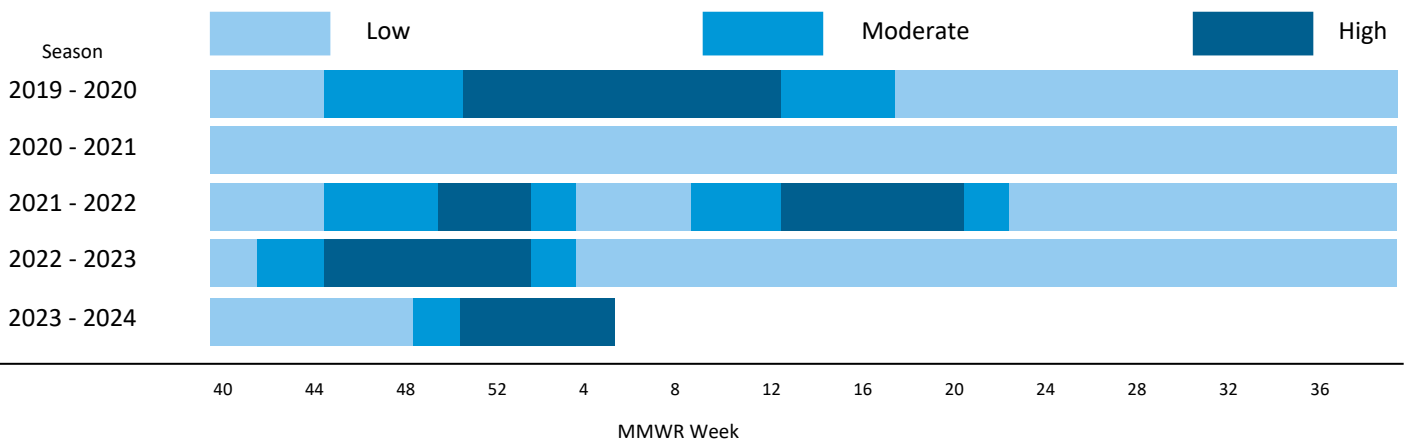


Highlights

- *Influenza activity level is high statewide.*
- *Emergency Department and outpatient provider visits associated with influenza-like illness are higher than last week & higher than this week last year.*
- *There have been two confirmed influenza-associated pediatric deaths reported this season.*
- *Of the 87 influenza outbreaks reported this season, 18 were in the last three weeks.*
- *Positive results continue to be reported; influenza A (subtyping not performed) is at 64.62%, followed by A(H1N1)pdm09 19.27%, B 11.58%, and A(H3N2) 4.53%.*
- *Among the subtyped influenza viruses this season, the most frequently reported type is Influenza A(H1N1)pdm 09.*

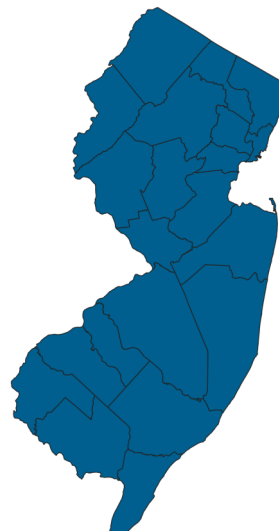
Influenza Activity Level Comparison



1. Current Influenza Activity Level

This report summarizes surveillance information for influenza illnesses reported to the New Jersey Department of Health (NJDOH) Communicable Disease Service. As per regulation, influenza is a laboratory reportable condition but it is not possible to count every case that occurs since some individuals will not seek medical care or may never get tested. Surveillance is conducted year round and this report is published from October to May. The [Morbidity and Mortality Weekly Report \(MMWR\) week](#) is the time frame used by the Centers for Disease Control and Prevention (CDC) for disease reporting and activity Levels are defined in the table on page 7 of this report. **Counts displayed below are the cumulative totals reported for the season beginning with MMWR week 40, week ending October 7, 2023.**

State Activity Level	
HIGH	
Regional Data	
Northwest <small>Morris, Passaic, Sussex, Warren</small>	HIGH
Northeast <small>Bergen, Essex, Hudson</small>	HIGH
Central West <small>Hunterdon, Mercer, Somerset</small>	HIGH
Central East <small>Middlesex, Monmouth, Ocean, Union</small>	HIGH
Southwest <small>Burlington, Camden, Gloucester, Salem</small>	HIGH
Southeast <small>Atlantic, Cape May, Cumberland</small>	HIGH



49,836
Cases reported (PCR & Rapid)

