

Respiratory Illness Surveillance Report

Week Ending December 7, 2024 (MMWR 49)

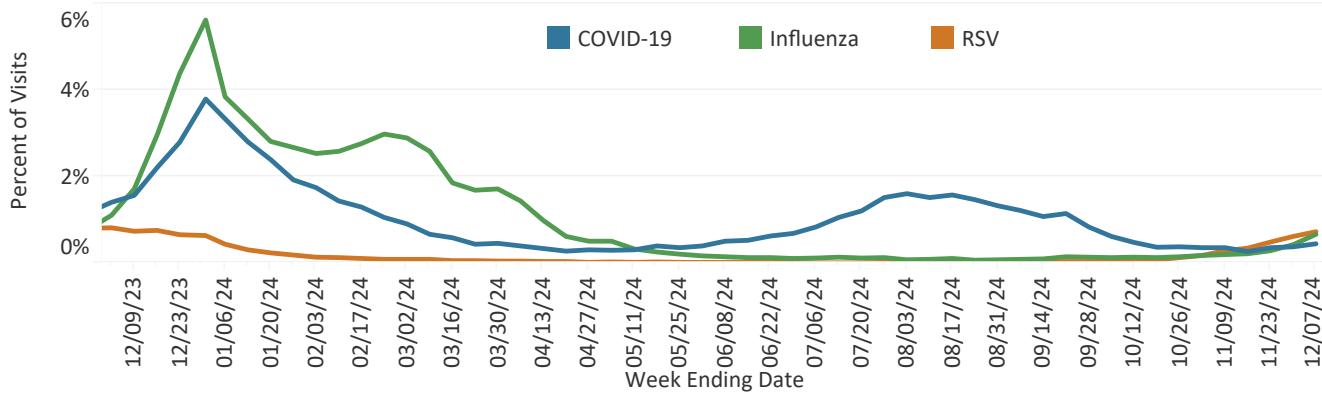
Report Highlights

- COVID-19 activity is low, however, there have been slight increases in emergency department visits and hospital admissions associated with COVID-19.
- The COVID-19 variant predominantly in circulation is KP.3.1.1. Circulating variants are closely related to fall vaccine formulations.
- Influenza activity level remains low statewide but is increasing. There continues to be increases in influenza associated with emergency department visits and influenza like illness among outpatient provider visits.
- Among the current circulating influenza viruses, the most frequently reported subtype remains influenza A(H1N1).
- RSV activity is high. There continue to be increases in percent positivity, emergency department visits with a RSV diagnosis, and hospital admissions, particularly among children 0-4 years of age.
- Percent positivity is elevated for adenovirus, parainfluenza, and rhinovirus/enterovirus.

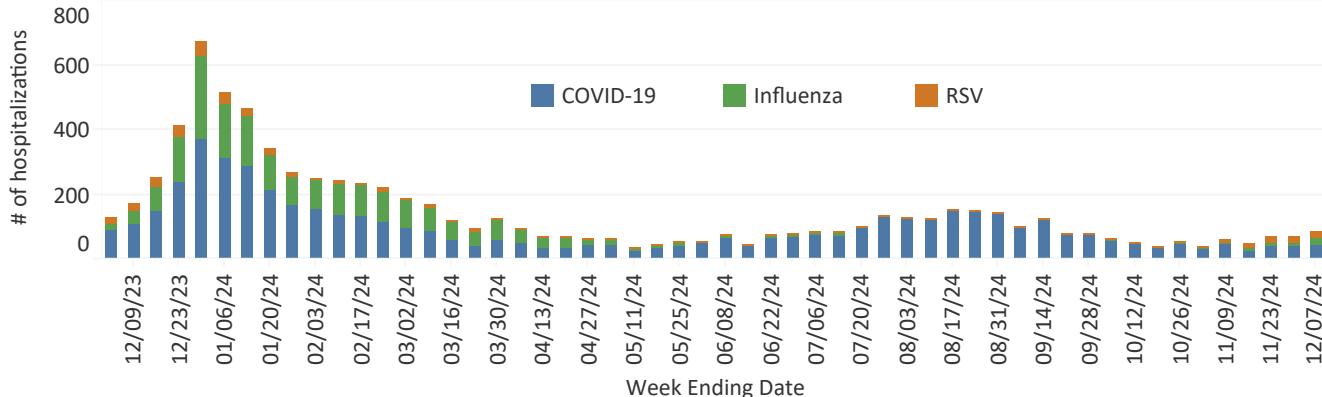
Respiratory Trends

Data from the NJDOH Syndromic Surveillance System (EpiCenter) shows the weekly percent of emergency department visits and visits that resulted in hospitalizations associated with COVID-19, Influenza, and/or RSV diagnoses codes reported by 79 New Jersey emergency departments.

