Nebraska Influenza and Other Respiratory Disease Surveillance 2024-2025

September 24th, 2024

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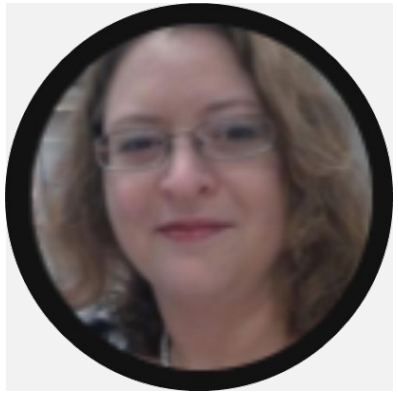
DEPT. OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC HEALTH

Nebraska Influenza and other Respiratory Disease Surveillance Team (aka NIRDS team ☺)



ROBIN WILLIAMS, MPH

Epidemiology Unit Administrator

DEREK JULIAN, MPH

Influenza Surveillance Coordinator

SAI PARITALA, PHARM.D, MPH

COVID-19 Epidemiologist

HANNAH BALL, MPH

Infectious Disease Epidemiologist

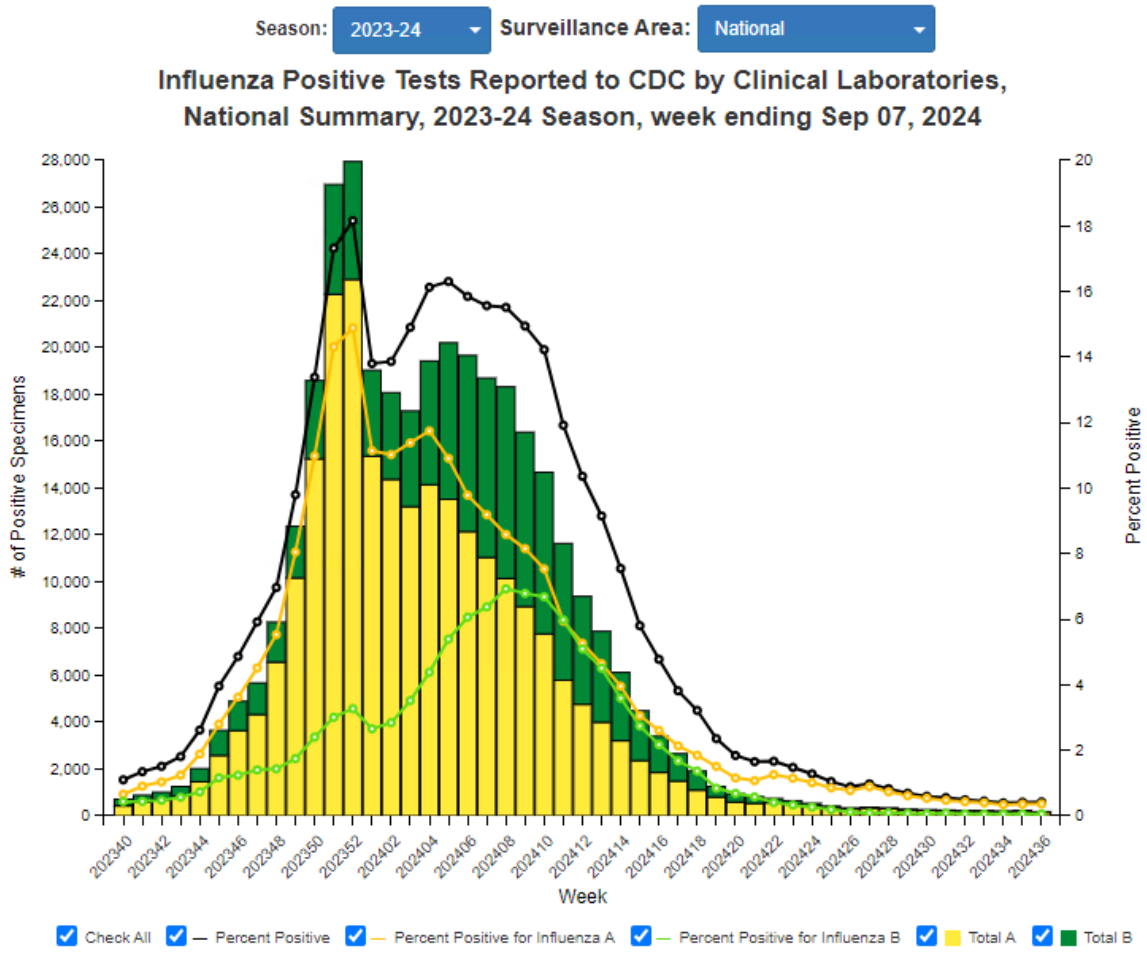
QUBILAH MONTGOMERY

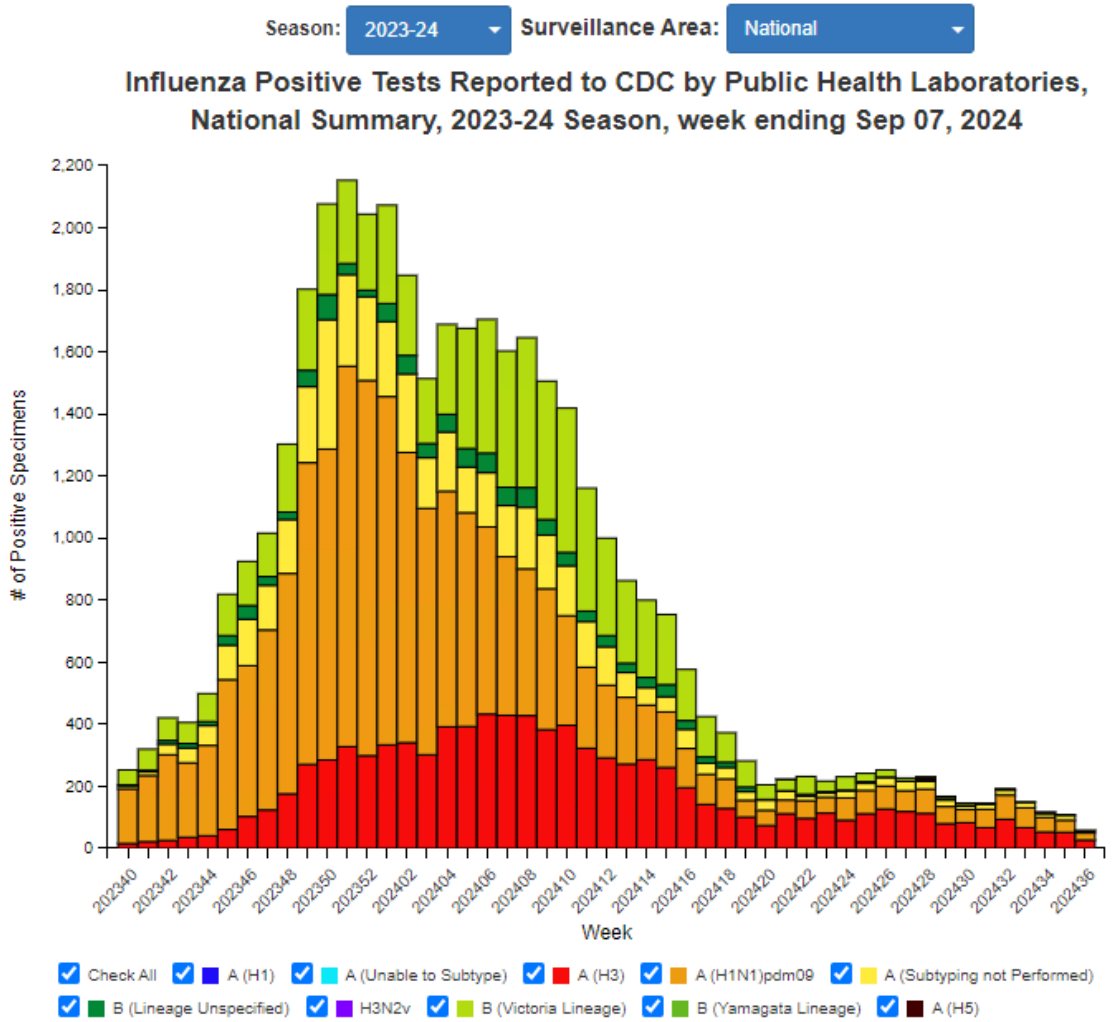
CDC Public Health Associate

What is Happening with Influenza

- Influenza (Flu) is a contagious respiratory illness caused by multiple influenza viruses
  - Flu A and B are the two main types of flu viruses
- Since 2010 (excluding 20-21 season), CDC estimates 9 million - 41 million flu illnesses occur each year in U.S.
- Influenza A H1N1 was the predominant strain during the 2023-24 season (nationally and in NE)
- 2024 southern hemisphere flu activity has varied across countries
  - Most countries experienced low to moderate flu activity reported with a few countries reporting high activity (Chile, Uruguay, Ecuador, Zambia, South Africa)
  - South America and Oceania: primarily flu A(H3N2)
  - Africa: primarily flu A(H1N1)
  - https://www.cdc.gov/flu/spotlights/2023-2024/southern-hemisphere-flu.htm
- The 2024-25 flu surveillance season begins on September 29th
  - Current flu activity remains low

US Influenza Surveillance 2023-24 Season





https://www.cdc.gov/fluview/surveillance

Influenza Vaccination

- Annual flu vaccination is recommended for everyone 6 months and older as it is the most effective way to prevent influenza
  - Those 65 and older are recommended for a higher dose
- Flu vaccine is now trivalent; no longer quadrivalent
  - Flu B Yamagata has been dropped from the vaccine; has not been detected globally since 2020
- There are two types of flu vaccines: egg-based and cell- or recombinant-based:
  - Trivalent formation of **egg-based** influenza
    - an A/Victoria/4897/2022 (H1N1)pdm09-like virus
    - an A/Thailand/8/2022 (H3N2)-like virus (Updated)
    - a B/Austria/1359417/2021 (B/Victoria lineage)-like virus
  - Trivalent formation of **cell- or recombinant-based** influenza
    - an A/Wisconsin/67/2022 (H1N1)pdm09-like virus
    - an A/Massachusetts/18/2022 (H3N2)-like virus (Updated)
    - a B/Austria/1359417/2021 (B/Victoria lineage)-like virus

Nebraska's Influenza Surveillance Program

- Influenza surveillance started in Nebraska in 2003 and has grown to include 7 surveillance systems
  - Allows us to determine when we first start to see flu activity each year
  - Provides an indicator of the progression of the influenza season as well as prevalence of disease in the community
  - Identifies what strains of influenza are circulating in any given year, thus determining whether the current vaccine protects against the circulating strain
- Our surveillance program is a collaborative effort between DHHS, local health departments, public health and clinical laboratories, vital statistics offices, healthcare providers, clinics, emergency departments, hospitals, etc.