87
Total Outbreaks

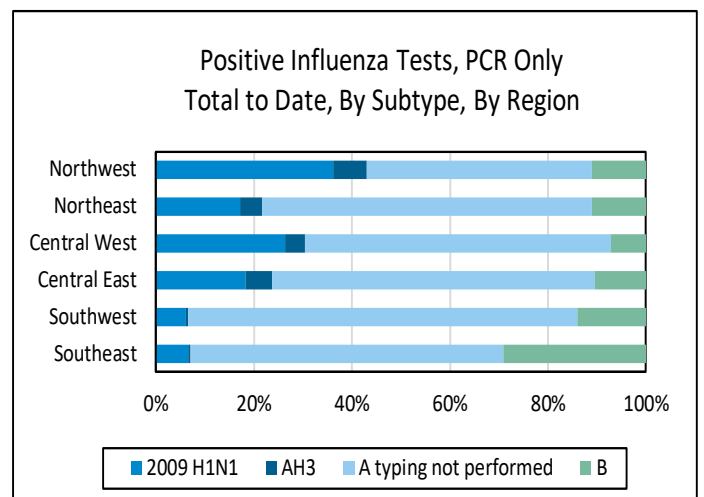
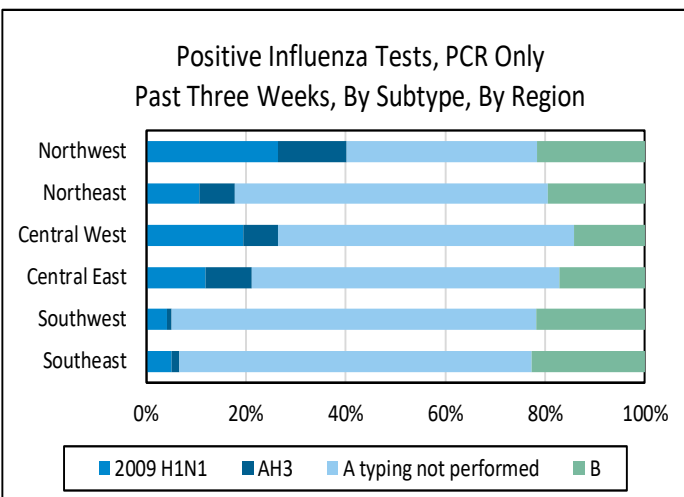
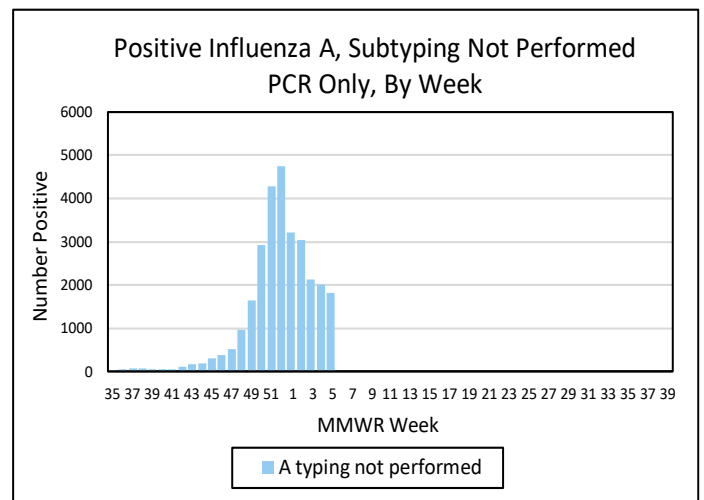
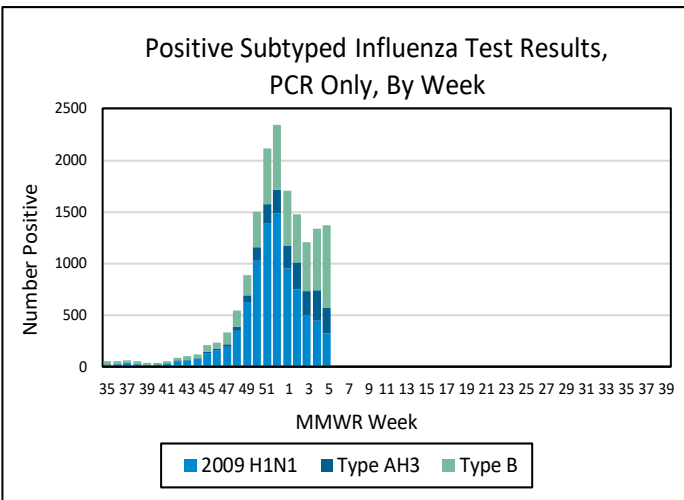
2
Pediatric flu deaths (confirmed)

2. Laboratory Testing

Real-time polymerase chain reaction (PCR) results for influenza (AH1N1, AH3N2, A subtyping not performed, and B) are obtained from electronic laboratory transmission submitted by acute care, commercial and public health laboratories. Rapid influenza test data are acquired from facilities reporting via the CDRSS Surveillance for Infectious Conditions (SIC) module. While the cumulative totals begin with MMWR week 40, week ending October 7, 2023, the data represented in charts begin with MMWR week 35, week ending September 2, 2023. Past 3 weeks data includes the current week and two prior weeks starting with MMWR week 40, week ending October 7, 2023.