Percent of Emergency Department Visits with a Respiratory Illness Diagnosis

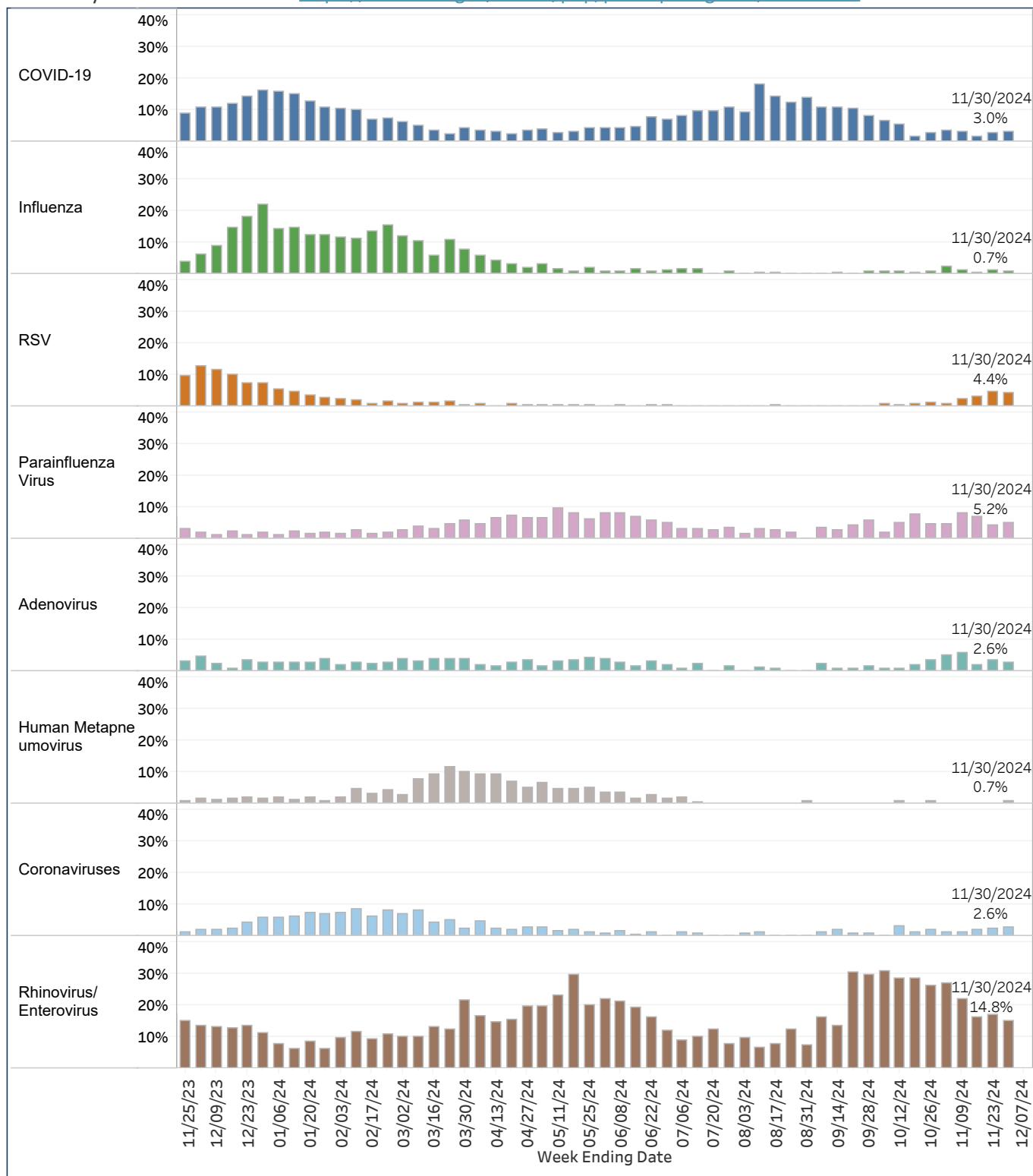


Emergency Department Visits with Respiratory Illness Diagnosis that Resulted in Admission