Nebraska Influenza Surveillance Systems

- Laboratory Surveillance
- School Absenteeism Surveillance
- Outpatient Influenza-like Illness Surveillance (ILINet)
- Emergency Department (ED) Syndromic Surveillance
- Outbreak Reporting
- Hospital Influenza-like Illness (ILI) Admissions Surveillance
- Mortality Surveillance

Laboratory Surveillance

- On a weekly basis, 31 laboratories submit data to an on-line database
  - Number of influenza and RSV tests performed and number of positives (173 NAC 1 1-005.01C)
- 158 laboratories submit influenza electronic lab reports (ELR) daily (173 NAC 1 1-004.02)
- All other hospitals and clinics only report during outbreak situations (173 NAC 1 1-005.01B)
- Sentinel laboratories are asked to routinely submit specimens to the Nebraska Public Health Laboratory (NPHL) for PCR testing and sub-typing of the influenza virus
  - 1 per LHD selected based on highest reported flu testing volume during previous surveillance season
    - Provided 10 collection kits. Specimens submitted to NPHL get tested for flu A/B, RSV, and SARS-CoV-2
    - Throughout surveillance season, top specimen submitters will have chance to win $50 dollar gift card (weekly) or $250 gift card (total season)
  - NPHL submits specimens to the CDC to determine the strain of influenza circulating during the current season along with antiviral resistance and assists with the determination of the following year's influenza vaccine

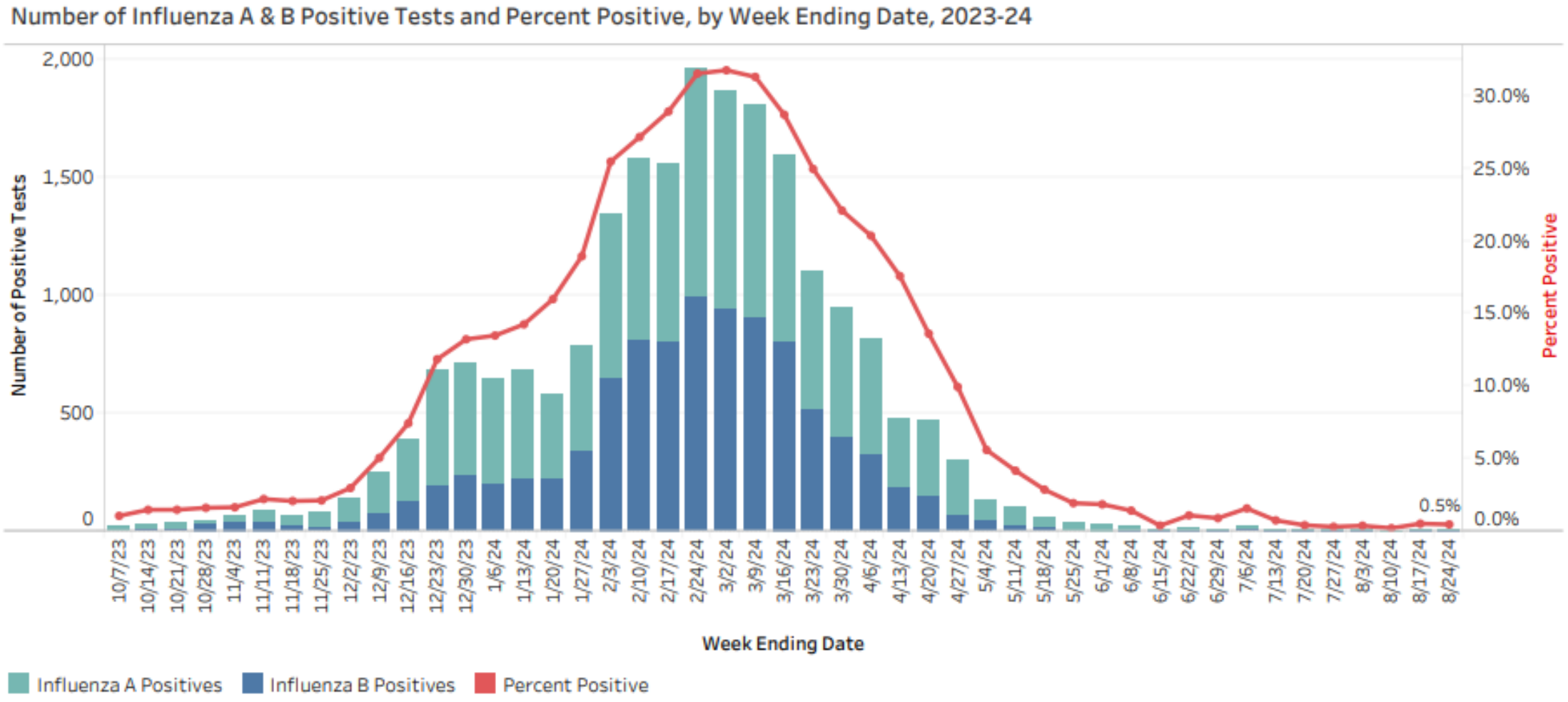
Laboratory Surveillance

- When laboratories submit specimens, they do so by using a system called NUlirt
- In NUlirt, labs will begin an order by searching for a patient or creating a new patient for people who are not in the system yet
- After filling in the ordering provider and type of test, the lab will answer some epidemiologic questions
- Once the order is reviewed and complete, the lab will send the specimen along with a printed page of the order to NPHL
- To create a NUlirt account or for other questions, please call NPHL Client Services: 402-559-2440, or visit https://www.nphl.org/index.cfm/nulirt/

Laboratory Surveillance: Novel Influenza

- Strong laboratory surveillance is crucial for novel influenza detections
  - MO human flu A(H5N1) case detected through routine surveillance
- Subtype identification for influenza A positives is important especially when testing persons with potentially high-risk exposures
  - Underlines the importance of obtaining thorough exposure histories on patients when influenza subtyping is not immediately possible
- For unsubtypable flu A positive specimens (flu A pos and A(H1) & A(H3) neg), your LHD or DHHS should be contacted immediately so further testing can be coordinated with NPHL
  - Sooner the notification -> faster the response -> lower risk of potential spread

Laboratory Surveillance

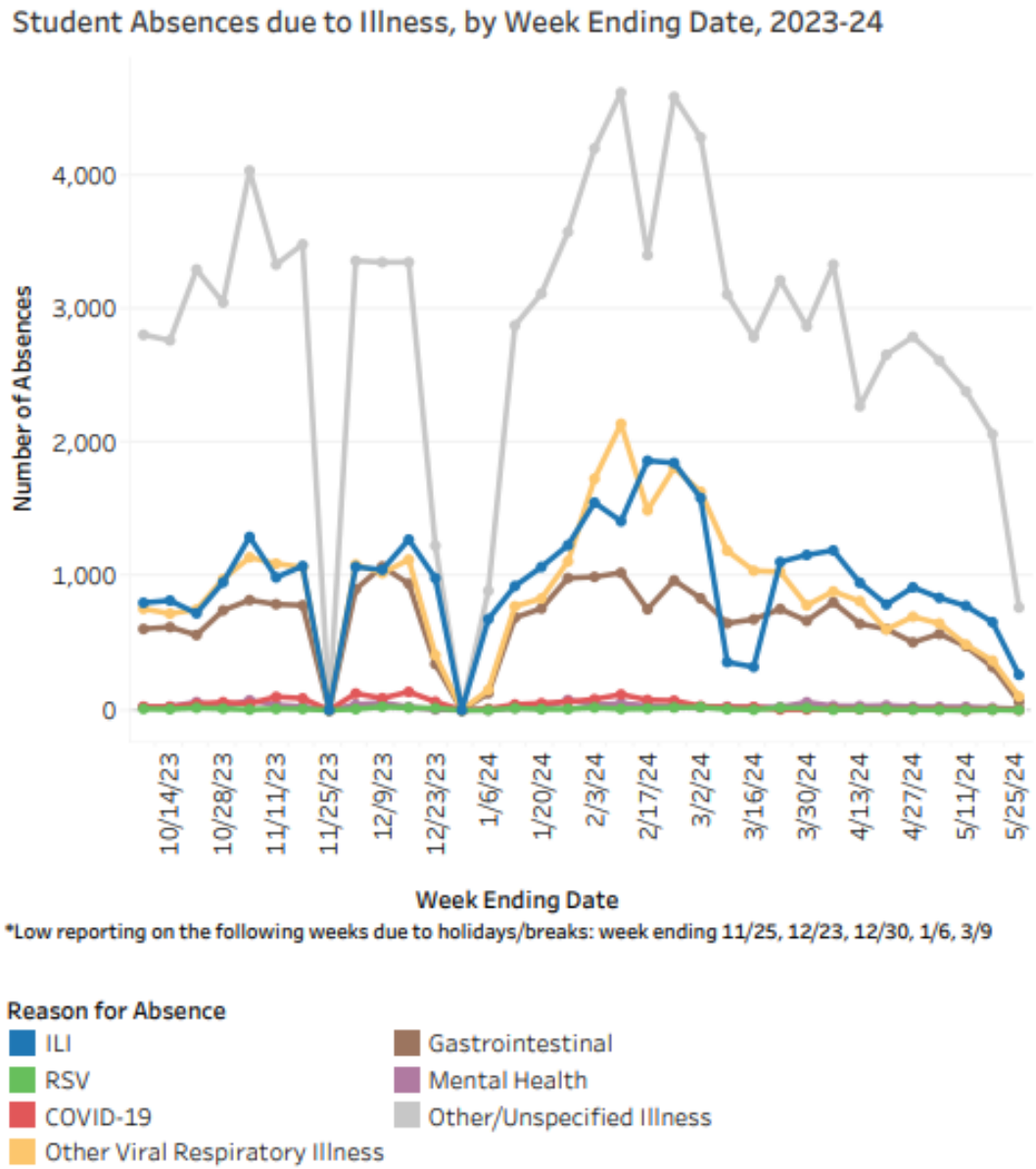


School Absenteeism Surveillance

- On a weekly basis, schools submit the number of absent students due to illness through the School Absenteeism REDCap Survey
- Once a school is enrolled, they will receive a new survey every week to complete
  - Information collected in the survey includes the number of absences, reason for absences, and if any classrooms or the school was closed
- Please contact your local health department if you are interested in enrolling your school in this surveillance program
  - To check for potential duplicates, LHD's can log in REDCap and either browse the dashboard or search the report called "Active Schools"

For information on reducing the spread of seasonal influenza in schools, visit: Guidance for School Administrators to Help Reduce the Spread of Seasonal Influenza in K-12 Schools

School Absenteeism Surveillance



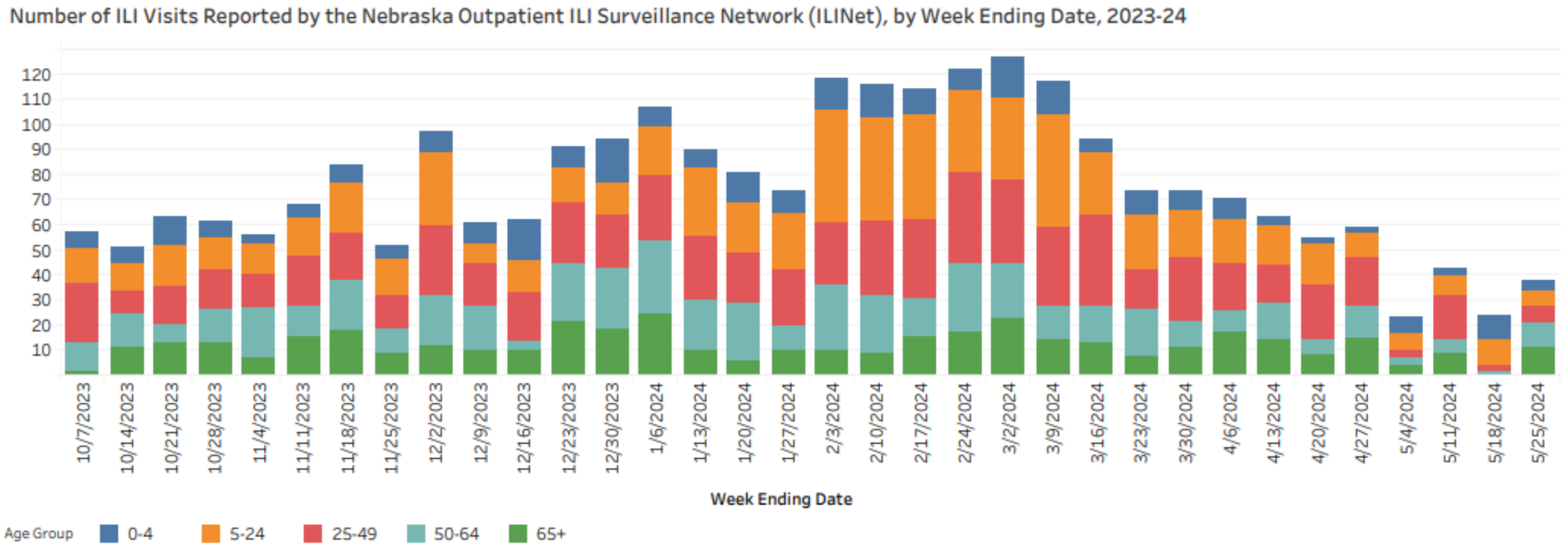
Outpatient Influenza-like Illness Surveillance (ILINet)

- On a weekly basis, a select group of Nebraska physicians (12) participate in the Outpatient Influenza-like Illness Surveillance Network (ILINet)
  - The sentinel providers report data to CDC on the total number of office visits and the number of those patients with influenza-like illness (ILI), by age group (0-4, 5-24, 25-49, 50-64, and 65+)
    - The current case definition for ILI: clinically diagnosed with influenza or ILI; OR patient having fever ≥ 100°F (≥ 37.8°C), oral or equivalent, AND cough and/or sore throat
  - Providers also provide the number of patients seen within the past three years for each age group to give us a population served estimate

Outpatient Influenza-like Illness Surveillance (ILINet)

