



# INFLUENZA REPORT

2024-2025 Influenza Season

MMWR Week 4 (1/19/25-1/25/25)

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



## Influenza and Influenza-like Illness Activity

### Spread

#### **Widespread**

Transmission levels continue to increase across the state

### Flu Activity

#### **Increasing**

Reported influenza activity has increased across the state

### ILI Activity

#### **Low**

Reports of outpatient respiratory illnesses continue to trend upward

### Co-circulating

#### **Other Viruses:**

SARS-CoV-2, Pertussis, 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 percent of ED visits and hospital admissions for influenza remains elevated

### Deaths

**0**

No locally reported pediatric deaths; 27 pediatric deaths reported in the US so far this season

### Syndromic

**0**

No syndromic anomalies were reported this week

### EMS

**32**

Suspected ILI reports this week

### Hot Spots

#### **Tracking Trends**

Case counts continue to increase in most counties



## Geographic Activity by Regions

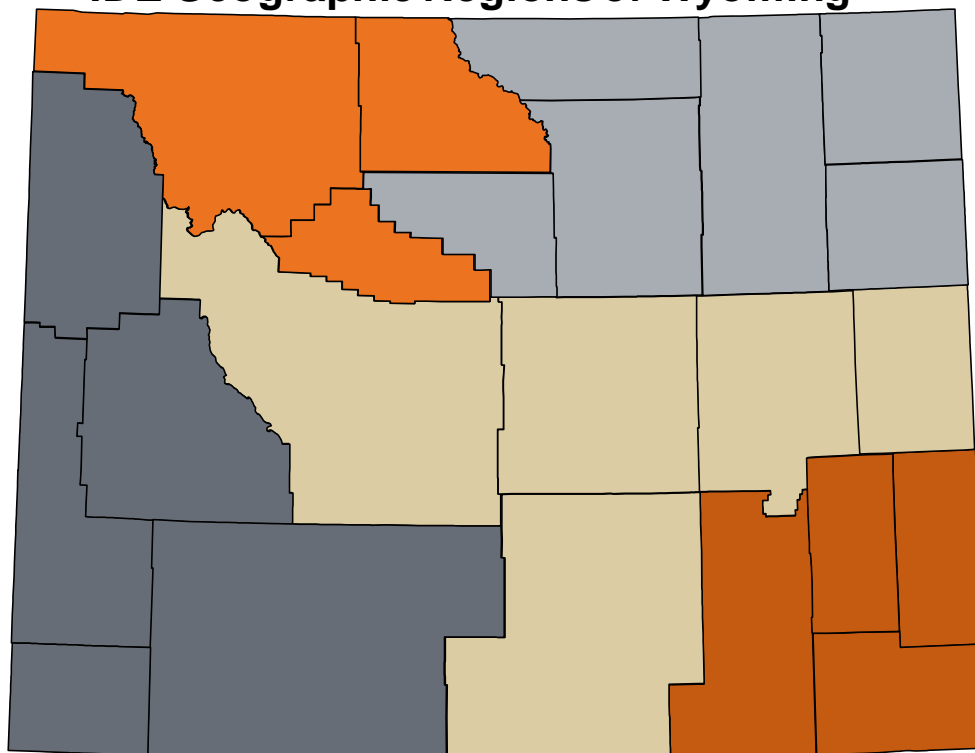
Wyoming as a whole had **low** ILI activity this week (MMWR Week 4). Transmission levels continue to increase across the state.

Healthcare providers in 19 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 **271 cases** of influenza (rapid influenza diagnostic tests and PCR confirmed tests) this week.

