

# INFLUENZA REPORT

2024-2025 Influenza Season

MMWR Week 52 (12/22/24-12/28/24)

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

# Overview (MMWR Week 52)



# Influenza and Influenza-like Illness Activity

# **Spread**

#### Regional

Transmission levels continue to increase across the state

# **Co-circulating**

#### Other Viruses:

SARS-CoV-2, Pertussis, and low levels of RSV

### **Outbreaks**

1

One newly reported LTCF outbreak this week

# **Syndromic**

25

Syndromic anomalies were reported this week; primarily in Fremont and Sweetwater counties

## Flu Activity

#### **Moderate**

Reported influenza activity has increased across the state

### **Seasonal Data**

### Types of Flu

Influenza A and B viruses are circulating

# Severity

#### **ED Visits**

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

### **EMS**

30

Suspected ILI reports this week

## **ILI** Activity

### **Increasing**

Reports of outpatient respiratory illnesses continue to trend upward

## **Subtypes**

### **Primary: A viruses**

Predominately H1N1 and H3N2 viruses reported across the country this week

### **Deaths**

0

No locally reported pediatric deaths; 11 pediatric deaths reported in the US so far this season

### **Hot Spots**

# **Tracking Trends**

Most counties reported a substantial increase in influenza case counts this week

# Geographic Spread



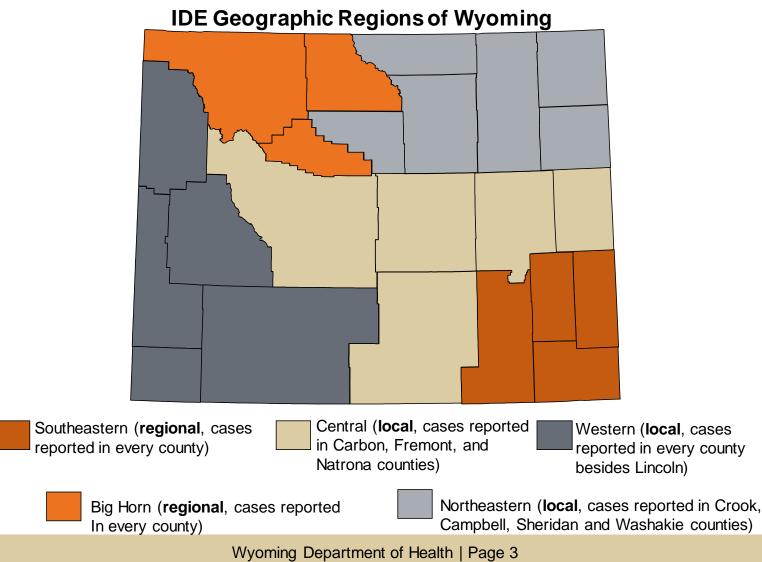
# **Geographic Activity by Regions**

Wyoming as a whole had moderate ILI activity this week (MMWR Week 52). Transmission levels are steadily increasing across the state.

Healthcare providers in 18 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 242 cases of influenza (rapid influenza diagnostic tests and PCR confirmed tests) this week.



# Virologic Surveillance



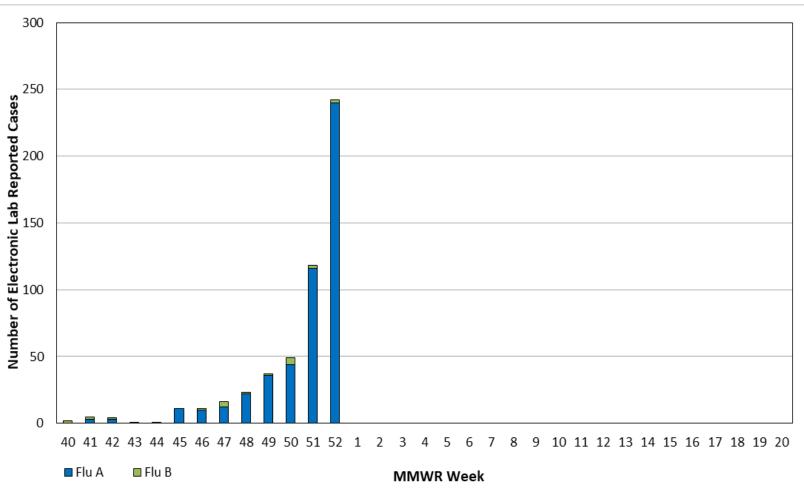
# **Public Health Laboratory**

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 substantially compared to week 51.

