WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

2022-2023 Influenza Surveillance Program

CDC Week #45 Nov. 06, 2022-Nov. 12, 2022

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Weekly Summary & Changes from Previous Week *

- Influenza-like-illness (ILI) activity: 2.6% **(increase from 1.7%)**
- Hospitalizations: 5.12 per 100,000 population **(increase from 3.07)**
- Deaths: 0 reported **(no change)**
- Pneumonia, Influenza, and COVID-19 (PIC) Mortality: 3.1% **(decrease from 4.8%)**
- Syndromic surveillance: **Increase** in ILI ED and UC visits were observed for Nov. 6th- Nov. 12th
- Respiratory Syncytial Virus: 157 cases **(increase from 80)**

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

Key message(s)

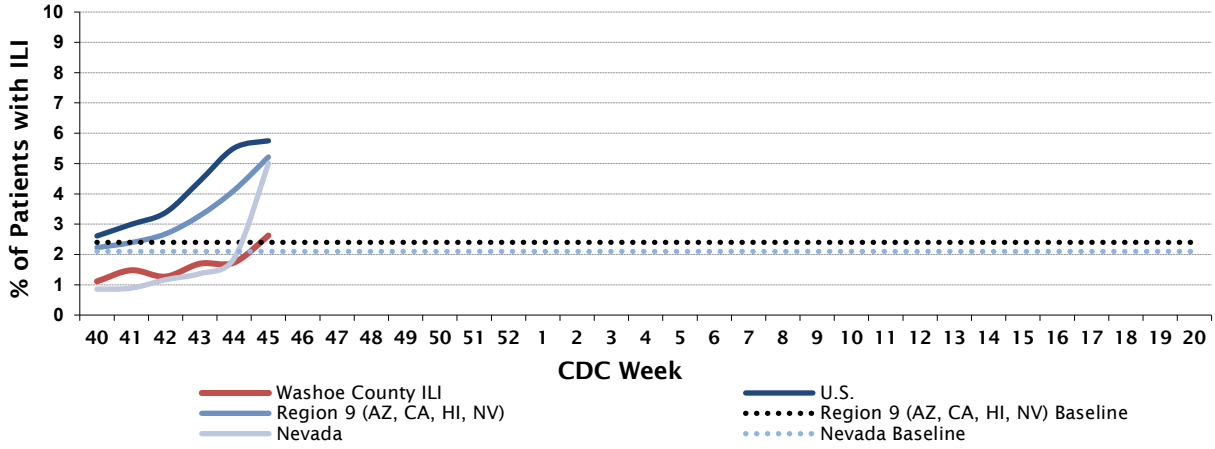
- National, regional, state, and local ILI activity continues to increase.
- Influenza hospitalization rate continues to increase.
- Influenza A H3N2 strain is the predominate strain in Week 45.
- RSV cases continue to significantly increase weekly since the start of the flu season.
- Routine annual influenza vaccination is recommended for ALL persons aged 6 months or older, as long as there are no contraindications.

Influenza-like-Illness

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.

- Out of 12 sentinel providers, 11 reported ILI activity.
- U.S. percentage of patients presenting with ILI was 5.0% **(increase from 5.5%)**.
- Region 9 percentage of patients presenting with ILI was 5.2% **(increase from 4.1%)**, which is **ABOVE** the regional baseline of 2.4%.
- Nevada percentage of patients presenting with ILI was 5.0% **(increase from 1.9%)**, which is **ABOVE** the state baseline of 2.1%.
- Washoe County percentage of patients presenting with ILI reported by sentinel providers for the current week was 2.6% **(increase from 1.7%)**.
- The highest proportion of patients presenting with ILI was among the 0-4-year age group at 12.9% **(no change in age group, increase from 9.6%)**.
- The lowest proportion of patients presenting with ILI was among the 50-64-year age group at 0.2% **(change in age group from 25-48 year olds and >65 year olds at 0.5%).**