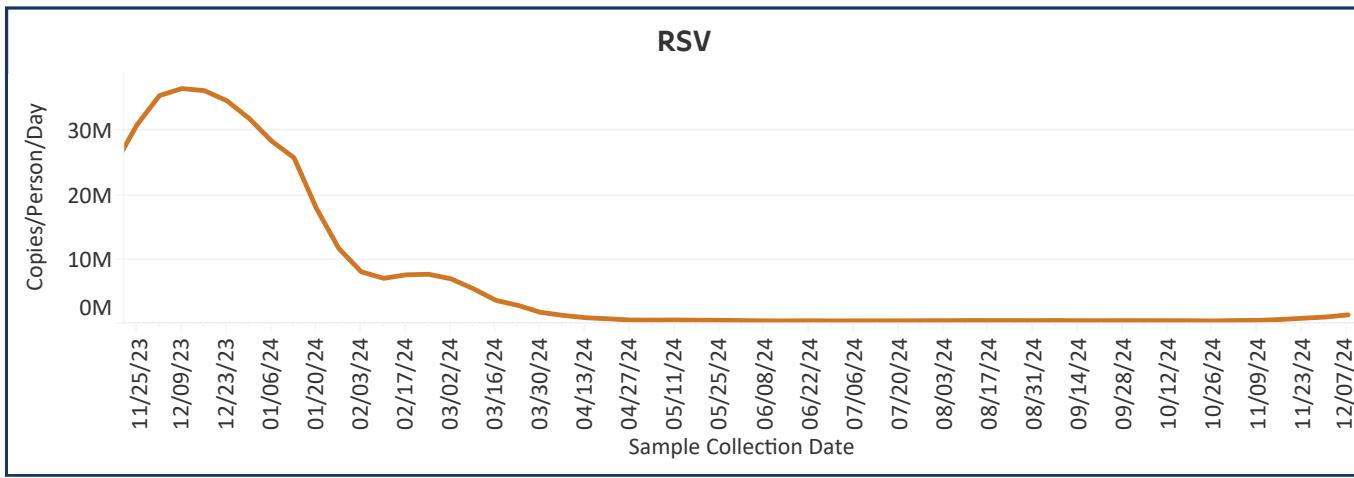
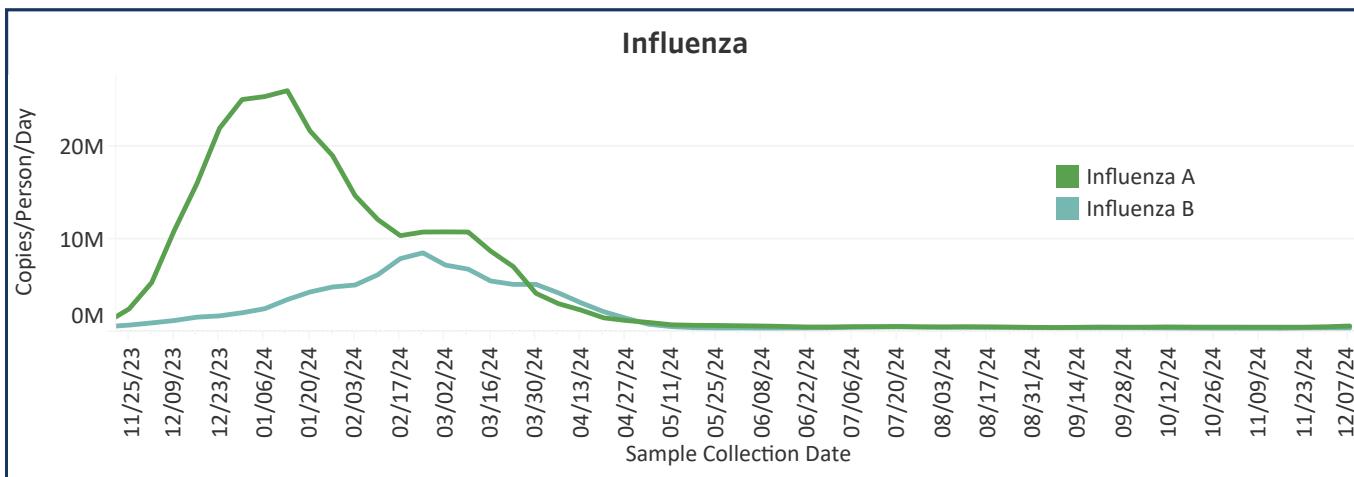
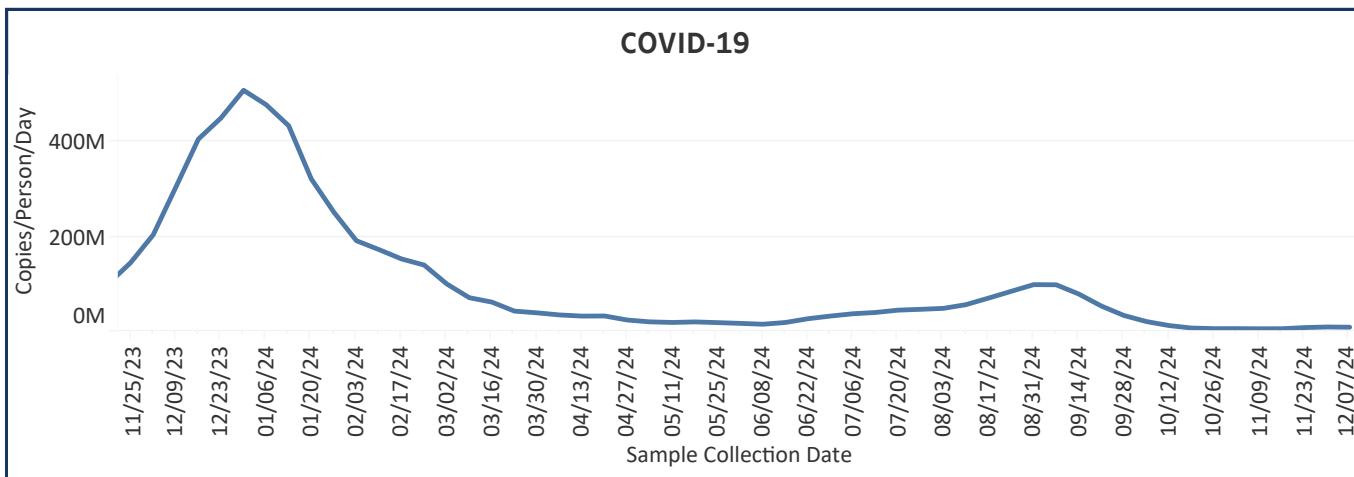
Respiratory Virus Test Positivity