### IDE Geographic Regions of Wyoming



**Southeastern (widespread, cases reported in Laramie, Goshen, and Platte)**

**Central (widespread, cases reported in Carbon, Natrona, Niobrara, and Fremont)**

**Western (widespread, cases reported in every county besides Lincoln)**

**Big Horn (widespread, cases reported in every county)**

**Northeastern (widespread, cases reported in every county besides Johnson)**



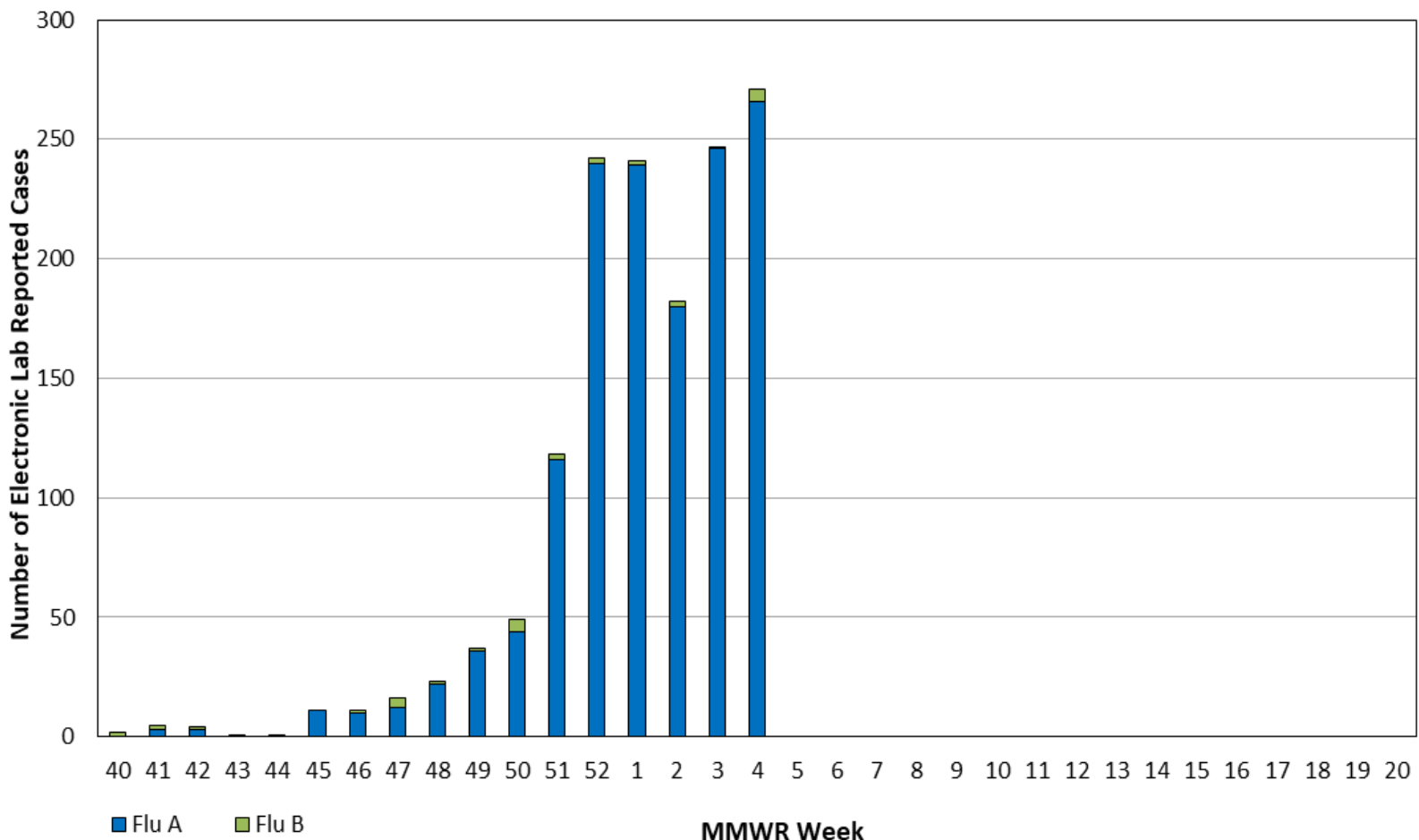
## Public Health Laboratory

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 3.

