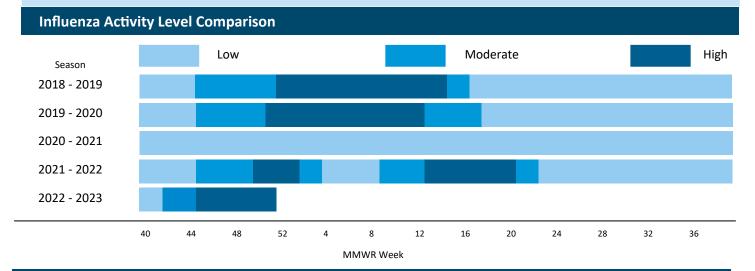


Influenza and Respiratory Illness Surveillance Report Week ending December 24, 2022 (MMWR Week 51)



Highlights

- Influenza activity level is high statewide
- Emergency Department visits and outpatient provider visits associated with influenza-like illness are lower than last week & lower than this week last year
- There have been two confirmed influenza-associated pediatric deaths reported this season
- Outbreaks of Influenza and RSV continue to be reported in all settings throughout the state
- Positive results continue to be reported; influenza A (subtyping not performed) is at 73.09%, followed by A(H3N2) 23.11%, A
 (H1N1)pdm09 3.53%, and B 0.28%



1. Current Influenza Activity Level

This report summarizes surveillance information for influenza and other viral respiratory 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 8, 2022.

HIGH	
Regional Data	1
Northwest Morris, Passaic, Sussex, Warren	HIGH
Northeast Bergen, Essex, Hudson	HIGH
Central West Hunterdon, Mercer, Somerset	HIGH
Central East Middlesex, Monmouth, Ocean, Union	HIGH
Southwest Burlington, Camden, Gloucester, Salem	HIGH
Southeast Atlantic, Cape May, Cumberland	HIGH

State Activity Level



71,383
Cases reported (PCR & Rapid)

44
Outbreaks (Long Term Care)

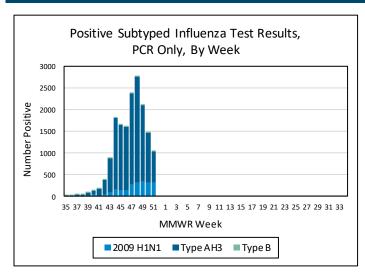
2
Pediatric flu deaths (confirmed)

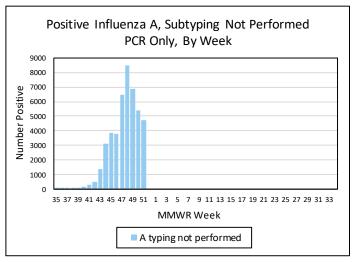
2. Laboratory Testing

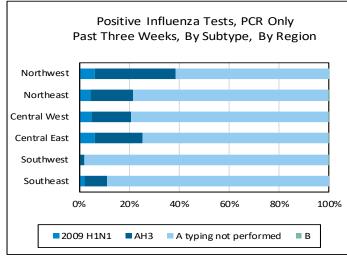
Real-time polymerase chain reaction (PCR) results for influenza (AH1N1, AH3N2, A subtyping not performed, and B) are obtained from electronic laboratory transmission submitted by acute care, commercial and public health laboratories. Rapid influenza test data are acquired from facilities reporting via the CDRSS Surveillance for Infectious Conditions (SIC) module. While the cumulative totals begin with MMWR week 40, week ending October 8, 2022, the data represented in charts begin with MMWR week 35, week ending September 3, 2022. Past 3 weeks data includes the current week and two prior weeks starting with MMWR week 40, week ending October 8, 2022.

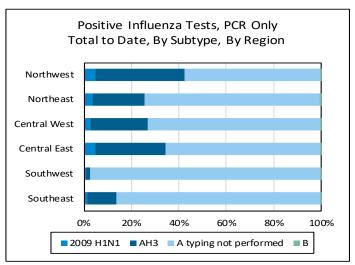
	Test Type	Current Week	Past 3 Weeks	Cumulative Total
	Influenza A (H1N1)pdm09	310	966	2180 (3.53%)
P	Influenza A H3N2	731	3655	14276 (23.11%)
PCR	Influenza A (Subtyping Not Performed)	4699	17032	45155 (73.09%)
	Influenza B	19	56	173 (0.28%)
Rapid	Rapid Influenza	1109	4491	9599

3. Virologic Surveillance



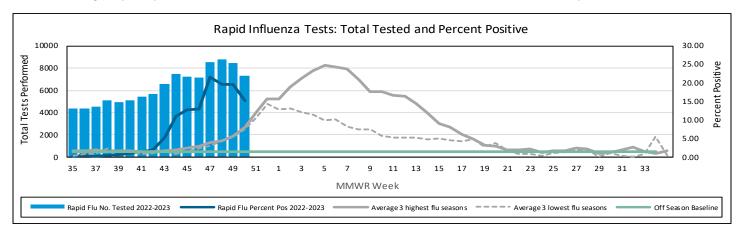






3. Virologic Surveillance, continued

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 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 the rapid influenza chart are as follows: High: 16-17, 17-18, 18 -19; Low: 12-13, 14-15, 21-22. Off season baseline is calculated by taking the average of percent positivity for a 10 year period (2012 through and including 2022) 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.