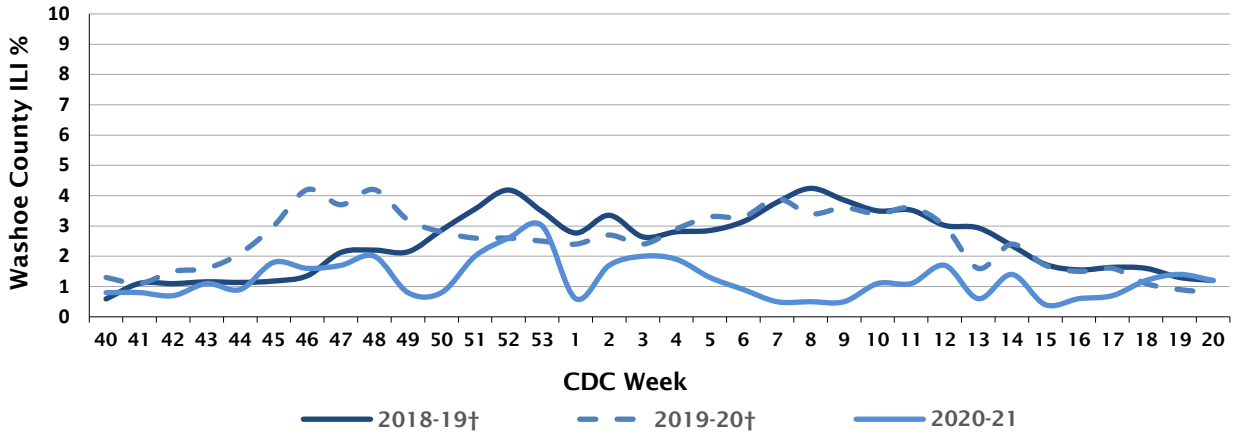
Figure 1. Comparison of ILI Activity at the Local, State, Regional, and National Level, Washoe County, 2022-2023



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.

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

Figure 2. ILI Activity Reported by Sentinel Providers Under Previous Case Definition, Washoe County, 2018-2021 Seasons†