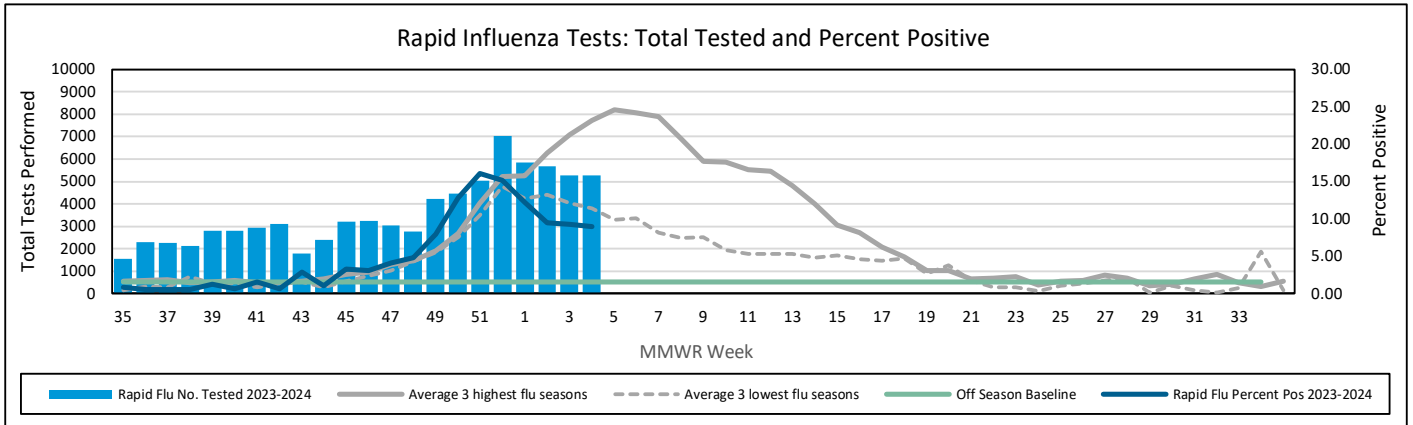
	Test Type	Current Week	Past 3 Weeks	Cumulative Total
PCR	Influenza A (H1N1)pdm09	321	1262	8522 (19.27%)
	Influenza A H3N2	245	775	2004 (4.53%)
	Influenza A (Subtyping Not Performed)	1818	5968	28573 (64.62%)
	Influenza B	807	1878	5119 (11.58%)
Rapid	Rapid Influenza	470	1500	5618

3. Virologic Surveillance



3. Virologic Surveillance, *continued*

Data presented for rapid influenza testing represents information for the week prior to the current report week. Three year seasonal averages for rapid influenza tests are determined by calculating the average percent positive for each influenza season (October to May) beginning with the 2013-2014 season. These averages were ranked and the three highest and lowest overall season averages were selected. The three highest and lowest numbers were then averaged to obtain a single high and single low value for each week. The seasons which contribute to the high and low value for the rapid influenza chart are as follows: High: 16-17, 17-18, 18 -19; Low: 14-15, 21-22, 22-23. Off season baseline is calculated by taking the average of percent positivity for a 10 year period (2013 through and including 2023) during the months when influenza is less likely to be circulating (May to September). Data from the 19-20 and 20-21 seasons were excluded due to the COVID-19 pandemic.



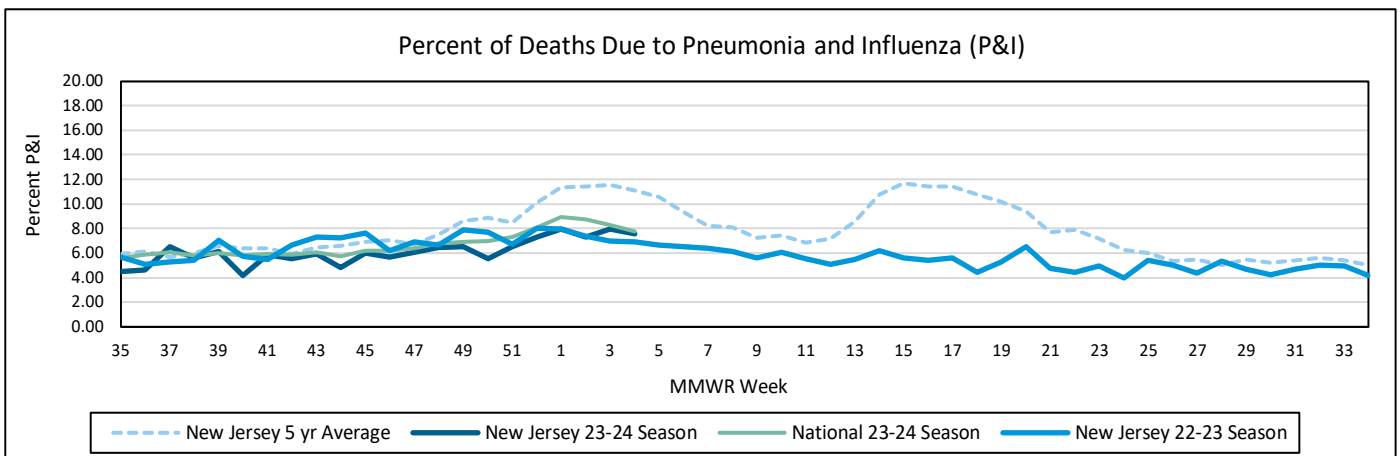
4. Pediatric Influenza Mortality

Influenza-associated pediatric mortality was added to New Jersey’s reportable disease list in 2009. The below table includes severe and fatal influenza associated pediatric cases reported to NJDOH. Severe illness is defined as admission to an intensive care unit for an influenza-related illness. An influenza associated pediatric death is defined as a death resulting from a clinically compatible illness with lab confirmed influenza.

