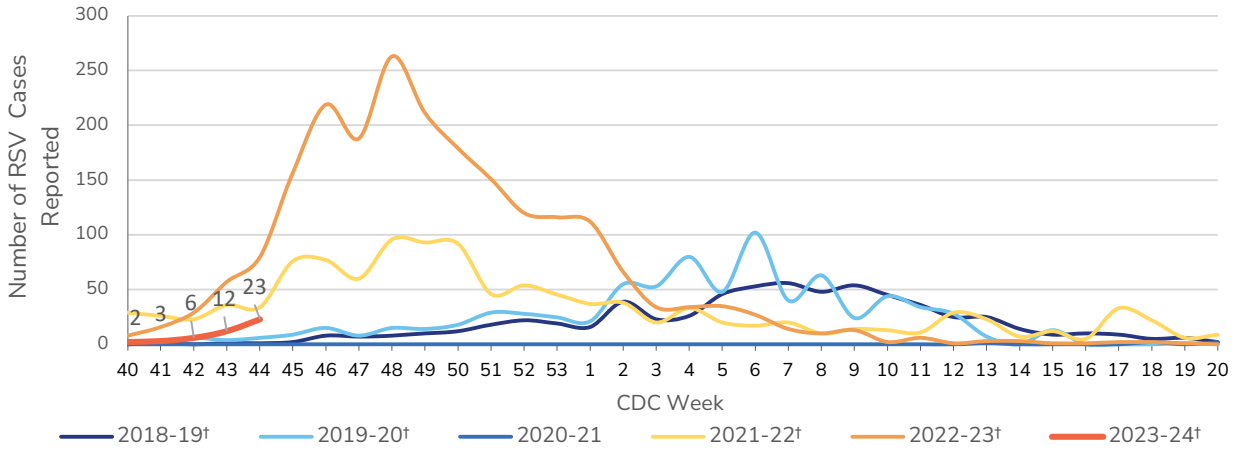
Data sources: National Center for Health Statistics (NCHS) Mortality Surveillance available at https://www.cdc.gov/flu/weekly/#S2 and Nevada Vital Records.
Current week reported data are unavailable for U.S. at time of report.

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.

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

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



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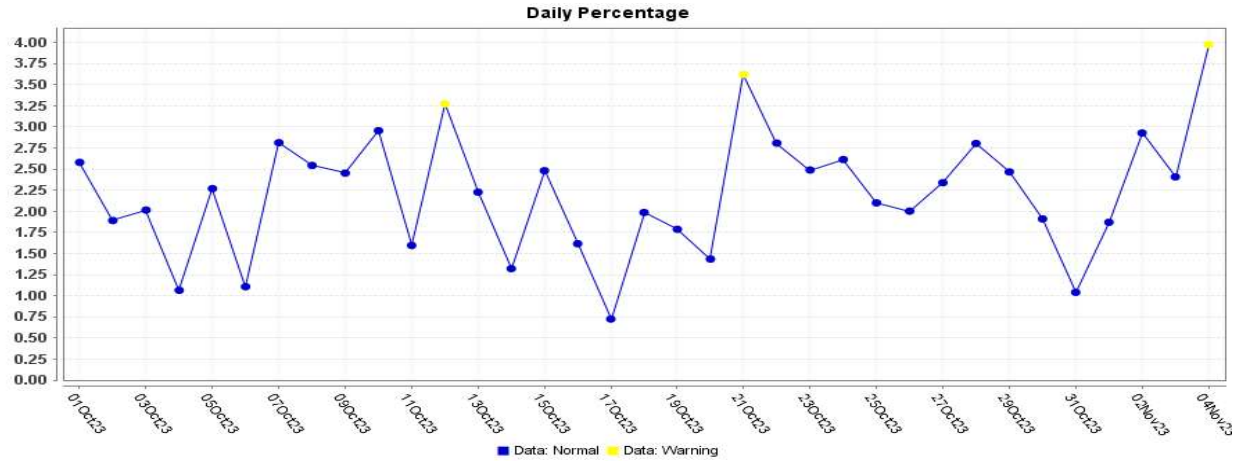
Syndromic Surveillance

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.

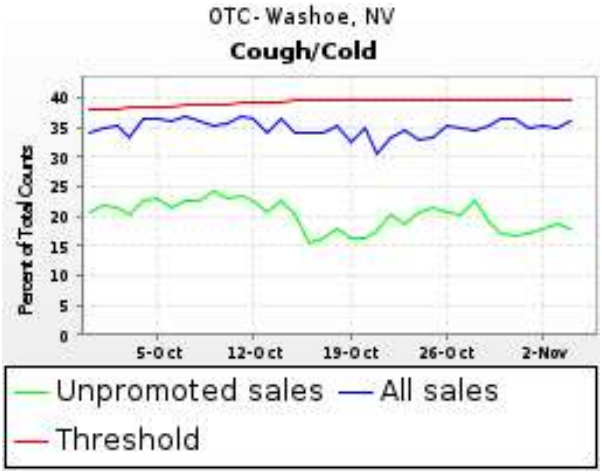
Figure 12. Percentage of ED and UC* Visits for ILI for Weeks 40-44, Washoe County, 2023-2024



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 40-44, Washoe County, 2023-2024



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

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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.