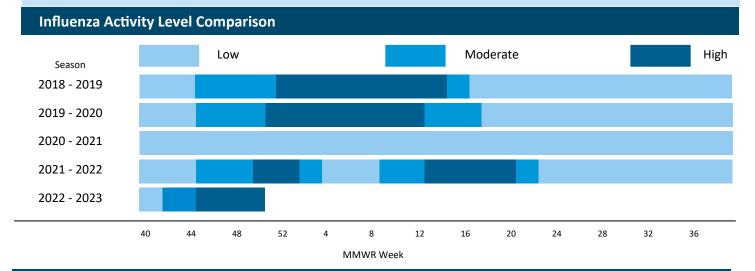


Influenza and Respiratory Illness Surveillance Report Week ending December 17, 2022 (MMWR Week 50)



Highlights

- Influenza activity level is high statewide
- Emergency Department visits and outpatient provider visits associated with influenza-like illness are lower than last week & higher 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 72.78%, followed by A(H3N2) 23.73%, A
 (H1N1)pdm09 3.22%, and B 0.27%



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	a
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



65,311
Cases reported (PCR & Rapid)

37
Outbreaks (Long Term Care)

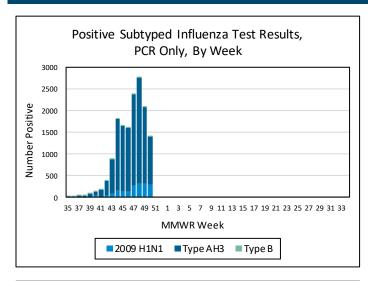
Pediatric flu deaths (confirmed)

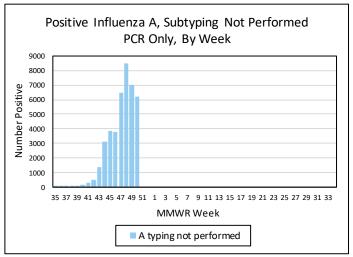
2. Laboratory Testing

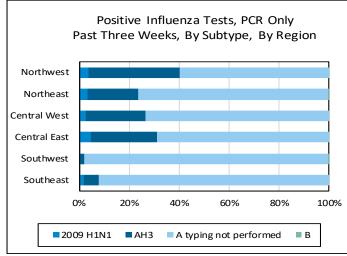
Real-time polymerase chain reaction (PCR) results for influenza (AH1N1, AH3N2, A subtyping not performed, and B) are obtained from electronic laboratory transmission submitted by acute care, commercial and public health laboratories. Rapid influenza test data are acquired from facilities reporting via 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.

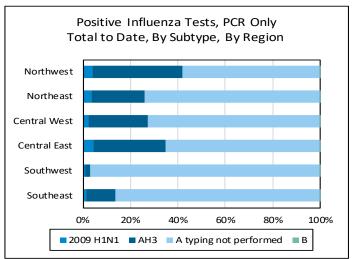
	Test Type	Current Week	Past 3 Weeks	Cumulative Total
	Influenza A (H1N1)pdm09	295	937	1831 (3.22%)
P	Influenza A H3N2	1107	5321	13484 (23.73%)
PCR	Influenza A (Subtyping Not Performed)	6221	21726	41353 (72.78%)
	Influenza B	22	62	153 (0.27%)
Rapid	Rapid Influenza	1661	5224	8490

3. Virologic Surveillance



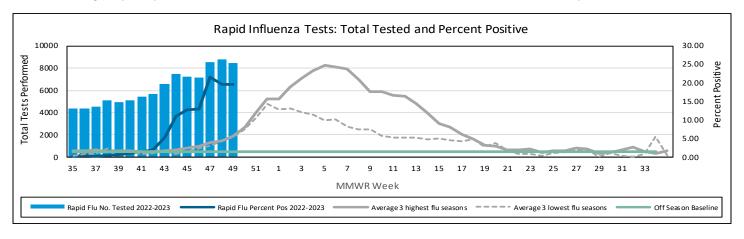






3. Virologic Surveillance, continued

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.



