# COVID-19 and Respiratory Illness Activity Report

MMWR Week Ending December 16, 2023

Highlights

- CDC COVID-19 Hospital Admission Levels for the MMWR week ending December 16, 2023 is medium in 7 counties (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem) and low in all other counties.
- The percentage of deaths due to COVID-19 in the past week is a timely measure of mortality trends. For the week ending December 16, 2023, 2.7% of deaths were due to COVID-19 (CDC COVID Data Tracker).
- In the past week, 2.4% of emergency department visits were diagnosed as COVID-19 (CDC COVID Data Tracker).
- In the four weeks leading up to December 9, 2023, HV.1 accounted for 31.7% of sequenced variants. JN.1 and EG.5 accounted for 18.8% and 10.3% of sequenced variants, respectively.
- For the week ending December 16, 2023, twenty COVID-19 and four other respiratory illness outbreaks were reported into the SIC module by K-12 schools.
- RSV activity and percent positivity in New Jersey are lower this week when compared to the previous week. Emergency department visits due to RSV are stable (CDC Respiratory Virus Activity Levels).

1. COVID-19 Hospitalizations

This report summarizes surveillance information for COVID-19, RSV, and other non-influenza viral respiratory illnesses. For information on influenza, please refer to the weekly Influenza Surveillance Reports.
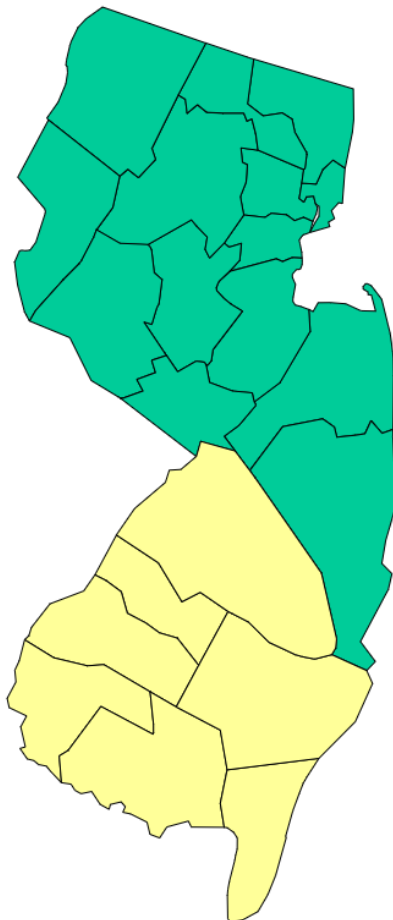
CDC COVID-19 hospital admission levels are the primary surveillance indicator to help guide individual and community decisions related to risk and preventative measures. The number of new COVID-19 hospital admissions for every 100,000 persons in the past week is used to classify county risk levels as low, medium, or high as follows:

New COVID-19 Hospital Admissions per 100,000 population	
Low	<10
Medium	10.0 – 19.9
High	≥ 20.0

In addition to new hospital admissions, the percentage of inpatient beds and ICU beds occupied by COVID-19 patients are important metrics for monitoring COVID-19 activity. Table 1 includes current values for these metrics and a comparison from the previous week. Many individuals have immunity against COVID-19 due to vaccination and/or prior infection. Immunity, in addition to treatments, have greatly reduced the risk of severe outcomes from COVID-19. In the meantime, immunocompromised individuals and persons with certain underlying health conditions continue to be at higher risk for severe illness. The following table includes recommendations for protecting yourself, your family, and communities. Additional information can be found at https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html.

COVID-19 Hospital Admission Level	Protect yourself and your family	Protect your communities, schools, and workplaces
Low	• Stay up to date with COVID-19 vaccines and boosters. • Stay home if you are sick. • Avoid contact with people who have suspected or confirmed COVID-19. • Follow isolation & post-exposure recommendations. • Get tested if exposed to someone with COVID-19, if you develop COVID-19 symptoms, and before/after travel. • Keep at-home tests on hand. • Look for ways to improve airflow when home or indoors. • Wash your hands frequently. • Clean and disinfect your home. • If you are at high risk for severe disease, have a plan for rapid testing and talk to your healthcare provider about whether you are a candidate for treatments.	• Promote equitable access to COVID-19 vaccines, testing, treatment, masks, outreach, and support services, particularly for those at high risk of severe illness and vulnerable populations. Contact your local health department (LHD) for information. • Ensure isolation & post-exposure recommendations are followed. • Maintain good indoor ventilation and airflow. • Teach and reinforce importance of proper hand hygiene and respiratory etiquette. • Ensure routine cleaning and disinfecting of buildings and facilities. • Maintain screening testing infrastructure in high-risk settings to allow for easier scale up when COVID-19 hospital admission levels are medium or high.
Medium	**Follow recommendations for 'Low' above and:** • If you are at high risk for severe illness from COVID-19, wear a high-quality mask or respirator (e.g., N95) when indoors in public. • If you spend time with someone at high risk for severe illness from COVID-19, consider self-testing before you see them and wearing a high-quality mask when indoors with them.	**Follow recommendations for 'Low' above and:** • High-risk congregate settings should consider their facility-specific risks to guide decisions about when to apply specific COVID-19 prevention actions.
High	**Follow recommendations for 'Low' and 'Medium' above and:** • Wear a high-quality mask or respirator. • If you are at high risk for severe illness from COVID-19, avoid non-essential indoor activities in public where you could be exposed.	**Follow recommendations for 'Low' and 'Medium' above and:** • Implement enhanced prevention measures in high-risk congregate settings, such as in homeless service sites and correctional facilities. Enhanced strategies include requiring universal indoor masking regardless of vaccination status, increasing/improving ventilation, adding enhanced cleaning & disinfection, increasing physical distance between individuals in congregate areas, and holding group activities outdoors. • High-risk congregate settings should consult with their LHD about implementing facility-wide routine screening testing. • Healthcare facilities should institute facility-wide masking when masks are recommended in the community. • School and childcare settings may consider implementing screening testing for high-risk activities or at key times in the year. Screening testing can also be implemented by schools serving students with moderate or severe immunocompromise or complex medical conditions.

Table 1. COVID-19 hospital admission levels and percentage of inpatient and ICU beds occupied based on data for MMWR week ending December 16, 2023.

