

Respiratory Illness Surveillance Report

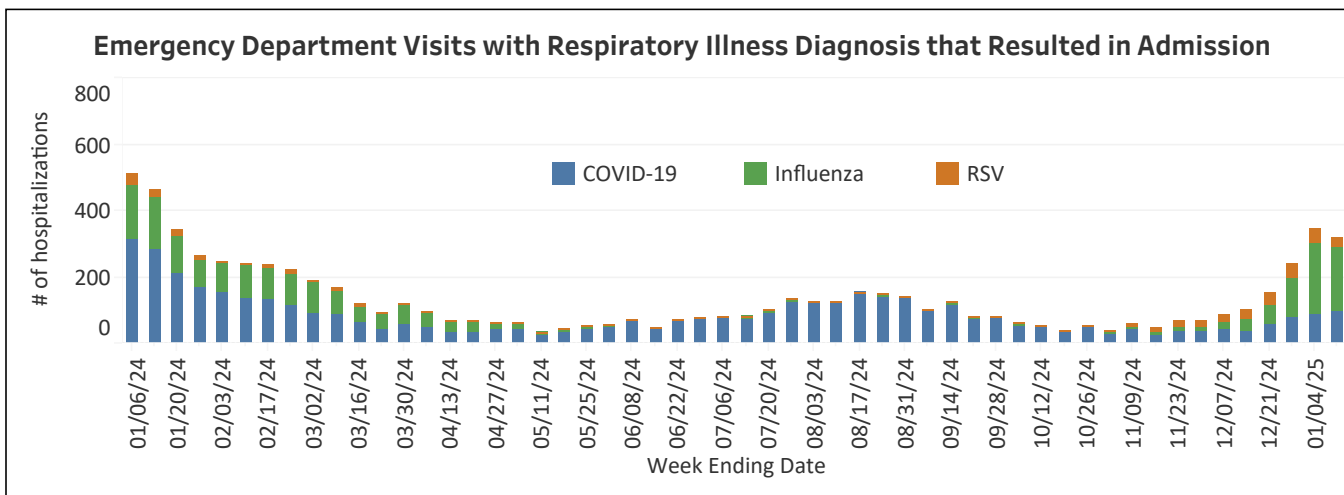
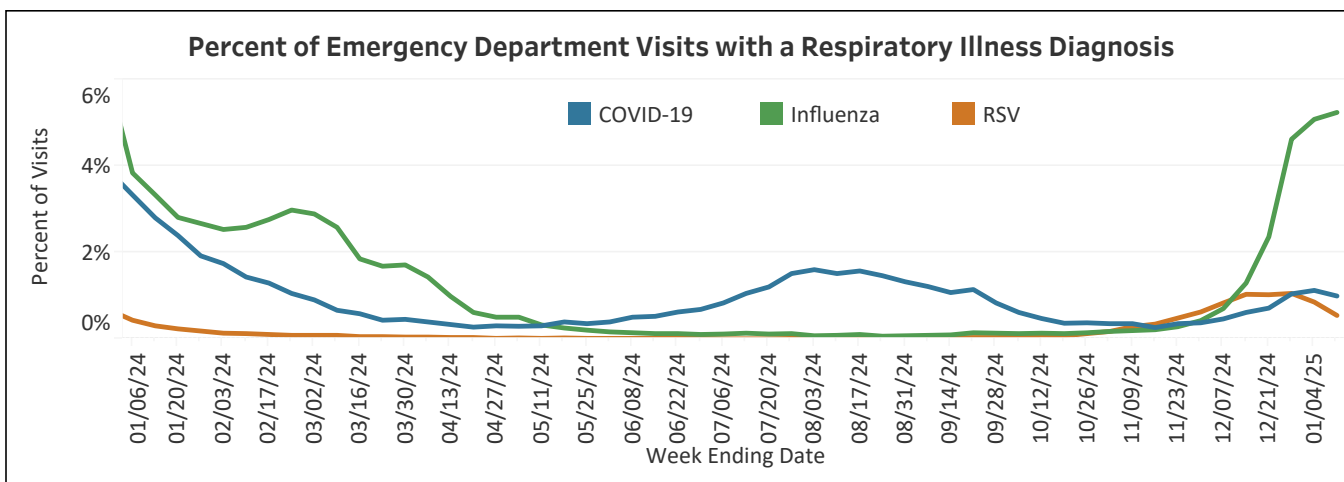
Week Ending January 11, 2025 (MMWR 2)

Report Highlights

- Emergency department visits and hospital admissions remain elevated for COVID-19, influenza, and RSV, though hospital admissions for influenza and RSV have decreased since last week. Overall, emergency department visits and hospitalizations for respiratory illness are lower than this time last year.
- Recent COVID-19, influenza, and RSV hospitalizations are mostly in persons 65 years and older, though RSV hospitalizations continue to be elevated in the 0-4 year age group. The number of influenza-associated deaths has been increasing over the past month; none have been reported in children.
- Detections of COVID-19, influenza A, and RSV in wastewater have been increasing over the past month, with the sharpest increases in influenza A and RSV. COVID-19 levels, while elevated, are lower than the summer 2024 peak.
- The predominant COVID-19 variants continue to be XEC and KP.3.1.1, with XEC increasing in proportion. Both are covered by the 2024-25 COVID-19 vaccine. The predominant circulating influenza A subtype is 2009 H1N1, consistent with the 2023-24 season and is included in the 2024-25 influenza vaccine.
- Respiratory outbreaks reported by K-12 schools thus far this month are primarily due to influenza. Respiratory outbreaks reported in long-term care facilities continue to be primarily due to COVID-19 and influenza.