## 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 4.

### Electronic Lab Reports of Influenza Cases



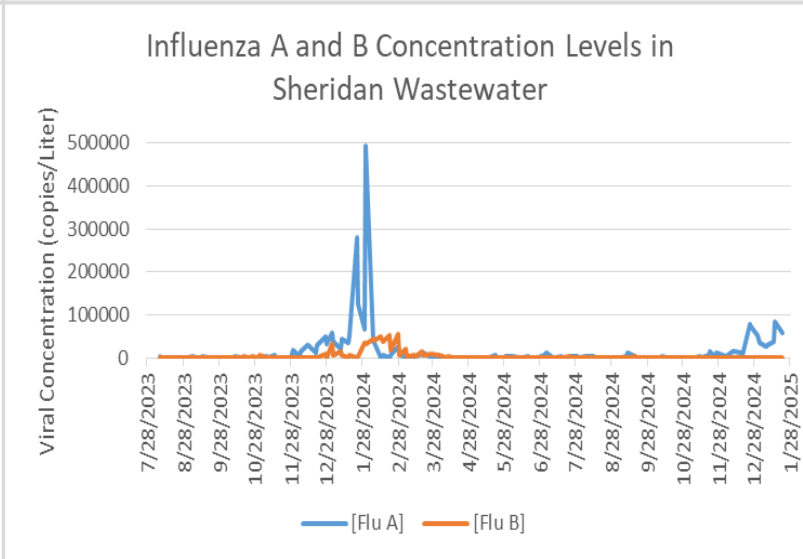
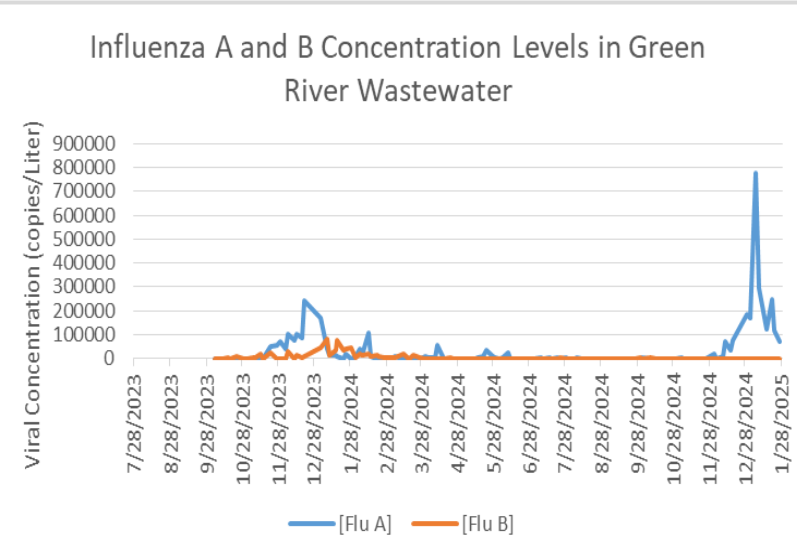
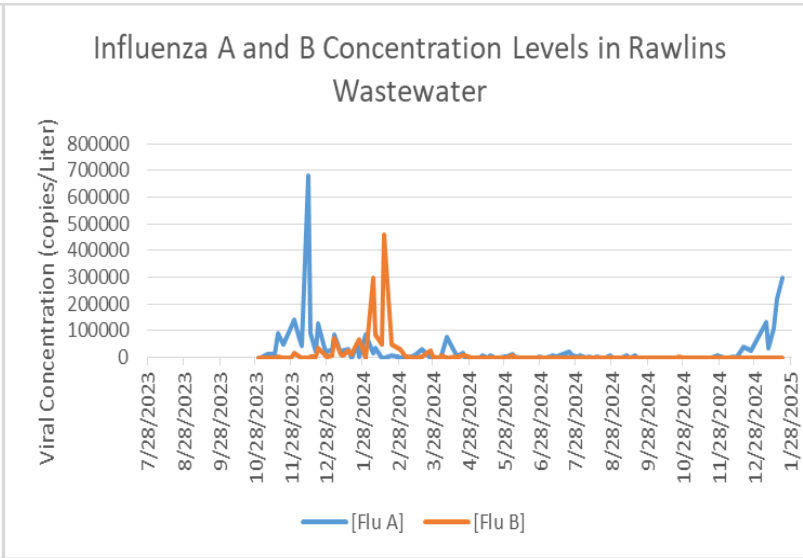
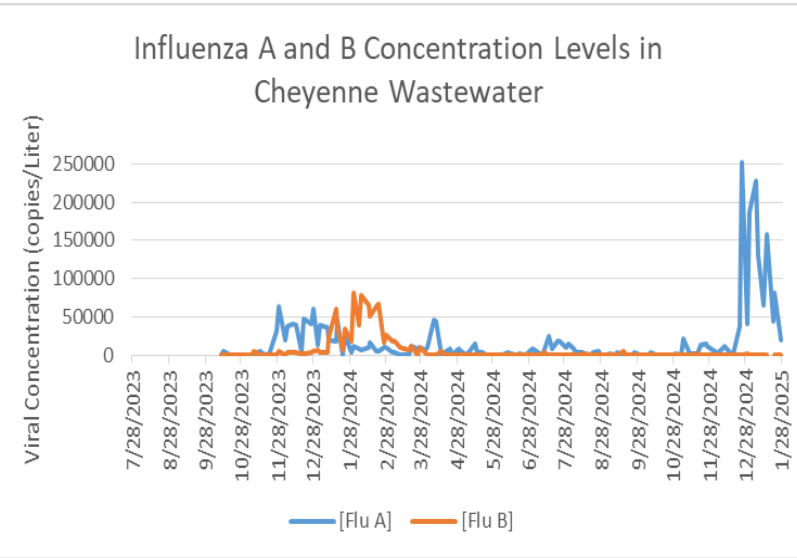
\* This graph is not representative of all influenza cases across the state