County	New Hospital Admissions per 100,000				Percentage of Inpatient Beds Occupied by COVID-19 patients		Percentage of ICU Beds Occupied by COVID-19 patients	
	Current Value	Current Level	Previous Week Level	Change since previous week	Current Value	Change since Previous Week	Current Value	Change since Previous Week
Atlantic	11.2	Medium	Medium	(−)	2.7	(−)	4.0	(↑)
Bergen	7.2	Low	Low	(−)	2.7	(−)	1.9	(−)
Burlington	10.0	Medium	Low	(↑)	2.8	(−)	2.1	(↑)
Camden	10.0	Medium	Low	(↑)	2.8	(−)	2.1	(↑)
Cape May	11.2	Medium	Medium	(−)	2.7	(−)	4.0	(↑)
Cumberland	16.7	Medium	Low	(↑)	3.7	(−)	6.7	(↑)
Essex	6.0	Low	Low	(−)	2.5	(−)	1.3	(−)
Gloucester	10.0	Medium	Low	(↑)	2.8	(−)	2.1	(↑)
Hudson	7.2	Low	Low	(−)	2.7	(−)	1.9	(−)
Hunterdon	7.8	Low	Low	(−)	3.2	(−)	2.9	(−)
Mercer	7.3	Low	Low	(−)	2.5	(−)	2.0	(↑)
Middlesex	6.0	Low	Low	(−)	2.5	(−)	1.3	(−)
Monmouth	8.4	Low	Low	(−)	5.2	(−)	2.4	(↑)
Morris	9.2	Low	Low	(−)	2.9	(−)	1.6	(−)
Ocean	8.4	Low	Low	(−)	5.2	(−)	2.4	(↑)
Passaic	7.2	Low	Low	(−)	2.7	(−)	1.9	(−)
Salem	10.0	Medium	Low	(↑)	2.8	(−)	2.1	(↑)
Somerset	6.0	Low	Low	(−)	2.5	(−)	1.3	(−)
Sussex	9.2	Low	Low	(−)	2.9	(−)	1.6	(−)
Union	6.0	Low	Low	(−)	2.5	(−)	1.3	(−)
Warren	7.8	Low	Low	(−)	3.2	(−)	2.9	(−)

Source: Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC; 2023, MMWR week ending December 16. https://covid.cdc.gov/covid-data-tracker

2. Healthcare Infection Prevention & Control

CDC healthcare guidance no longer uses COVID-19 Transmission Levels to guide facility COVID-19 infection prevention and control interventions. Healthcare facilities each have unique strengths and challenges which often require facility-specific infection prevention and control practices. Healthcare facilities should consider several factors when determining when and how to implement COVID-19 infection prevention and control practices (e.g., patients/residents with highest risk of severe outcomes, input from stakeholders, outbreak status). In addition, state and national data on COVID-19 and trends of other respiratory viruses can help inform facility-specific practices:

- NJDOH Influenza and Respiratory Illness Surveillance Reports
- National Emergency Department Visits for COVID-19, Influenza, and Respiratory Syncytial Virus

Source control remains an important intervention during periods of higher respiratory virus transmission. **Healthcare facilities should institute facility-wide masking when masks are recommended in the community (e.g., when COVID-19 hospital admission levels are high).**

New admission testing in nursing homes has been updated to align with other healthcare settings and is at the discretion of the nursing home. Refer to CDC Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2.

3. COVID-19 Cases

NJDOH uses CSTE Case Definition criteria to define COVID-19 cases for public health surveillance. Confirmed and probable COVID-19 cases by illness onset date are plotted below. When the illness onset date is unknown, the date of earliest positive specimen collection or the date of NJDOH notification is used, whichever is earlier. The statewide COVID-19 case rate has been below 200 cases per 100,000 residents since mid-January 2023.

Confirmed and Probable COVID-19 Cases by Illness Onset Date
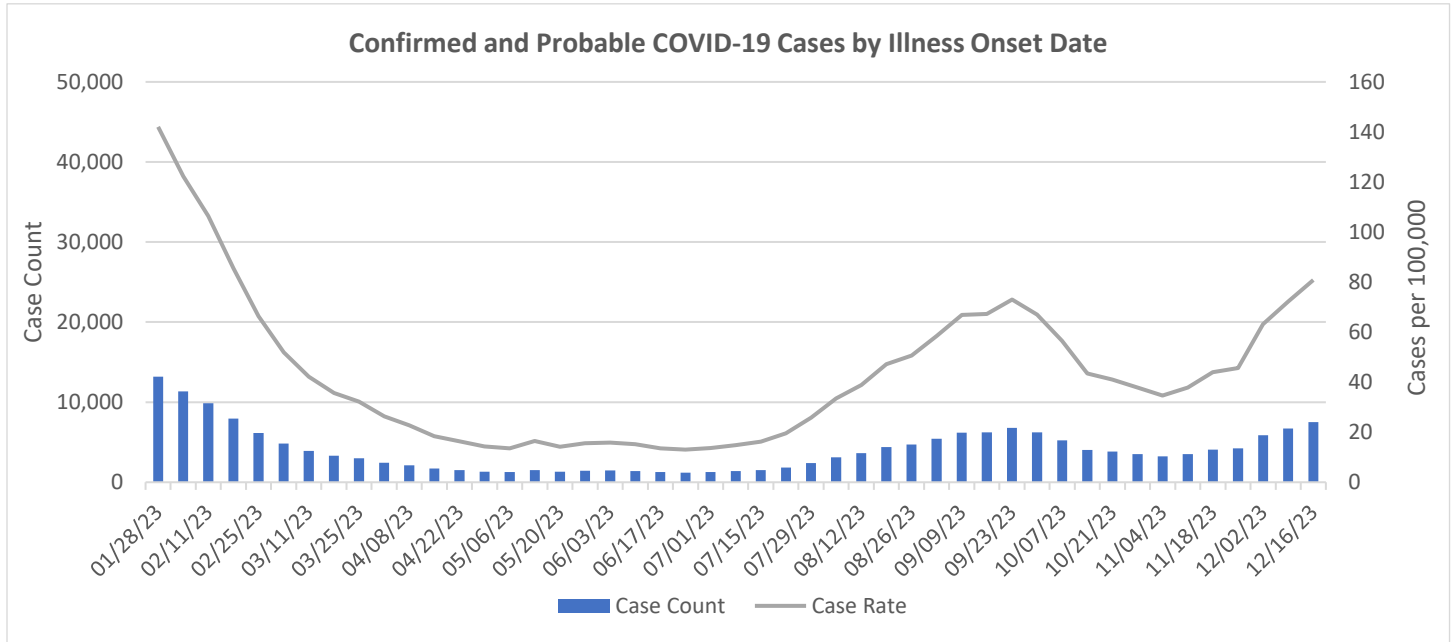
Source: NJDOH Communicable Disease Reporting and Surveillance System (CDRSS)

4. COVID-19 Cases by Age

The percentage of confirmed and probable COVID-19 cases by age group as reported to the NJDOH Communicable Disease Reporting and Surveillance System are plotted below.