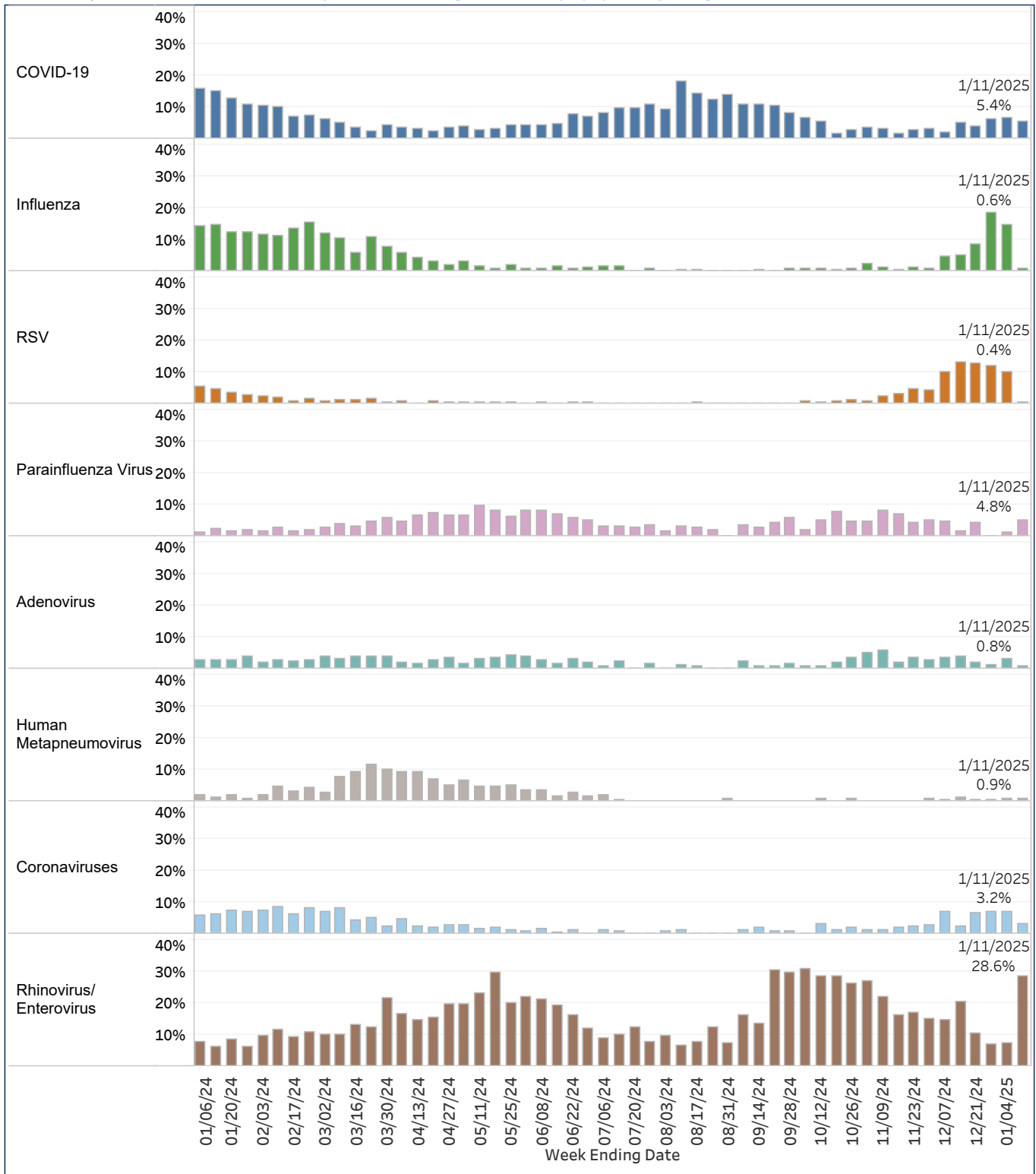
Respiratory Trends

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.



