



INFLUENZA REPORT

2024-2025 Influenza Season

MMWR Week 43 (10/20/24-10/26/24)

Weekly Report of Influenza and Influenza-like Illness (ILI) Activity



Influenza and Influenza-like Illness Activity

Spread

Sporadic

Transmission levels remain relatively low across the state

Flu Activity

Minimal

Reported influenza activity is minimal across the state

ILI Activity

Minimal

Reports of outpatient respiratory illnesses remain low

Co-circulating

Other Viruses:

SARS-CoV-2 and RSV

Seasonal Data

Types of Flu

Influenza A and B viruses are circulating

Subtypes

Primary: A viruses

Predominately H1N1 and H3N2 viruses reported across the country this week

Outbreaks

0

No newly reported LTCF or school associated outbreaks this week

Severity

Hospitalizations

The number and weekly rate of hospital admissions remains low

Deaths

0

No locally or nationally reported pediatric deaths so far this season

Syndromic

3

Three syndromic anomalies reported in Laramie County this week

EMS

11

Suspected ILI reports this week

Hot Spots

Tracking Trends

Most counties continue to report low levels of influenza activity



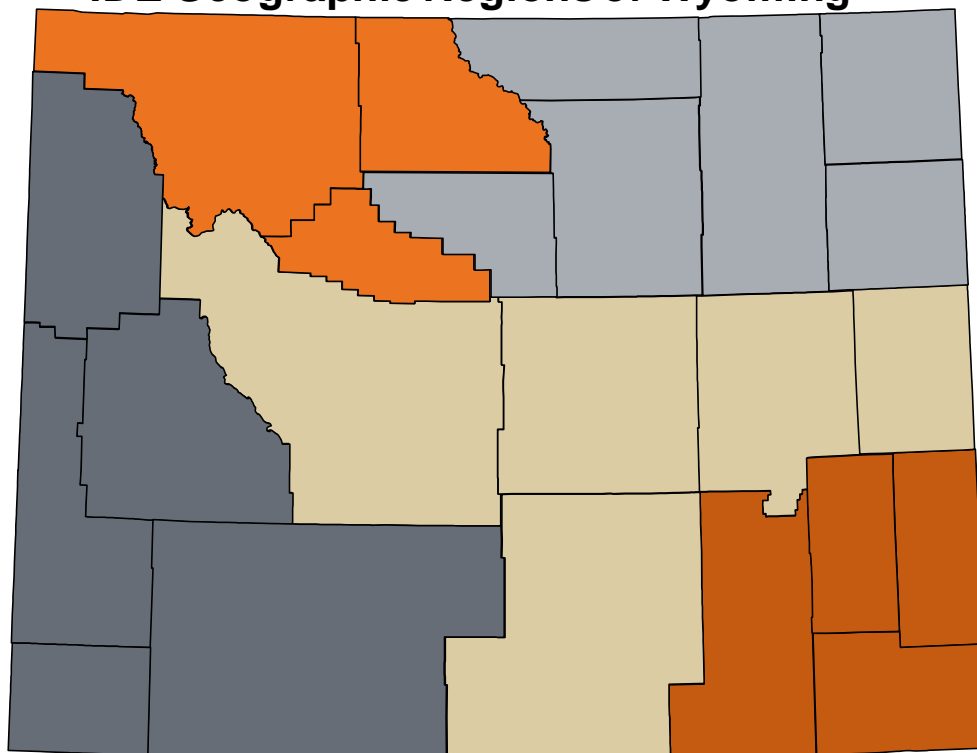
Geographic Activity by Regions






Wyoming as a whole had **minimal** ILI activity this week (MMWR Week 43). Transmission levels remain low across the state.

The electronically reported influenza cases represent one Infectious Disease Epidemiology (IDE) Geographic Regions.

Healthcare providers across the state electronically reported **less than 10 cases** of influenza (rapid influenza diagnostic tests and PCR confirmed tests) this week.

IDE Geographic Regions of Wyoming



-  Southeastern (no reported cases this week)
-  Central (no reported cases this week)
-  Western (no reported cases this week)
-  Big Horn (no reported cases this week)
-  Northeastern (sporadic, reports of cases this week)