The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based surveillance system and participating laboratories report the total number of tests performed and the total positive tests for respiratory viruses, including adenovirus, human metapneumovirus, and parainfluenza. Information about the CDC NREVSS system can be found at: <https://www.cdc.gov/nrevss/php/participating-labs/index.html>



Wastewater Surveillance

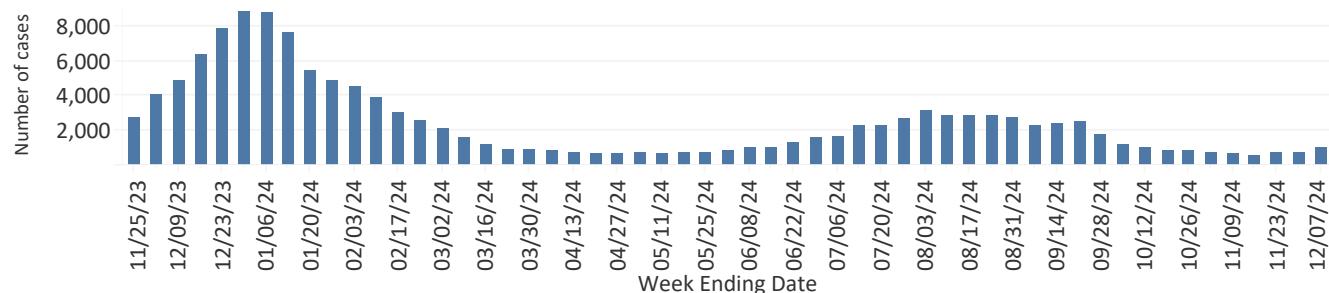
Aggregate, state-level, normalized concentrations of SARS-CoV-2, influenza, and RSV charted over time, based on testing from wastewater samples submitted twice weekly from participating sites, provide information on changing levels of disease circulation, and are used as a tool in monitoring respiratory virus trends.



COVID-19: Cases

Data from the NJDOH Communicable Disease Reporting and Surveillance System (CDRSS) is used to report weekly COVID-19 cases. COVID-19 case data is based on PCR and antigen tests.

COVID-19 Cases by Illness Onset Date



COVID-19: Hospitalizations

NJDOH uses syndromic surveillance data to monitor trends associated with visits to emergency departments for COVID-19. Data shows the number of emergency department visits with a COVID-19 diagnosis that resulted in hospitalizations by age group.

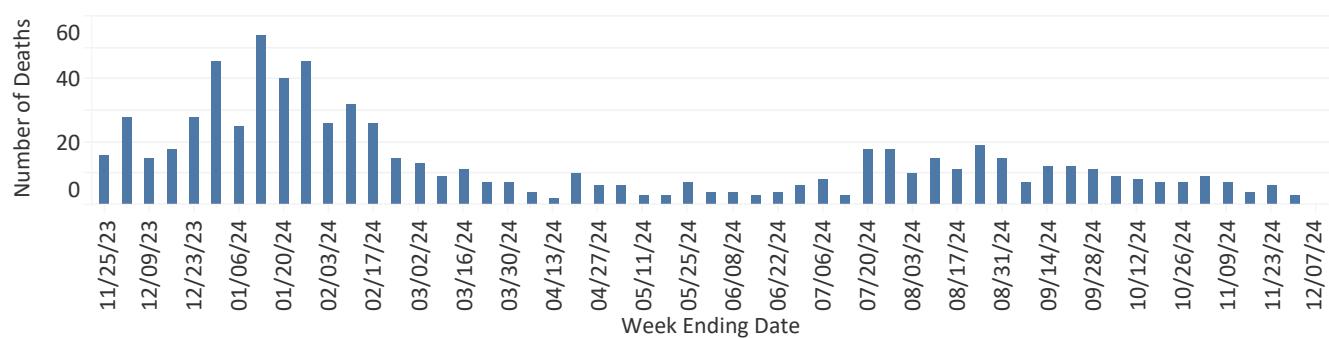
Emergency Department Visits with a COVID-19 Diagnosis that Resulted in Admission