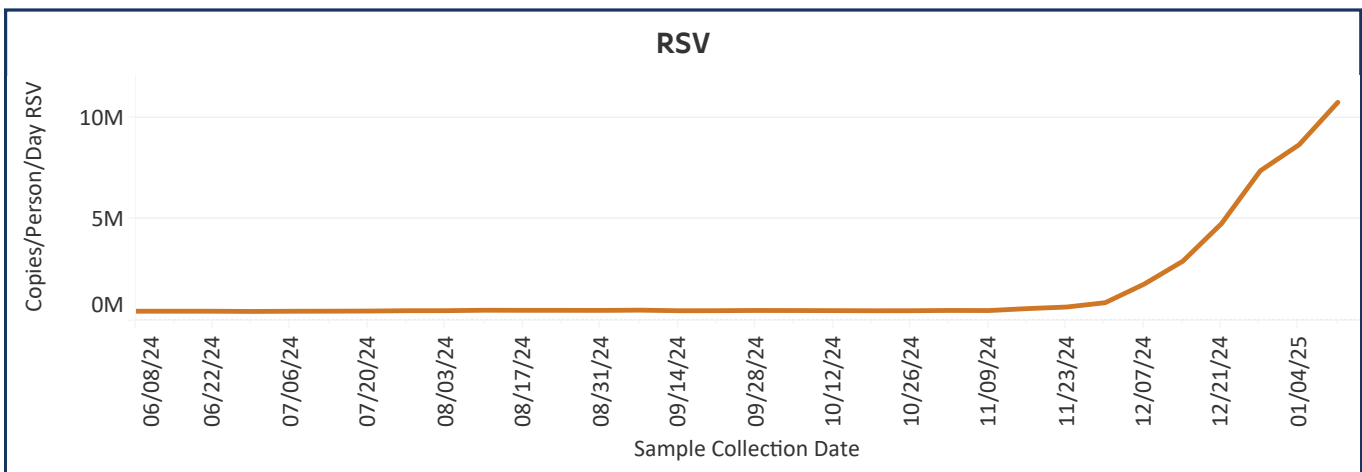
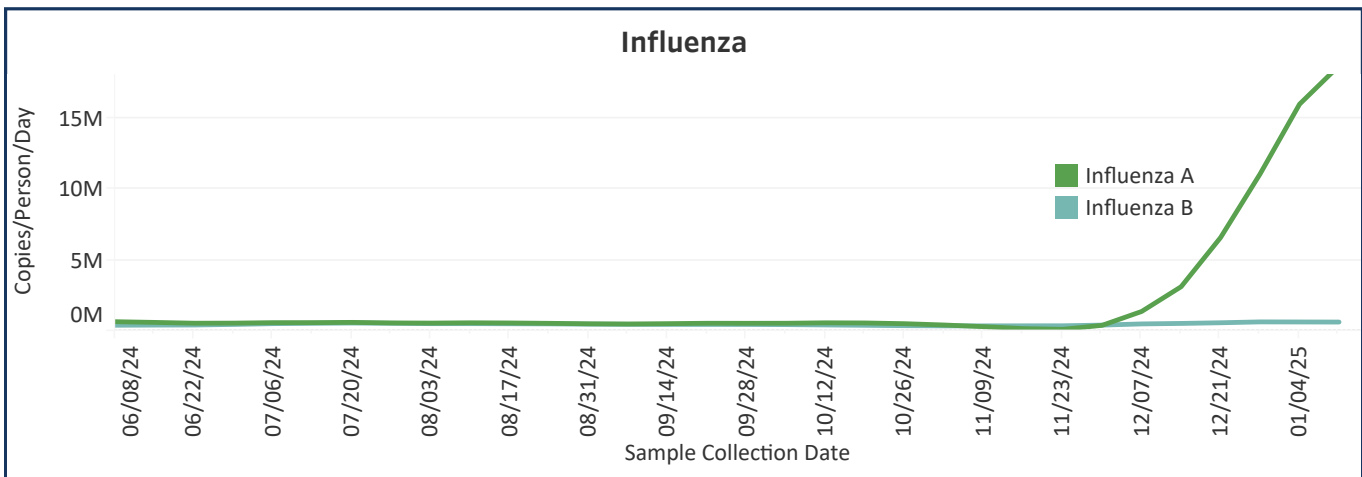
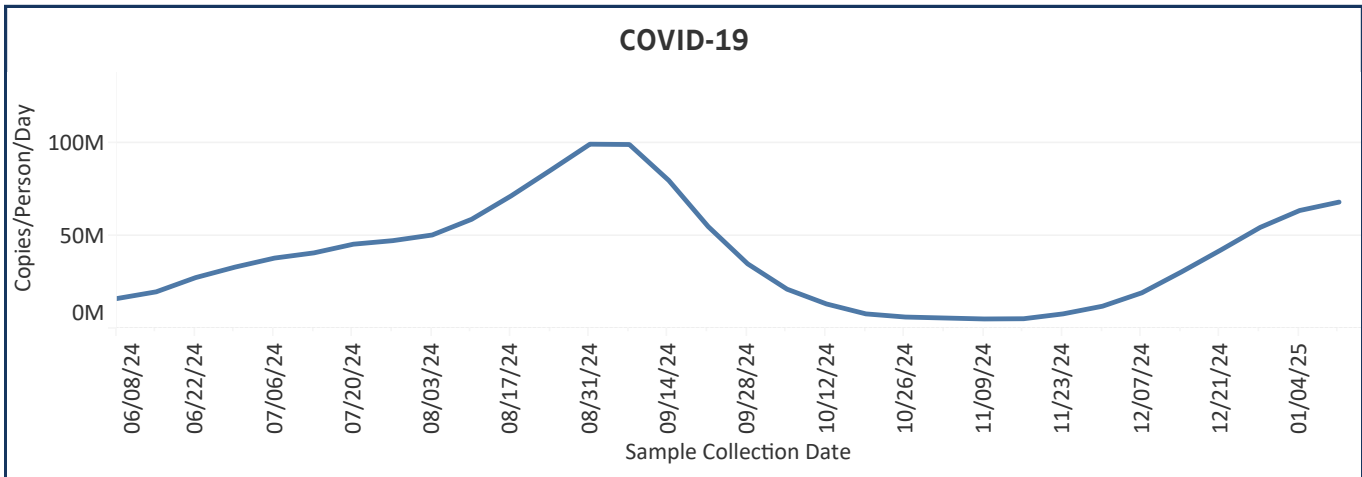
Respiratory Virus Test Positivity