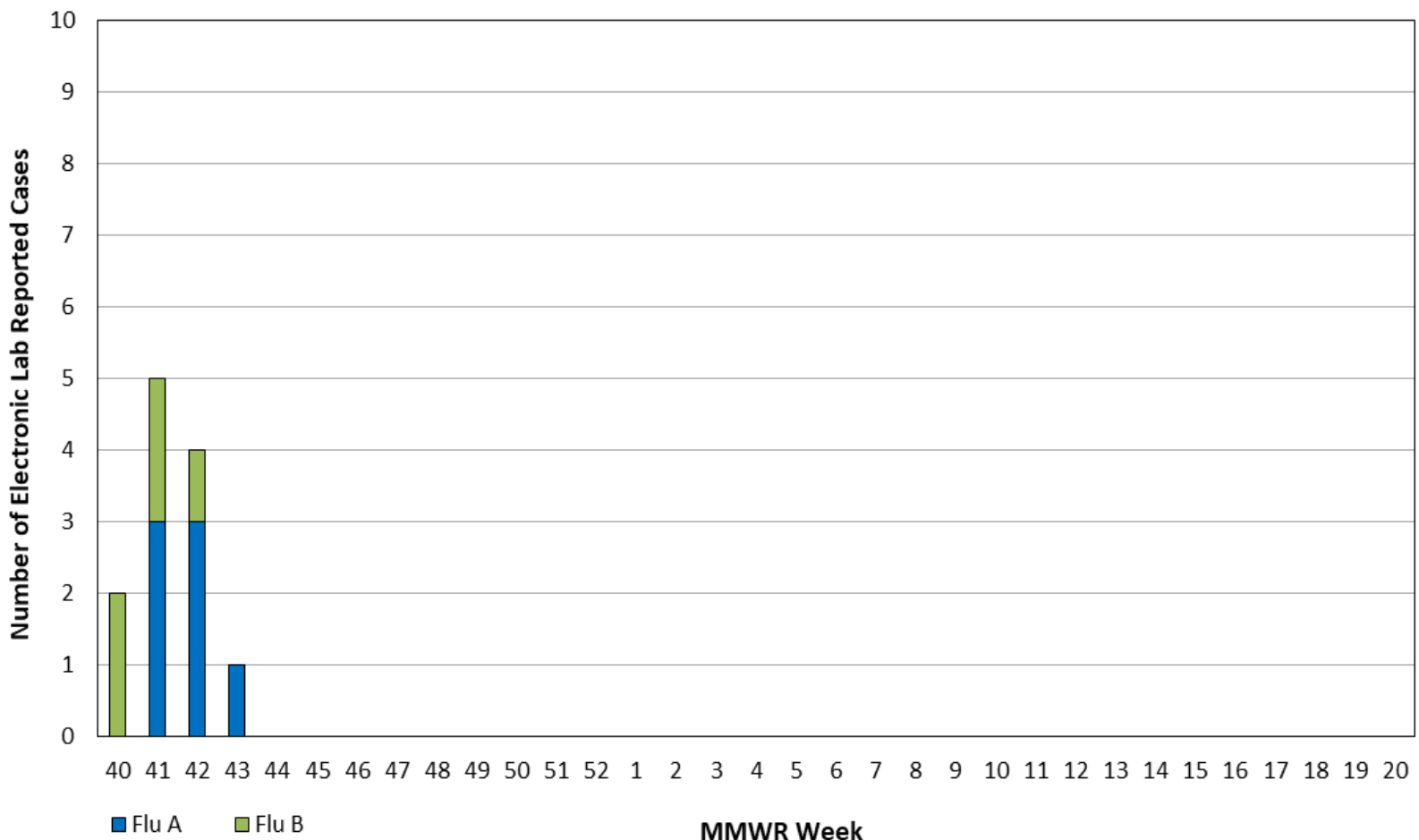
Public Health Laboratory

The overall volume of samples tested for influenza at the Wyoming Public Health Laboratory has increased since the introduction of the CDC Influenza SARS-CoV-2 Multiplex Assay. Wyoming saw a **decrease** in the number of positive influenza specimens reported this week compared to week 42.

Healthcare and Clinical Laboratories

Clinical laboratories across the country most frequently reported **Influenza A/H1N1 and A/H3N2 viruses** co-circulating during MMWR Week 43, with a handful of Influenza B viruses.