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

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

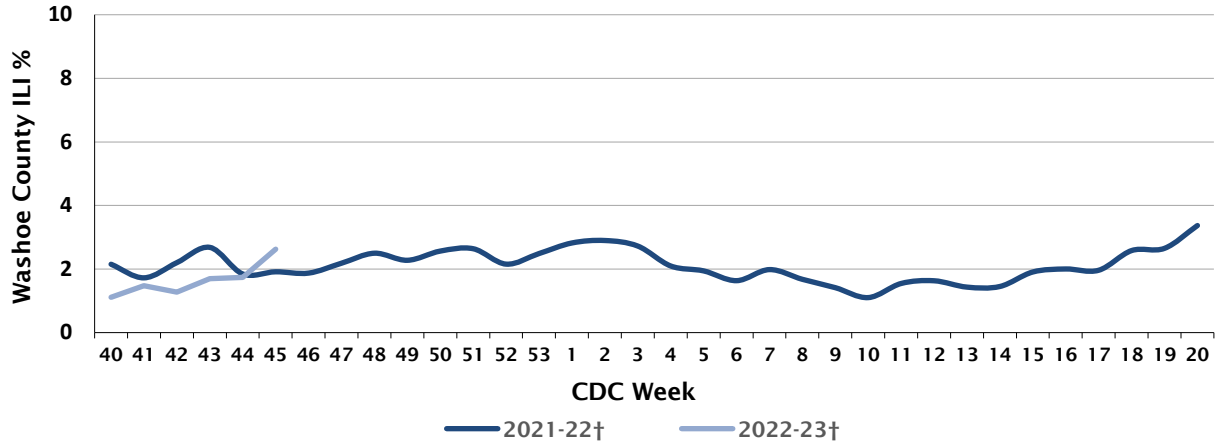


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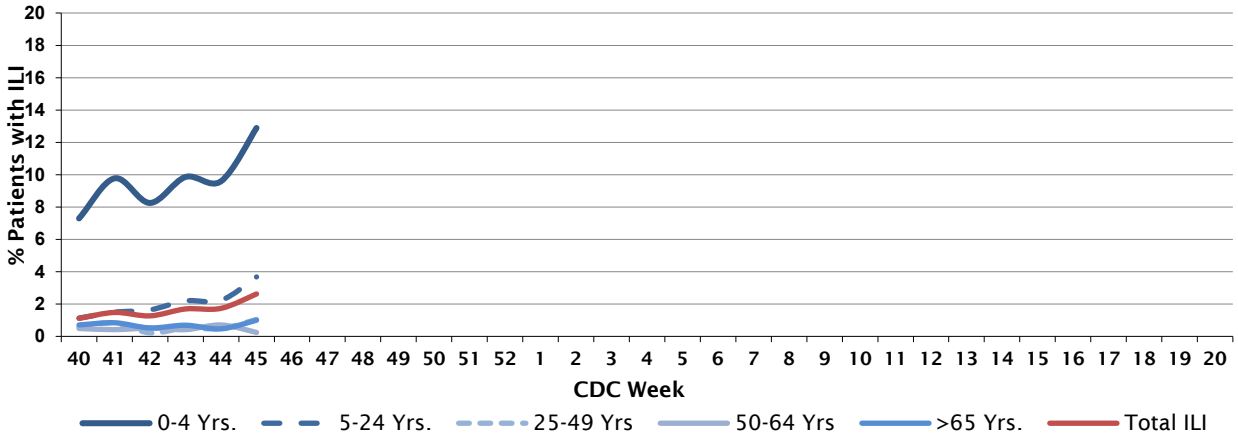
Figure 4. ILI Activity Reported by Sentinel Providers by Age Group, Washoe County, 2022-2023



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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 even those not submitted by sentinel providers.

- The highest proportion of NSPHL specimens were A(H3N2) at 80% (n=4) of specimens, followed by A (unsubtyped) at 20% (n=1).
- The highest proportion of NSPHL specimens to date have been A(H3N2) at 80% of specimens.

Table 1 & Figure 5. Specimens Submitted to NSPHL for Subtyping to Date, Washoe County, 2022-2023

Influenza Subtype	# of Specimens	% of Total Specimens
A (H3N2)	4	80%
A (2009 H1N1)	0	0%
A Unsubtyped	1	20%
B (Yamagata)	0	0%
B (Victoria)	0	0%
B Unknown	0	0%
Negative	0	0%
Total	5	100%

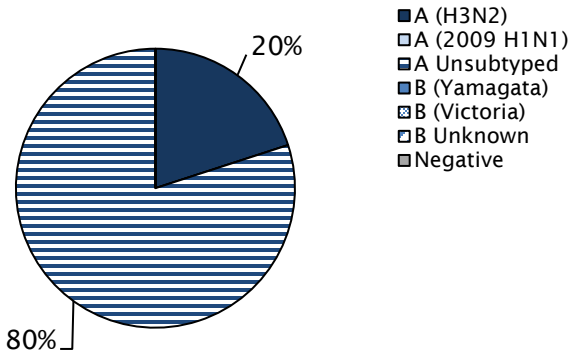
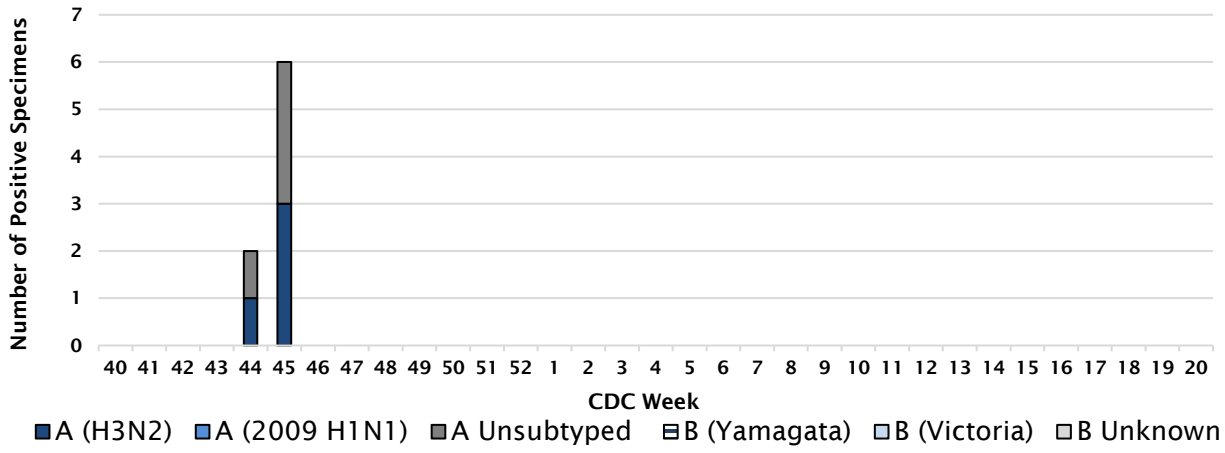