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>



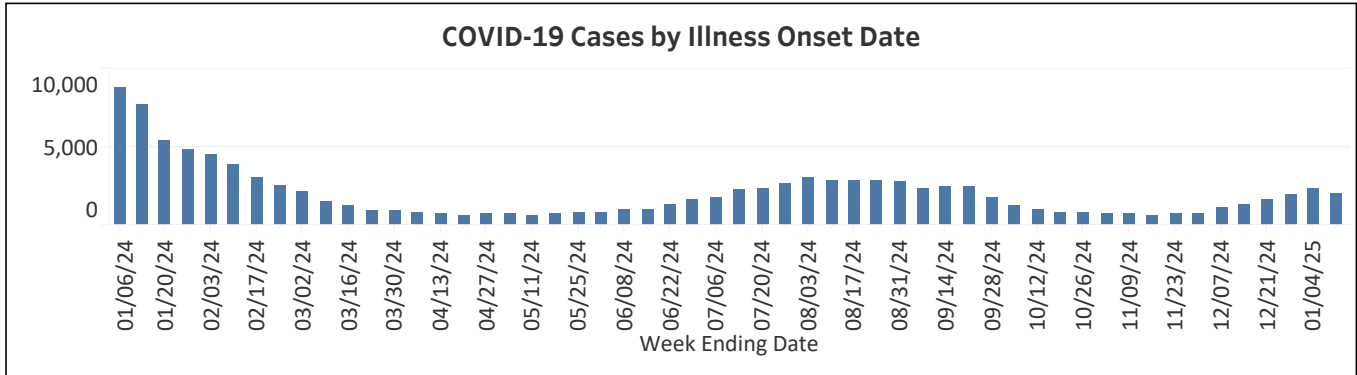
Wastewater Surveillance

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.



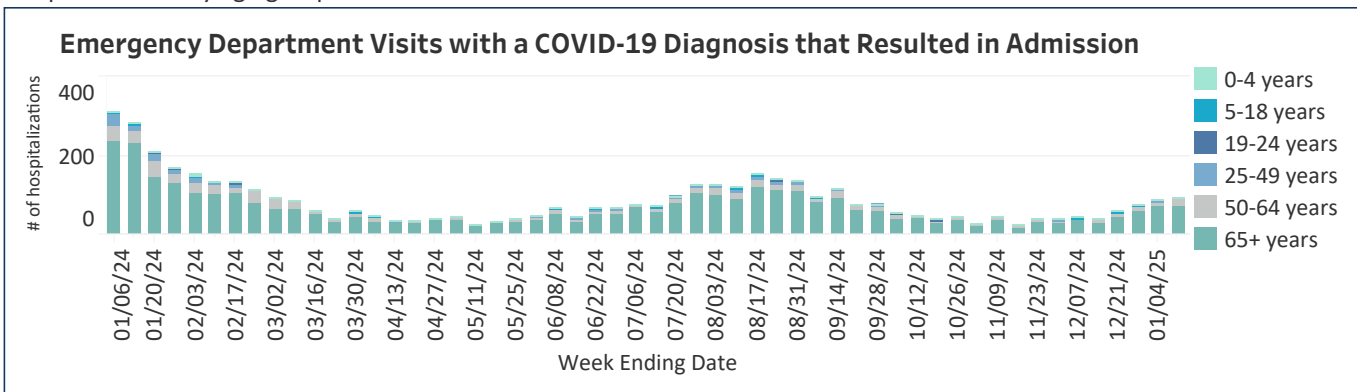
COVID-19: Cases

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.