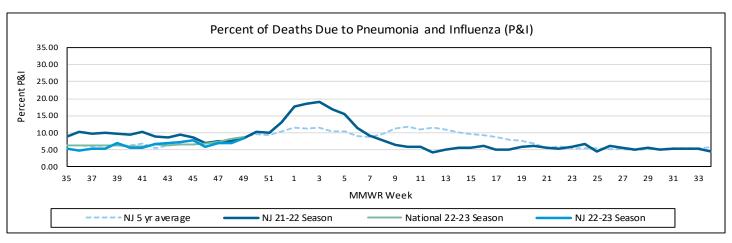
4. Pediatric Influenza Mortality

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	30	35	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.

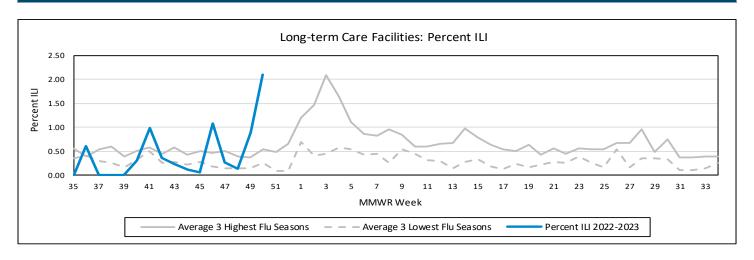


6. ILI Activity

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	2.11 (0.00, 9.70)	0.90	0.00	0.42 (0.30, 0.75)
Emergency Departments	7.93 (4.80, 13.96)	8.73	5.34	2.09 (3.52, 4.30)
Schools (Absenteeism)	5.99 (2.51, 9.05)	6.38	6.61	3.98 (4.33, 4.93)

6a. Long-term Care Facility ILI Activity



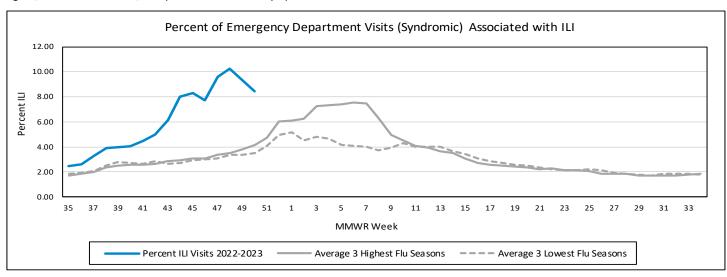
6b. Long-term Care Facility Outbreaks

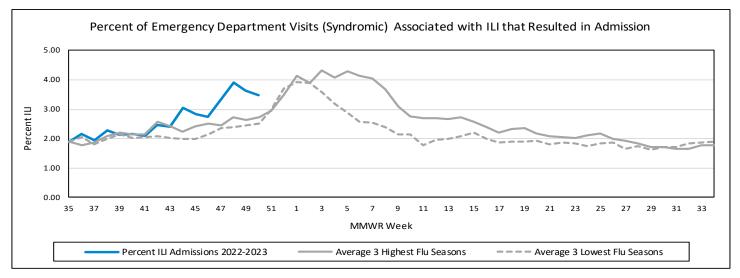
Only LTCF respiratory virus outbreaks reported to NJDOH that receive an outbreak number are recorded in this report. This does not include outbreaks due to COVID-19.

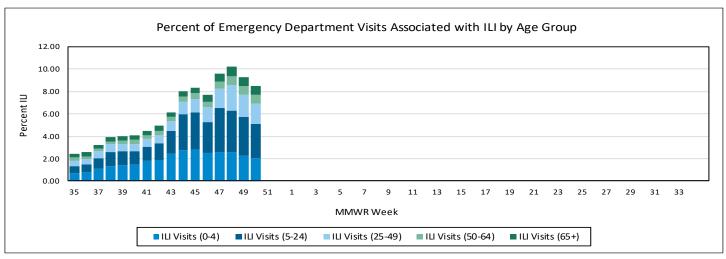
Respiratory Outbreaks in Long-term Car	re Facilities
Cumulative Outbreaks 2022-2023 Season	37
No. outbreaks last 3 weeks	17
Regions with recent outbreaks	NW, NE, CW, CE, SW, SE

6c. Emergency Department ILI Activity (Syndromic Surveillance)