Figure 6. Positive Specimens Submitted to NSPHL, Subtyping to Date by Week, Washoe County, 2022-2023



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Hospitalizations

Medical records are reviewed for cases hospitalized for greater than or equal to 24 hours. Information on the number of hospitalized cases, the number of hospitalized cases vaccinated at least 2 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 7, and by age group in Figure 8.

- Influenza hospitalization rate per 100,000 population in Washoe County was 5.1 **(increase from 3.07)**.
- The age group with the highest influenza hospitalization rate per 100,000 population in Washoe County was 0-4-year age group at 6.5 **(change from 50-64 years age group)**.
- The highest proportion of specimens among hospitalized cases was unsubtyped A at 70% of specimens **(no change)**.
- The highest proportion of specimens among hospitalized cases to date has been unsubtyped A at 72% of specimens **(no change)**.

Figure 7. Influenza Hospitalization Rate per 100,000 Population, Washoe County, 2022-2023

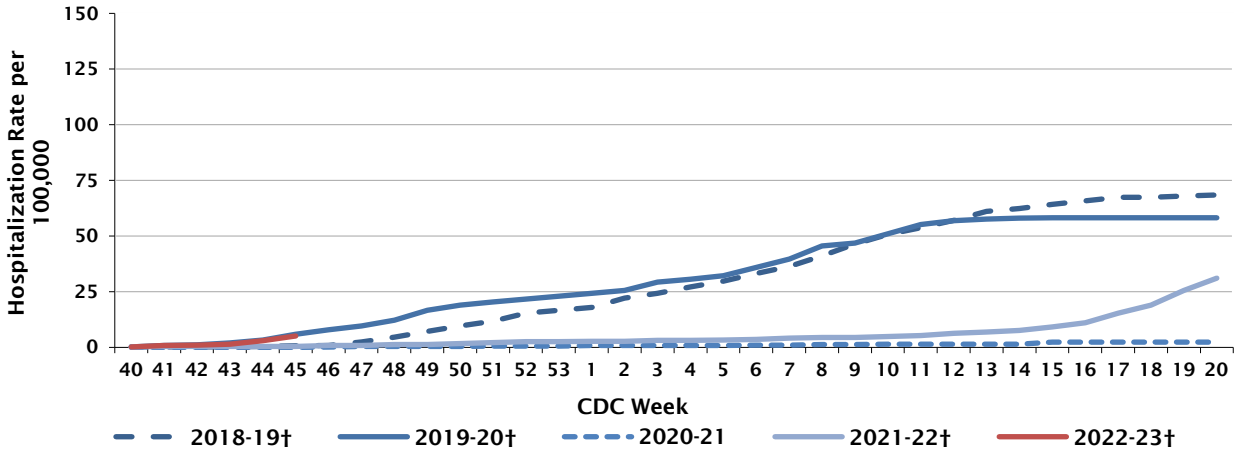

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Figure 8. Influenza Hospitalization Rate per 100,000 Population by Age Group, Washoe County, 2022-2023

