



INFLUENZA REPORT 2024-2025 Influenza Season

MMWR Week 50 (12/8/24-12/14/24)

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

Wyoming Department of Health | Updated December 20, 2024

Overview (MMWR Week 50)



Influenza and Influenza-like Illness Activity

Spread

Sporadic Transmission levels have started to increase across the state

Flu Activity

Minimal Reported influenza activity remains minimal across the state

Co-circulating S

Other Viruses: SARS-CoV-2, Pertussis, and low levels of RSV

Seasonal Data

Types of Flu Influenza A and B viruses are circulating

Outbreaks

0 No newly reported LTCF or school associated outbreaks this week

Syndromic

One syndromic anomaly was reported this week in Natrona County

Severity

ED Visits

The percentage of ED visits and hospitalizations for influenza increased compared to last week

EMS

16 Suspected ILI reports this week

ILI Activity

Minimal

Reports of outpatient respiratory illnesses have increased slightly

Subtypes

Primary: A viruses Predominately H1N1 and H3N2 viruses reported across the country this week

Deaths

0

No locally reported pediatric deaths; four pediatric deaths reported in the US so far this season

Hot Spots

Tracking Trends

Most counties continue to report low levels of influenza activity, while some have started to see an increase

Geographic Spread



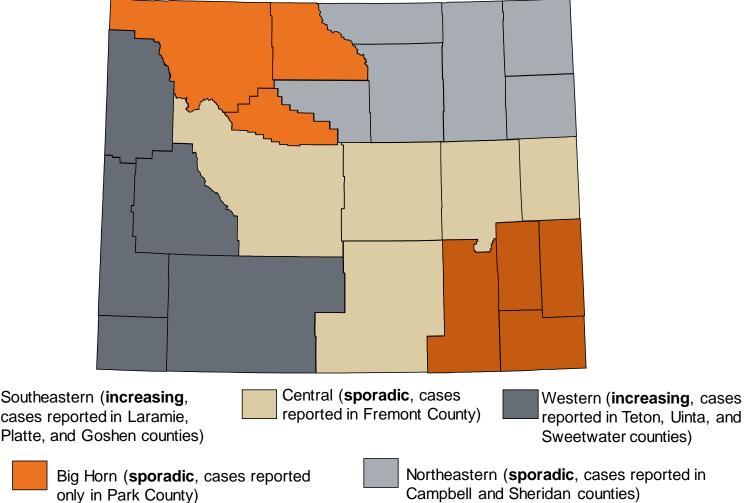
Geographic Activity by Regions

Wyoming as a whole had minimal ILI activity this week (MMWR Week 50). Transmission levels remain relatively low across the state.

Healthcare providers in 10 counties reported ILI activity.

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

Healthcare providers across the state electronically reported 49 cases of influenza (rapid influenza diagnostic tests and PCR confirmed tests) this week.



IDE Geographic Regions of Wyoming

Virologic Surveillance

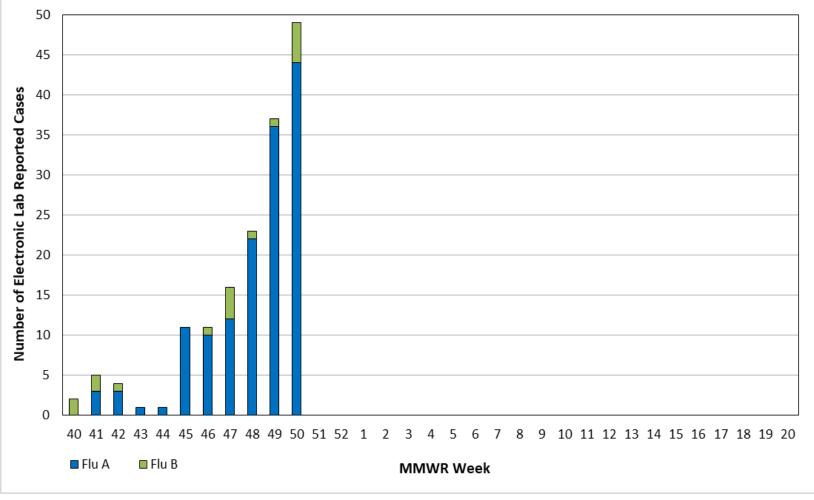


Public Health Laboratory

The overall volume of samples tested for influenza at the Wyoming Public Health Laboratory has steadily declined following the increasing distribution of the CDC Influenza SARS-CoV-2 Multiplex Assay in addition to at home testing options. We strongly encourage providers across the state to send additional specimens to the WPHL for virologic surveillance. The number of positive influenza specimens electronically reported this week increased compared to week 49.

Healthcare and Clinical Laboratories

Clinical laboratories across the country most frequently reported influenza A viruses (A/H1N1 and A/H3N2) co-circulating during MMWR Week 50.