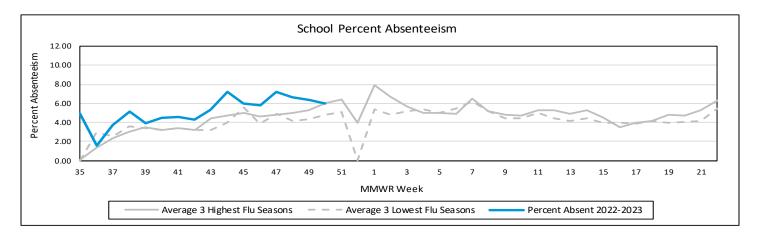
Daily visits and admissions associated with ILI from emergency department data are collected via EpiCenter (NJDOH syndromic surveillance). Prior to the 2017-2018 season, data on ILI visits were only recorded on one day per week usually on Tuesday. Beginning in the 2017-2018 season, weekly aggregate data 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.





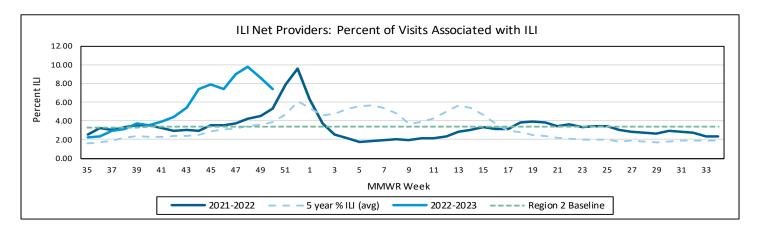


6d. School Absenteeism



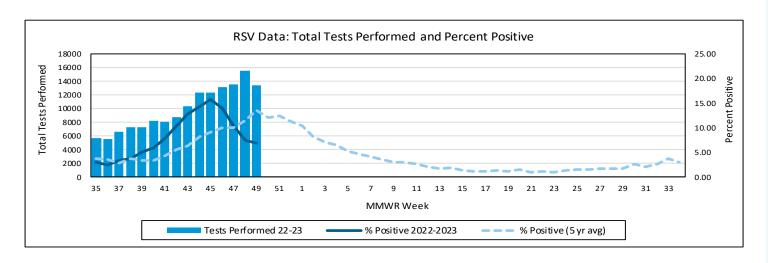
7. ILI Net Providers

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.

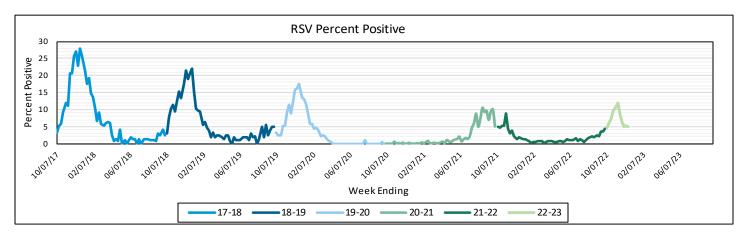


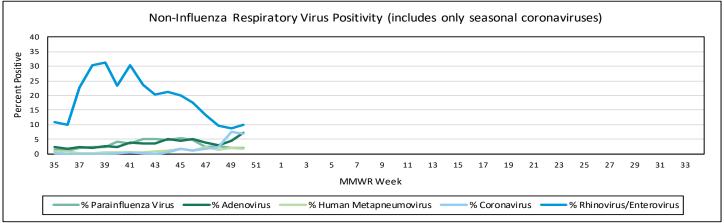
8. Non-Influenza Viral Respiratory Surveillance

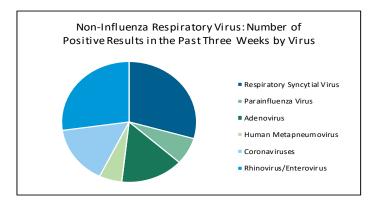
The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based surveillance system and participating laboratories report the total number of tests performed and the total positive for a number of non-influenza respiratory viruses. Information about the CDC NREVSS system 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%.