Influenza Season	US (fatal)	NJ (severe)	NJ (fatal)
2019-2020	199	57	2
2020-2021	1	1	0
2021-2022	49	19	0
2022-2023	183	95	4
2023-2024	65	62	2

5. Percent of Deaths due to Pneumonia and Influenza

Records of all deaths in New Jersey are maintained by NJDOH, Office of Vital Statistics and Registry and are submitted to the National Center for Health Statistics (NCHS). Pneumonia and influenza (P&I) deaths are identified from these records, compiled by the week of death and percentages are calculated. There is a 2-4 week lag period between the week the deaths have occurred and when the data for that week is reported. Because many influenza and COVID-19 deaths have pneumonia included on the death certificate, P&I no longer measures the impact of influenza in the same way as in the past. Additional information is also available at <https://gis.cdc.gov/grasp/fluview/mortality.html>.



6. ILI Activity

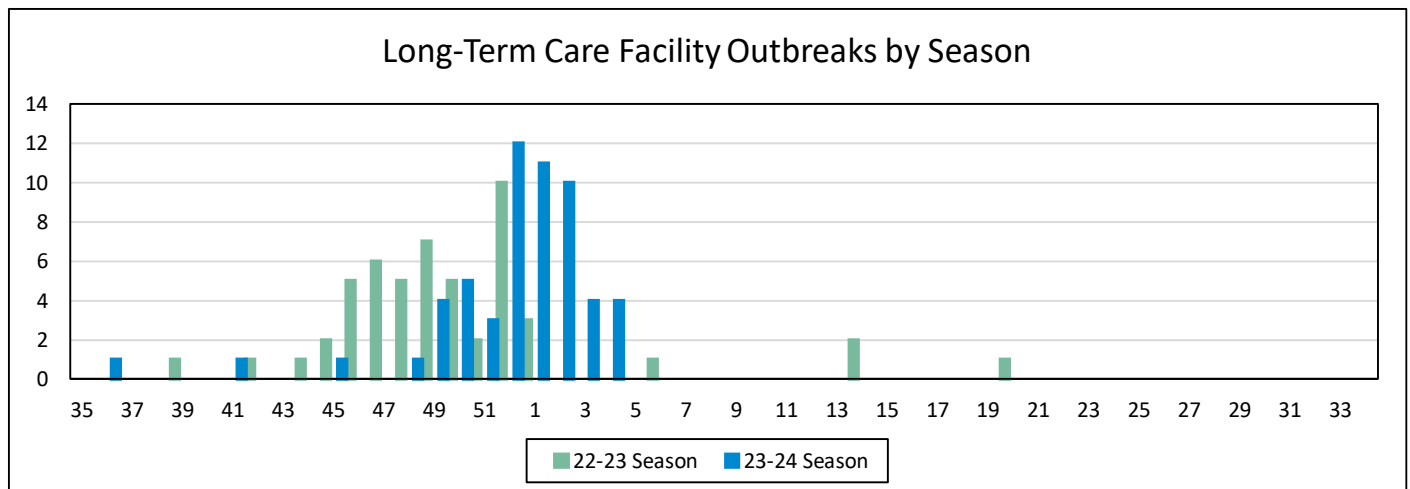
Influenza-like illness (ILI) is defined as fever (> 100°F [37.8°C], oral or equivalent) and cough and/or sore throat. For Long-term Care Facilities (LTCFs), fever is defined as 2°F above baseline temperature. ILI Activity from LTCFs and absenteeism data from schools is collected in the SIC Module of the Communicable Disease Reporting and Surveillance System (CDRSS). LTCFs and schools report their total census and number ill with ILI or number absent along with reason for absenteeism, respectively. Emergency department (ED) data is the aggregate weekly total of syndromic ILI visits and total ED registrations as recorded in EpiCenter (e.g., NJDOH syndromic surveillance system). Off season baseline is calculated by taking the average of statewide percentages of ILI for a 10 year period (2013 through and including 2023) during months when influenza is less likely to be circulating (May to September). Data from the 19-20 and 20-21 seasons were excluded due to the COVID-19 pandemic.

Percent Influenza-like Illness/Absenteeism				Baselines
	Current Week (range by county)	Last week Current year	Current week Last year	Off Season (Seasonal Average– low, high)
Long-term Care Facilities	0.13 (0.00, 1.15)	0.11	0.00	0.38 (0.30, 0.75)
Emergency Departments	5.58 (1.29, 7.81)	5.50	3.89	2.17 (3.52, 4.58)
Schools (Absenteeism)	5.99 (4.69, 7.84)	5.54	5.04	4.37 (4.33, 5.07)