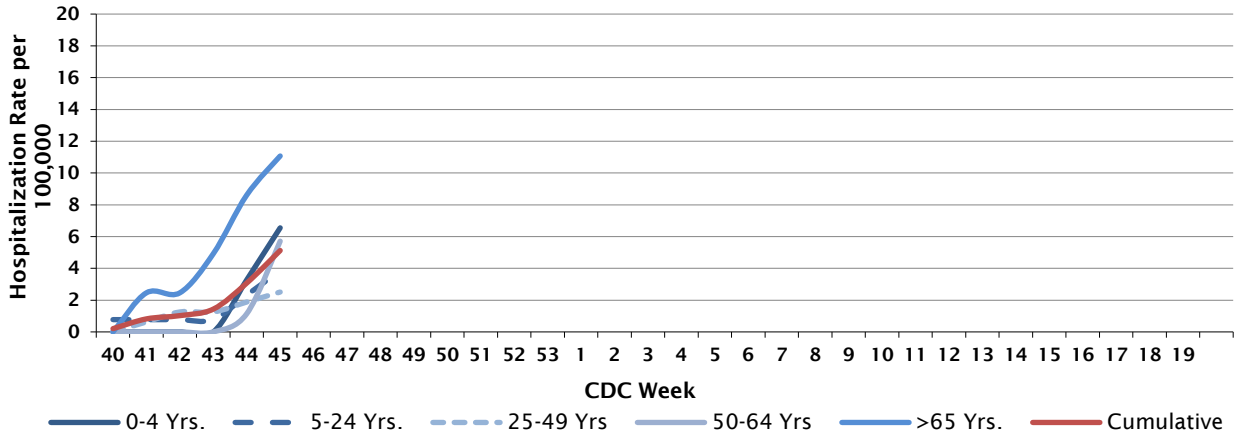

Figure 9. Influenza Positive Tests Among Hospitalized Cases by Week Reported, Washoe County, 2022-2023

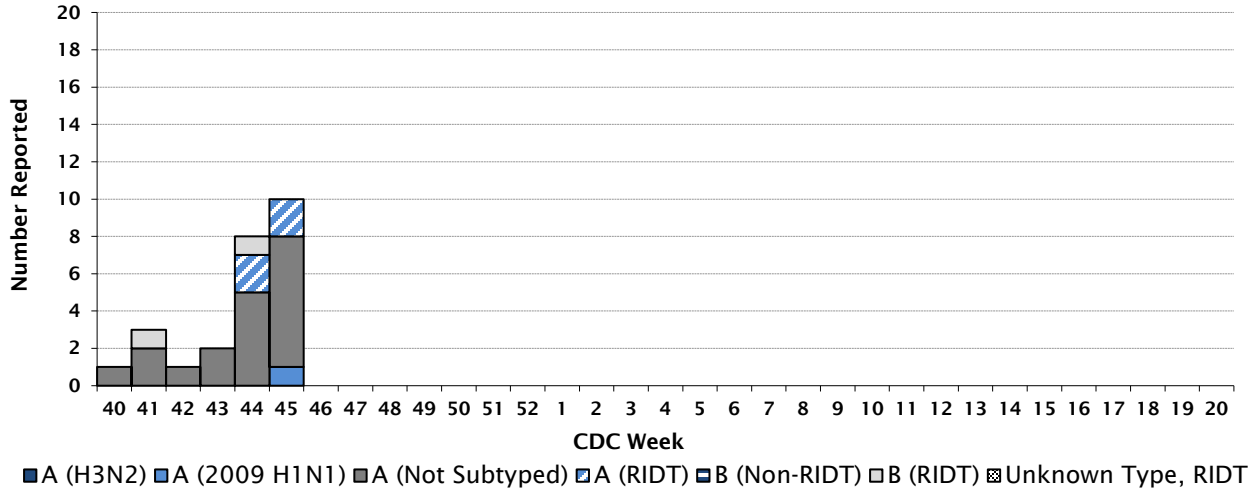

Table 2. Number of Hospitalized Cases with Lab-Confirmed Influenza by Vaccination, ICU, and Death Status, Washoe County, 2022-2023