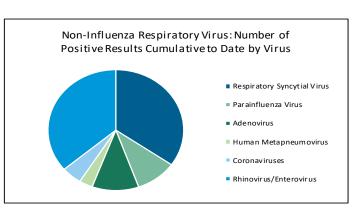


8. Non-Influenza Viral Respiratory Surveillance (continued)









Influenza Activity Level—Definitions for Public Health Regions

NJ Level	Defini	tion	
MJ 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: 12/13/2022



12/19/2022 10:33 AM

		Long Term Ca	re		Schools		Hospi	ital Emergency	Dept
COUNTY	# Enrolled	# Reports Rec'd	□ %	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	□ %
December 13, 2022 12:00 A					<u> </u>				
ATLANTIC	2	0	0.00	136	66	6.81	4	4	5.52
BERGEN	13	1	0.00	473	260	6.55	6	6	6.62
BURLINGTON	6	1	0.00	266	102	8.52	4	4	6.40
CAMDEN	1	0	0.00	238	108	6.83	7	7	8.15
CAPE MAY	3	0	0.00	50	11	9.04	1	1	6.84
CUMBERLAND	5	4	0.00	69	38	8.94	3	3	6.84
ESSEX	9	1	0.00	357	100	2.51	8	7	9.69
GLOUCESTER	3	0	0.00	117	69	5.16	3	3	8.64
HUDSON	4	0	0.00	259	118	7.45	6	6	12.03
HUNTERDON	4	3	9.70	68	38	5.61	1	1	4.95
MERCER	1	0	0.00	194	86	3.54	4	4	7.98
MIDDLESEX	14	0	0.00	337	151	4.22	6	6	8.71
MONMOUTH	6	0	0.00	342	131	5.80	5	5	6.61
MORRIS	3	0	0.00	239	89	7.13	4	4	6.08
OCEAN	9	1	0.00	316	53	8.45	4	4	4.80
PASSAIC	9	0	0.00	251	79	7.75	3	3	7.57
SALEM	0	0	0.00	40	22	8.97	1	1	13.96
SOMERSET	5	0	0.00	165	80	6.25	1	1	6.21
SUSSEX	3	0	0.00	63	37	9.05	1	1	6.82
UNION	3	0	0.00	313	95	6.13	5	5	9.00
WARREN	6	1	0.00	65	34	8.25	2	2	8.85
NW Region	21	1	0.00	618	239	7.79	10	10	11.95
NE Region	26	2	0.00	1089	478	5.60	20	19	9.27
CW Region	10	3	9.70	427	204	4.82	6	6	7.28
CE Region	32	1	0.00	1308	430	5.37	20	20	7.47
SW Region	10	1	0.00	661	301	6.86	15	15	10.75
SE Region	10	4	0.00	255	115	7.54	8	8	6.20
State Total	109	12	2.11	4358	1767	5.99	79	78	7.93

User Name: ANNMARIE HALDEMAN

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Communicable Disease Reporting and Surveillance System

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS SURVEILLANCE DATE: 12/13/2022



12/19/2022 10:34 AM

	RSV Tests		RSV Tests Rapid Flu Tests	
County	# Positive	Total Tests Performed	# Positive	Total Tests Performed
December 13, 2022 12:00 AM M	MWR WEEK 50	"	#	
ATLANTIC	18	974	277	1365
BERGEN	63	1170	112	536
BURLINGTON	0	0	16	115
CAMDEN	15	161	0	0
CAPE MAY	0	0	0	0
CUMBERLAND	0	0	0	0
ESSEX	34	361	312	1535
GLOUCESTER	0	0	0	0
HUDSON	0	19	38	102
HUNTERDON	33	571	78	571
MERCER	13	50	37	50
MIDDLESEX	14	298	66	298
MONMOUTH	58	1441	547	2723
MORRIS	74	1017	0	0
OCEAN	1	19	54	415
PASSAIC	0	0	0	0
SALEM	0	0	0	0
SOMERSET	537	5440	0	0
SUSSEX	16	472	73	472
UNION	37	1188	0	0
WARREN	13	280	51	280
NW Region	103	1769	124	752
NE Region	97	1550	462	2173
CW Region	583	6061	115	621
CE Region	110	2946	667	3436
SW Region	15	161	16	115
SE Region	18	974	277	1365
State Total	926	13461	1661	8462