- Sentinel providers are given 10 specimen collection kits at the beginning of the flu season
  - New this year, all submitted specimens will be tested for influenza A/B, RSV, and SARS-CoV-2 routinely.
    - If influenza positive, further testing will be done to determine subtype/lineage.
  - This season, $50 dollar gift card will be awarded to top specimen submitter each week during duration of season and $250 awarded to top specimen submitter overall for the surveillance season (Oct-May).
- The goal is for sentinel providers to report 85% of weeks during the flu season and to submit up to 10 specimens to NPHL
- We are looking to get two providers for each local health department
  - Current sentinel providers are from LLCHD (1), Sarpy/Cass (1), ELVLHD (1), West Central (1), Two Rivers (2), Three Rivers (1), Panhandle (2), Central (2), and Four Corners (1)

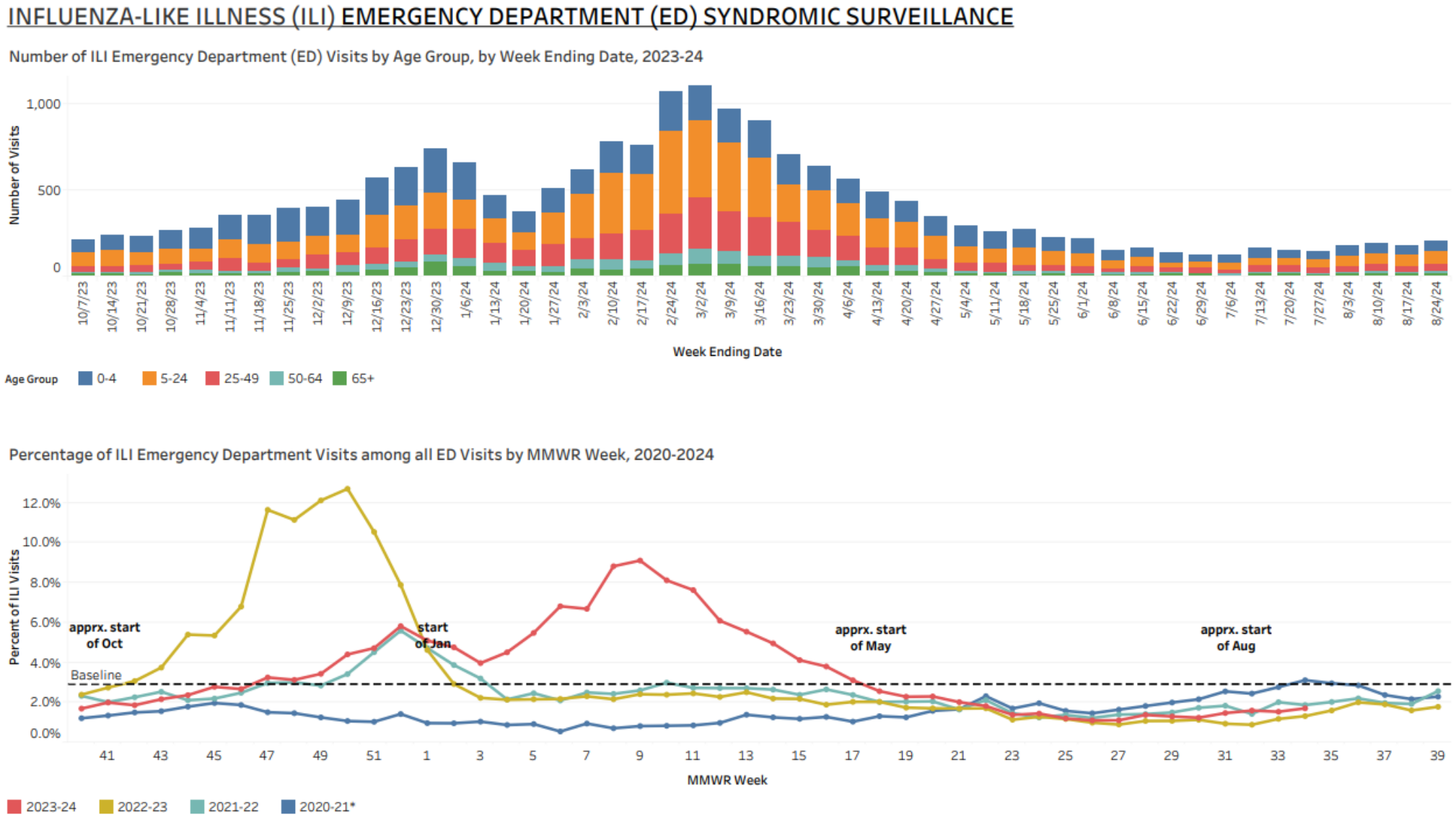
Outpatient Influenza-like Illness Surveillance (ILINet)



Emergency Department (ED) Syndromic Surveillance

- Syndromic surveillance: real-time (or near real-time) collection of patient visit data from clinics, EDs, hospitals, and other healthcare facilities
  - Currently submitting ED ILI data for 69 ED facilities across the state
  - Analyze discharge diagnoses and chief complaint data for ILI to help determine burden of ILI illness in EDs
  - Track total ILI visits by age group and percent of ILI visits among all ED visits, by reporting week
- Also utilize syndromic data to track ILI outpatient data from 10 Federally Qualified Health Centers (FQHCs)
- Report this data weekly to CDC's ILINet year round

Emergency Department (ED) Syndromic Surveillance



Outbreak Reporting

Reporting of respiratory outbreaks in long-term care facilities (LTCF), schools and other congregate settings is required by rules and regulations.

Outbreaks are required to be reported by rules and regulations:

- 173 NAC 1 1-004.01B Clusters, Outbreaks, or Unusual Events, Including Possible Bioterroristic Attacks: Clusters, outbreaks, or epidemics of any health problem, infectious or other, including food poisoning, healthcare-associated outbreaks or clusters, influenza, or possible bioterroristic attack; increased disease incidence beyond expectations; unexplained deaths possibly due to unidentified infectious causes; and any unusual disease or manifestations of illness must be reported immediately.

Definition of a respiratory outbreak (non COVID-19):

A sudden increase in acute febrile respiratory illness* over the normal background rate (e.g., 2 or more cases of acute respiratory illness occurring within 72 hours of each other).

*Acute febrile respiratory illness is defined as fever > 100°F AND one or more respiratory symptoms (runny nose, sore throat, laryngitis, or cough). However, please note that elderly patients with influenza may not develop a fever.

COVID-19 outbreak: historically, been defined as one case positive for COVID-19; ongoing discussions to update/reflect the respiratory outbreak definition

- If such a change occurs, it will be communicated with all appropriate partners (LHD, ICAP, LTCFs, etc.)

For information on preventing outbreaks in long-term care facilities, visit: Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities

Outbreak Reporting

- When a positive influenza, RSV, or any other respiratory virus test is identified in one of our long-term care facilities, DHHS reaches out to LHD's about a potential outbreak
  - LHD's will then contact the facility to see if they are experiencing an outbreak
- If there is an outbreak occurring, facilities and LHDs will complete our Outbreak Reporting survey through REDCap
- Please contact your local health department if a respiratory outbreak is identified
- Respiratory Outbreak Protocol is currently published on our website
  - An updated version of this is in progress

Outbreak Reporting

- The Outbreak Reporting survey has three forms to it
  - The initial outbreak summary form, the information about healthcare facilities form, and the patient line list form
- After the LHD or facility completes the Outbreak Summary form, they will create a password that they can use to get into the survey queue
- The LHD or facility will use the link and password to complete the healthcare facilities and patient line list forms that will appear in the survey queue

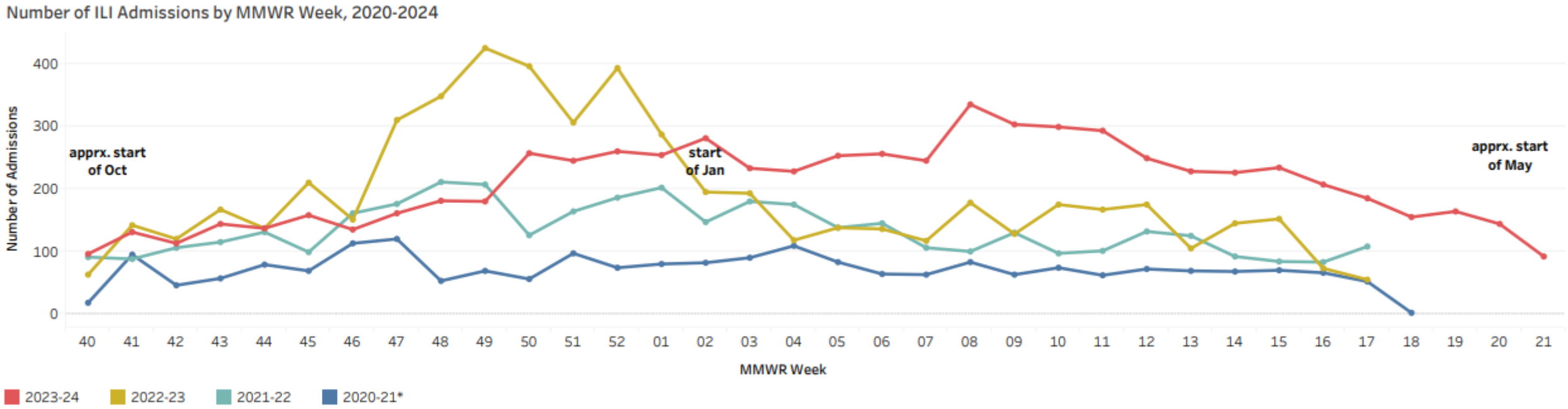
Infection Control Assessment and Promotion Program (ICAP)

- ICAP is a program that is supported by Nebraska DHHS HAI/AR program via a CDC grant with a team consisting of experienced infection preventionists, infectious disease trained medical directors, and professional educators
- They offer no cost, peer-peer infection control assessments and recommendations to all facilities in Nebraska
  - Conduct infection control assessments and recommendations
  - Collect and analyze data from the Office of Epidemiology
  - Update ICAP resources and guidance to fill infection control gaps
  - Provide resources to facilities that are experiencing outbreaks
- For more information about ICAP, please visit https://icap.nebraskamed.com/

Hospital Influenza-like Illness (ILI) Admissions Surveillance

- On a weekly basis, Nebraska Infection Preventionists from 87 hospitals submit influenza-like illness (ILI) admission data
  - Facility can submit the online form themselves
  - Facility can send data to their local health department for them to submit
- The current case definition for ILI is:
  - Clinically diagnosed with influenza or ILI
  - Has a fever ≥ 100°F (≥ 37.8°C), oral or equivalent, AND cough and/or sore throat

Hospital Influenza-like Illness (ILI) Admissions Surveillance



Mortality Surveillance

- Nebraska utilizes the electronic death registration system (EDRS) for surveillance of influenza-related and RSV-related deaths
  - We search for ICD-10 codes and causes of death related to influenza and RSV
  - It is very important to put influenza as an underlying cause if applicable
- It is required to report all influenza-associated pediatric deaths to a public health authority
- Display season death totals in respiratory report for influenza and RSV, respectively
  - Specify pediatric deaths in this report as well if reported

Respiratory Syncytial Virus (RSV)