	Current Week (Week 45) November 6, 2022 - November 12, 2022								Cumulative for 2022-2023 Influenza Season October 2, 2022 - October 22, 2022							
	Hosp.		Vax§		ICU		Death		Hosp.		Vax§		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	**10**	**N/A**	**3**	**30.0**	**5**	**50**	**0**	**0**	**25**	**N/A**	**6**	**24**	**8**	**32**	**0**	**0**
Influenza A (2009 H1N1)	1	10	0	0	1	20	0	0	1	4	0	0	1	13	0	0
Influenza A (seasonal H3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza A (not subtyped)	7	70	2	67	4	80	0	0	18	72	4	67	6	75	0	0
Influenza A (RIDT*)	2	20	1	33	0	0	0	0	4	16	2	33	0	0	0	0
Influenza B (RIDT*)	0	0	0	0	0	0	0	0	2	8	0	0	1	13	0	0
Influenza B (non-RIDT**)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Influenza (unk. type, RIDT*)	0	0	0	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.

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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. Note that 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 **(no change)**.

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:

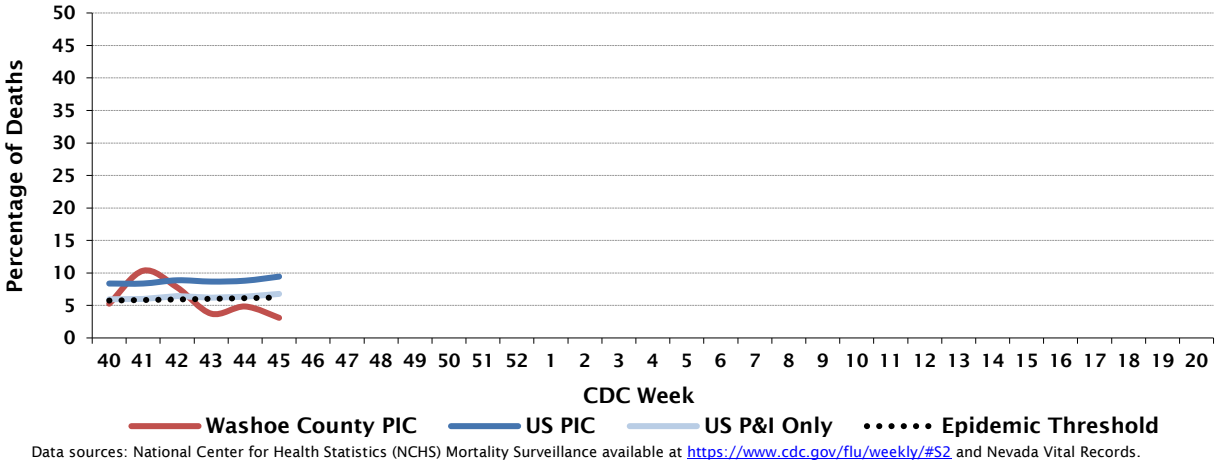
National

- The percentage of deaths due to PIC was 9.4%, which is **ABOVE** the epidemic threshold of 6.2% **(increase from 8.8%)**.
- The percentage of deaths due to pneumonia and influenza (P&I) was 6.8% **(increase from 6.3%)**.

Washoe County

- The percentage of deaths due to PIC was 3.1% **(**3 out of 97 total deaths, **decrease from 4.8%)**.
- The percentage of PIC deaths that had COVID-19 as a contributing cause was 33.3% (1out of 3, **no change)**.

Figure 10. Pneumonia, Influenza, and COVID-19 Mortality, Washoe County and the United States, 2022-2023