6a. Long-term Care Facility Outbreaks

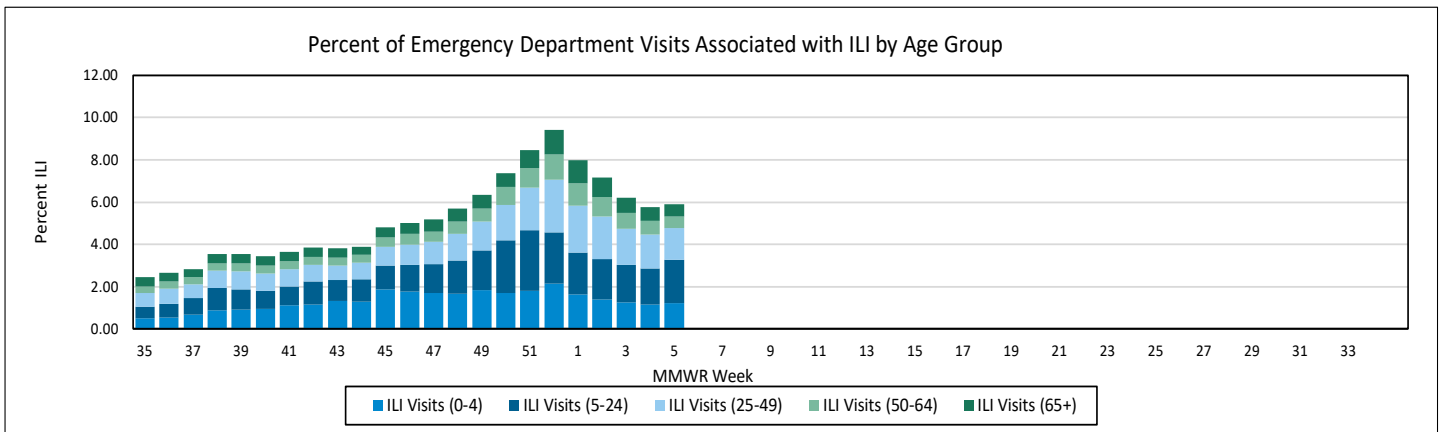
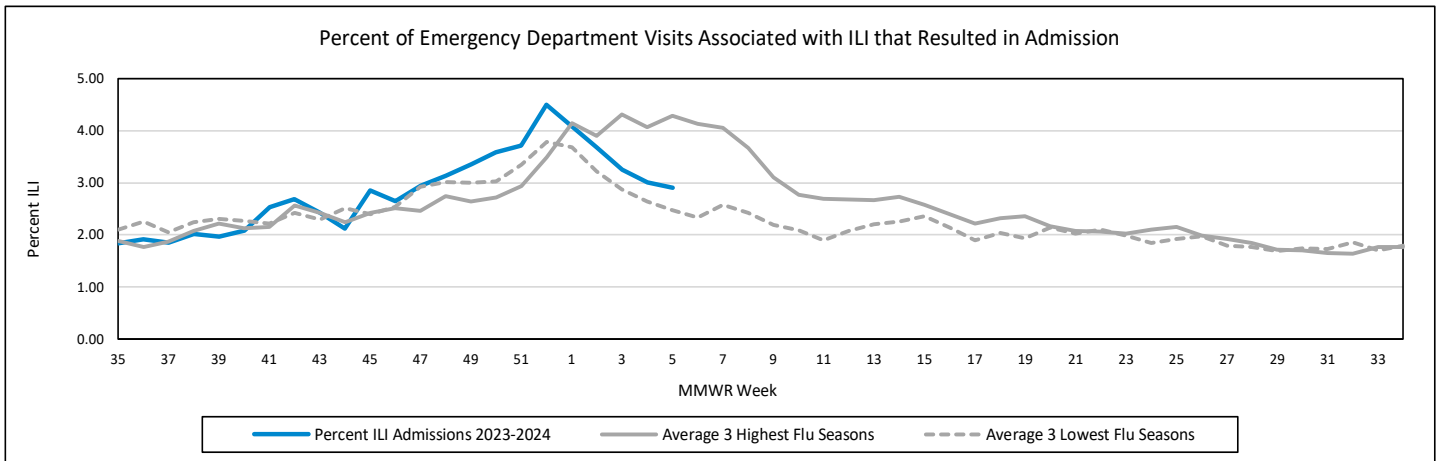
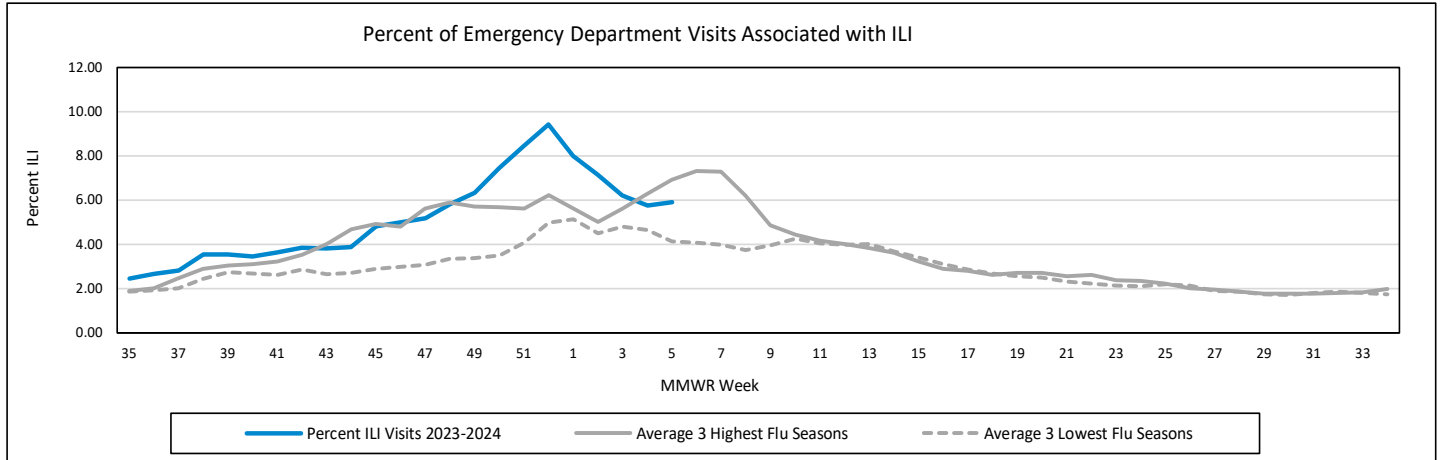
LTCF influenza outbreaks reported to NJDOH are recorded below by MMWR week. Outbreaks listed below are included within the outbreak module in CDRSS and have been issued an outbreak number.