#### **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 52.

#### **Electronic Lab Reports of Influenza Cases**



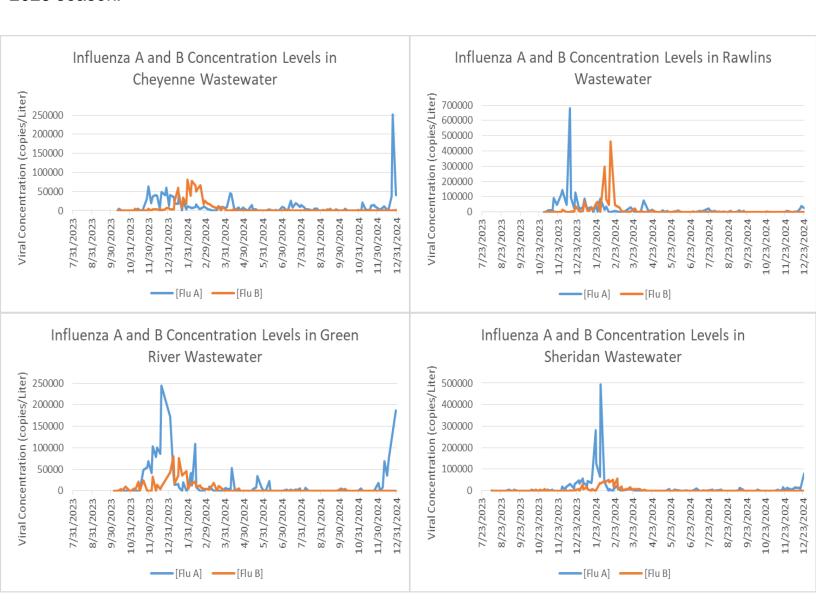
\* This graph is not representative of all influenza cases across the state

# 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



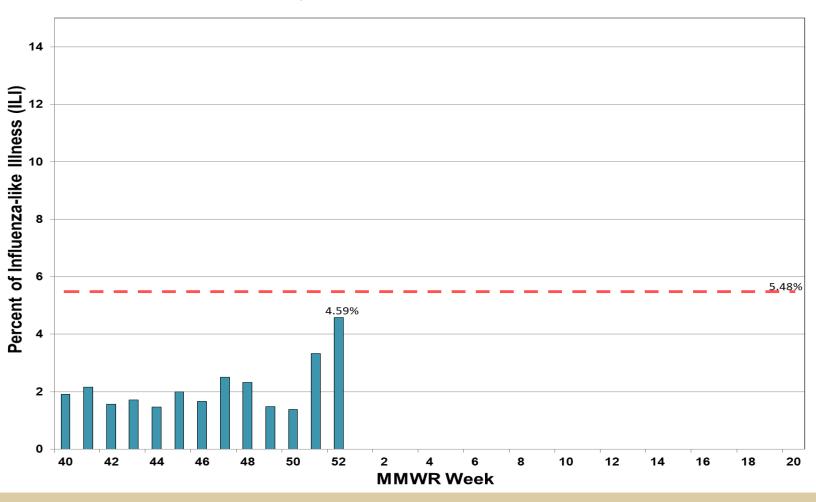
#### **ILINet Providers**

The percent of patient visits to ILINet Sentinel Providers for an influenza-like illness was 4.59%, which is below Wyoming's baseline (5.48%), and an increase compared to week 51.

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 and is elevated across most of the country. Based on CDC calculations, transmission within Wyoming was **moderate** this week. Outpatient respiratory illness is above baseline nationally for the fifth consecutive week and is above baseline in all 10 HHS regions

#### **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 influenza-associated deaths across the state.

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

#### Monthly P&I Mortality Reports (2020-2025)