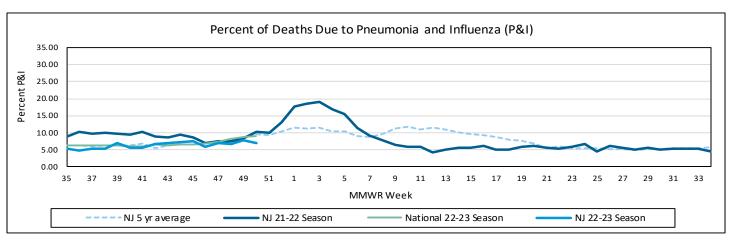
4. Pediatric Influenza Mortality

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)
2018-2019	106	51	6
2019-2020	188	57	2
2020-2021	1	1	0
2021-2022	43	19	0
2022-2023	47	39	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.

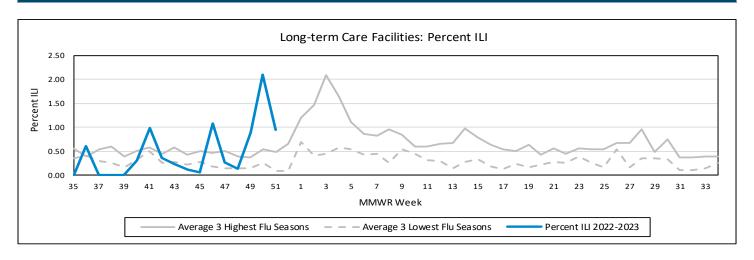


6. ILI Activity

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, 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 (2012 through and including 2022) 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	0.94 (0.00, 4.27)	2.11	0.00	0.42 (0.30, 0.75)
Emergency Departments	6.91 (2.74, 12.07)	7.93	8.40	2.09 (3.52, 4.30)
Schools (Absenteeism)	6.22 (3.32, 12.36)	5.99	9.11	3.98 (4.33, 4.93)

6a. Long-term Care Facility ILI Activity



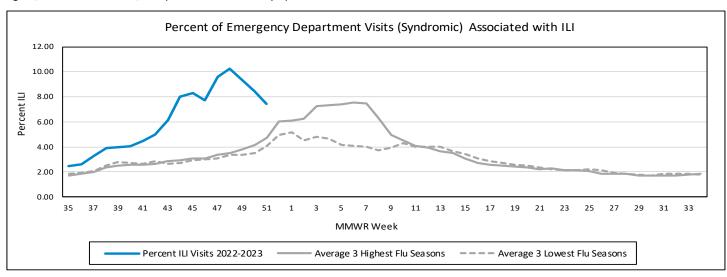
6b. Long-term Care Facility Outbreaks

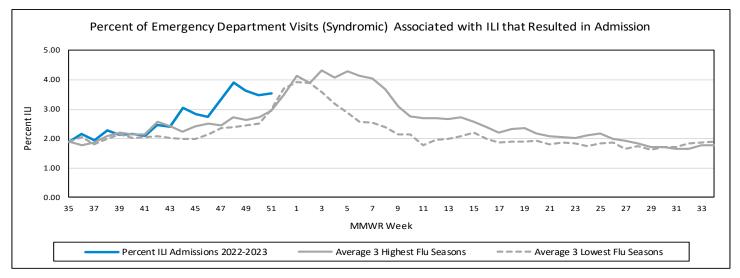
Only LTCF respiratory virus outbreaks reported to NJDOH that receive an outbreak number are recorded in this report. This does not include outbreaks due to COVID-19.