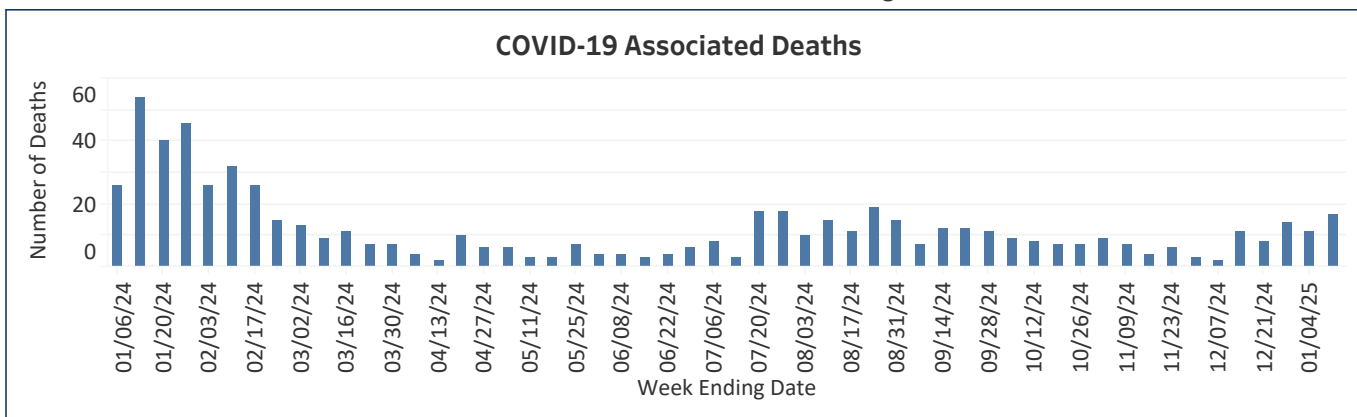
COVID-19: Hospitalizations

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.



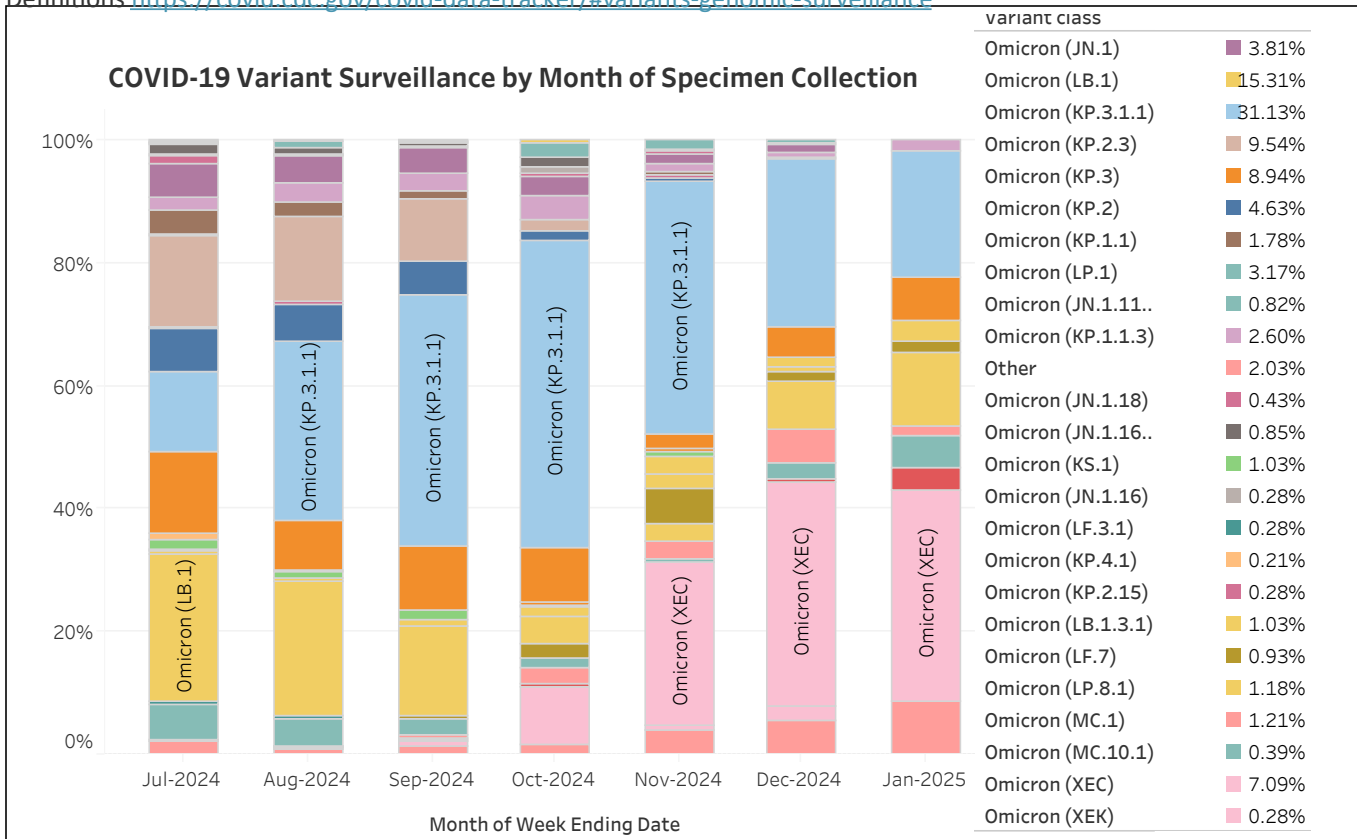
COVID-19: Deaths

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.