Electronic Lab Reports of Influenza Cases



* This graph is not representative of all influenza cases across the state

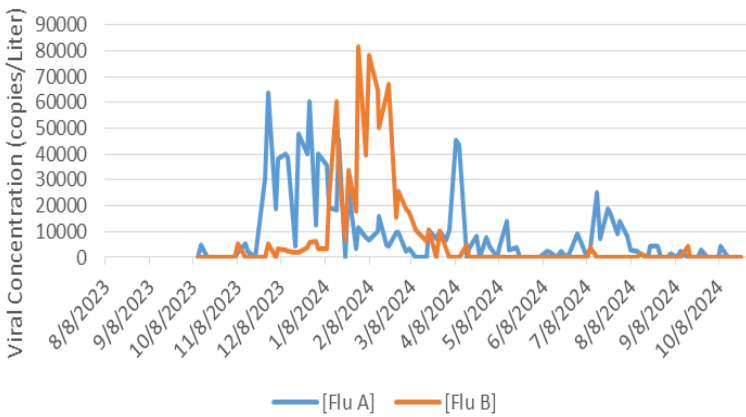
Wastewater Surveillance



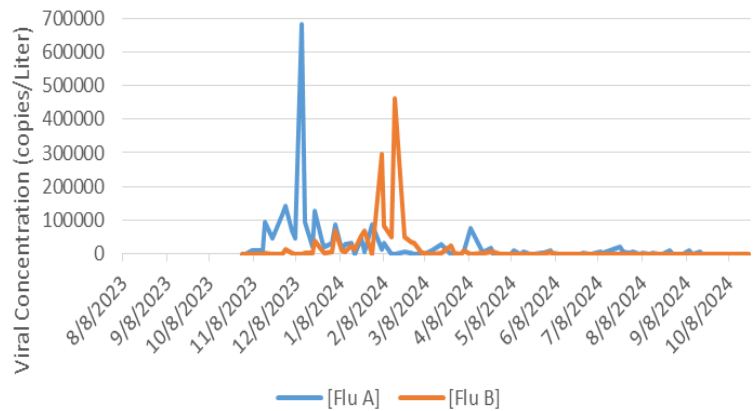
Importance of Wastewater Surveillance:

Here at the Wyoming Public Health Laboratory, we have a team of scientists working to analyze wastewater samples to identify trends in influenza (and many other pathogens). The graphs pictured below depict trend lines for the 2023-2024 influenza season and the start of the 2024-2025 season.

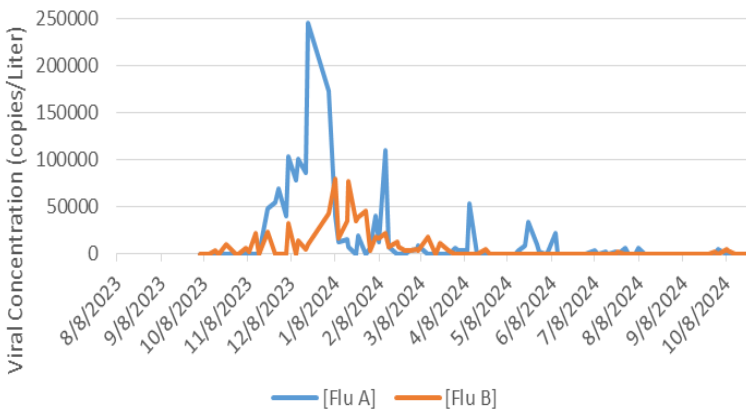
Influenza A and B Concentration Levels in Cheyenne Wastewater



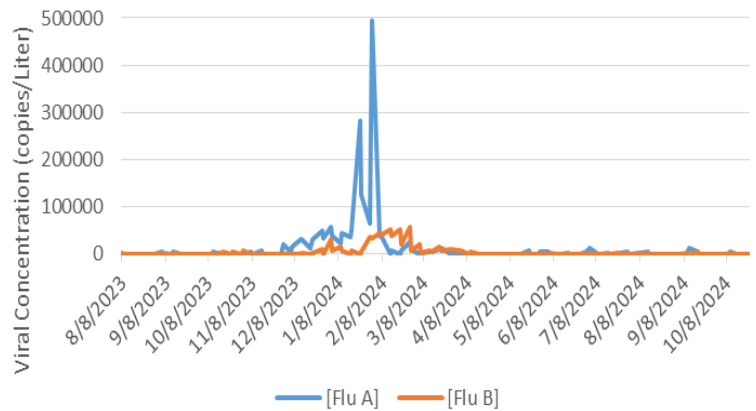
Influenza A and B Concentration Levels in Rawlins Wastewater



Influenza A and B Concentration Levels in Green River Wastewater



Influenza A and B Concentration Levels in Sheridan Wastewater



Sampling and Analysis Methodologies:

For each city, twice a week, we have a wastewater utility operator take a 24 hour composite sample from the influent channel prior to treatment, of which they send us a total of 150mL in three 50mL tubes for us to test. They then ship the samples chilled via priority overnight so that we can run all of our measurements the following day. The sampling procedure is conducted in triplicate, and we take an average of the three to determine the estimated concentration of viral particles present in the wastewater for any given day. We then take the average concentration and divide it by our percent recovery to account for any deviation due to differing levels of present inhibitors. Each plot point on the graph represents the average viral concentration for a set of triplicates, normalized for the percent recovery.