Cases By Age Group
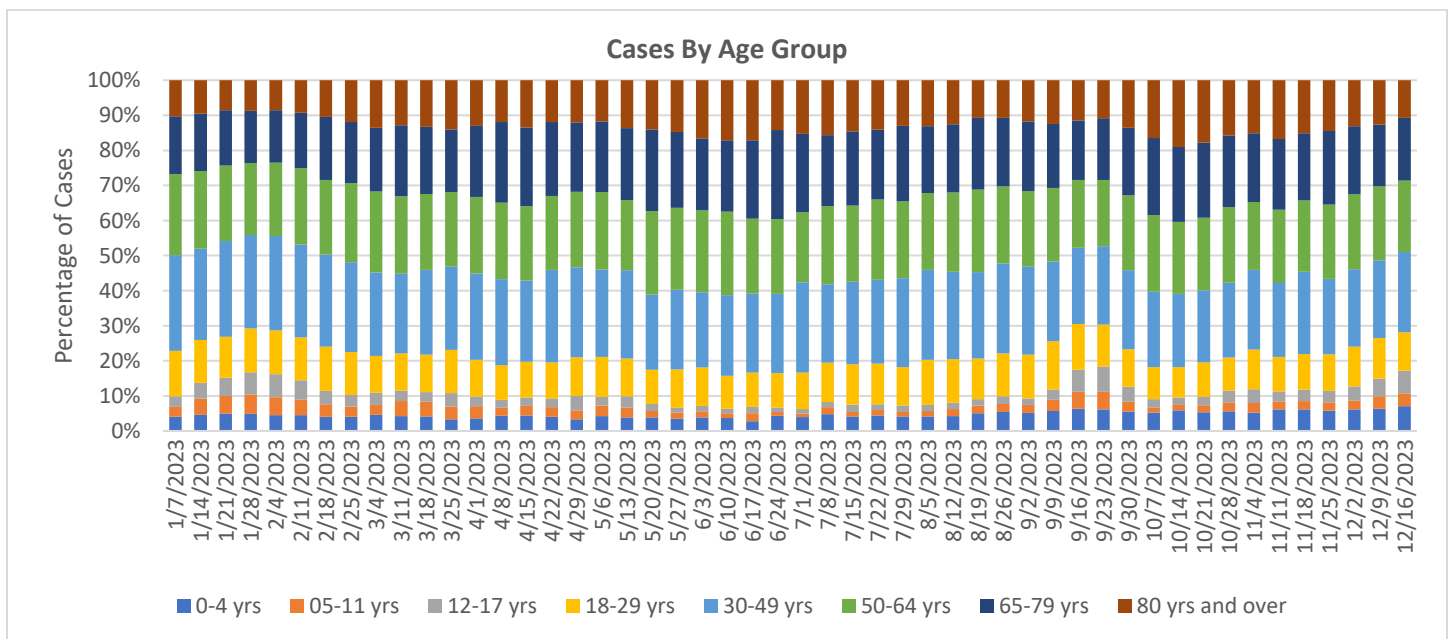
Source: NJDOH Communicable Disease Reporting and Surveillance System (CDRSS)

5. COVID-19 Deaths

The percentage of deaths due to COVID-19 in the past week is a timely disease severity indicator. The percentage of deaths due to COVID-19 in the past week as indicated by National Vital Statistics Surveillance (NVSS) data is included on the CDC COVID Data Tracker. COVID-19-associated deaths by age group and date of death are shown below. COVID-19 associated deaths are classified according to CSTE Revised COVID-19-associated Death Classification Guidance for Public Health Surveillance Programs. For information on historical COVID-19 death data, see the Mortality dashboard on the NJ COVID-19 Information Hub.

2023 COVID-19-associated Deaths by Age group

Total	0-4 yrs	5-17 yrs	18-29 yrs	30-49 yrs	50-64 yrs	65-79 yrs	80+
876	1	2	3	18	51	249	552
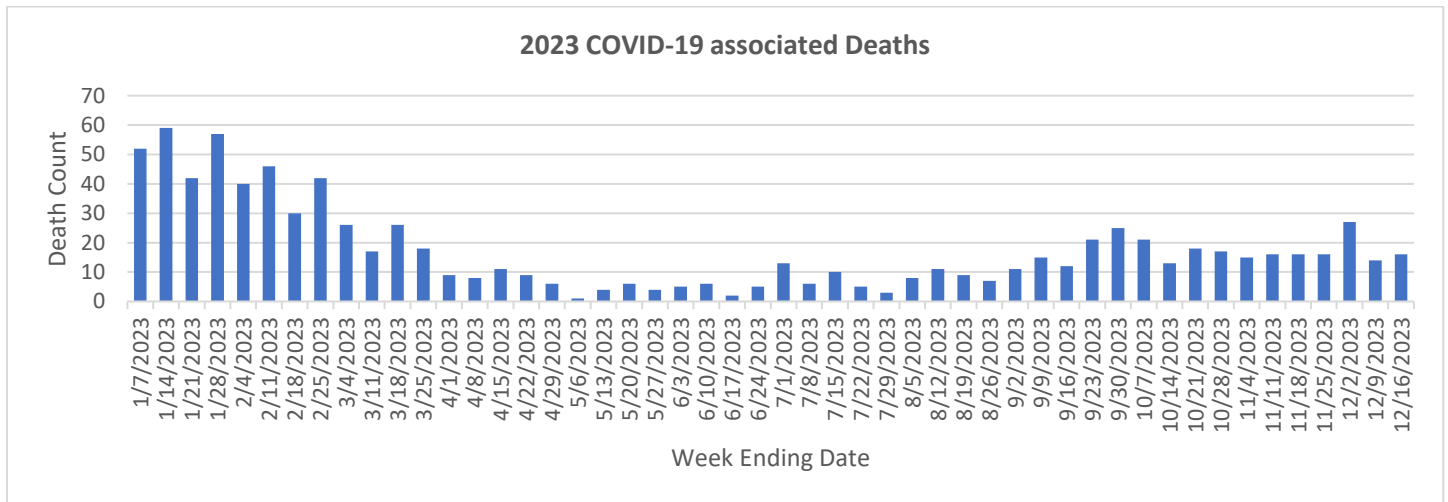
Source: NJDOH Communicable Disease Service, NJ Electronic Death Registration System (EDRS)