COVID-19: Deaths

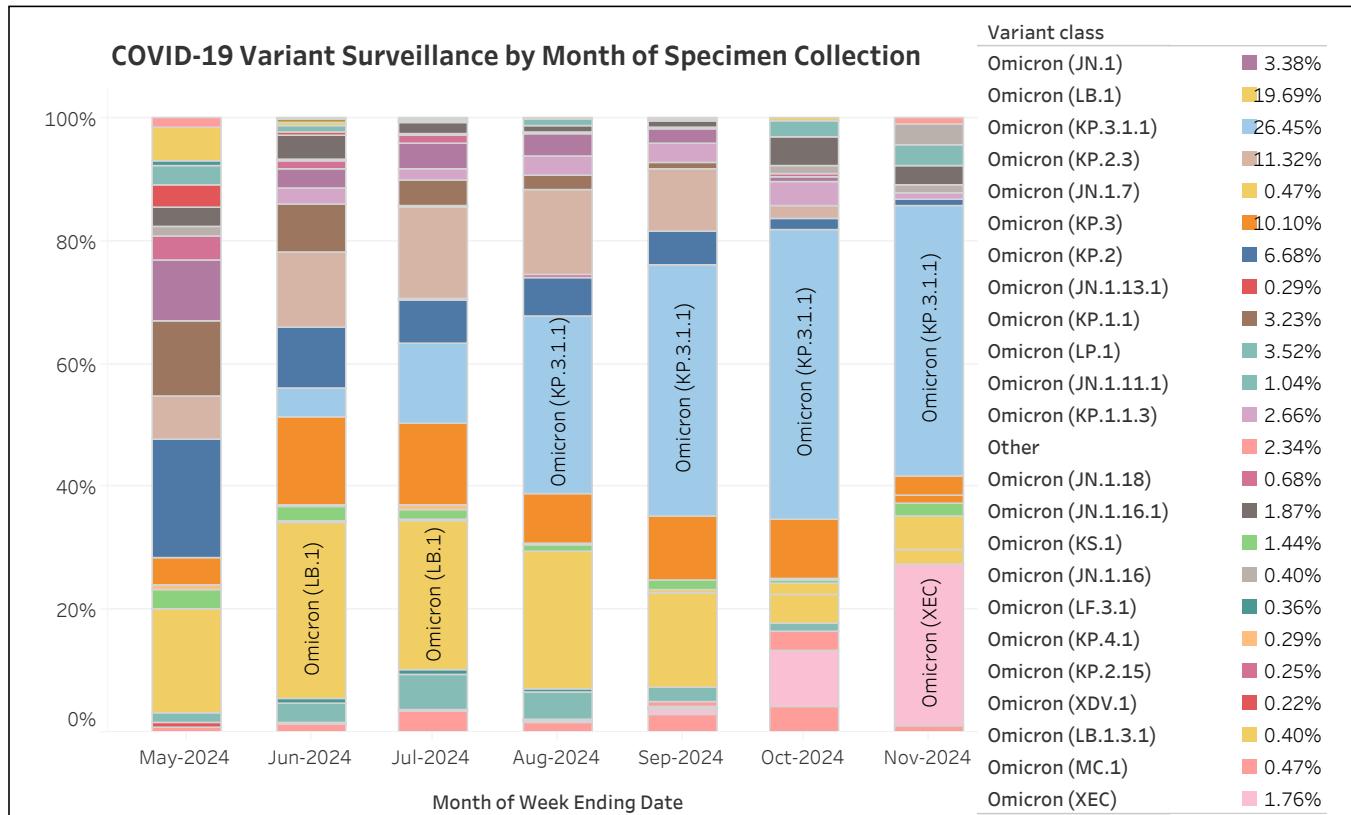
Data from CDRSS and the NJ Electronic Death Registration System (EDRS) are used to provide information on the number of COVID-19 associated deaths. COVID-19 associated deaths are based on the CSTE Revised COVID-19 associated Death Classification Guidance for Public Health Surveillance Programs.

COVID-19 Associated Deaths



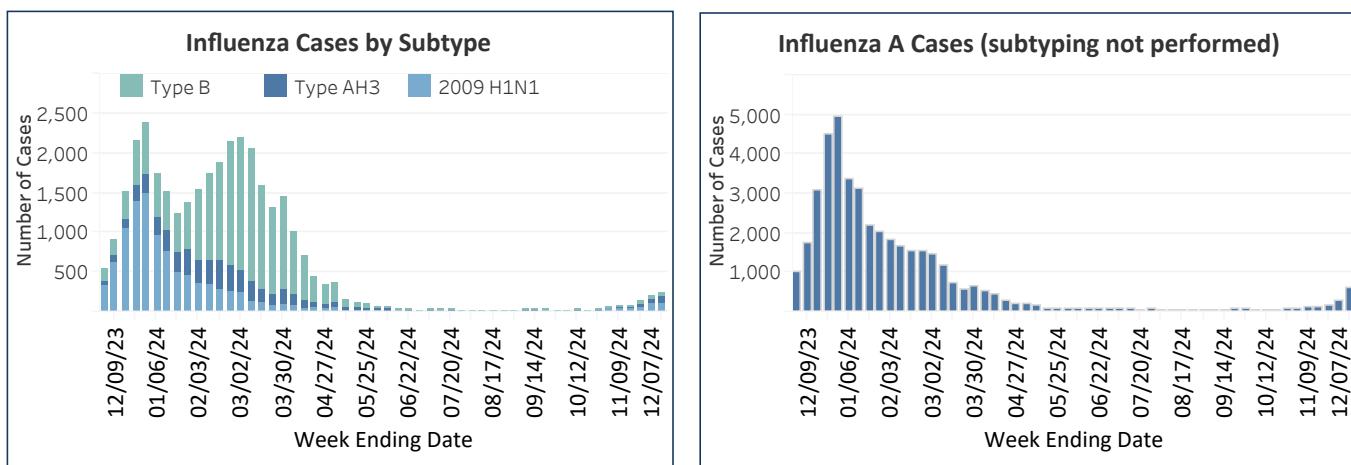
COVID-19: Variants

The chart depicts a summary of COVID-19 variant surveillance by month of specimen collection. Data includes sequencing results reported by selected commercial Labs and the NJ Public Health and Environmental Laboratories that have been submitted for surveillance purposes. Percentages represent the proportion of specimens sequenced with the specified variant lineage. For additional information on variant classification, see CDC SARS-CoV-2 Variant Classifications and Definitions <https://covid.cdc.gov/covid-data-tracker/#variants-genomic-surveillance>