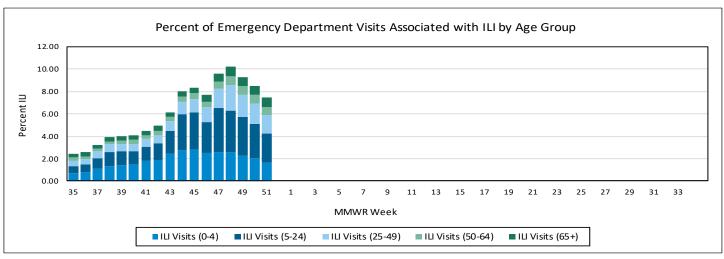
Respiratory Outbreaks in Long-term Car	re Facilities
Cumulative Outbreaks 2022-2023 Season	44
No. outbreaks last 3 weeks	17
Regions with recent outbreaks	NW, NE, CW, CE, SW, SE

6c. Emergency Department ILI Activity (Syndromic Surveillance)

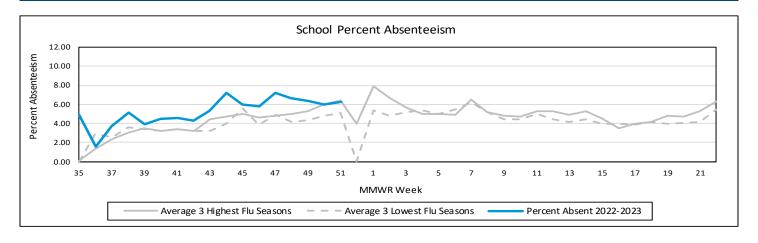
Daily visits and admissions associated with ILI from emergency department data are collected via EpiCenter (NJDOH syndromic surveillance). Prior to the 2017-2018 season, data on ILI visits were only recorded on one day per week usually on Tuesday. Beginning in the 2017-2018 season, weekly aggregate data 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: 12-13, 17-18, 18-19; 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: 12-13, 16-17, 21-22. Data from the 19-20 and 20-21 seasons were excluded due to the COVID-19 pandemic. Syndromic surveillance may capture other respiratory pathogens, such as SARS-CoV-2, that present with similar symptoms.





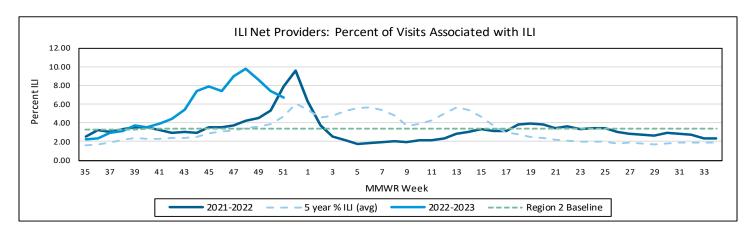


6d. School Absenteeism



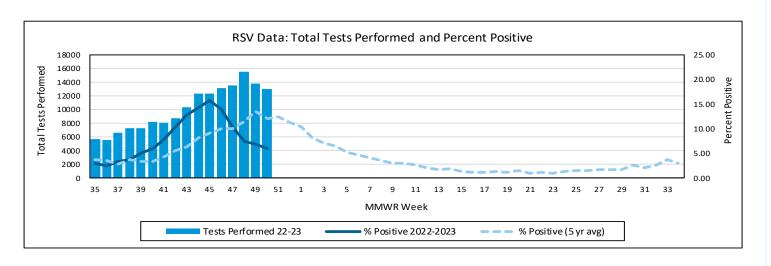
7. ILI Net Providers

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits for influenza-like illness (ILI), not laboratory-confirmed influenza, and may capture visits due to other respiratory pathogens, such as SARS-CoV-2, that present with similar symptoms.

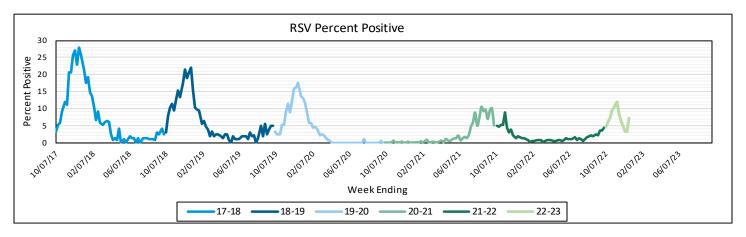


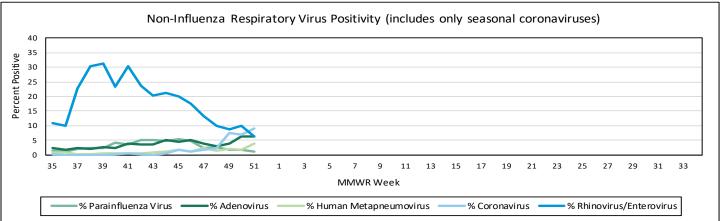
8. Non-Influenza Viral Respiratory Surveillance

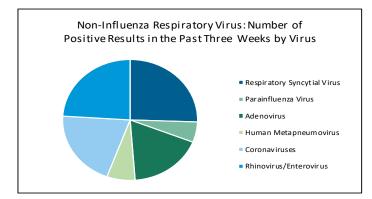
The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based surveillance system and participating laboratories report the total number of tests performed and the total positive for a number of non-influenza respiratory viruses. Information about the CDC NREVSS system can be found at: https://www.cdc.gov/surveillance/nrevss/labs/index.html. Respiratory syncytial virus (RSV) data are acquired from facilities reporting via NREVSS or 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%.