6. COVID-19 Syndromic Surveillance

NJDOH uses syndromic surveillance data to monitor trends associated with visits to emergency departments for COVID-like illness (CLI). CLI is defined as fever and cough or dyspnea (shortness of breath, difficulty breathing, etc.) or the presence of coronavirus diagnosis codes. The diagnosis of another respiratory pathogen (such as influenza, parainfluenza, and RSV) is excluded. Percent daily visits associated with CLI from emergency department data is collected via EpiCenter (i.e. NJDOH syndromic surveillance). CLI is monitored as a 7-day weekly average.
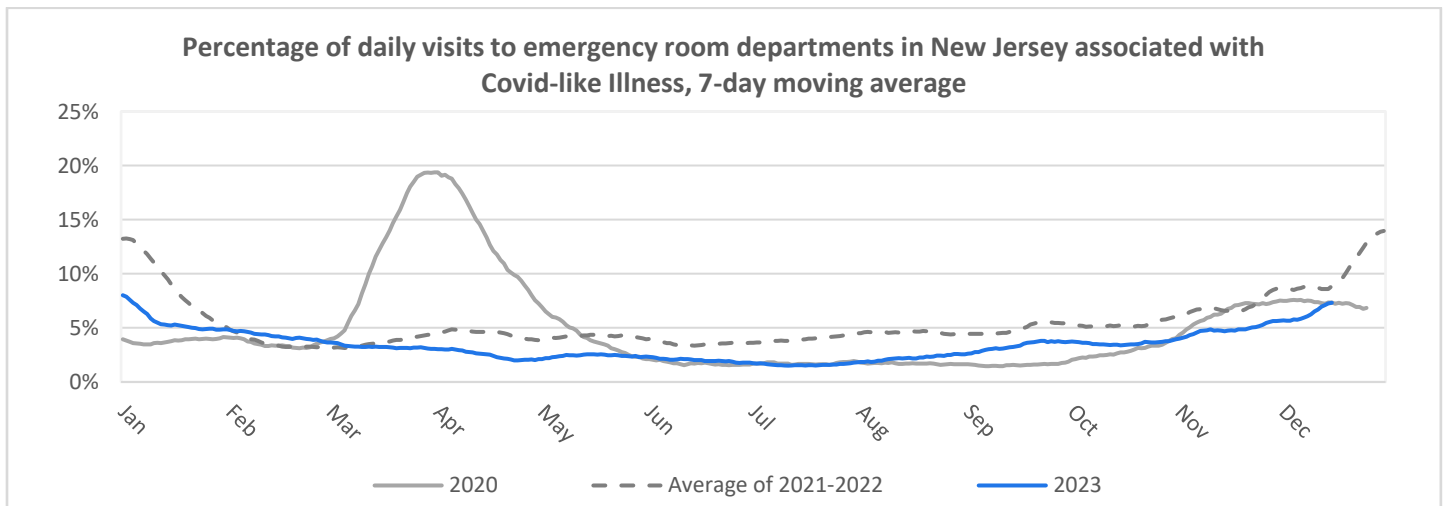

Source: EpiCenter, NJDOH syndromic surveillance data

7. COVID-19 Variant Surveillance

The table below shows the proportion of variants sequenced in the last 4 weeks as of the week ending December 9, 2023. The chart depicts a cumulative summary of COVID-19 variant surveillance by week of specimen collection. Data includes sequencing results reported by Commercial Labs (LabCorp, Aegis Sciences Corporation, Helix, Infinity Biologix, and Quest Diagnostics) and the NJDOH State Public Health Lab 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.

Variant of Concern Lineage (WHO Classification)	Proportion of Variants Sequenced in the last 4 weeks, as of week ending December 9, 2023
HV.1 (Omicron)	31.7%
JN.1 (Omicron)	18.8%
EG.5 (Omicron)	10.3%
HK.3 (Omicron)	7.0%
JG.3 (Omicron)	5.5%
FL.1.5.1 (Omicron)	4.0%
JD.1.1 (Omicron)	3.0%
BA.2.86 (Omicron)	2.7%
XBB.1.16.6 (Omicron)	2.5%
JF.1 (Omicron)	2.3%
XBB.1.9.1 (Omicron)	2.1%
XBB.1.5 (Omicron)	1.7%
Other (Omicron)	1.5%
GK.1.1 (Omicron)	1.1%