Influenza: Cases

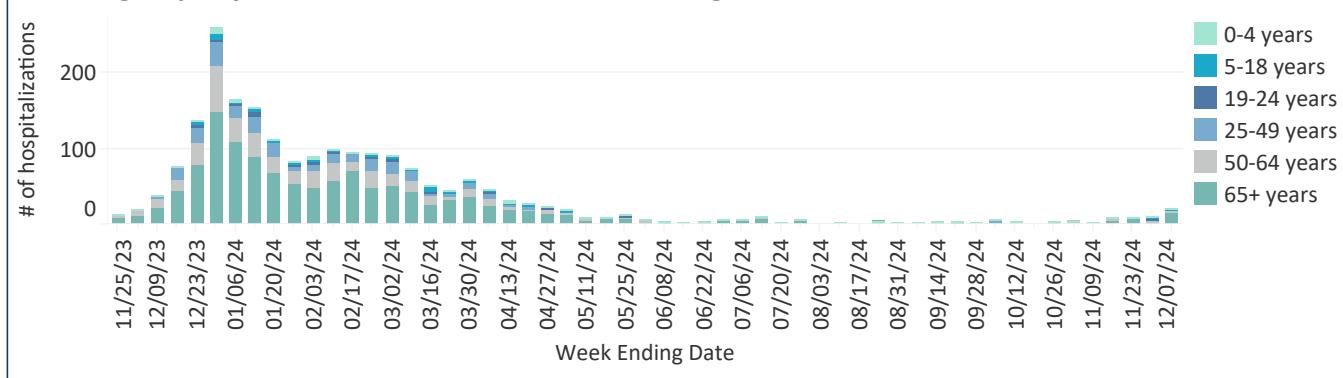
Data from CDRSS is used to report weekly influenza cases. Influenza case data is based on PCR tests.



Influenza: Hospitalizations

NJDOH uses syndromic surveillance data to monitor trends associated with visits to emergency departments for influenza. Data shows the number of emergency department visits with an influenza diagnosis that resulted in hospitalization by age group.

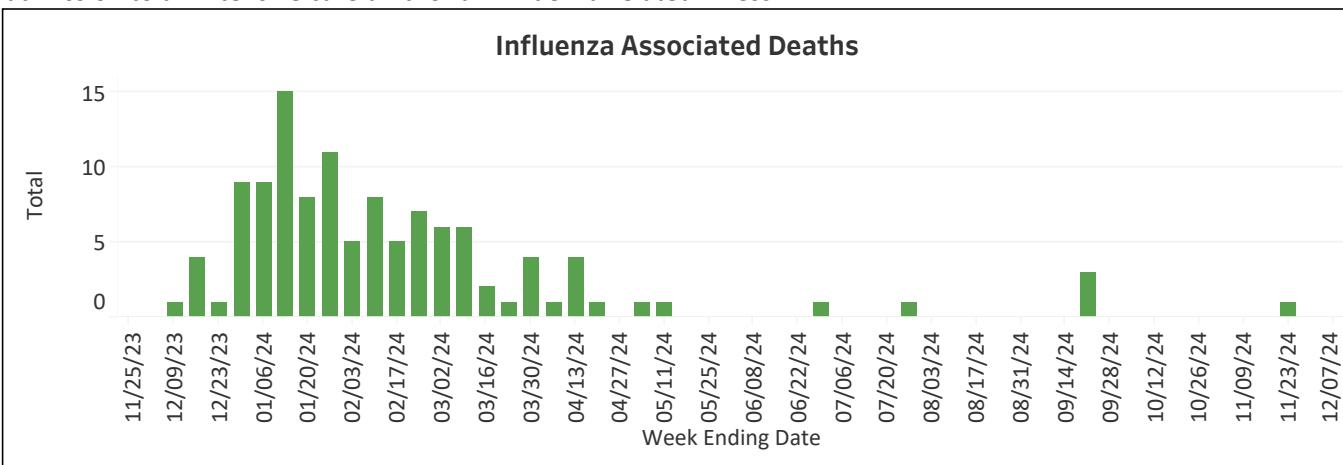
Emergency Department Visits with an Influenza Diagnosis that Resulted in Admission



Influenza: Deaths

Data from CDRSS and EDRS is used determine the number of adult influenza-associated deaths reported weekly.

The table includes severe and fatal influenza-associated pediatric cases reported to NJDOH compared to national pediatric influenza deaths for a 5-year period. An influenza-associated pediatric death is defined as a death resulting from a clinically compatible illness with laboratory confirmed influenza. Severe illness is defined as admission to an intensive care unit for an influenza-related illness.

