



Respiratory Virus Surveillance Report¹

New Jersey Department of Health

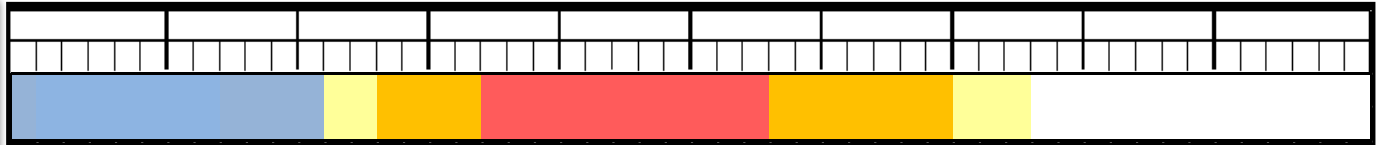
Communicable Disease Service

Week ending May 26, 2018 (MMWR week 21²)



Influenza Activity Level³

Week 40 Week 45 Week 50 Week 3 Week 8 Week 13 Week 18 Week 23 Week 28



■ No Activity
 ■ Sporadic
 ■ Local
 ■ Regional
 ■ Widespread



New Jersey Activity Level: MODERATE

Current week last year: **LOW**

Regional⁴ Data

Northwest: **LOW**

Northeast: **LOW**

Central West: **LOW**

Central East: **LOW**

South: **LOW**

ILI⁵ Activity

Percent ILI/Absenteeism ⁵				Baselines
	Current Week (range by county)	Last week Current year	Current week Last year	Non-season ⁶ (Seasonal Average– low, high) ⁷
Long Term Care Facilities	0.09 (0.00, 0.39)	0.48	0.58	0.48 (0.45, 0.76)
Schools (absenteeism)	3.78 (2.01, 5.50)	3.60	3.50	3.36 (4.49, 4.86)
Emergency Departments	2.11 (0.13, 6.55)	2.31	2.37	2.21 (3.17, 3.92)

Laboratory Testing⁸

	Current Week	Past 3 Weeks	Cumulative Total
Influenza A H1N1 (2009)	0	7	537
Influenza A H3N2	0	3	1668
Influenza B	3	31	4254
Rapid Influenza Tests	19	90	18468

Report also available at <http://nj.gov/health/cd/statistics/flu-stats/>

Footnotes:

1. This report contains surveillance information about influenza and other viral respiratory illnesses collected by the New Jersey Department of Health, Communicable Disease Service.
2. The Morbidity and Mortality Weekly Report (MMWR) week is the week of the epidemiologic year used by the Centers for Disease Control and Prevention (CDC) for disease reporting. is assigned by the reporting local or state health department for the purposes of MMWR disease incidence reporting and publishing. MMWR weeks begin on a Saturday and end on a Sunday and are assigned a numeric value ranging from 1 to 53, although most years consist of 52 weeks. Week ending dates and associated MMWR weeks can be found at: http://www.nj.gov/health/cd/documents/flu/mmwr_weeks.pdf
3. Activity levels for the state and region are defined in Tables 1 and 2 at the end of this document.
4. The following is a breakdown of counties contained within each public health region: Northwest: Morris, Passaic, Sussex, Warren; Northeast: Bergen, Essex, Hudson; Central West: Hunterdon, Mercer, Somerset; Central East: Middlesex, Monmouth, Ocean, Union; South: Atlantic, Burlington, Camden, Cape May, Salem, Cumberland, Gloucester.
5. Influenza-like illness (ILI) is defined as fever ($> 100^{\circ}\text{F}$ [37.8°C], oral or equivalent) and cough and/or sore throat (in the absence of a known cause other than influenza). For long term care facilities, fever is defined as 2°F above baseline temperature. ILI Activity from long term care (LTC) facilities and absenteeism data from schools is collected in the ILI Module of the Communicable Disease Reporting and Surveillance System (CDRSS). LTCs and schools report their total census and number ill with ILI or number absent, respectively. Emergency department (ED) data is aggregate weekly totals of syndromic ILI visits and total ED registrations as recorded in EpiCenter (e.g., NJDOH syndromic surveillance system). Data presented represents information for the week prior to the current report week. Current week data presented on ED Chart on page 3.
6. Non-season baseline is calculated by taking the average of statewide percentages of ILI for a 10 year (2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2017) period during months when influenza is less likely to be circulating (May-August).
7. Three year seasonal averages are determined by calculating the average percent ILI/absenteeism for each influenza season (October to May) beginning with the 2010-2011 season. These averages are 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. The season which contribute to the high and low value vary by entity type and are as follows: LTCF (High: 10-11, 12-13, 14-15; Low: 11-12, 15-16, 16-17), ED (High: 12-13, 14-15, 16-17; Low: 10-11, 11-12, 15-16) and schools (High: 10-11, 12-13, 16-17; Low: 11-12, 13-14, 14-15). A week by week average was also calculated using the average of the seasons listed above for each entity type.
8. Laboratory testing: Real-time polymerase chain reaction (PCR) results for influenza (AH1N1, AH3N2, and B) are obtained from electronic laboratory transmission submitted by acute care, commercial and public health laboratories to CDRSS. Rapid influenza test data and respiratory syncytial virus data are acquired from facilities reporting via the National Respiratory and Enteric Virus Surveillance System (NREVSS) or CDRSS ILI module. Counts for cumulative totals begin with week ending October 7, 2017. Three week count data includes current week and two prior weeks. 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 2010-2011 season. These averages are 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 season which contribute to the high and low value for rapid influenza chart are as follows: High: 10-11, 11-12, 12-13; Low: 13-14, 15-16, 16-17.