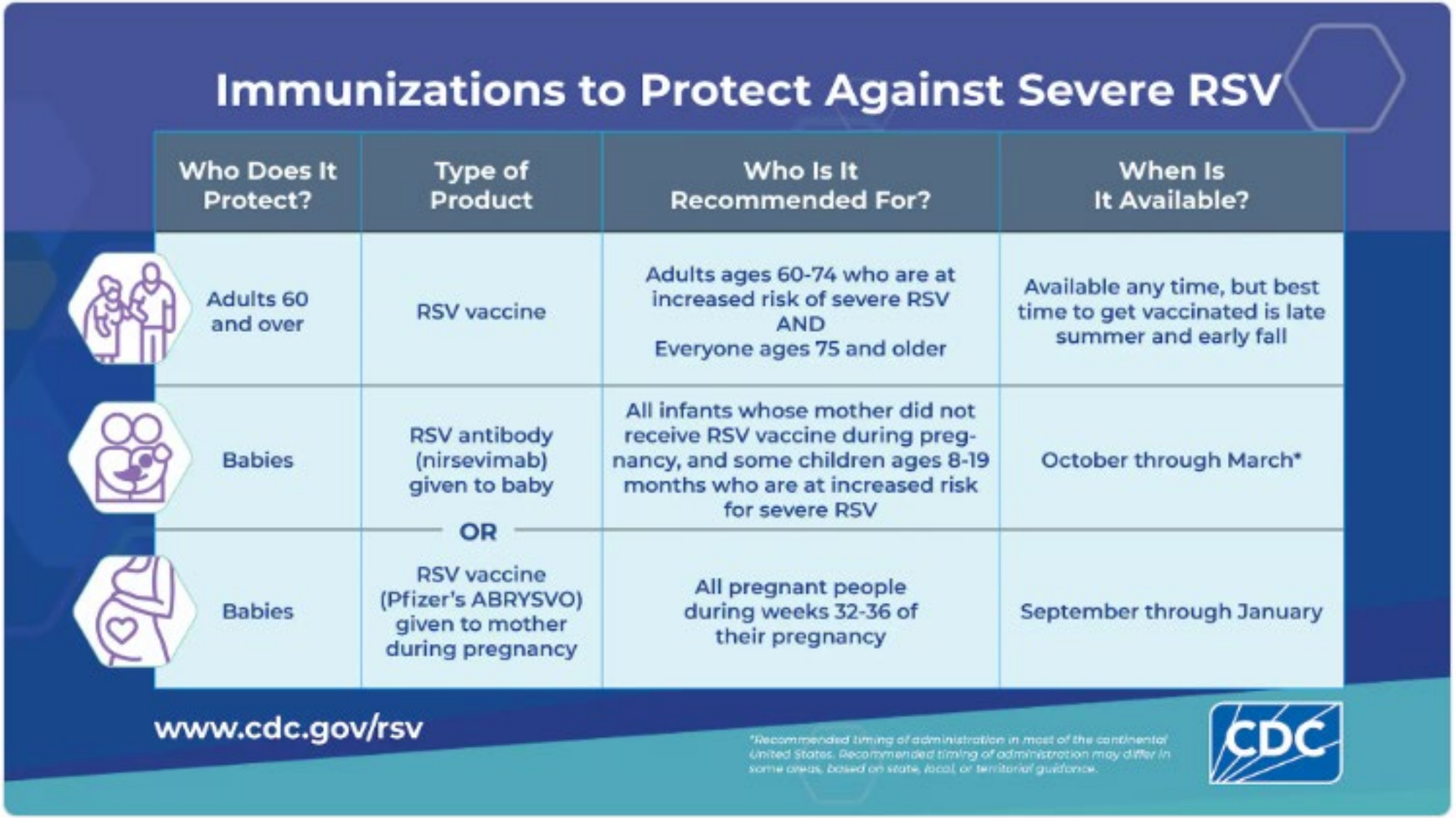
- CDC definition: “is a common respiratory virus that usually causes mild, cold-like symptoms”
  - Runny nose, coughing, sneezing, loss of appetite, wheezing, fever; s/s typically occur within 4-6 days after exposure
  - In very young infants, s/s may only appear as irritability, decreased activity, and difficulty breathing
- Transmission: mainly via respiratory droplets, but fomite transmission can occur
- Most people recover in 1-2 weeks but can be serious, especially for infants and older adults.
  - most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs) in children younger than 1 year of age in the United States.
- Care/Treatment: no specific treatment available for RSV
  - Manage fever/pain with over-the-counter meds, stay hydrated
  - Contact your healthcare provider as needed

Respiratory Syncytial Virus (RSV)

- Prevention: prevention methods are like prevention methods recommended to prevent transmission of other respiratory viruses, including influenza and COVID-19:
  - Covering your coughs/sneezes with a tissue or into your shirt sleeve, NOT into your hands
  - Frequently wash your hands with soap and water
  - Avoid close contact (i.e., kissing, shaking hands, sharing cups/utensils) with others, especially with those at risk of severe illness (i.e., young infants and elderly)
  - Clean and disinfect frequently touched surfaces
  - Stay home while sick and/or avoid others as best possible

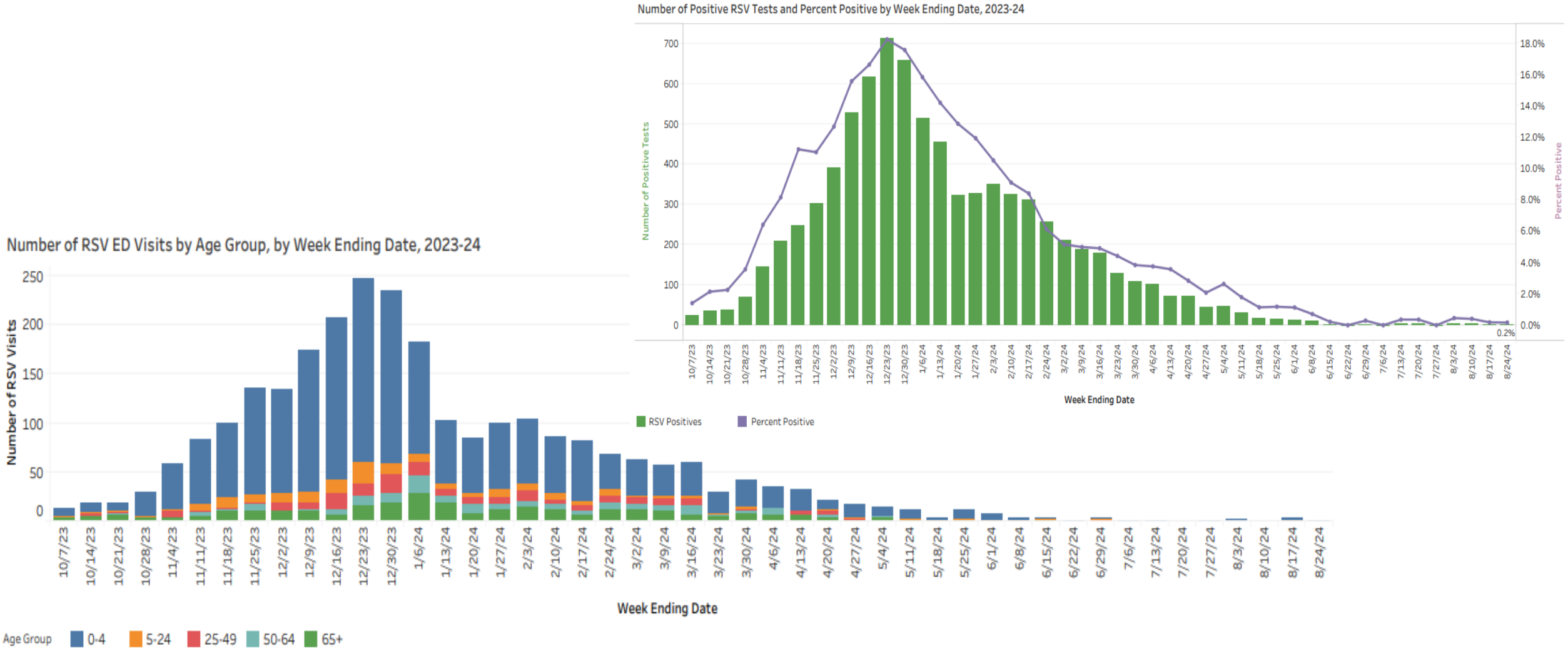
- There are two prescription monoclonal antibody therapies available to help prevent severe RSV illness in infants and children. These drugs help **PREVENT** serious illness, they **cannot help cure or treat** children who are already infected with RSV.
  - Nirsevimab – one dose only given before RSV season or within 1 week of birth if born during season (Oct – Mar)
    - All babies younger than 8 months of age born to mothers who didn't receive maternal RSV vaccine. Can also be given to young children aged 8-19 months of age who are at increased risk for severe RSV.
  - Palivizumab (SYNAGIS) – given monthly throughout RSV season (5 months)
    - For infants/young children under 24 months of age at increased risk of severe RSV disease based on gestational age and underlying medical conditions.

RSV Vaccination: Current Recommendations



Respiratory Syncytial Virus (RSV) Data

- Surveillance systems for RSV overlap with influenza
  - Laboratory, syndromic (ED **AND** inpatient facility data), outbreaks, mortality



COVID-19 Status 2024

High Wastewater Levels Nationwide

- **Most States:** "High" or "Very High" COVID-19 levels in wastewater
- **Nebraska:** Slight uptick in reported COVID-19 cases in Nebraska, particularly in urban areas, with most cases being mild to moderate
- **Regional Differences:** The West appears to have peaked, while other regions are still experiencing rising levels

Peak Signs Nationwide

- Emergency department visits and test positivity rates have peaked, indicating we may be on the verge of riding the wave down

Hospitalizations Rising

- For the third consecutive week, over 1,000 deaths from COVID-19 were reported. Hospitalizations continue to increase nationally
- **Nebraska:** Hospitalizations have remained steady and low, with no significant rise in severe outcomes

COVID-19 Status 2024

CDC Winter Projections

- Mathematical Models predict COVID-19 hospitalizations will remain higher than pre-pandemic levels

Two Likely Scenarios

- A similar or less severe COVID-19 winter compared to last year
- Continued elevated respiratory virus burden across the population

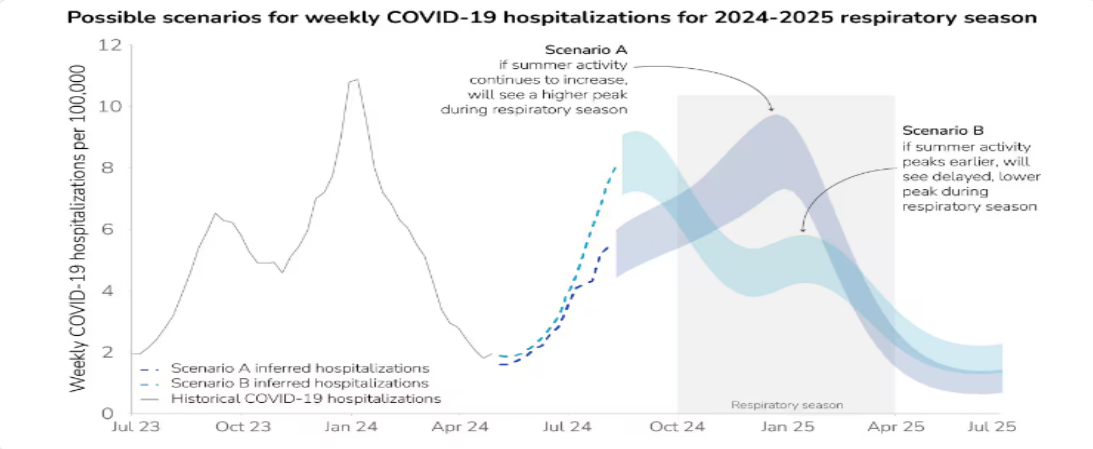


Figure 2. CDC scenario modeling indicates if summer activity peaks later, we will see a higher peak COVID-19 hospitalization burden during the respiratory season. Dashed lines represent inferred COVID-19 hospitalization rates for the summer, using hospitalization data for a relatively small subset of hospitals (Scenario A) or emergency department visit data (Scenario B). Ribbons represent 50% prediction interval range of scenario modeling results. The model is calibrated to NHSN data (historical COVID-19 hospitalizations line in figure).