Influenza Outbreaks in Long-term Care Facilities	
Cumulative Outbreaks 2023-2024 Season	56
No. outbreaks last 3 weeks	8
Regions with recent outbreaks	NW, NE, CE, SW



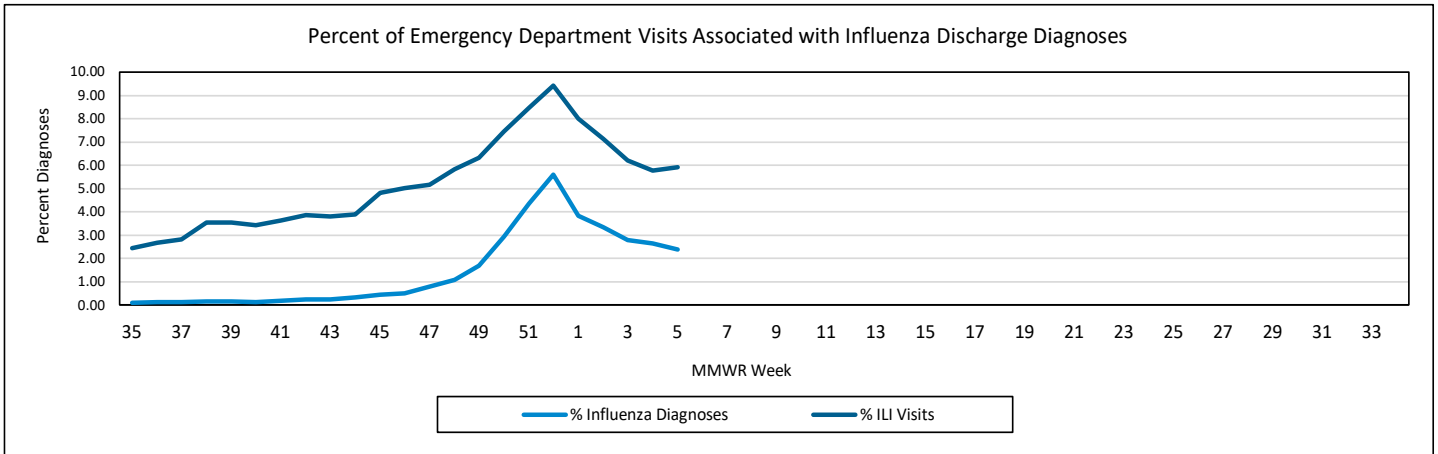
6b. Emergency Department Activity (Syndromic Surveillance)

Daily visits and admissions associated with ILI from emergency department data reported by 79 Emergency Department facilities and 13 Urgent Centers are collected via EpiCenter (NJDOH syndromic surveillance). Prior to the 2017-2018 season, data on ILI visits were only recorded on one day per week usually on Tuesday. Beginning in the 2017-2018 season, weekly aggregate data is being recorded for ILI visits and admissions. Three year seasonal averages for emergency department visits and admissions are determined by calculating the average percent positivity for each influenza season (October to May) beginning with the 2012-2013 season. These averages were ranked and the three highest and lowest overall season averages were selected. The three highest and lowest numbers were then averaged to obtain a single high and single low value for each week. The seasons which contribute to the high and low value for emergency department visits chart are as follows: High: 17-18, 18-19, 22-23; Low: 13-14, 14-15, 15-16. The seasons which contribute to the high and low value for emergency department admissions chart are as follows: High: 13-14, 14-15, 17-18; Low: 16-17, 21-22, 22-23. Data from the 19-20 and 20-21 seasons were excluded due to the COVID-19 pandemic. Syndromic surveillance may capture other respiratory pathogens that present with similar symptoms.