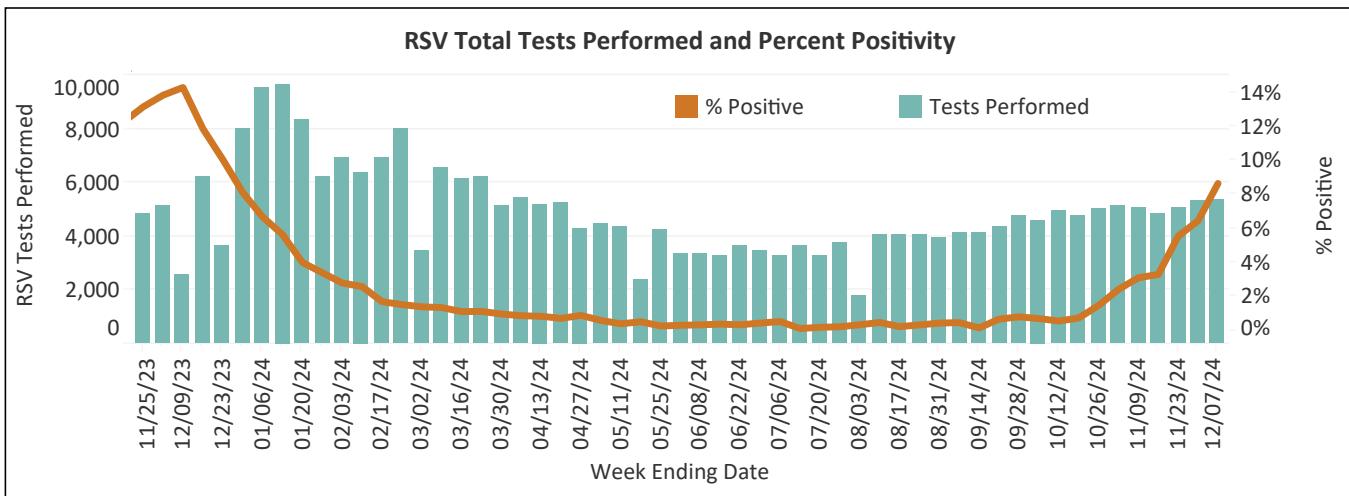


Pediatric Influenza Deaths and Severe Cases

| Influenza Season | US (fatal) | NJ (fatal) | NJ (severe cases) |
|------------------|------------|------------|-------------------|
| 2020-2021 | 1 | 0 | 1 |
| 2021-2022 | 49 | 0 | 19 |
| 2022-2023 | 187 | 4 | 95 |
| 2023-2024 | 206 | 2 | 99 |
| 2024-2025 | 2 | 0 | 3 |

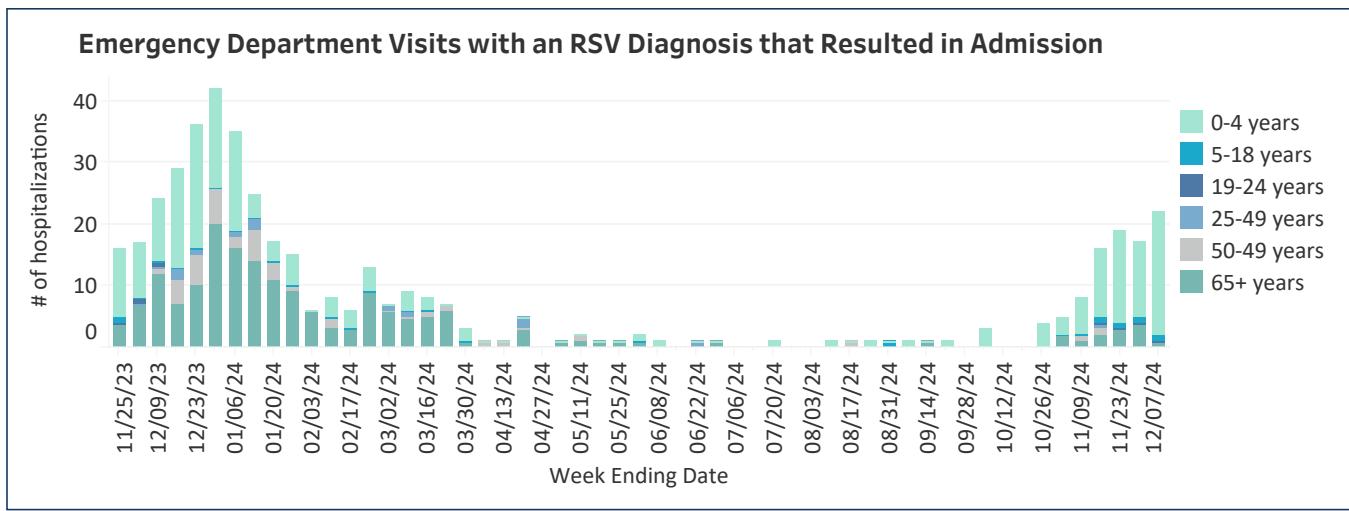
RSV: Tests Positivity

Data from CDRSS submitted by select acute care facilities is used to report weekly number of respiratory syncytial virus (RSV) tests performed and the test positivity.