Table 1 Influenza Activity Level—Definitions for State Activity				
<u>NJ Level</u>	<u>CSTE Level</u>	<u>Definition</u>		
		<u>ILI Activity/Outbreaks</u>		<u>Lab Activity</u>
Low	No Activity	ILI activity at or below baseline AND no detected outbreaks	AND	No lab confirmed cases
	Sporadic	Low ILI activity detected OR one lab confirmed outbreak anywhere in the state	AND	Sporadic isolation of laboratory confirmed influenza
Moderate	Local	Increase in ILI activity OR ≥ 2 lab confirmed outbreaks in one public health region (Other regions not experiencing increased ILI activity)	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI
	Regional	Increase in ILI activity OR ≥ 2 lab confirmed outbreaks in at least 2 public health regions (Other regions not experiencing ILI activity)	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI
High	Widespread	Increase in ILI activity OR two or more lab confirmed outbreaks in > 2 public health regions	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI

Table 2 Influenza Activity Level—Definitions for Public Health Regions			
<u>NJ Level</u>	<u>Definition</u>		
	<u>ILI Activity/Outbreaks</u>		<u>Lab Activity</u>
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

Notes:

ILI activity: Systems used to detect increases in ILI activity include: ILINet (i.e., sentinel providers), school absenteeism data, ED ILI visits and admissions collected via EpiCenter, LTCF ILI data, respiratory outbreak data and information on influenza mortality (National Center for Health Statistics).

Lab Activity: NJPHL and commercial laboratories positive influenza tests identified by PCR and culture will be used as the primary data source for the above levels. However, rapid influenza test data will also be considered when determining the appropriate activity levels.

INFLUENZA LABORATORY REPORTS BY COUNTY

Counts represent total positive specimens
from week ending October 7, 2017 to current MMWR week

Source: CDRSS

Frequency	COUNTY(COUNTY)	RESULT				
		Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	Total
	ATLANTIC	814	8	12	516	1350
	BERGEN	1767	69	236	1503	3575
	BURLINGTON	643	0	7	409	1059
	CAMDEN	1103	1	35	747	1886
	CAPE MAY	326	0	0	148	474
	CUMBERLAND	34	1	2	41	78
	ESSEX	971	59	148	776	1954
	GLOUCESTER	275	7	24	163	469
	HUDSON	1487	35	71	781	2374
	HUNTERDON	146	6	49	177	378
	MERCER	383	14	30	491	918
	MIDDLESEX	702	19	51	519	1291
	MONMOUTH	1483	3	25	1017	2528
	MORRIS	426	44	250	370	1090
	OCEAN	1084	49	33	781	1947
	PASSAIC	1070	40	102	812	2024
	SALEM	12	3	1	11	27
	SOMERSET	165	12	74	193	444
	SUSSEX	91	26	75	106	298
	UNION	460	136	441	678	1715
	WARREN	82	6	14	34	136
	Total	13524	538	1680	10273	26015