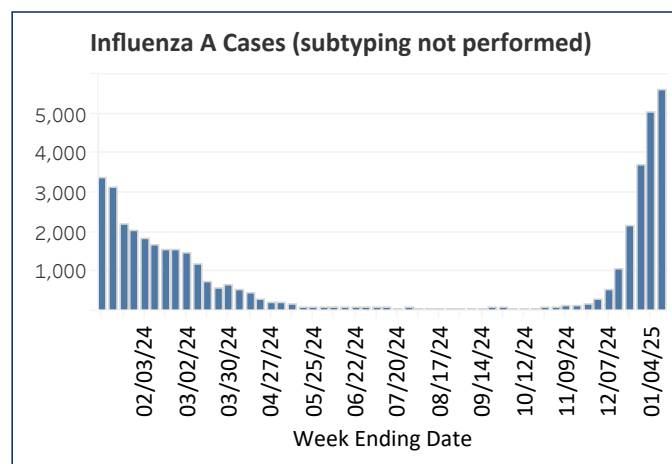
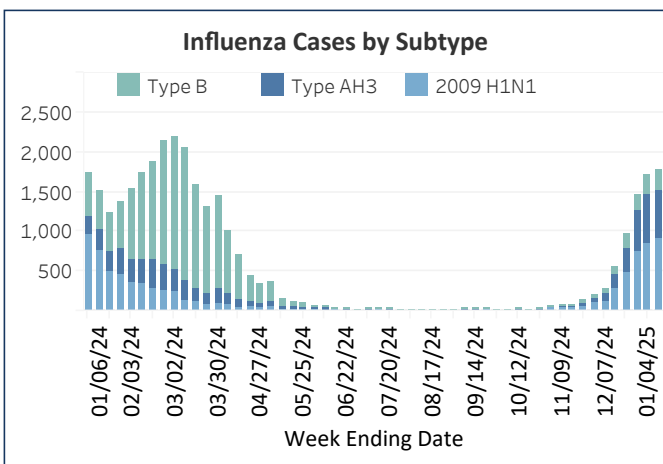
COVID-19: Variants

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>



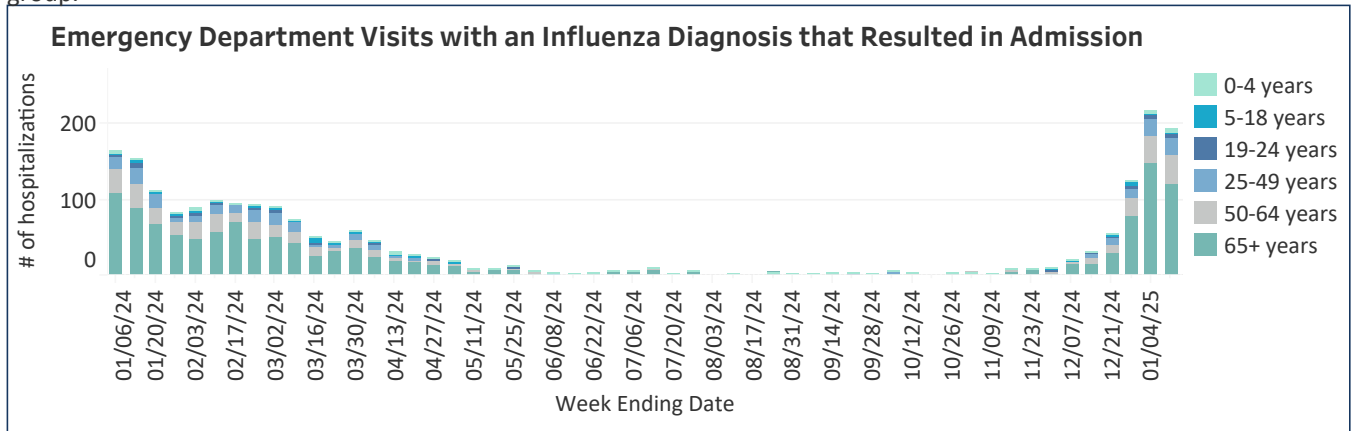
Influenza: Cases

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



Influenza: Hospitalizations

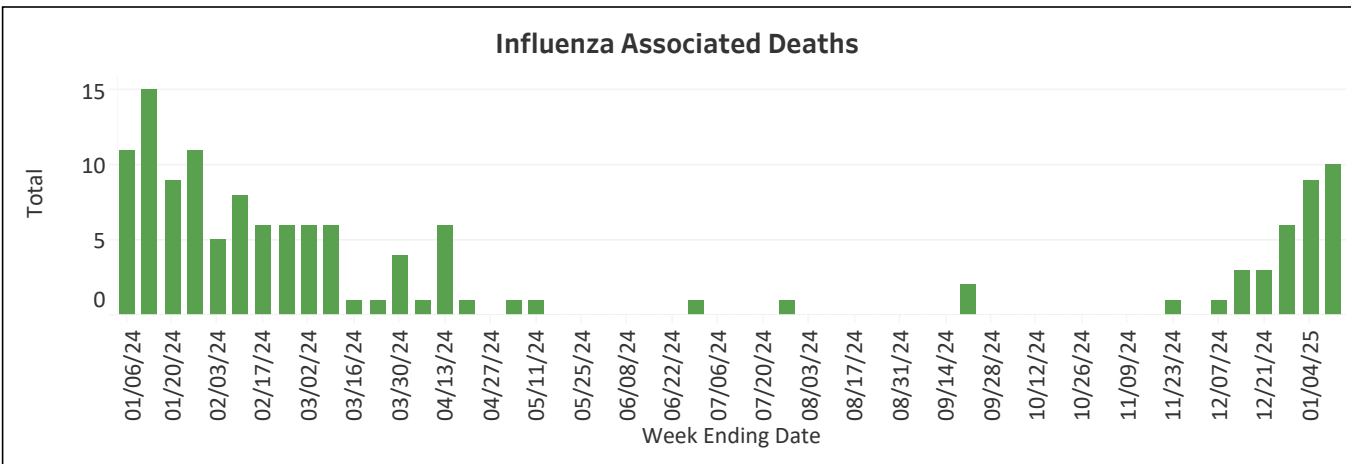
NJDOH uses syndromic surveillance data to monitor trends associated with visits to emergency departments for influenza. Data shows the number of emergency department visits with an influenza diagnosis that resulted in hospitalization by age group.