COVID-19 Status 2024

- **Dominant Variants**: KP.1, KP.2, KP.3, and their sub lineages are the main variants in the U.S. as of August 2024

- **Impact**: These variants show slightly higher transmissibility and partial escape from previous immunity, contributing to a summer surge. However, hospitalizations and deaths remain low compared to previous surges

- **Vaccine Update**: The FDA approved new mRNA vaccines in August 2024, targeting the KP.2 variant to boost protection. These vaccines are now available for individuals aged 6 months and older

- **Effectiveness**: The updated vaccines offer strong protection against severe illness and hospitalization, even with slight immune escape by the variants

- **Broader Immunity**: While the KP.2-targeted vaccines are optimized for this variant, they also provide cross-protection against related subvariants like KP.1 and KP.3 due to similar spike protein mutations

COVID-19 Cases

Daily Nebraska COVID-19 Case Metrics

By Laboratory Report Date

In the past 7 days
668
cases were reported

In the past 7 days
95.4 average cases were reported
4.9 per 100K was the average incidence rate
Percent change was ▼ **-4.4%**

In the past 7 days
68.4%
of cases were by PCR test

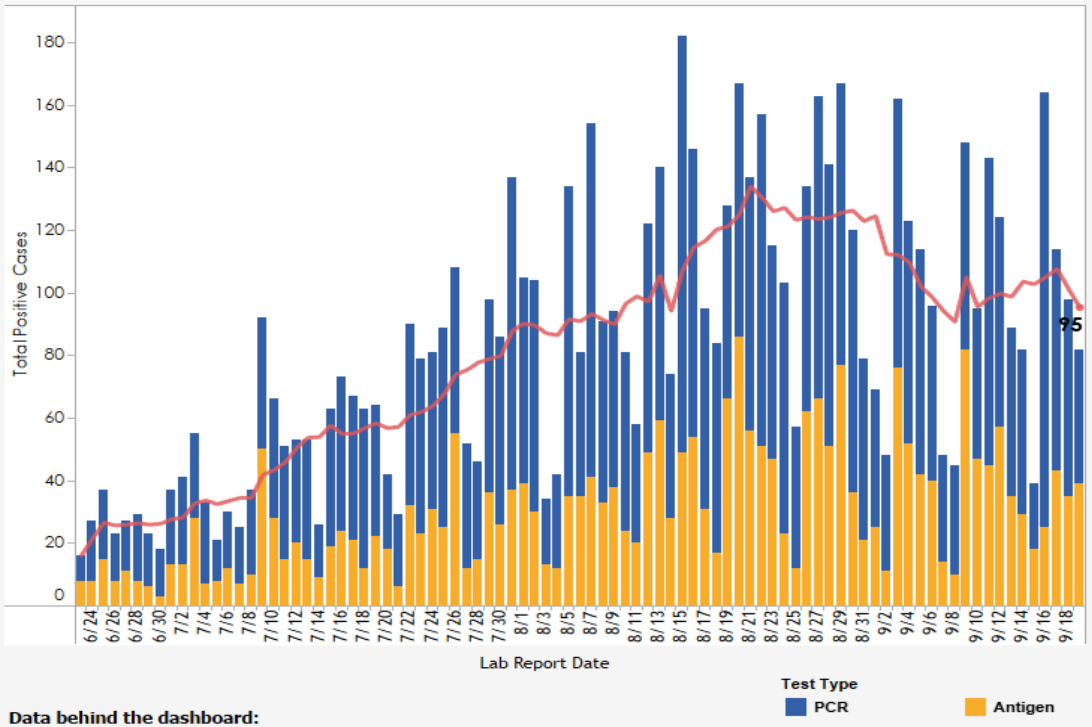
By Specimen Collection Date

In the past 7 days
688
cases were reported

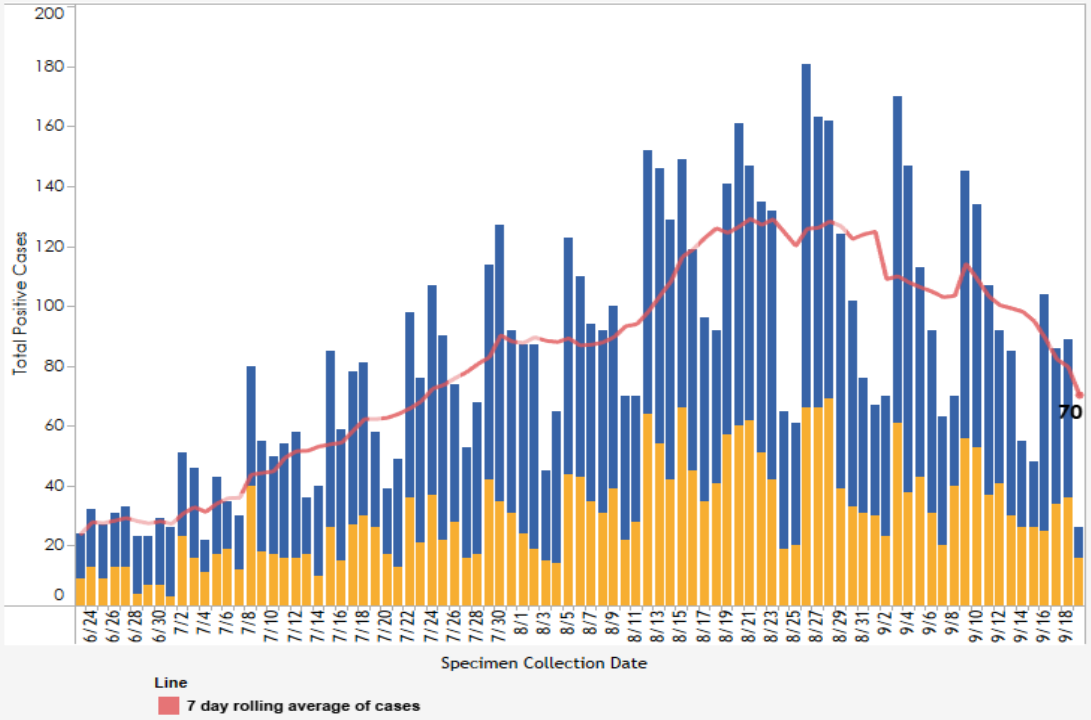
In the past 7 days
98.3 average cases were reported
5.1 per 100K was the average incidence rate
Percent change was ▼ **-4.7%**

In the past 7 days
68.4%
cases were by PCR test

Daily New COVD-19 **Cases** by **Lab Report Date**, by Test Type, and Last 90 Days



Daily New COVID-19 **Cases** by **Specimen Collection Date**, by Test Type, and Last 90 Days



Test Type
PCR
Antigen

Line
7 day rolling average of cases

Data behind the dashboard:

COVID-19 positive (PCR & Antigen) numbers sourced from the COVID-19 laboratory re-infection data from the Nebraska Electronic Disease Surveillance System (NEDSS)

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COVID-19 Local Health Department Trends

Local Health Department Weekly COVID-19 Trends

Weekly LHD Trends, by Lab Report Date

Weekly Cases, Weekly Percent Positive, Weekly Case Rate (per 100K)

Weekly Case Rate: 6.5 – 86.4

LHD short	8/11/2024	8/18/2024	8/25/2024	9/1/2024	9/8/2024
Central	Cases: 17 / 15.0% pos Week Rate: 22	Cases: 22 / 16.7% pos Week Rate: 28	Cases: 26 / 20.0% pos Week Rate: 33	Cases: 19 / 15.1% pos Week Rate: 24	Cases: 38 / 18.3% pos Week Rate: 48
Dakota	Cases: 6 / 60.0% pos Week Rate: 30	Cases: 3 / 75.0% pos Week Rate: 15	Cases: 4 / 80.0% pos Week Rate: 20	Cases: 5 / 100.0% pos Week Rate: 25	Cases: 2 / 50.0% pos Week Rate: 10
Douglas	Cases: 249 / 25.0% pos Week Rate: 44	Cases: 287 / 24.3% pos Week Rate: 50	Cases: 259 / 19.5% pos Week Rate: 45	Cases: 185 / 19.7% pos Week Rate: 32	Cases: 186 / 15.1% pos Week Rate: 33
East Central	Cases: 18 / 41.9% pos Week Rate: 34	Cases: 17 / 32.7% pos Week Rate: 32	Cases: 36 / 46.8% pos Week Rate: 68	Cases: 15 / 26.2% pos Week Rate: 28	Cases: 14 / 23.0% pos Week Rate: 26
Elkhorn Logan Valley	Cases: 19 / 47.5% pos Week Rate: 34	Cases: 20 / 39.2% pos Week Rate: 36	Cases: 14 / 24.5% pos Week Rate: 25	Cases: 14 / 24.6% pos Week Rate: 25	Cases: 27 / 41.8% pos Week Rate: 48
Four Corners	Cases: 3 / 3.5% pos Week Rate: 7	Cases: 6 / 9.8% pos Week Rate: 14	Cases: 25 / 33.8% pos Week Rate: 57	Cases: 10 / 23.8% pos Week Rate: 23	Cases: 6 / 8.1% pos Week Rate: 14
Lincoln/Lancaster	Cases: 148 / 23.8% pos Week Rate: 46	Cases: 138 / 17.7% pos Week Rate: 43	Cases: 149 / 17.1% pos Week Rate: 47	Cases: 101 / 14.2% pos Week Rate: 32	Cases: 125 / 16.4% pos Week Rate: 39
Loup Basin	Cases: 5 / 35.3% pos Week Rate: 16	Cases: 9 / 43.5% pos Week Rate: 29	Cases: 4 / 21.1% pos Week Rate: 13	Cases: 6 / 25.0% pos Week Rate: 20	Cases: 3 / 15.8% pos Week Rate: 10
North Central	Cases: 7 / 19.6% pos Week Rate: 16	Cases: 7 / 23.7% pos Week Rate: 16	Cases: 7 / 18.4% pos Week Rate: 16	Cases: 20 / 35.1% pos Week Rate: 45	Cases: 12 / 21.0% pos Week Rate: 27
Northeast	Cases: 9 / 52.6% pos Week Rate: 29	Cases: 7 / 43.8% pos Week Rate: 23	Cases: 2 / 12.5% pos Week Rate: 7	Cases: 5 / 27.3% pos Week Rate: 16	Cases: 8 / 25.7% pos Week Rate: 26
Panhandle	Cases: 37 / 23.7% pos Week Rate: 44	Cases: 41 / 28.4% pos Week Rate: 49	Cases: 34 / 20.2% pos Week Rate: 41	Cases: 64 / 32.3% pos Week Rate: 77	Cases: 72 / 29.1% pos Week Rate: 86
Public Health Solutions	Cases: 35 / 35.7% pos Week Rate: 66	Cases: 40 / 29.9% pos Week Rate: 75	Cases: 44 / 35.7% pos Week Rate: 83	Cases: 46 / 34.5% pos Week Rate: 86	Cases: 44 / 27.6% pos Week Rate: 83
Sarpy/Cass	Cases: 106 / 30.4% pos Week Rate: 50	Cases: 125 / 27.7% pos Week Rate: 59	Cases: 120 / 25.3% pos Week Rate: 56	Cases: 63 / 18.3% pos Week Rate: 30	Cases: 64 / 15.2% pos Week Rate: 30
South Heartland	Cases: 10 / 19.0% pos Week Rate: 22	Cases: 9 / 16.1% pos Week Rate: 20	Cases: 12 / 14.0% pos Week Rate: 27	Cases: 6 / 13.3% pos Week Rate: 13	Cases: 7 / 13.6% pos Week Rate: 15
Southeast	Cases: 23 / 35.9% pos Week Rate: 60	Cases: 22 / 32.4% pos Week Rate: 57	Cases: 25 / 27.8% pos Week Rate: 65	Cases: 29 / 27.6% pos Week Rate: 75	Cases: 26 / 19.8% pos Week Rate: 67
Southwest	Cases: 6 / 15.8% pos Week Rate: 16	Cases: 11 / 20.8% pos Week Rate: 29	Cases: 5 / 13.3% pos Week Rate: 13	Cases: 10 / 22.2% pos Week Rate: 26	Cases: 18 / 30.6% pos Week Rate: 47
Three Rivers	Cases: 60 / 29.1% pos Week Rate: 76	Cases: 54 / 30.0% pos Week Rate: 68	Cases: 49 / 20.6% pos Week Rate: 62	Cases: 29 / 26.9% pos Week Rate: 37	Cases: 38 / 16.4% pos Week Rate: 48
Two Rivers	Cases: 41 / 34.4% pos Week Rate: 42	Cases: 43 / 30.0% pos Week Rate: 44	Cases: 27 / 21.2% pos Week Rate: 28	Cases: 15 / 14.1% pos Week Rate: 15	Cases: 14 / 11.2% pos Week Rate: 14
West Central	Cases: 12 / 21.8% pos Week Rate: 32	Cases: 11 / 19.4% pos Week Rate: 29	Cases: 5 / 11.3% pos Week Rate: 13	Cases: 7 / 11.3% pos Week Rate: 18	Cases: 11 / 17.5% pos Week Rate: 29

Data behind the dashboard:

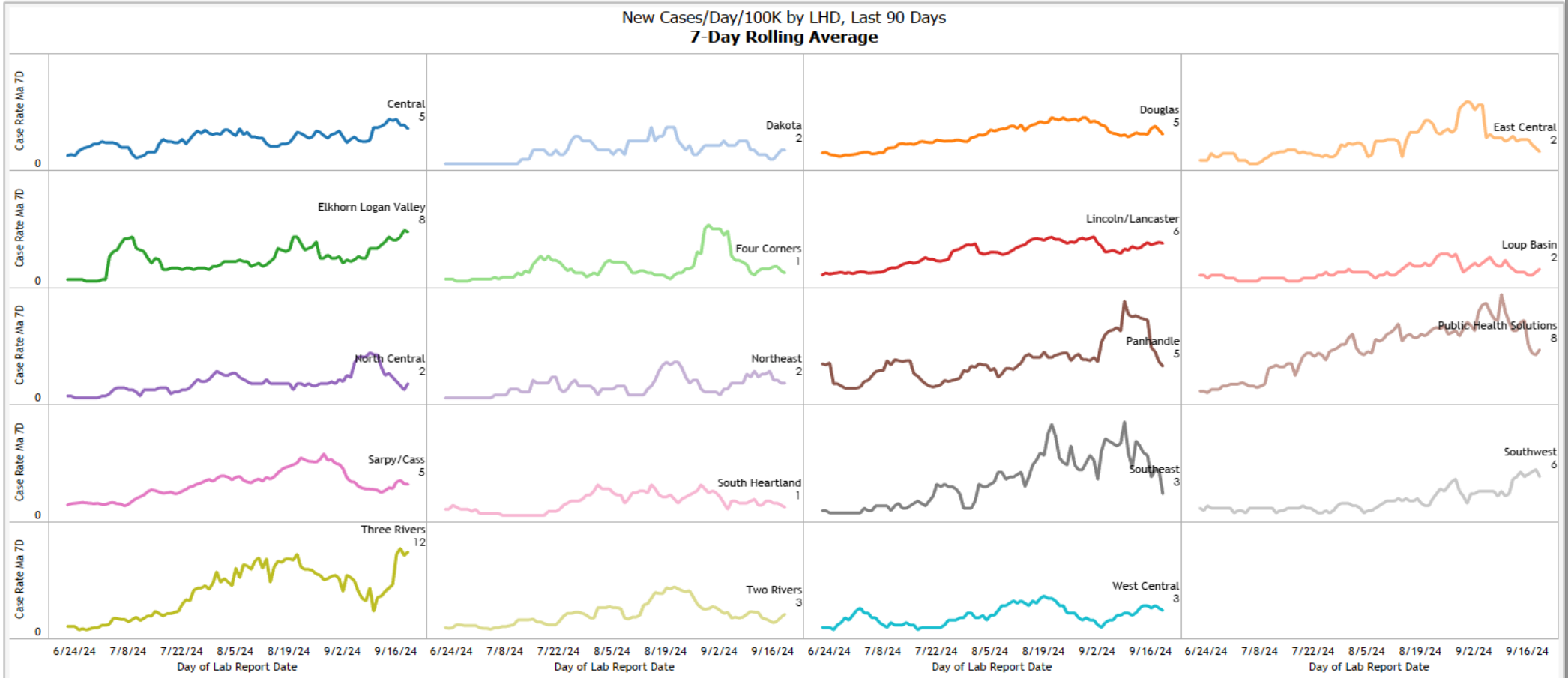
COVID-19 laboratory vertical de-duplicated data from Nebraska Electronic Disease Surveillance System (NEDSS)

COVID-19 laboratory reinfection data from NEDSS

Population data from the 2020 CDC bridged race survey

COVID-19 Local Health Department Trends

Local Health Department Case Rate Trends



Data behind the dashboard:

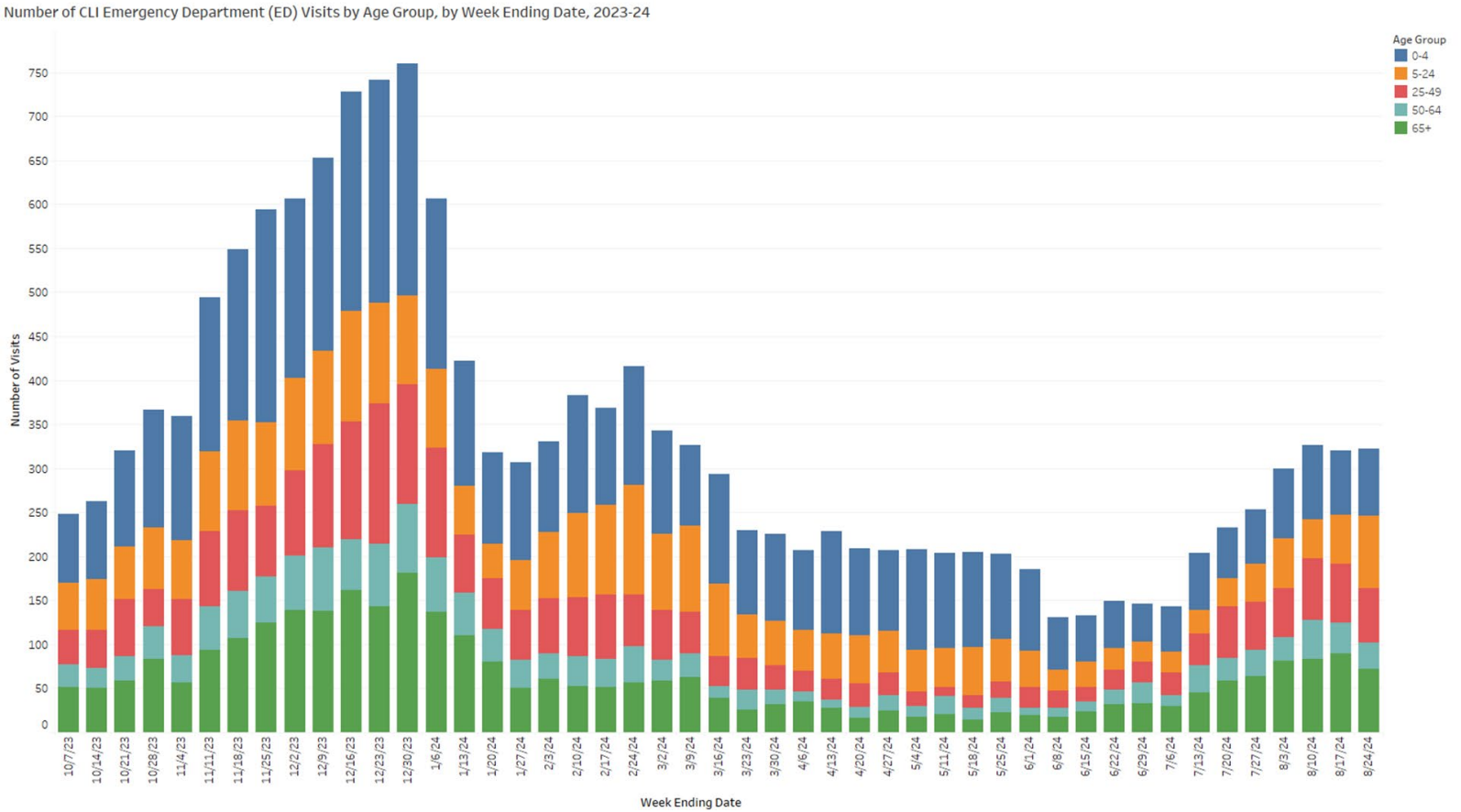
COVID-19 laboratory vertical de-duplicated data from Nebraska Electronic Disease Surveillance System (NEDSS)

COVID-19 laboratory reinfection data from NEDSS

Population data from the 2020 CDC bridged race survey

COVID-19 Syndromic Surveillance

- We monitor COVID-like illness (CLI) visits in emergency department facilities across the state
  - Visits by age group and proportion of CLI ED visits from all ED visits
  - Track these metrics for influenza (ILI) and RSV as well



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COVID-19 Outbreak Reporting

- ICAP will continue to assist in COVID-19 outbreak situations as they have done so in the past

- If you suspect or have an COVID-19 outbreak at your facility, please contact your LHD and/or the ICAP team
  - For more information about ICAP, please visit https://icap.nebraskamed.com/

COVID-19 Hospital Reporting

Unified Hospital Data Surveillance System (UHDSS)

- UHDSS will resume COVID-19 hospital reporting in November 2024, providing a comprehensive look at hospitalizations related to COVID-19 across Nebraska and other regions

Enhanced Data Collection

- UHDSS will enable more detailed tracking of hospital capacity, patient outcomes, and resource needs during the respiratory season

Importance of UHDSS Data

- The updated system is expected to improve timely response to COVID-19 surges and help public health agencies make informed decisions on interventions and resource allocation

Collaboration with Health Departments

- Local health departments will play a key role in utilizing this data to address regional challenges during the upcoming winter season

COVID-19 Hospital Reporting

- Hospitals can report data individually or through a third-party provider

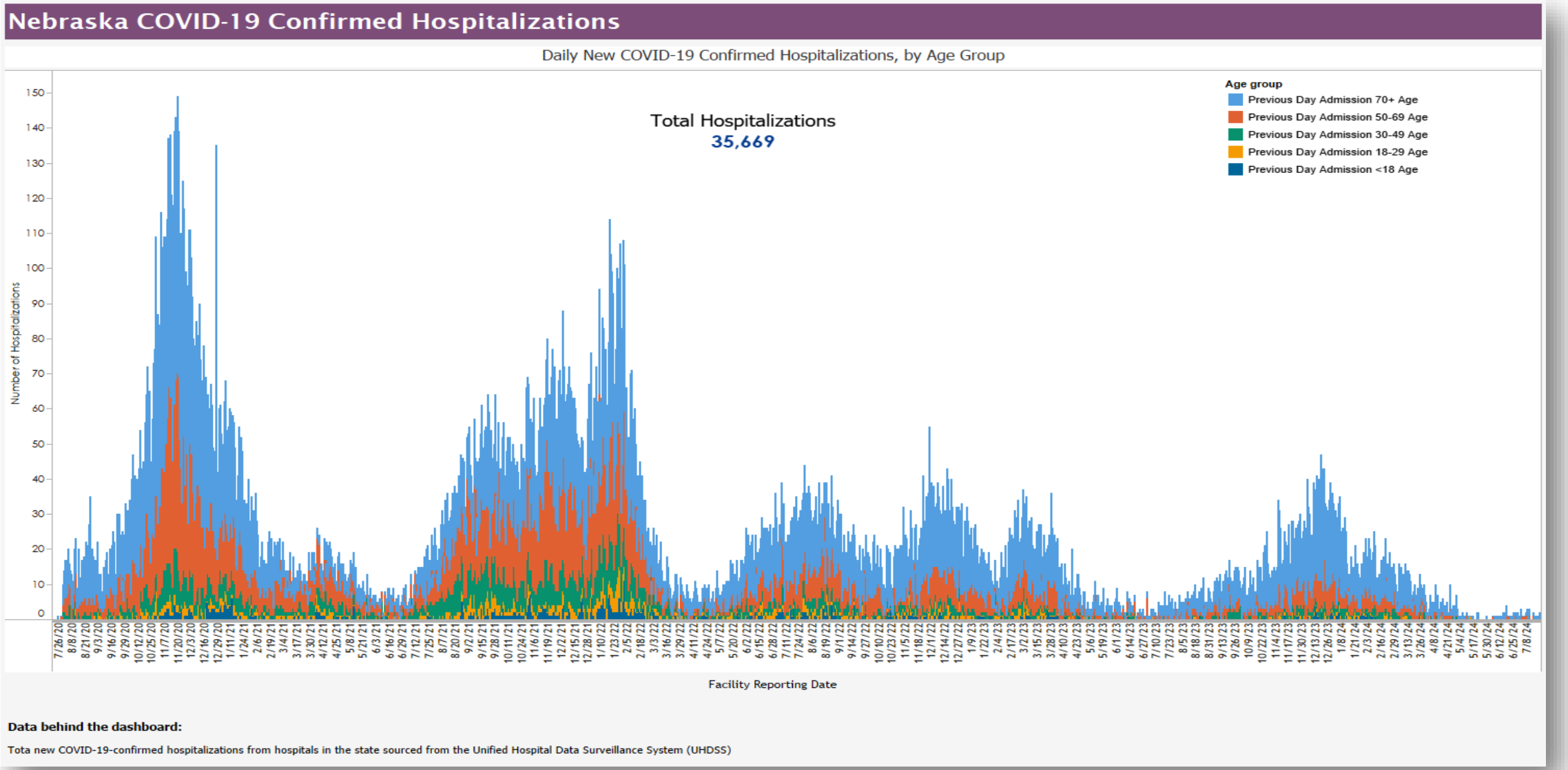
- Hospitals can submit data through:
    a. Web interface: The most common way for hospitals to submit data
    b. CSV upload: Data can be uploaded in CSV format
    c. API: Hospitals can use NHSN API to submit data

- 140 hospitals participate and report the data to NHSN on a regular basis

- Hospital data is pulled and analyzed weekly at DHHS

- Some of the important insights gained through this data:
    a. No: of COVID-19 patients in hospitals and ICUs
    b. Identify hospitals under strain
    c. To inform decisions about hospital capacity and staffing