COVID-19 Variant Surveillance by Month/Year of Specimen Collection
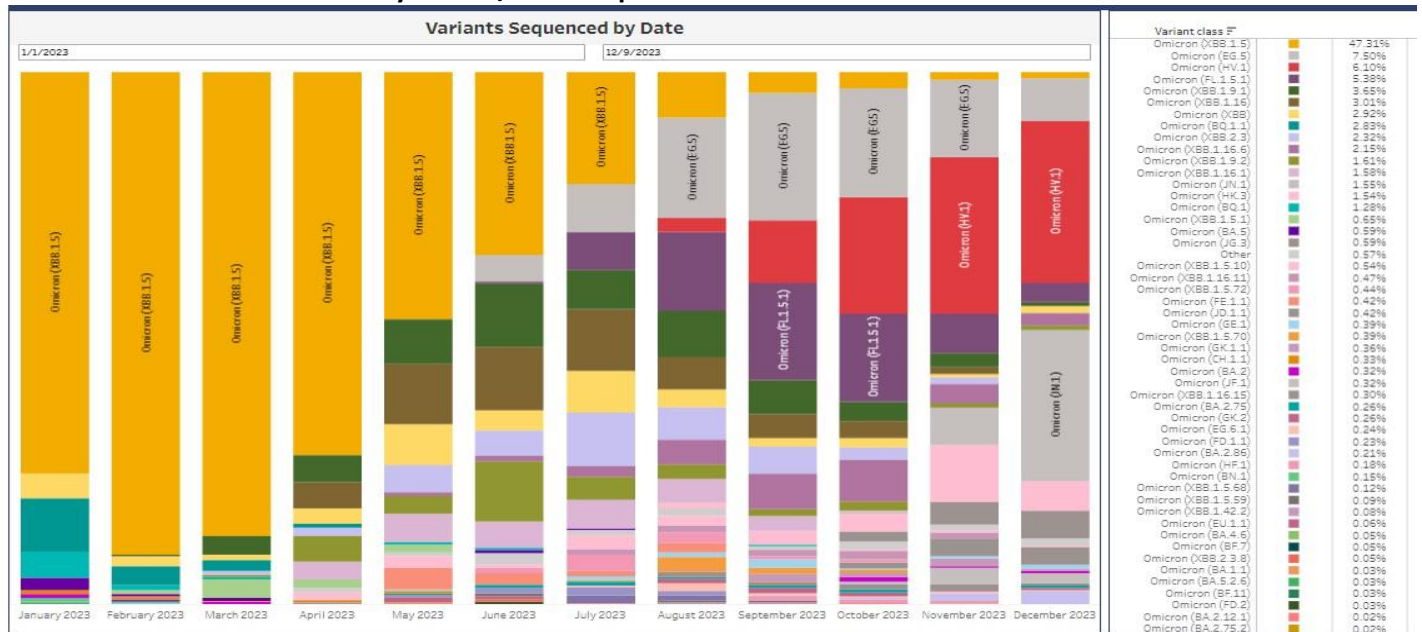
Notes:
Omicron B.1.1.529 includes BA.1, BA.3 and all sublineages (except BA.1.1 and its sublineages).
Omicron BA.2 includes all sublineages except BA.2.12.1, BA.2.75, BA.2.75.2, XBB and their sublineages.
Omicron BA.2.75 includes all BA.2.75.2, CH.1.1, BN.1 and their sublineages.
Omicron BA.4 includes all sublineages except BA.4.6.
Omicron BA.5 includes all sublineages, including (BE.x and BF.x), except BF.7, BF.11, BA.5.2.6, BQ.1, BQ.1.1 and their sublineages.
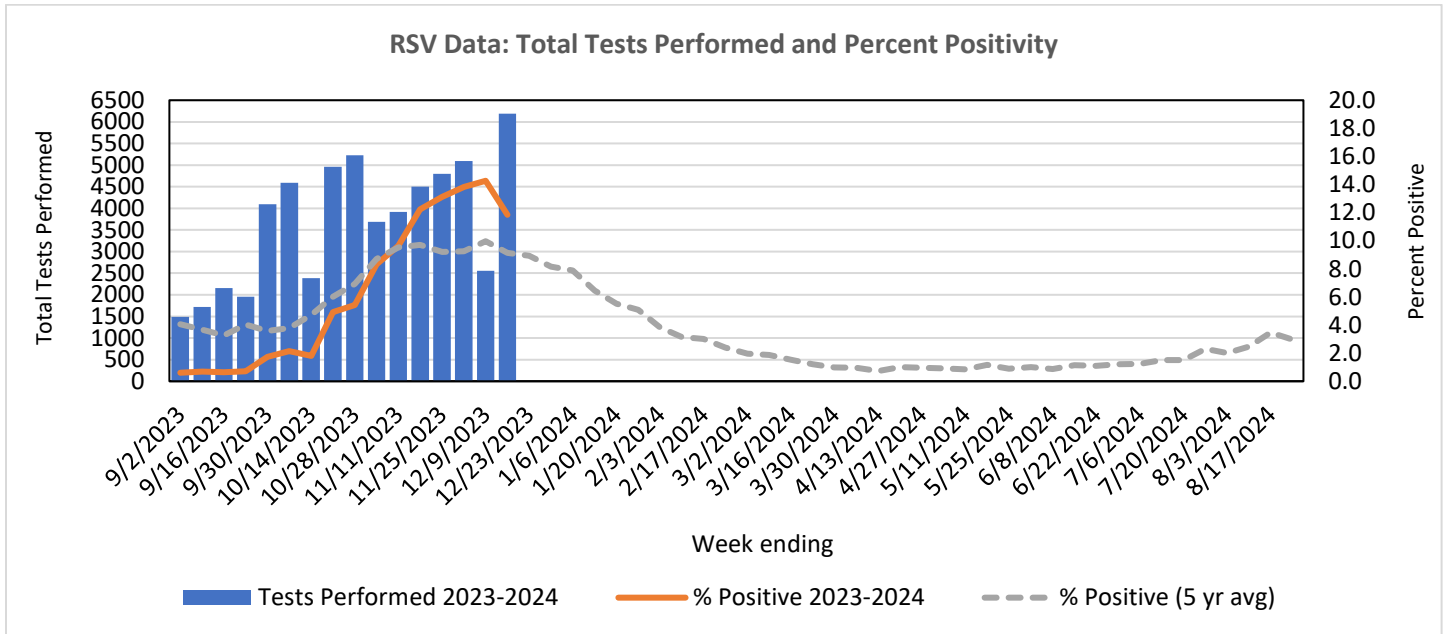Omicron XBB includes all XBB sublineages except XBB.1.16, XBB1.5, XBB1.5.1, FD.2 and all their sublineages.
Delta includes B.1.617.2 and all AY variants. Other represents additional and unassigned lineages not classified as variants of concern or variants of interest
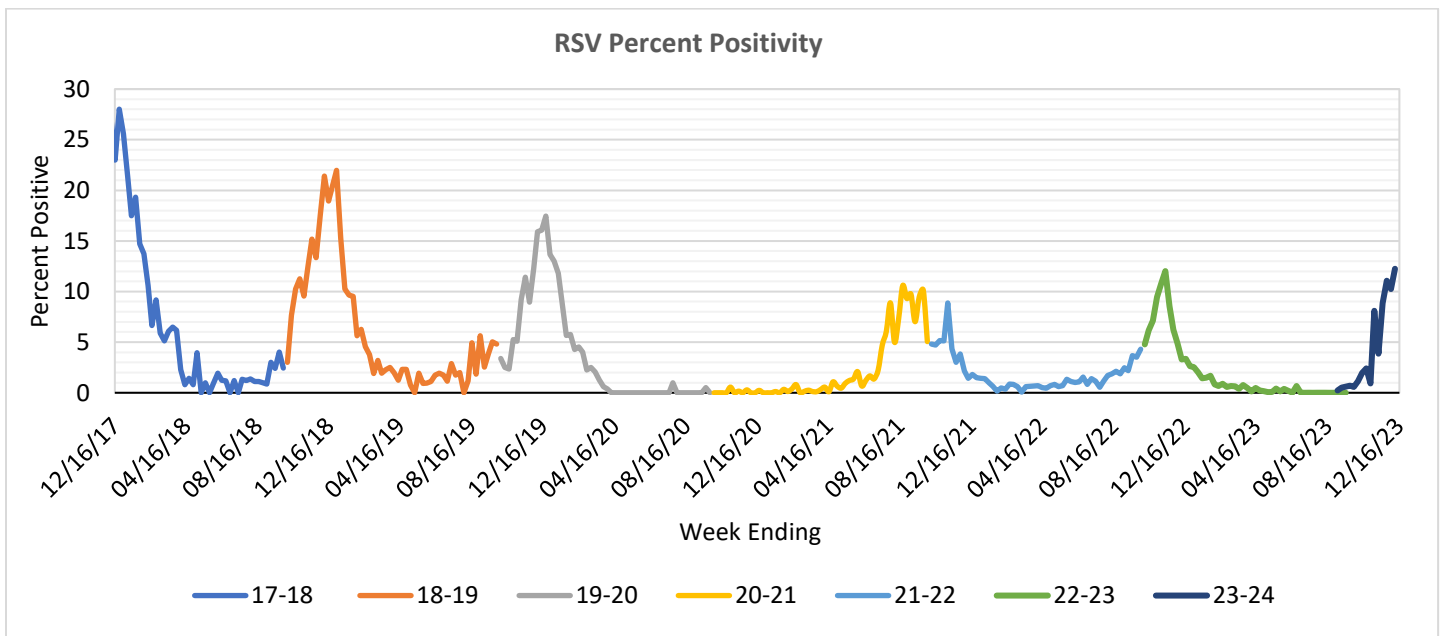
8. Non-COVID-19 Viral Respiratory Surveillance