Electronic Lab Reports of Influenza Cases

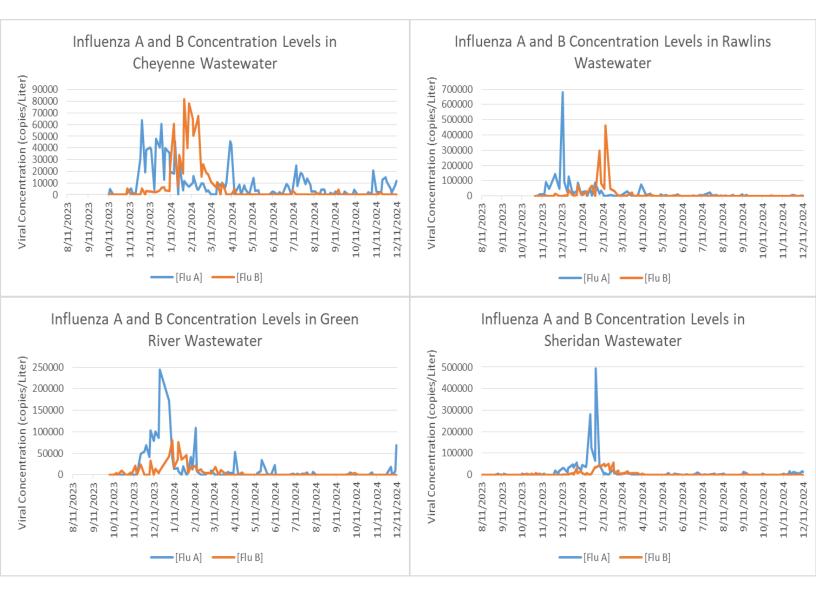
* This graph is not representative of all influenza cases across the state

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.



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

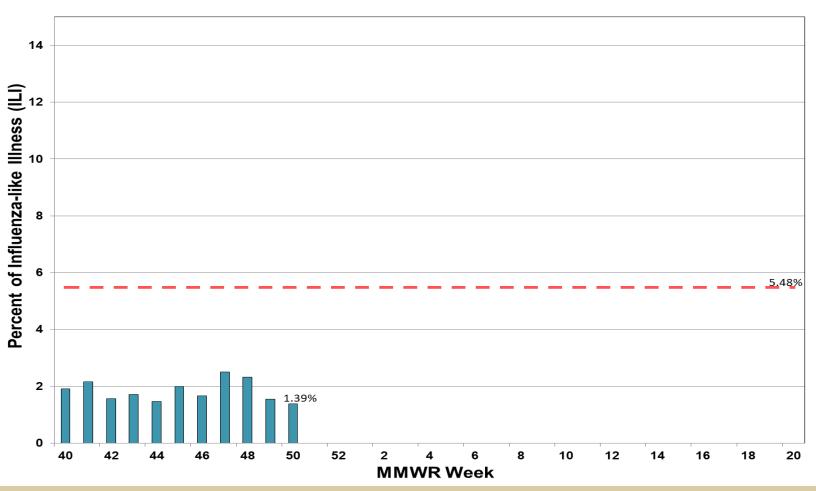


ILINet Providers

The percent of patient visits to ILINet Sentinel Providers for an influenza-like illness was 1.39%, which is below Wyoming's baseline (5.48%), and a slight decrease compared to week 49.

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

Key Updates: Seasonal influenza activity continues to increase across the country. Based on CDC calculations, transmission within Wyoming remained **minimal** this week. Nationally and in all HHS regions, the percentage of respiratory specimens testing positive for influenza virus in clinical laboratories increased compared to the previous week.



Weekly Percent of ILI Visits

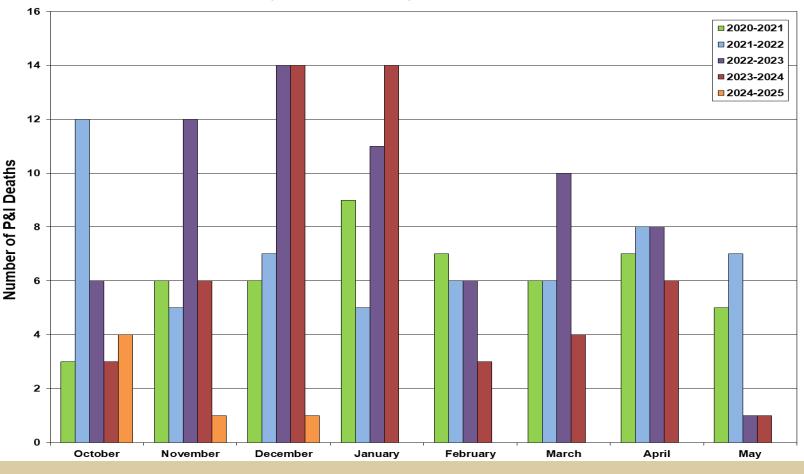
Pneumonia and Influenza Mortality



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 influenzaassociated deaths across the state.

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



Monthly P&I Mortality Reports (2020-2025)