Influenza-like Illness Surveillance



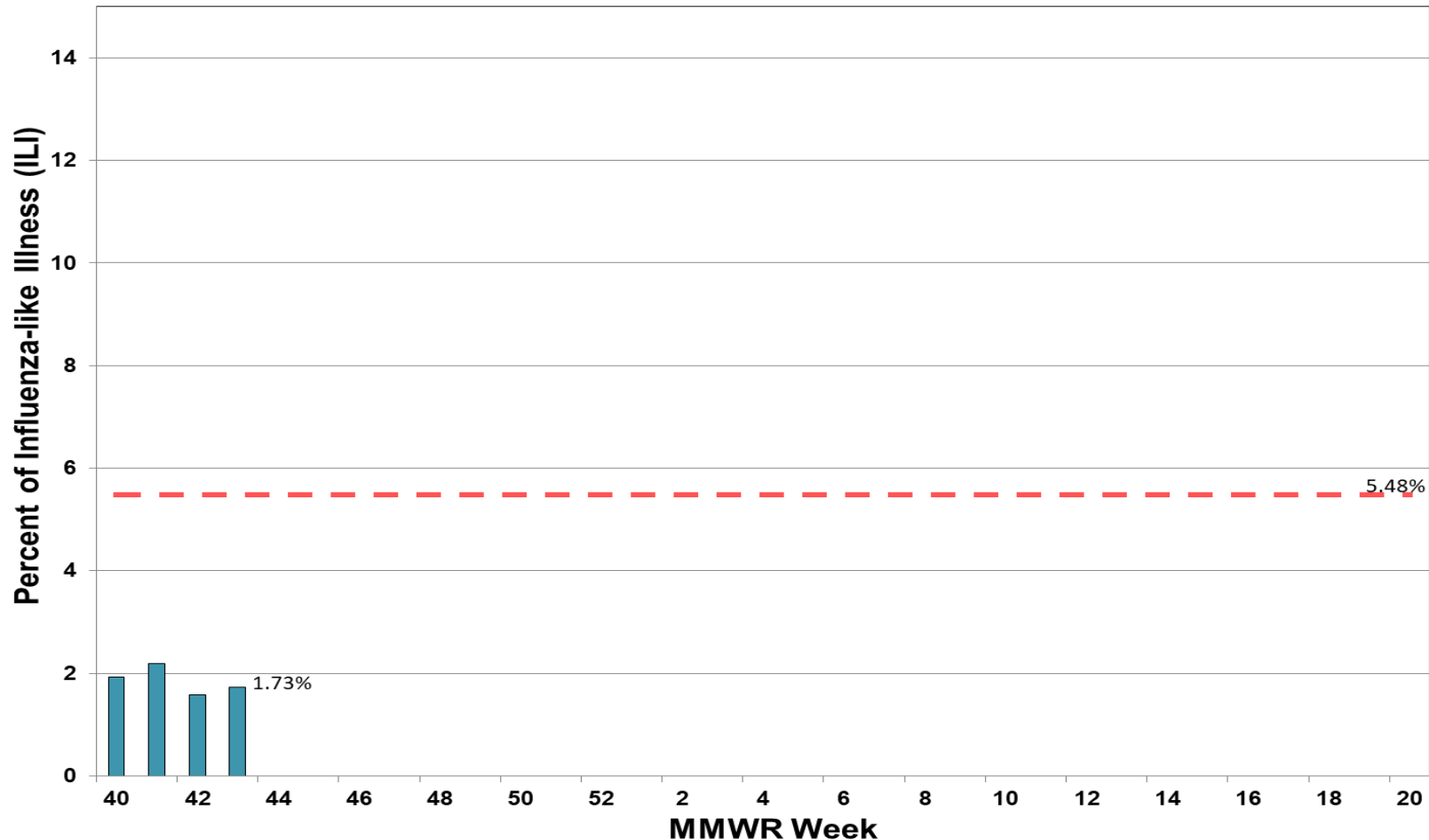
ILINet Providers

The percent of patient visits to ILINet Sentinel Providers for an influenza-like illness was **1.73%**, which is **below** Wyoming's baseline (**5.48%**), and relatively stable compared to week 42.

The Wyoming Department of Health received reports from more than 50% of the ILINet providers across the state. Although weekly percentages could continue to change as additional values are submitted.

Key Updates: Seasonal influenza activity remains low nationally. Based on CDC calculations, transmission within Wyoming remained **minimal** this week. Nationally and in all 10 HHS regions, the percentage of respiratory specimens testing positive for influenza virus in clinical laboratories remained stable (change of <0.5 percentage points) compared to the previous week.

Weekly Percent of ILI Visits





Mortality Data

Tracking death certificates is the best surveillance system to capture and identify pneumonia and influenza-associated deaths in Wyoming. According to the CDC, influenza is infrequently listed on death certificates. Also, testing for seasonal influenza infections is not frequently performed, particularly among the elderly, who are at greatest risk for seasonal influenza complications and death. Therefore, public health officials may not identify influenza-associated deaths in many instances; consequently, this surveillance system may underestimate the true impact of influenza-associated deaths across the state.

There have been two pneumonia and influenza (P&I) mortality reports certified since the beginning of the 2024-2025 Influenza Season.

Monthly P&I Mortality Reports (2020-2025)