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 for a number of non-influenza respiratory viruses. Information about the CDC NREVSS system can be found at: https://ww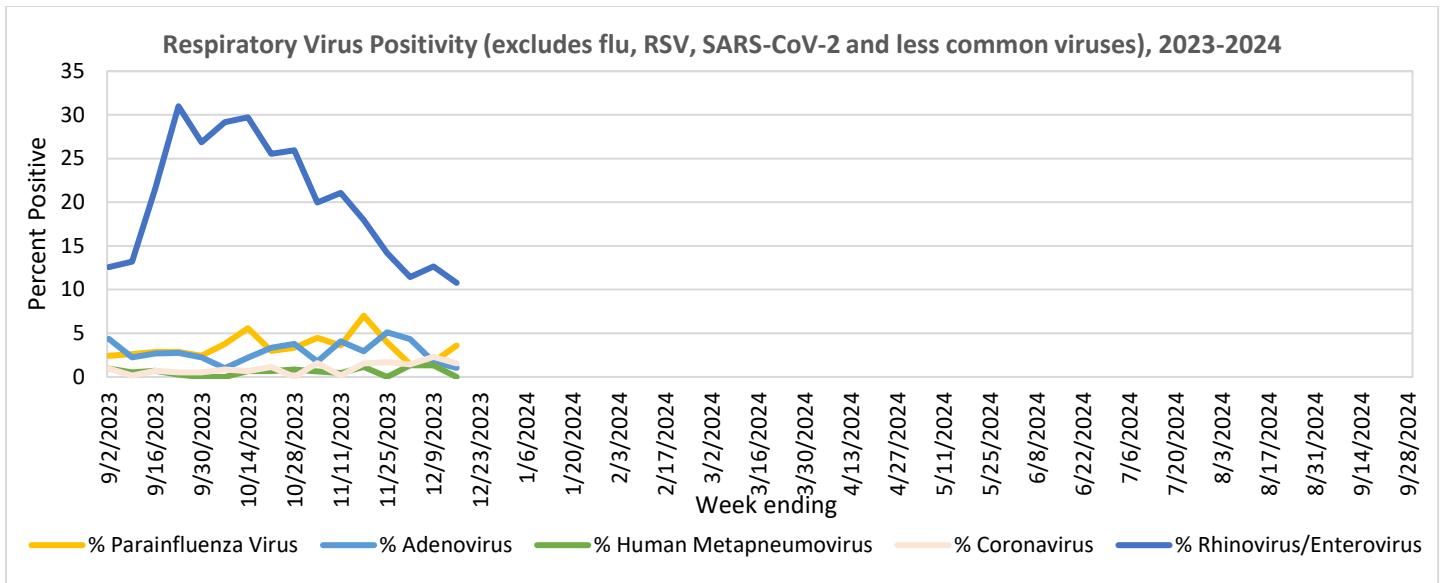w.cdc.gov/surveillance/nrevss/labs/index.html. Respiratory syncytial virus (RSV) data are acquired from facilities reporting via NREVSS or into the CDRSS SIC module. The RSV season is based upon the 5-year average of percent positivity and runs from the two consecutive weeks where percent positivity is at or above 10% through two consecutive weeks where it is below 10%. The charts below show data on total tests performed and percent positivity for RSV and other non-influenza respiratory viruses for the 2023-24 season.
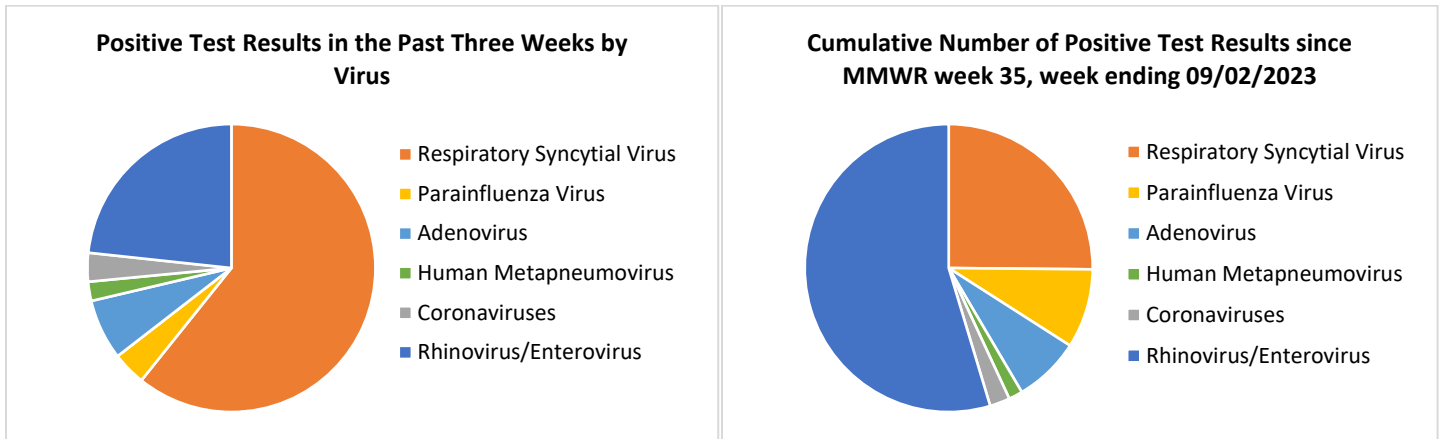
RSV Data: Total Tests Performed and Percent Positivity