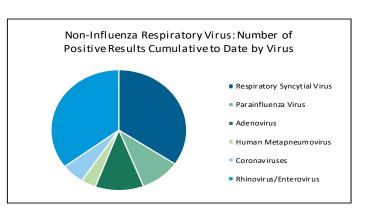


8. Non-Influenza Viral Respiratory Surveillance (continued)









Influenza Activity Level—Definitions for Public Health Regions

NJ Level	Defini	tion	
NJ Level	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

Communicable Disease Reporting and Surveillance System

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS SURVEILLANCE DATE: 12/20/2022



Page 1 of 1

12/27/2022 9:54 AM

		Long Term Car	·e		Schools		Hospi	tal Emergency	Dept
COUNTY	# Enrolled	# Reports Rec'd		# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	
December 20, 2022 12:00 AM N	MWR WEEK 51								
ATLANTIC	2	0	0.00	136	53	6.26	4	4	6.20
BERGEN	13	1	0.00	473	264	7.15	6	6	5.07
BURLINGTON	6	1	0.00	266	109	8.04	4	4	6.14
CAMDEN	1	0	0.00	239	115	6.51	7	7	7.35
CAPE MAY	3	0	0.00	50	10	10.48	1	1	7.16
CUMBERLAND	5	4	0.00	69	35	8.68	3	3	5.36
ESSEX	9	1	0.00	357	100	3.32	8	7	7.74
GLOUCESTER	3	0	0.00	117	64	5.16	3	3	8.64
HUDSON	4	0	0.00	259	102	4.06	6	6	8.45
HUNTERDON	4	3	4.27	68	37	6.42	1	1	2.74
MERCER	1	0	0.00	194	83	4.31	4	4	7.57
MIDDLESEX	14	0	0.00	337	141	5.33	6	6	7.68
MONMOUTH	6	0	0.00	342	131	7.50	5	5	5.82
MORRIS	3	0	0.00	239	87	7.60	4	4	5.53
OCEAN	9	1	0.00	316	61	9.29	4	4	4.04
PASSAIC	9	0	0.00	251	75	7.90	3	3	7.06
SALEM	0	0	0.00	40	25	6.23	1	1	12.07
SOMERSET	5	0	0.00	165	71	7.30	1	1	6.28
SUSSEX	3	0	0.00	63	37	12.36	1	1	6.67
UNION	3	0	0.00	313	93	8.08	5	5	9.10
WARREN	6	1	0.00	65	35	7.71	2	2	10.37
NW Region	21	1	0.00	618	234	8.41	10	10	10.90
NE Region	26	2	0.00	1089	466	4.99	20	19	7.08
CW Region	10	3	4.27	427	191	5.61	6	6	6.61
CE Region	32	1	0.00	1308	426	6.73	20	20	6.77
SW Region	10	1	0.00	662	313	6.57	15	15	10.17
SE Region	10	4	0.00	255	98	7.13	8	8	5.98
State Total	109	12	0.94	4359	1728	6.22	79	78	6.91

User Name: ANNMARIE HALDEMAN

Communicable Disease Reporting and Surveillance System

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS SURVEILLANCE DATE: 12/20/2022



12/27/2022 9:54 AM

	RSV Tests		RSV Tests Rapid Flu Tests	
County	# Positive	Total Tests Performed	# Positive	Total Tests Performed
December 20, 2022 12:00 AM M			i.	
ATLANTIC	14	883	155	1195
BERGEN	72	1254	89	494
BURLINGTON	0	0	29	103
CAMDEN	6	135	0	0
CAPE MAY	0	0	0	0
CUMBERLAND	0	0	0	0
ESSEX	30	381	207	1483
GLOUCESTER	0	0	0	0
HUDSON	5	18	49	105
HUNTERDON	23	574	58	574
MERCER	11	45	34	45
MIDDLESEX	17	301	48	301
MONMOUTH	38	993	325	1949
MORRIS	58	994	0	0
OCEAN	0	13	43	394
PASSAIC	18	338	0	0
SALEM	0	0	0	0
SOMERSET	443	5351	0	0
SUSSEX	12	441	46	441
UNION	21	1115	0	0
WARREN	1	242	26	242
NW Region	89	2015	72	683
NE Region	107	1653	345	2082
CW Region	477	5970	92	619
CE Region	76	2422	416	2644
SW Region	6	135	29	103
SE Region	14	883	155	1195
State Total	769	13078	1109	7326