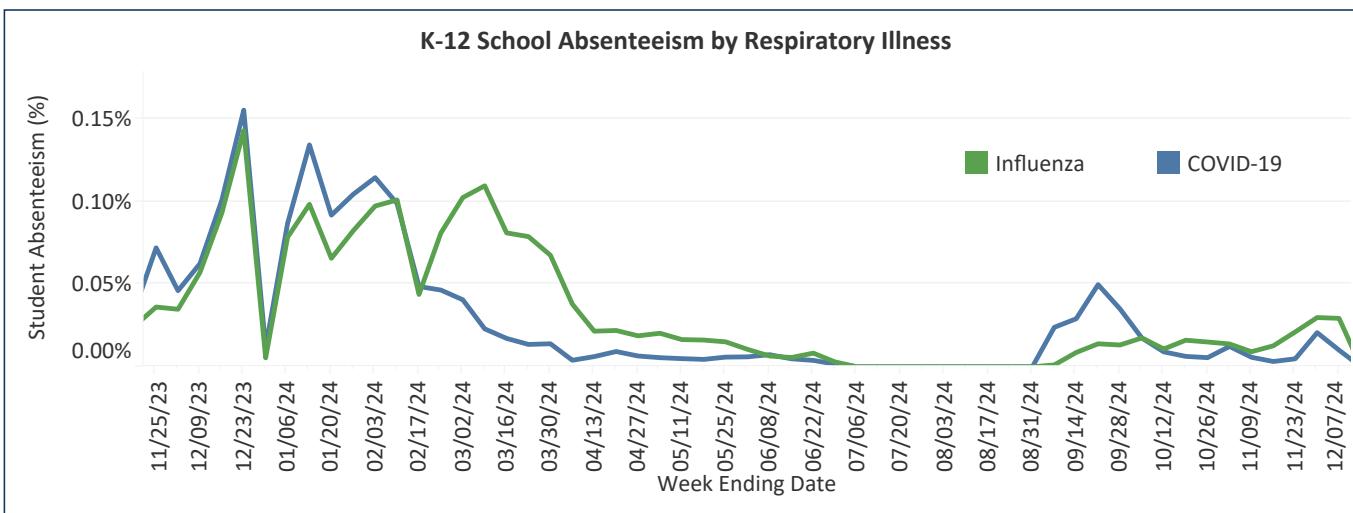
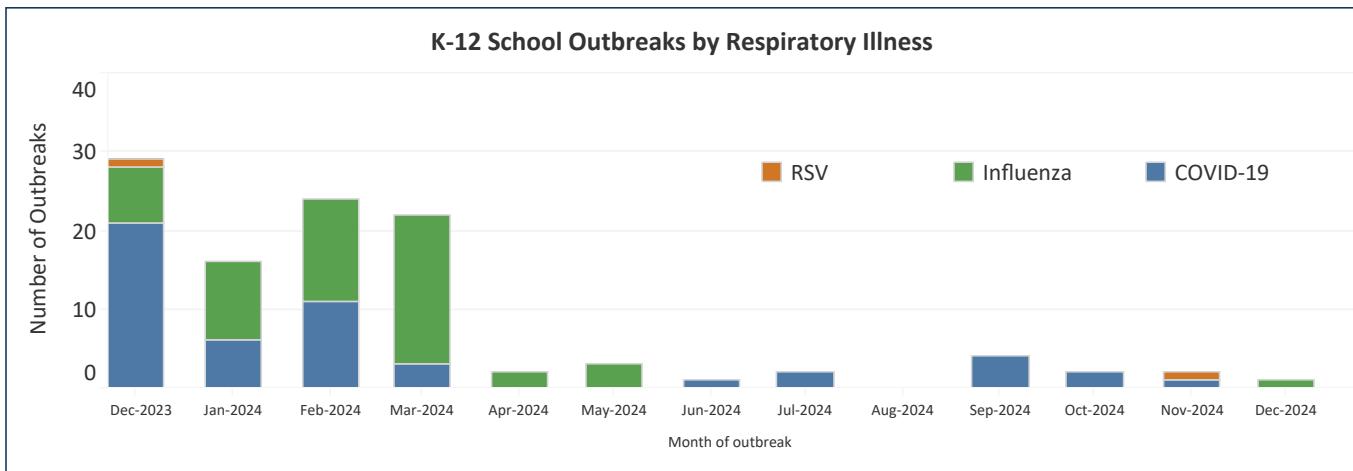
RSV: Hospitalizations

NJDOH uses syndromic surveillance data to monitor trends associated with visits to emergency departments for RSV. Data shows the number of emergency department visits with an RSV diagnosis that resulted in hospitalization by age group.



K-12 Schools

Data from CDRSS is used to provide information on COVID-19, influenza, and RSV outbreaks in school settings, including in childcare and early elementary care facilities and to provide information on school-related absenteeism due to COVID-19 and influenza.



Outbreaks in Long-Term Care

Respiratory outbreaks in long-term care facilities by month of outbreak as reported to NJDOH in the Communicable Disease Surveillance and Reporting System (CDRSS) are plotted below. Counts include COVID-19, influenza and RSV outbreaks.