Tests Performed 2023-2024 — % Positive 2023-2024 — % Positive (5 yr avg)

Source: NJDOH Communicable Disease Reporting and Surveillance System (CDRSS), Surveillance for Infectious Conditions (SIC) module

RSV Percent Positivity

17-18 — 18-19 — 19-20 — 20-21 — 21-22 — 22-23 — 23-24

Source: National Respiratory and Enteric Virus Surveillance System (NREVSS)

Respiratory Virus Positivity (excludes flu, RSV, SARS-CoV-2 and less common viruses), 2023-2024

Legend: % Parainfluenza Virus, % Adenovirus, % Human Metapneumovirus, % Coronavirus, % Rhinovirus/Enterovirus

Source: National Respiratory and Enteric Virus Surveillance System (NREVSS)

Positive Test Results in the Past Three Weeks by Virus

Legend: Respiratory Syncytial Virus, Parainfluenza Virus, Adenovirus, Human Metapneumovirus, Coronaviruses, Rhinovirus/Enterovirus

Cumulative Number of Positive Test Results since MMWR week 35, week ending 09/02/2023

Legend: Respiratory Syncytial Virus, Parainfluenza Virus, Adenovirus, Human Metapneumovirus, Coronaviruses, Rhinovirus/Enterovirus

Source: National Respiratory and Enteric Virus Surveillance System (NREVSS)

9. K-12 Schools

As of the week ending December 16, 2023, 2011 schools reported their outbreak data into the Surveillance for Infectious Conditions (SIC) module. The percent of schools reporting non-flu respiratory outbreaks from COVID-19 and other respiratory pathogens increased from 0.42% to 1.19% this week. This percentage is calculated as the number of schools reporting non-flu respiratory outbreaks/clusters divided by the total number of schools reporting multiplied by 100.
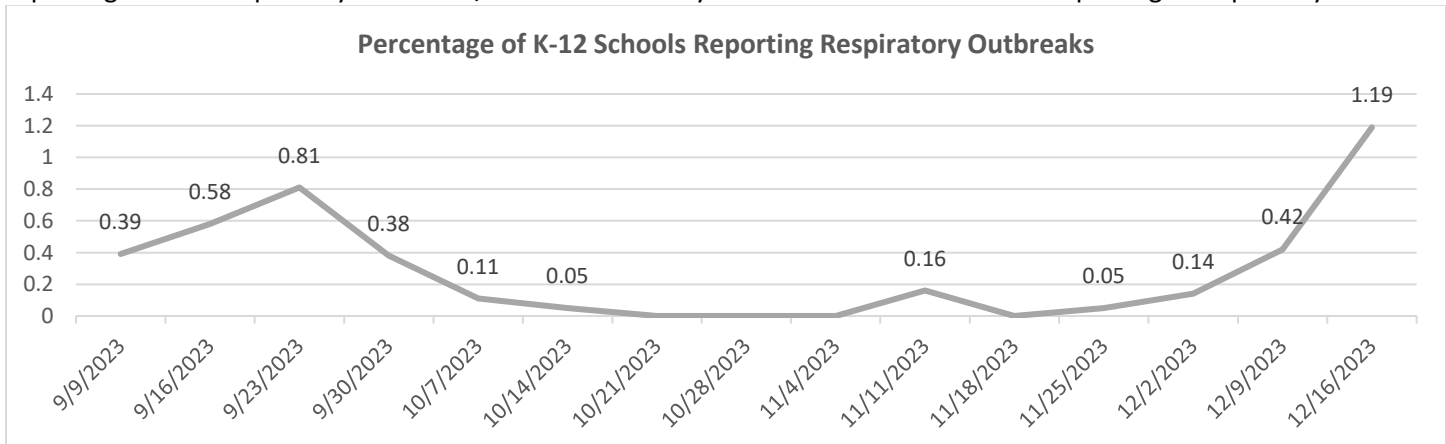
Percentage of K-12 Schools Reporting Respiratory Outbreaks

Source: NJDOH Communicable Disease Reporting and Surveillance System (CDRSS), Surveillance for Infectious Conditions (SIC) module