# 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 2024-2025 season. It is important to note that the high concentrations we have started to see recently have dwarfed many of the values that were detected last year.



## 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.

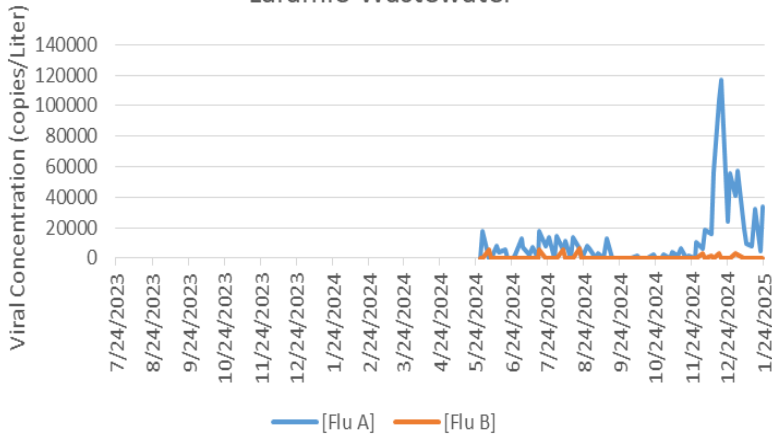
# Wastewater Surveillance Continued



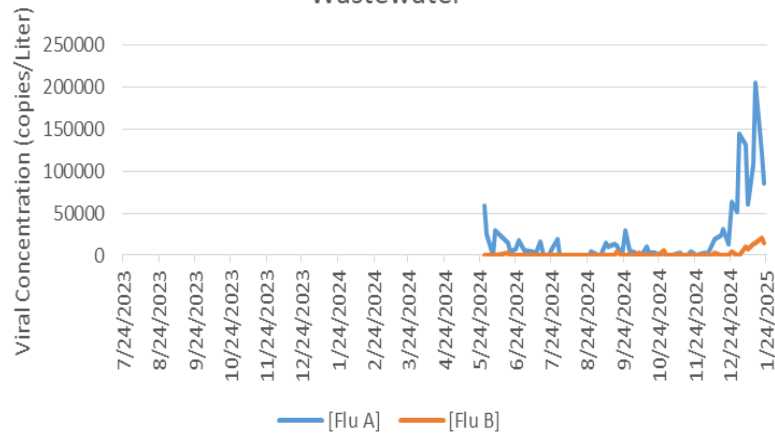
## Four additional sample sites:

Our colleagues at the University of Wyoming have also started to analyze wastewater samples that have been collected at four additional treatment facilities across the state. The graphs below show current trend lines of varying influenza concentrations detected in wastewater starting in June of 2024 up until present. The data depicted below does not include the 2023-2024 influenza season. As a result, the initial viral concentrations will appear diminished now that we are starting to see community wide viral spread.

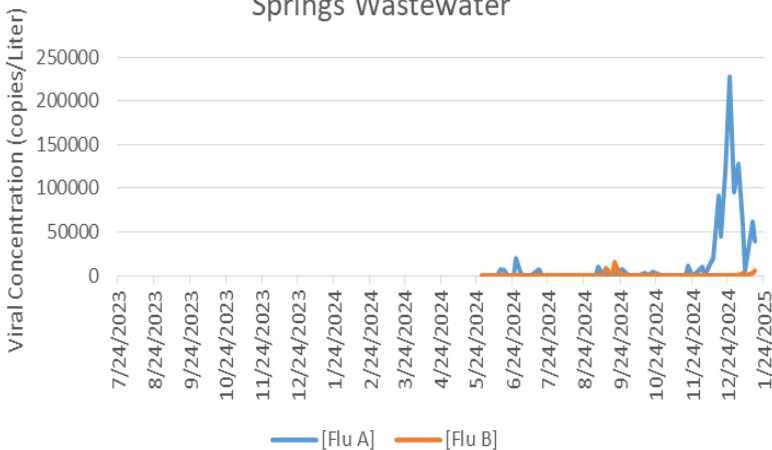
### Influenza A and B Concentration Levels in Laramie Wastewater



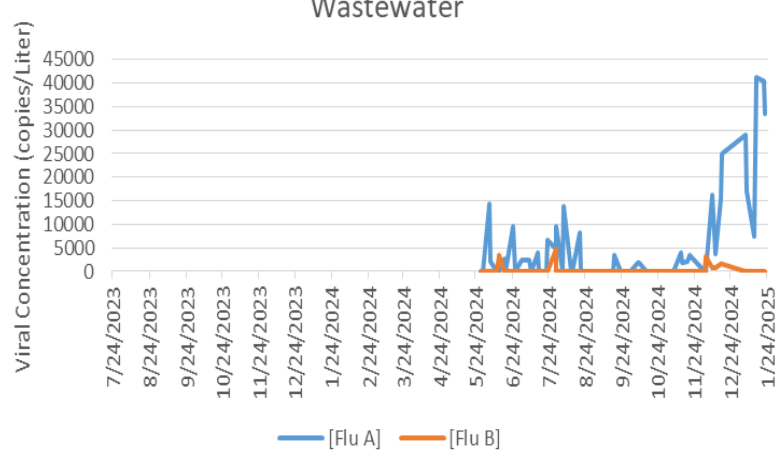
### Influenza A and B Concentration Levels in Jackson Wastewater