COVID-19 Hospital Reporting



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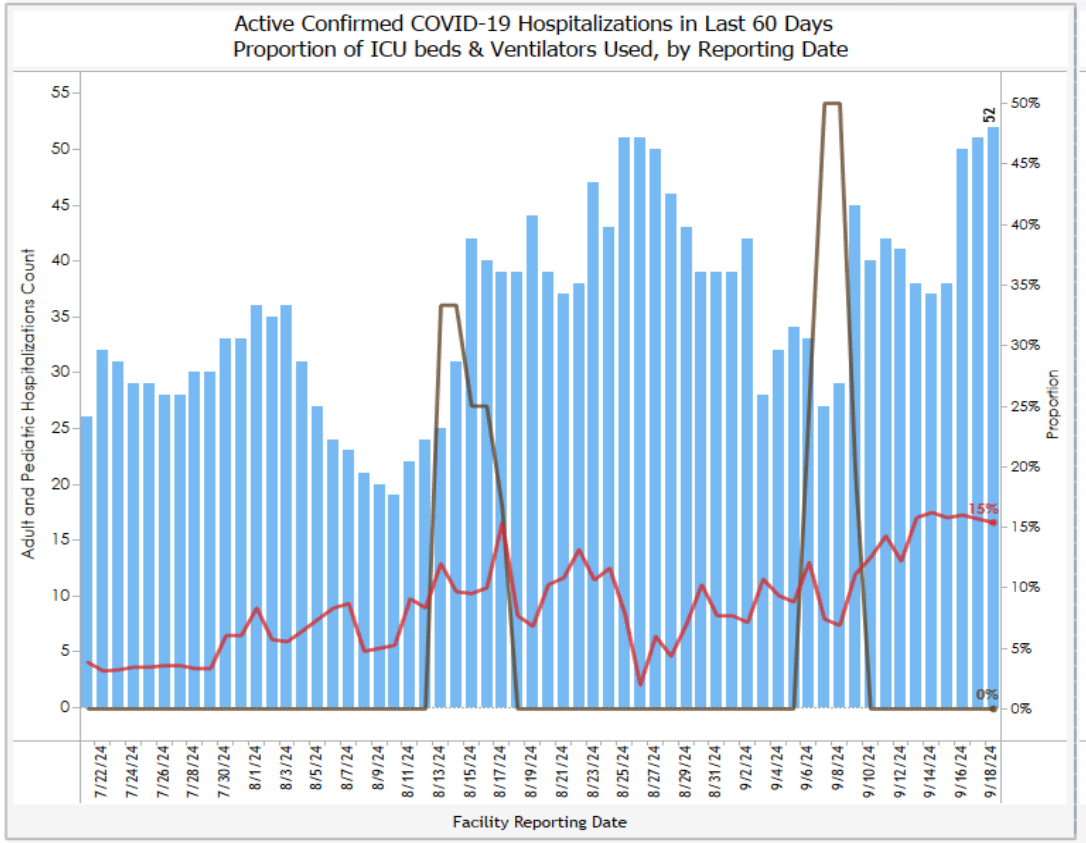
COVID-19 Hospital Reporting

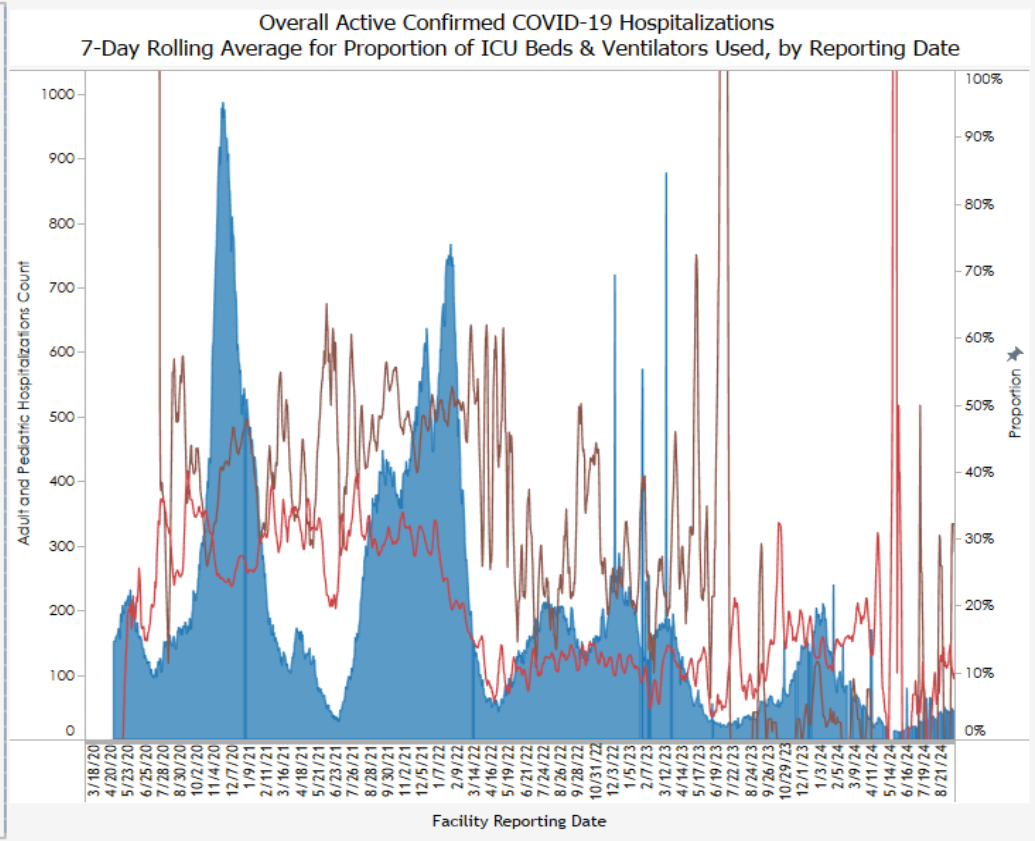
Nebraska COVID-19 Active Hospitalizations

8 ICU beds are being used with occupancy at **15%**

52 Current active hospitalizations

0 Ventilators are being used with usage at **0%**





Data behind the dashboard:

Active confirmed COVID-19 hospitalization counts are sourced from the Electronic Emergency Department Information System (EEI)

Proportion of ventilators used by ICU patients is the ventilators used by total ICU confirmed patients.

Reference

- Adult & Pediatric Hospitalizations
- Proportion of ICU Beds Out of COVID In-Patients
- Proportion of Ventilators Used By ICU Patients

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COVID-19 Vaccine Surveillance

- COVID-19 vaccine data reported through the Nebraska State Immunization Information System (NESIIS)

- Vaccines are reported by healthcare providers who administer vaccines to NE residents

- Providers can report vaccines through NESIIS through:
    a. Web interface
    b. Secure file transfer protocol connection
    c. Direct electronic interface

- NESIIS stores this reported information in a secure database and makes it available to other healthcare providers, schools, and organizations that need to know a patient's immunization status

- Vaccine surveillance data is pulled and periodically the analysis and visuals are adjusted considering the changing vaccine schedules. NESIIS data is used to:
    a. Track vaccination counts and rates in Nebraska
    b. Analyze vaccine coverage and uptake
    c. Analyze vaccine effectiveness in the NE population

Long COVID-19

National Academies of Sciences Definition (2024)

- Long COVID is defined as persistent or relapsing symptoms lasting beyond 3 months after the acute phase of infection, with no alternative diagnosis

Key Symptoms

- Fatigue, cognitive impairment (brain fog), respiratory and cardiac issues, and general malaise.
- These symptoms can fluctuate over time, making management complex.

Prevalence

- Affects 10-30% of COVID-19 survivors, depending on severity of the initial infection and individual risk factors.

Healthcare Response

- Emphasis on developing long-term care strategies and specialized clinics to address the multi-system effects of Long COVID, ensuring patients receive comprehensive follow-up care.

Long COVID-19

Long COVID Surveillance Implementation Plan

Redcap Case Report Form Optimization

- Revise and align with new Long COVID guidelines to capture essential data points
- Ensure compatibility with various healthcare IT systems

Healthcare Provider Engagement

- Increase outreach to primary care, specialist clinics, and rehabilitation centers to promote consistent data entry and reporting

Onboarding New Facilities

- Focus on high-volume and long COVID prevalent sites for extended onboarding efforts

Training Program

- Implement comprehensive training for all participating healthcare entities to ensure accurate and timely data submission

Long COVID-19

Milestones

Form Update

- Update and test the Redcap form for user-friendliness and comprehensiveness

Outreach & Partnerships

- Engage more clinicians and establish partnerships with new healthcare facilities

Onboarding & Data Integration

- Prioritize high-prevalence sites for onboarding and ensure seamless data flow from new facilities

Training & Support

- Develop tailored training modules and provide ongoing support for high-quality data collection

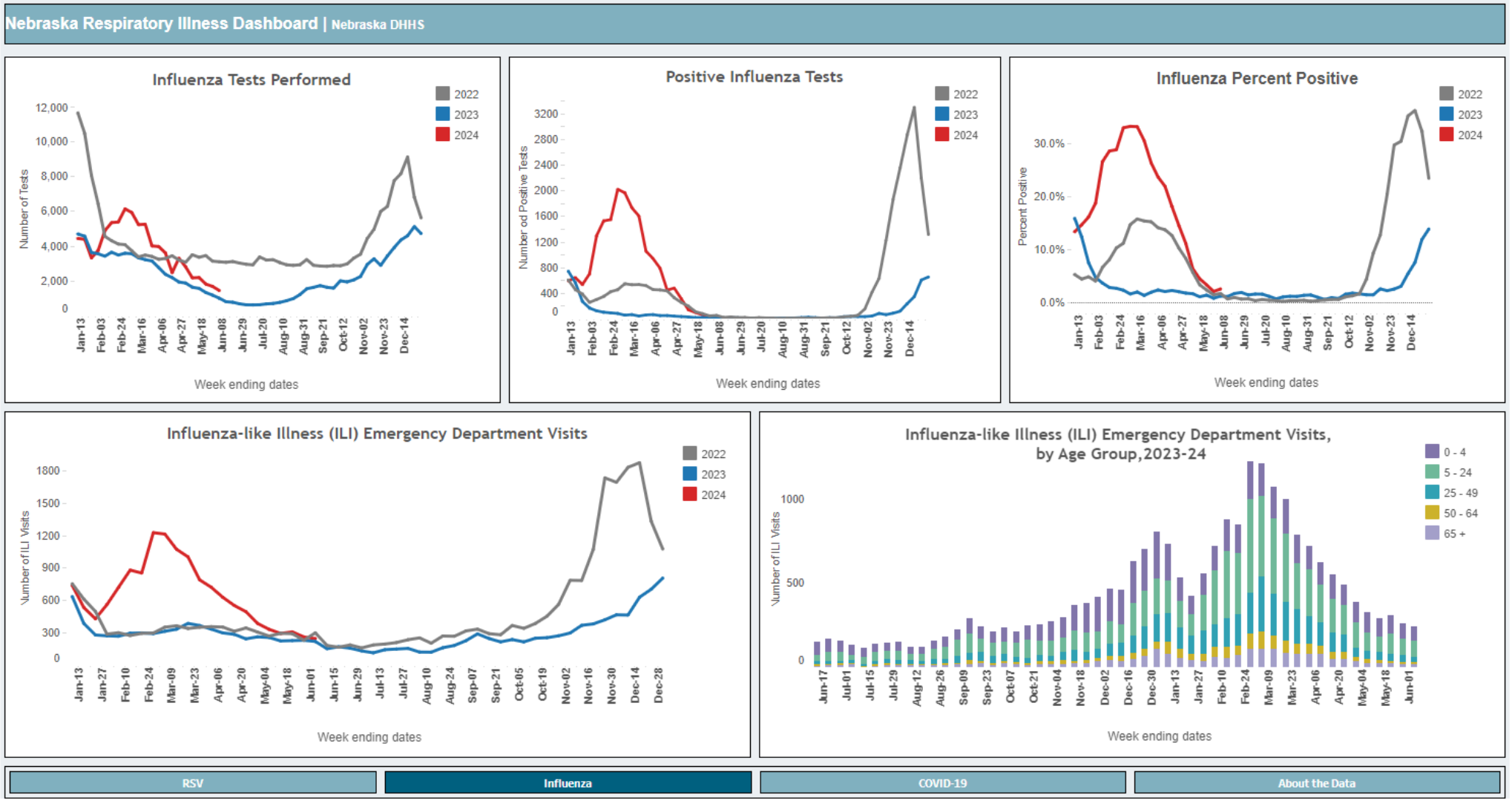
Data Analysis & Strategy Adjustment

- Regularly review data to assess long COVID impacts and adjust public health strategies as needed