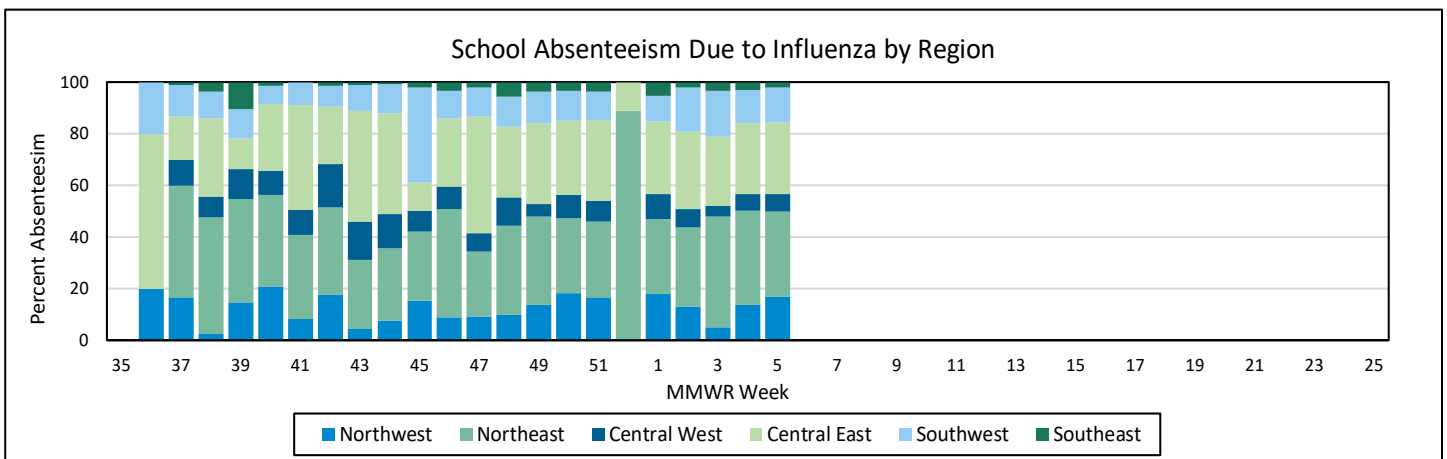
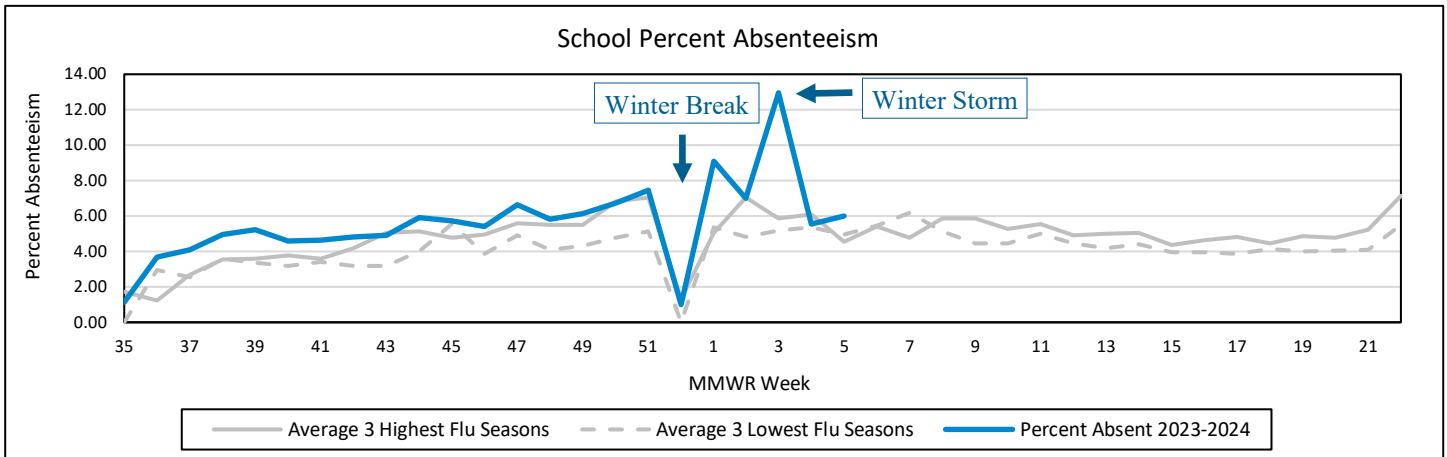


6b. Emergency Department Activity (Syndromic Surveillance), *continued*

The ILI definition (fever plus cough and/or sore throat) used within syndromic surveillance captures multiple circulating respiratory pathogens, not just influenza. Diagnostic codes and clinical terms are more specific but not always as sensitive. The chart below depicts the proportion of patient visits associated with Influenza Diagnoses (ICD-10-CM and ICD-9-CM) compared to those associated with the syndromic ILI definition.