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

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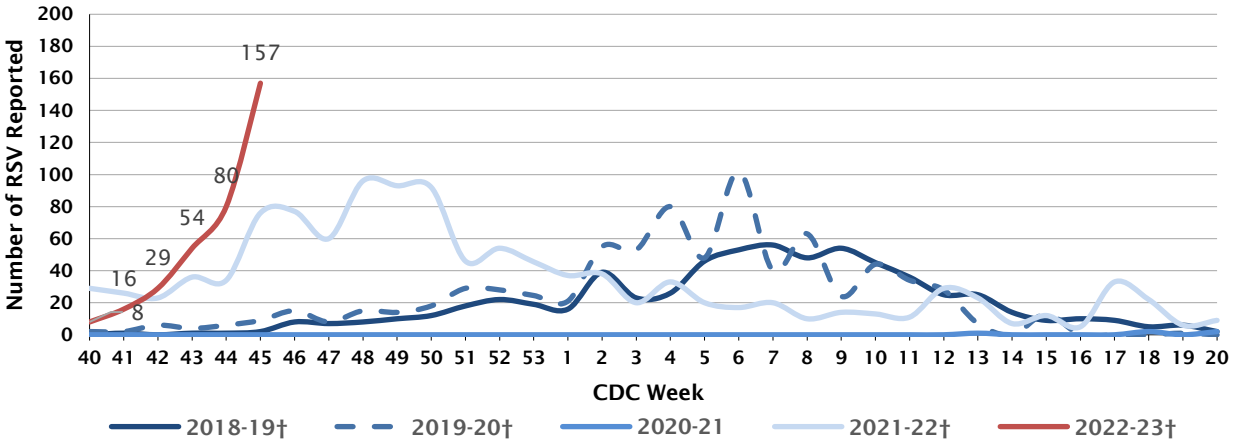
Respiratory Syncytial Virus

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.

- 157 cases were reported for the current week **(increase from 80).**

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



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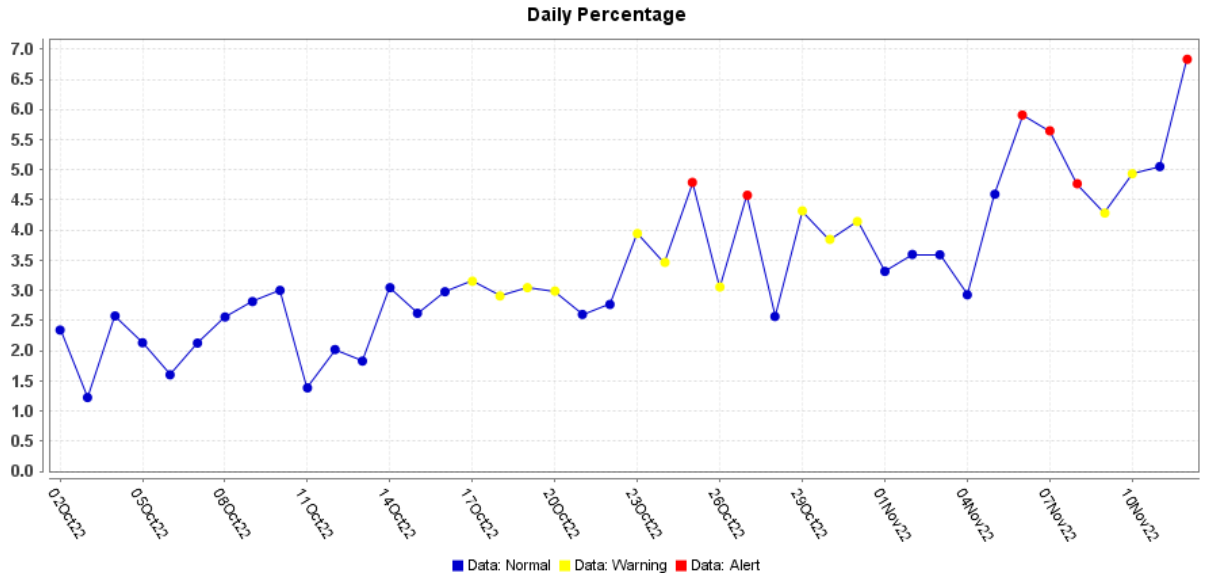
Syndromic Surveillance

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.