Influenza: Deaths

Data from CDRSS and EDRS is used to 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.

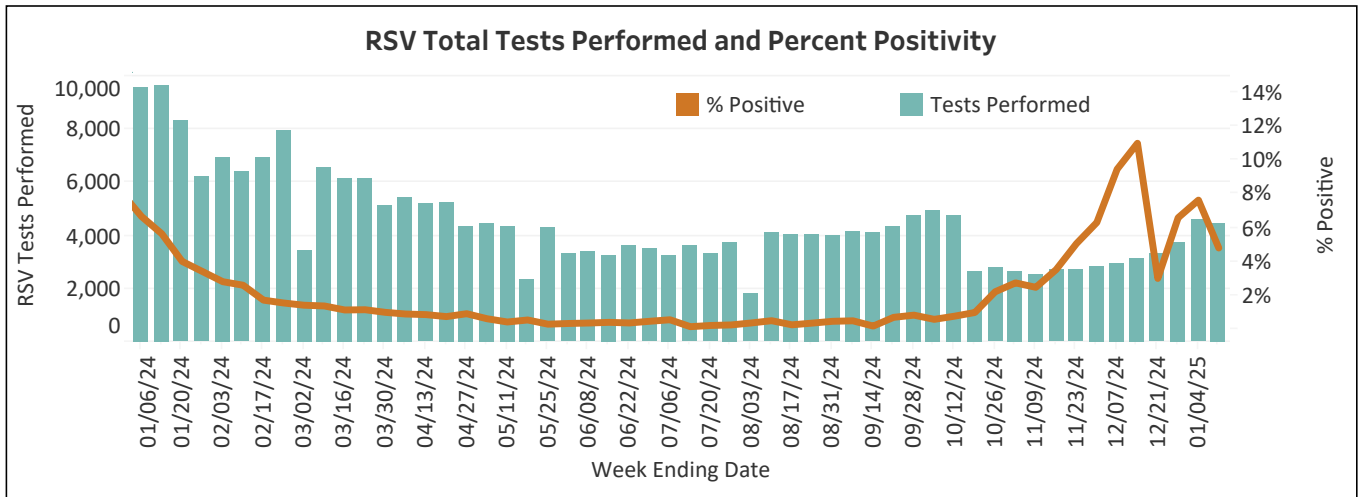


Pediatric Influenza Deaths and Severe Cases

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	11	0	15

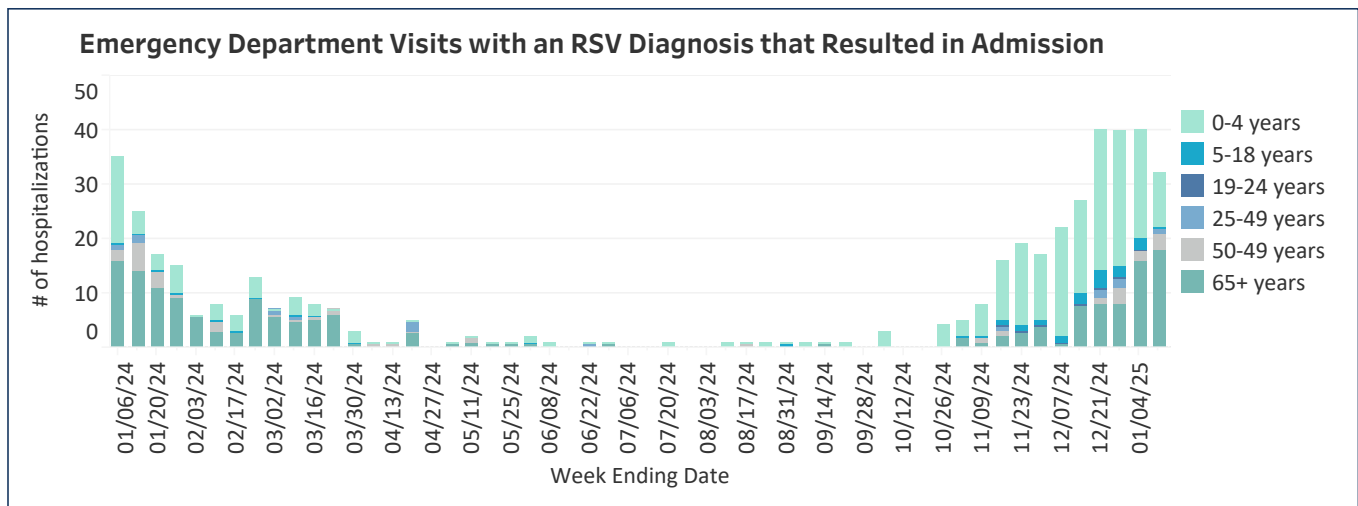
RSV: Tests Positivity

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.