Influenza and Other Respiratory Disease Surveillance Report

- During flu surveillance season, we publish a weekly surveillance report that contains all this data and more.
  - Historically, this report contained influenza, RSV, and other respiratory pathogen data. The report can be accessed on the DHHS seasonal respiratory disease website.
  - NEW this season:
    - SARS-CoV-2 will be added; data will mirror what is shown for flu/RSV
      - Laboratory, syndromic, outbreaks, hospitalizations, mortality (COVID-19 hospitalization data from Unified Hospital Data Surveillance System; this is unique to COVID-19 compared to data used for influenza/RSV)
    - Mycoplasma pneumoniae and Chlamydia pneumoniae added to other respiratory pathogen section
  - To subscribe to the report, please visit https://public.govdelivery.com/accounts/NESTATE/subscriber/new?topic_id=NEDHHS_209

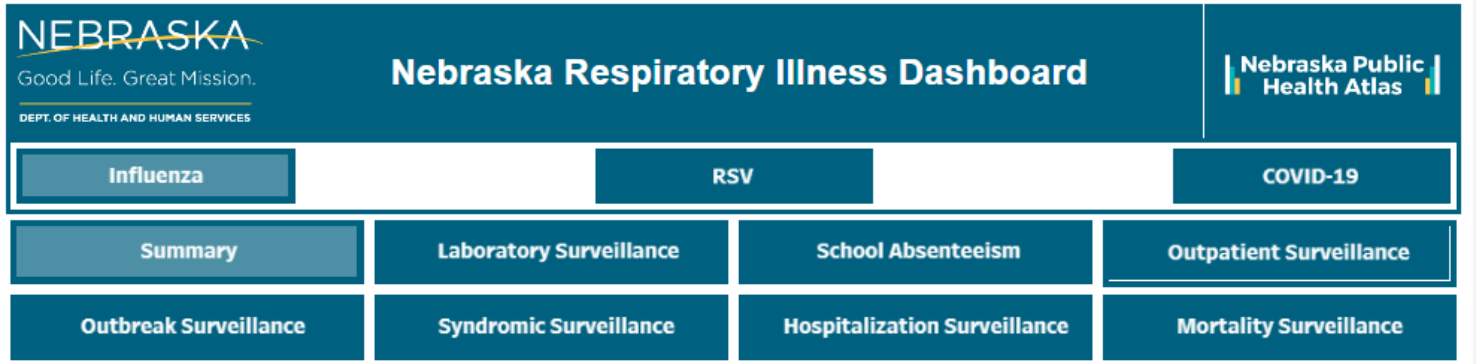
Respiratory Illness Dashboard (Current)



https://atlas-dhhs.ne.gov/Atlas/Respiratory_Illness

NEW Respiratory Illness Dashboard

Set to go live in October 2024



Nebraska Influenza Dashboard Summary for 2023-24 Surveillance Season, through week ending, 5/25/2024

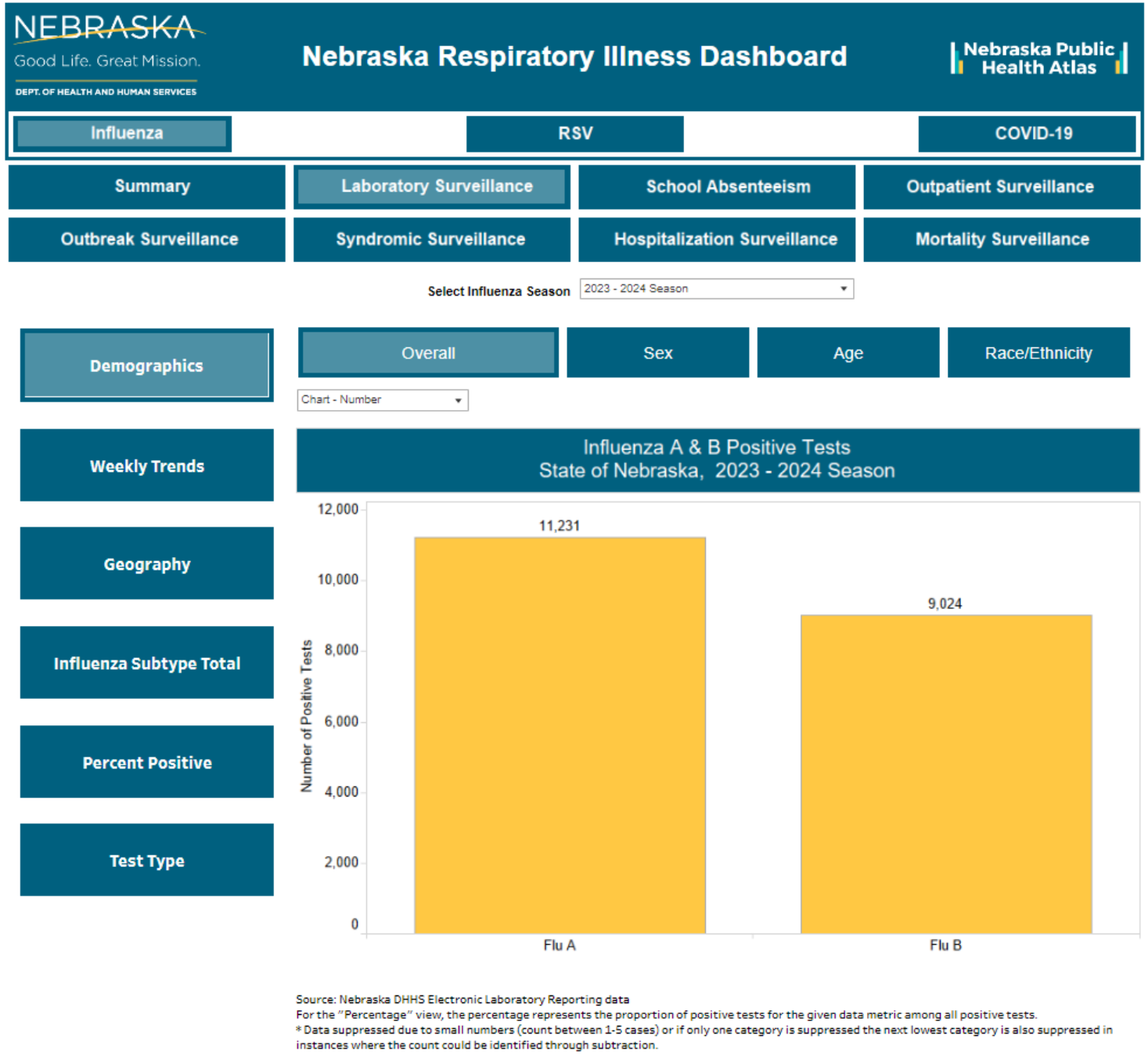
	Week Ending 5/25/2024	Change from Last Week	Season Total
Influenza A Positive Tests	26	▼ 13	11,910
Influenza B Positive Tests	8	▼ 9	9,478
Influenza Test Positivity (%)	1.9%	▼ 0.9%	15.6%
Influenza-like Illness (ILI) Outpatient Visits	7	0	2,473
% of Students Absent from school (for any reason)	0.5%	▼ 0.8%	2.3%
ILI Emergency Department Visits	226	▼ 47	17,560
ILI Hospital Admissions	92	▼ 52	7,062
Reported Influenza Outbreaks	0	0	30
Reported Influenza-associated Deaths (all ages)	0	0	51
Reported Pediatric Influenza-associated Deaths *	0	0	

* Data suppressed due to small numbers (count between 1-5 cases). Source: Nebraska DHHS 6/5/2024 10:22:49 AM

Seasonal Respiratory Diseases About the Data

NEW Respiratory Illness Dashboard

Set to go live in October 2024



NEW Respiratory Illness Dashboard

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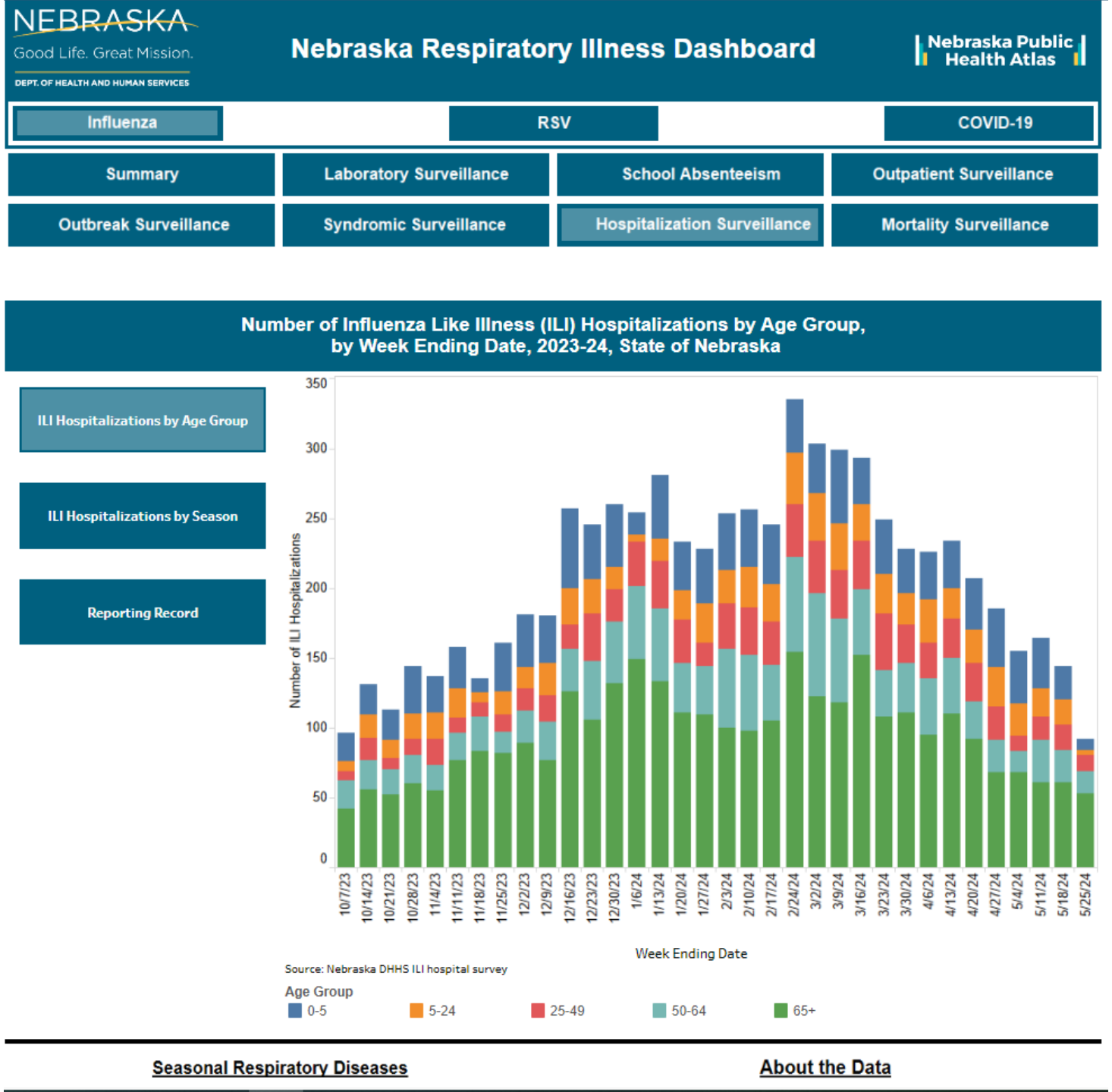

Resources

- Nebraska DHHS Respiratory Disease Page
- CDC Flu Page
- CDC Avian Influenza Home Page
- CDC FluView: Weekly Influenza Surveillance Report
- CDC FluView Interactive
- CDC Media Toolkit:
- WHO FluNet
- USDA High Path Avian Influenza
- Youth in Agriculture

THANK YOU

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Derek Julian, MPH
Respiratory Disease Epidemiologist
derek.julian@nebraska.gov
402-471-1376

Hannah Ball, MPH
Infectious Disease Epidemiologist
Hannah.ball@nebraska.gov
531-893-1334

Sai Paritala, Pharm.D, MPH
COVID-19 Epidemiologist
sai.paritala@nebraska.gov
402-471-6549

Qubilah Montgomery
CDC PHAP Respiratory Fellow
Qubilah.Montgomery@nebraska.gov
470-334-2110