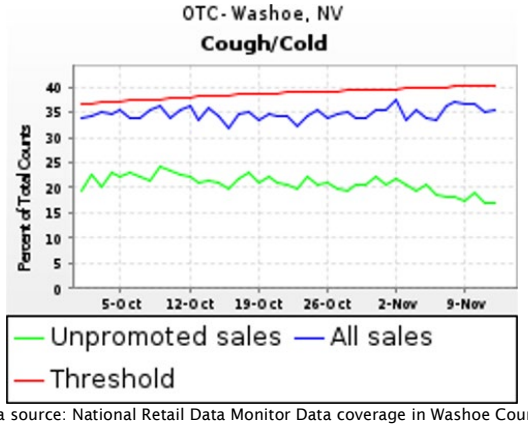
Figure 12. Percentage of ED and UC* Visits for ILI for Weeks 40-45, Washoe County, 2022-2023



Data source: ESSENCE, *14 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 40-45, Washoe County, 2022-2023



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

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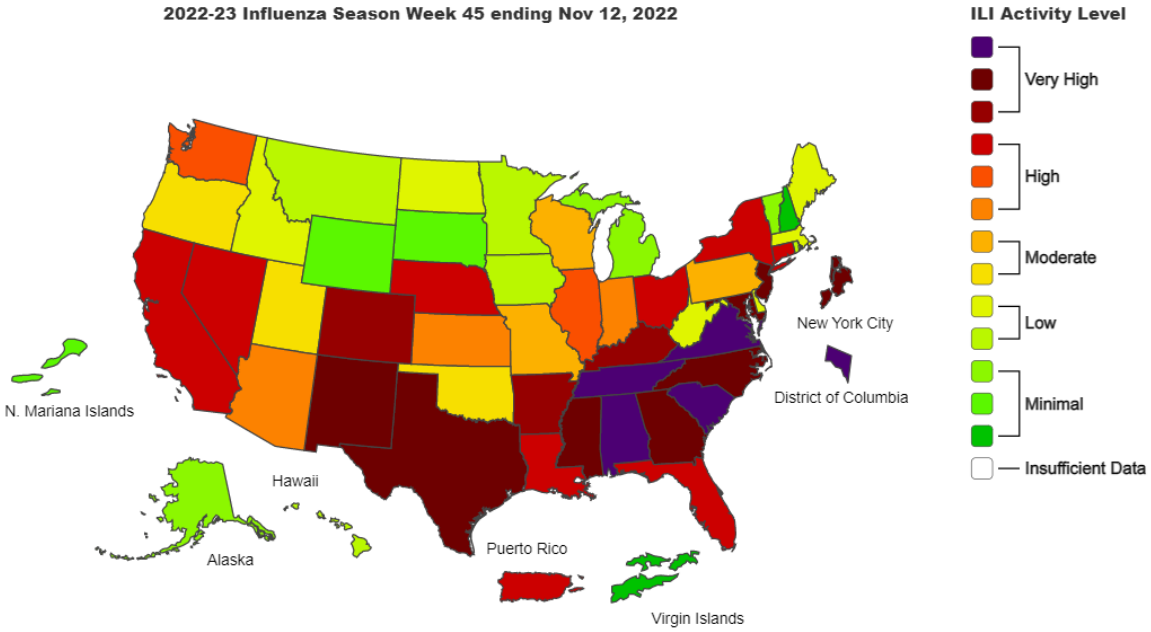
ILI Activity Level

It is important to note the map uses the proportion of outpatient visits to healthcare providers to measure the ILI activity level within a state. It does not measure the extent of geographic spread of influenza within a state.

Figure 14. Geographic Spread of ILI Activity Level for Week 45, United States, 2022-2023



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

Surveillance Changes

2022-2023 Season

- Figures 6 and 8 are newly added to the report.
- Table 1, Figure 5, Figure 9, and Figure 11 were updated to include information not previously included in past seasons, such as unsubtyped A and B specimen result counts and previous seasonal RSV cases by week.
- Table 1 and Figure 5 now include unsubtyped A and B specimen results.
- Figure 6 was created to allow comparison of only positive specimens subtypes from NSPHL by MMWR week.
- Figure 8 was created to allow comparison of hospitalization rates by ILI age group (as seen in Figure 4) in addition to the cumulative hospitalization rate for the season.
- Figure 11 (previously Figure 9) was revised to include previous seasons for comparison.
- For sentinel providers, one urgent care closed permanently and is no longer a reporter as they were in previous seasons. However, one emergency room was newly onboarded as a new sentinel provider this season.