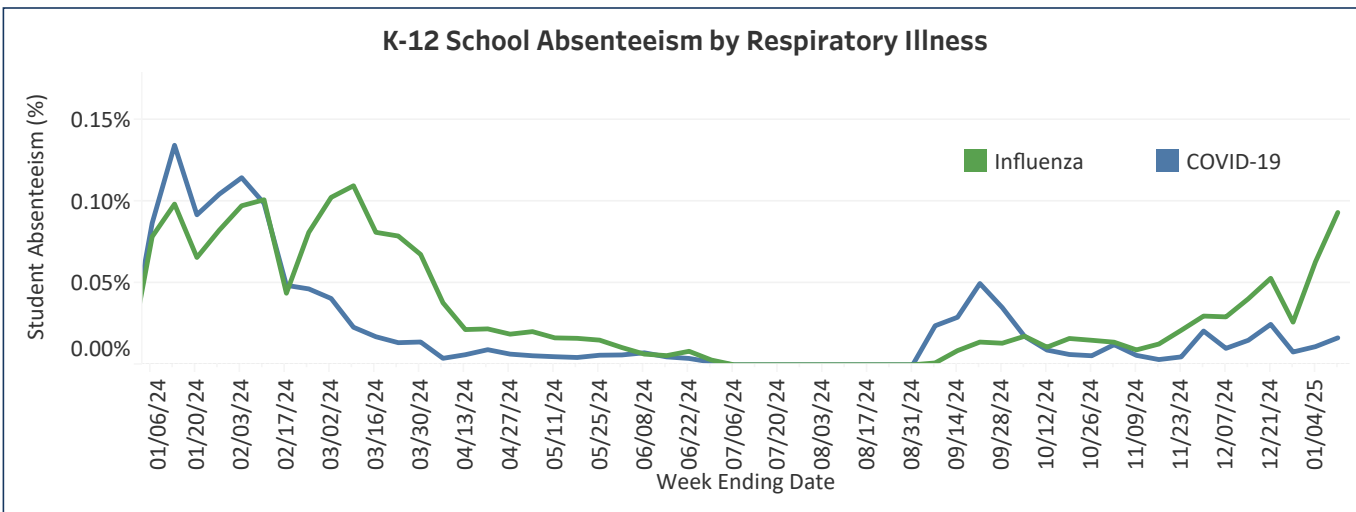
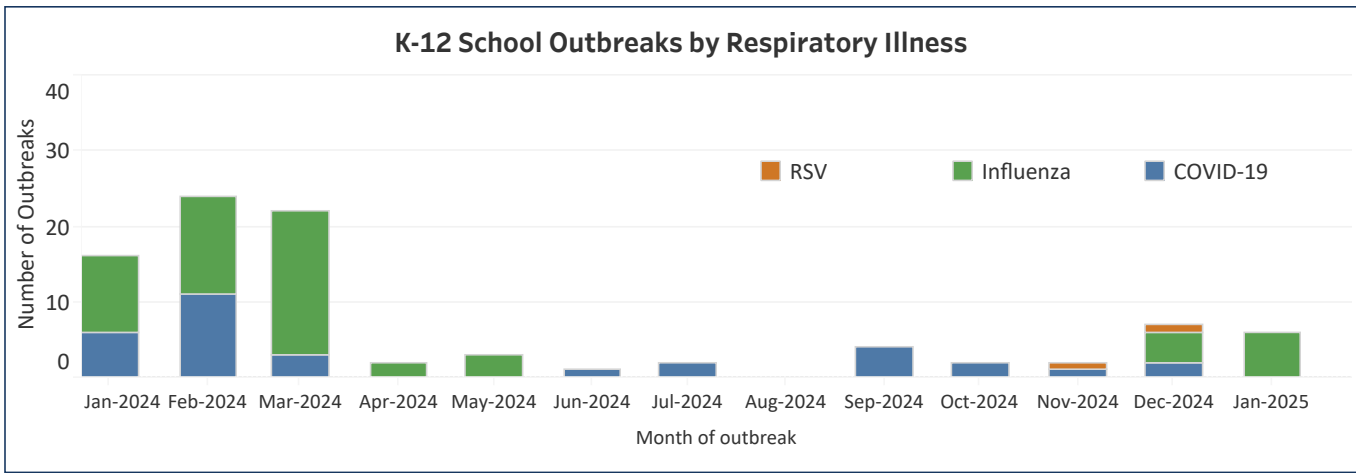
RSV: Hospitalizations

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.