INFLUENZA LABORATORY REPORTS BY REGION

**Counts represent total positive specimens
from week ending October 7, 2017 to current MMWR week**

Source: CDRSS

Frequency	Table of REGION by RESULT					
	REGION	RESULT				
		Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	Total
	Central East	3729	207	550	2995	7481
	Central West	694	32	153	861	1740
	Northeast	4225	163	455	3060	7903
	Northwest	1669	116	441	1322	3548
	South	3207	20	81	2035	5343
	Total	13524	538	1680	10273	26015

***The following is a breakdown of counties contained within each public health region:
Northwest: Morris, Passaic, Sussex, Warren; Northeast: Bergen, Essex, Hudson
Central west: Hunterdon, Mercer, Somerset
Central East: Middlesex, Monmouth, Ocean, Union
South: Atlantic, Burlington, Camden, Cape May, Salem, Cumberland, Gloucester***

SURVEILLANCE DATE: 05/22/2018

COUNTY	Long Term Care			Schools			Hospital Emergency Dept		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
May 22, 2018 MMWR WEEK 21									
ATLANTIC	2	0	0.00	36	8	5.40	4	4	1.09
BERGEN	11	2	0.00	34	5	3.26	6	6	2.14
BURLINGTON	7	2	0.00	101	43	4.29	4	4	2.04
CAMDEN	1	0	0.00	8	7	5.13	8	7	1.48
CAPE MAY	3	0	0.00	12	5	3.07	1	1	2.06
CUMBERLAND	5	3	0.18	12	9	5.13	3	3	2.06
ESSEX	9	1	0.00	4	0	0.00	8	7	2.92
GLOUCESTER	3	0	0.00	4	0	0.00	2	2	0.84
HUDSON	4	0	0.00	15	4	3.25	6	6	1.64
HUNTERDON	4	3	0.39	11	7	2.72	1	1	1.60
MERCER	1	0	0.00	31	10	3.25	5	4	2.68
MIDDLESEX	13	3	0.00	21	14	3.85	6	6	2.29
MONMOUTH	6	0	0.00	69	10	4.06	5	5	1.66
MORRIS	3	0	0.00	10	2	2.01	4	4	1.10
OCEAN	10	0	0.00	6	3	4.41	4	4	2.22
PASSAIC	10	1	0.00	30	6	3.39	3	3	3.16
SALEM	0	0	0.00	5	2	5.50	1	1	1.90
SOMERSET	5	0	0.00	23	13	2.15	1	1	2.37
SUSSEX	3	1	0.00	4	0	0.00	2	2	0.13
UNION	2	0	0.00	57	10	3.29	5	5	2.36
WARREN	6	0	0.00	19	6	4.34	2	2	6.55
NW Region	22	2	0.00	63	14	3.43	11	11	2.48
NE Region	24	3	0.00	53	9	3.25	20	19	2.37
CW Region	10	3	0.39	65	30	2.57	7	6	2.50
CE Region	31	3	0.00	153	37	3.81	20	20	2.13
South Region	21	5	0.15	178	74	4.50	23	22	1.52
State Total	108	16	0.09	512	164	3.78	81	78	2.11

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS

SURVEILLANCE DATE: 05/22/2018

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County	RSV Tests		Rapid Flu Tests		
	# Positive	Total Tests Performed	# Positive	Total Tests Performed	
May 22, 2018 MMWR WEEK 21					
ATLANTIC	1	13	0	68	
BERGEN	1	88	5	34	
BURLINGTON	0	0	0	0	
CAMDEN	0	0	0	23	
CAPE MAY	0	9	2	20	
CUMBERLAND	0	0	0	0	
ESSEX	0	19	3	110	
GLOUCESTER	0	0	0	0	
HUDSON	0	6	1	16	
HUNTERDON	0	48	0	48	
MERCER	0	2	0	25	
MIDDLESEX	1	32	0	20	
MONMOUTH	1	88	2	153	
MORRIS	0	24	1	44	
OCEAN	0	6	1	56	
PASSAIC	0	11	4	45	
SALEM	0	0	0	0	
SOMERSET	0	0	0	0	
SUSSEX	0	0	0	0	
UNION	4	131	0	0	
WARREN	0	0	0	0	
NW Region	0	35	5	89	
NE Region	1	113	9	160	
CW Region	0	50	0	73	
CE Region	6	257	3	229	
South Region	1	22	2	111	
State Total	8	477	19	662	