Twenty COVID-19 and four other respiratory illness outbreaks were reported in Bergen, Burlington, Camden, Cape May, Cumberland, Essex, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Salem, Sussex, and Union counties. See the Schools Tab of the COVID-19 information hub for more information.
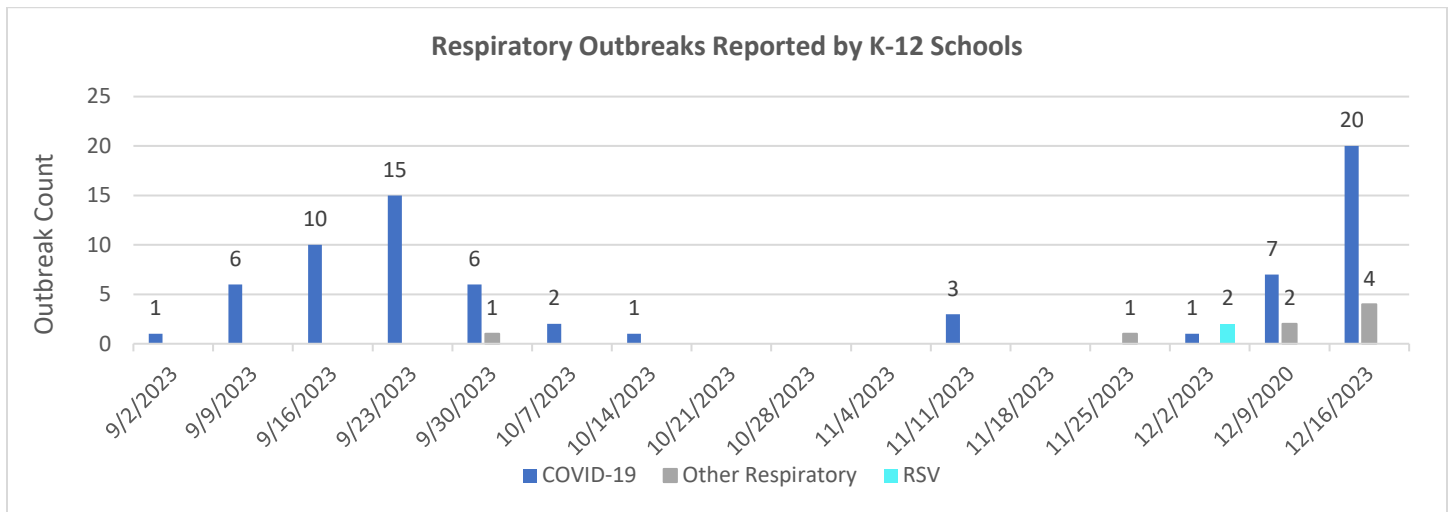
Source: NJDOH CDRSS, Surveillance for Infectious Conditions (SIC) module

10. 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 and RSV outbreaks.
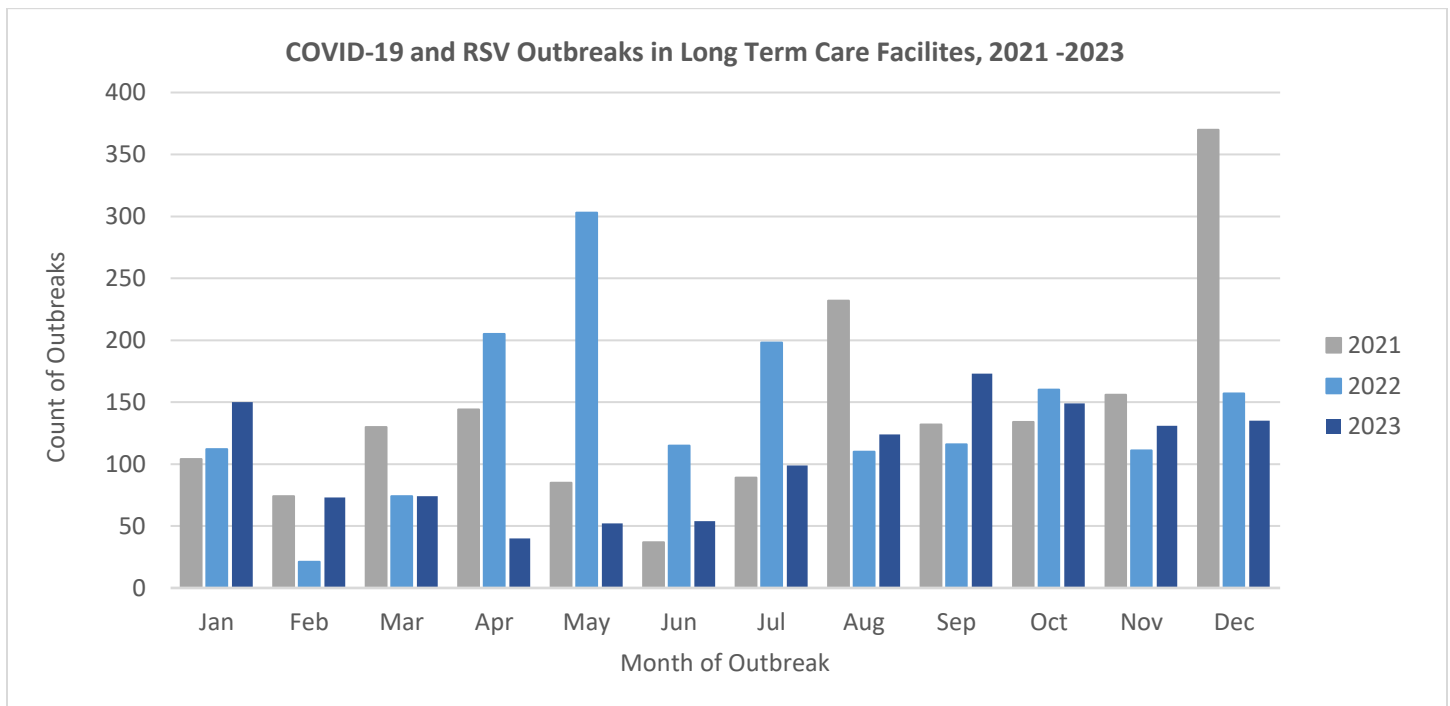
Source: NJDOH Communicable Disease Reporting and Surveillance System (CDRSS)

This report will be updated weekly and posted at: https://www.nj.gov/health/cd/statistics/covid/index.shtml.
For additional information visit:
NJDOH Communicable Disease Service: COVID-19
NJDOH Communicable Disease Service: Influenza Illness Surveillance Reports
NJ COVID-19 Information Hub