### Influenza A and B Concentration Levels in Rock Springs Wastewater



### Influenza A and B Concentration Levels in Gillette Wastewater





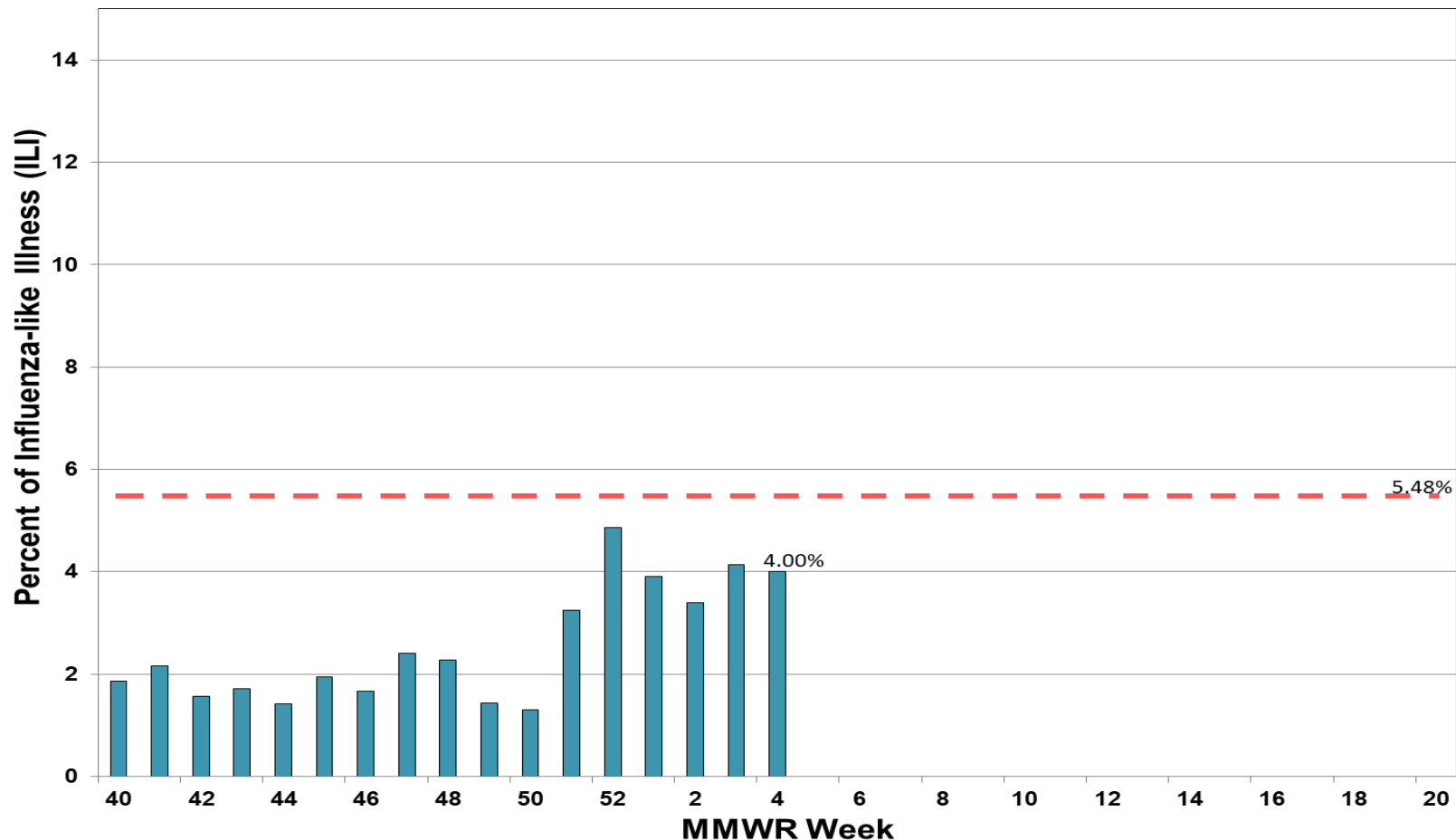
## ILINet Providers

The percent of patient visits to ILINet Sentinel Providers for an influenza-like illness was **4.00%**, which is **below** Wyoming's baseline (**5.48%**), and a slight decrease compared to week 3.

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

## 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 26 pneumonia and influenza (P&I) mortality reports certified since the beginning of the 2024-2025 Influenza Season.

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