6c. School Absenteeism

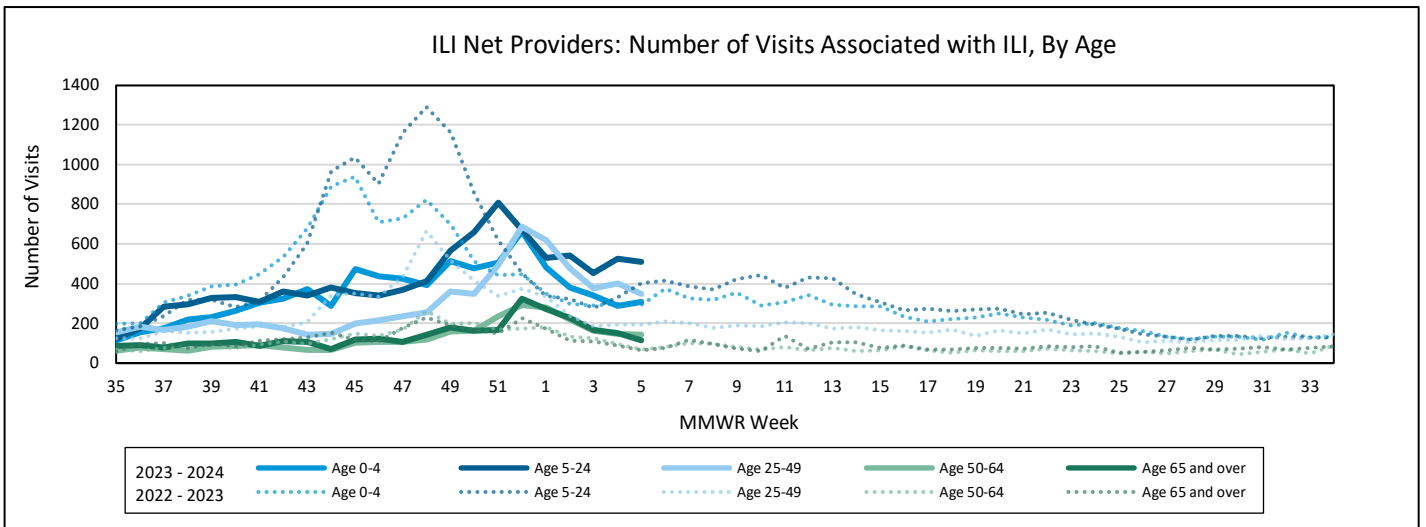
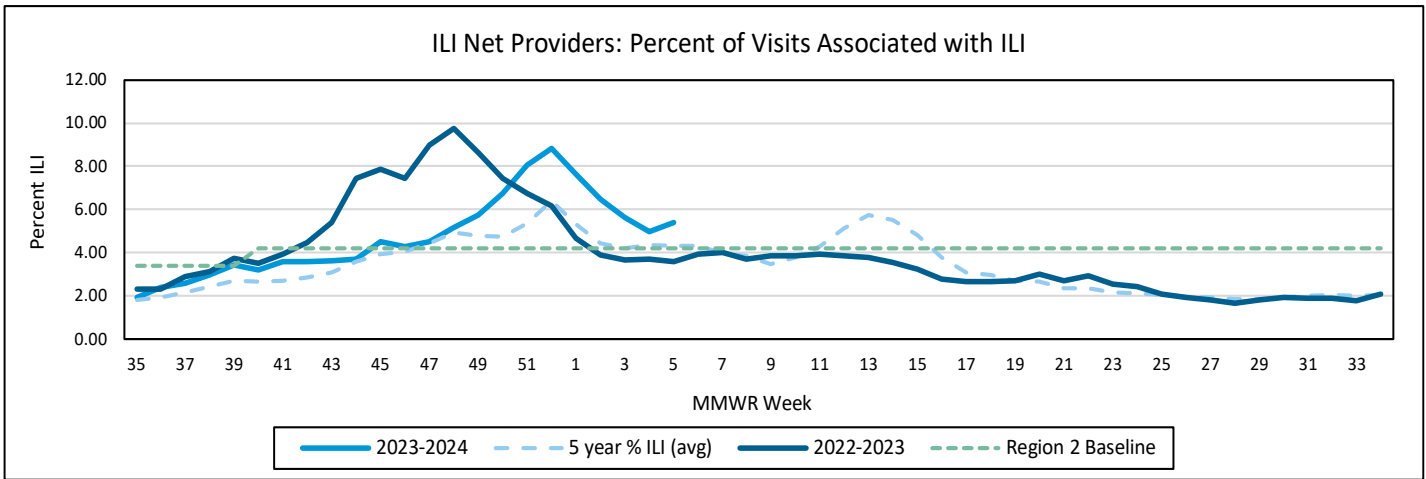


Influenza Outbreaks in School, Daycare, and Other Settings

Cumulative Outbreaks 2023-2024 Season	31
No. outbreaks last 3 weeks	10
Regions with recent outbreaks	NE, CW, CE, SW

7. ILI Net Providers

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits from 33 providers for respiratory illness referred to as influenza-like illness [ILI (fever plus cough or sore throat)], not laboratory-confirmed influenza, and may capture visits due to other respiratory pathogens, including influenza, SARS-CoV-2, and RSV. Therefore, it is important to evaluate syndromic surveillance data, including that from ILINet, in the context of other sources of surveillance data to obtain a complete and accurate picture of respiratory virus activity.



Influenza Activity Level—Definitions for Public Health Regions

NJ Level	Definition		
	ILI Activity/Outbreaks		Lab Activity
Low	Low ILI activity detected OR one lab confirmed outbreak anywhere in the region	AND	Sporadic isolation of laboratory confirmed influenza anywhere in the region
Moderate	Increased ILI activity in less than half of the counties in the region OR two lab confirmed outbreaks in the public health region	AND	Recent (within 3 weeks) laboratory activity in the same counties of the region with increased ILI
High	Increased ILI activity in more than half of the counties in the region OR ≥ 3 lab confirmed outbreaks in the region	AND	Recent (within 3 weeks) laboratory activity in more than half of the counties in the region with increased ILI

For additional information, visit the following websites: <https://www.nj.gov/health/cd/topics/flu.shtml> and <http://www.cdc.gov/flu/>