

# Respiratory Virus Surveillance Report<sup>1</sup> New Jersey Department of Health Communicable Disease Service Week Ending January 28, 2017 (MMWR week 4)



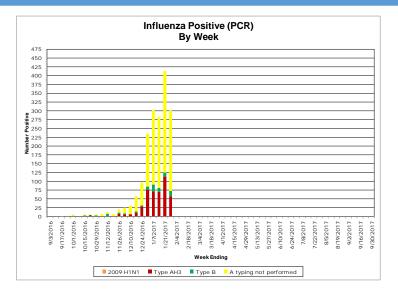
### Synopsis

	Influenza Activi		
State Activity Week 1 HIGH	Ending 1/28:		
Current Week La MODERAT			
Regional <sup>3</sup> D	Regional <sup>3</sup> Data		
Northwest	HIGH		
Northeast	HIGH		
Central West	HIGH		
Central East	HIGH		
South	HIGH		

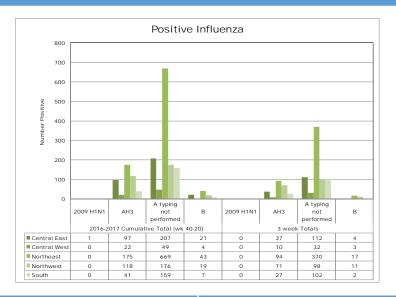
		ILI Activity <sup>4</sup>		
	Perce	nt ILI/Absenteeis	m	Baselines
	Current Week (range by county)	Last week Current year	Current week Last year	Non-season <sup>5</sup> Season <sup>6</sup> (3 low, 3 high)
Long Term Care Facilities	1.14 (0.00, 3.13)	0.67	0.51	0.56 (0.52, 0.76)
Schools (Absenteeism)	5.94 (3.85, 10.48)	3.44	5.77	3.42 (4.49, 4.81)
Emergency Departments	5.45 (0.00, 8.81)	5.64	2.95	2.35 (3.17, 3.81)
		Viral Activity	7	
		Current Week	Past 3 Weeks	Cumulative Total
Influenza I	H1N1 (2009)	0	0	1
Influen	za H3N2	58	241	455
Influ	enza B	14	37	90
	Syncytial Virus SV)	187	595	2064
Rapid Infl	uenza Tests	1063	2278	3664

### Virologic Surveillance<sup>7</sup>

#### Influenza Positive Specimens (PCR) – Result by Week

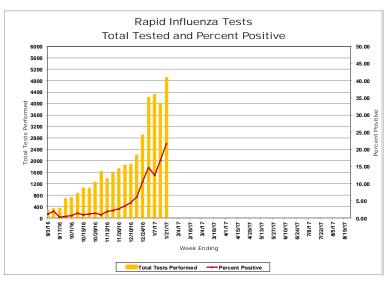


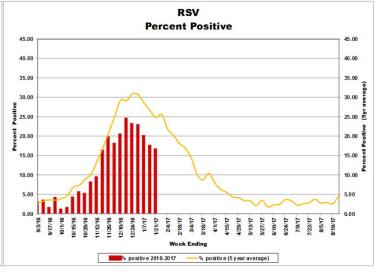
#### Influenza Positive Specimens (PCR) – Result by Region<sup>3</sup>



#### Influenza Rapid Antigen Result by Week

#### Repiratory Syncytial Virus (RSV) Result by Week



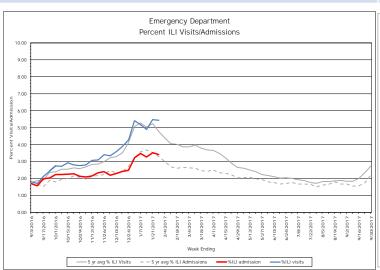


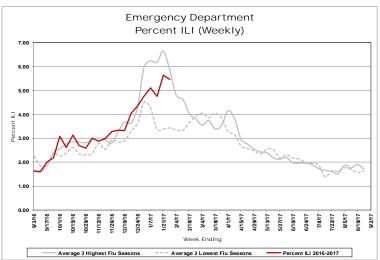
### **Influenza-Like Illness Surveillance**



#### **Daily Visits and Admission**

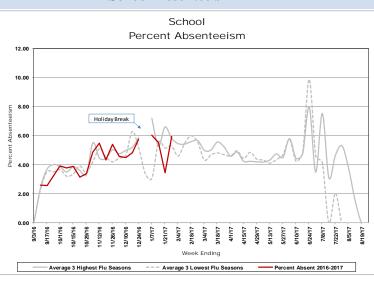
#### Visits – Tuesday Only

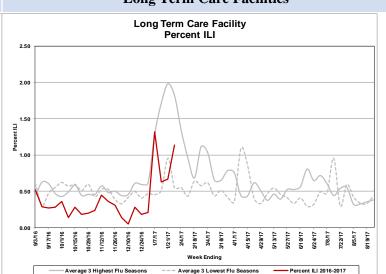




#### **School Absenteeism**

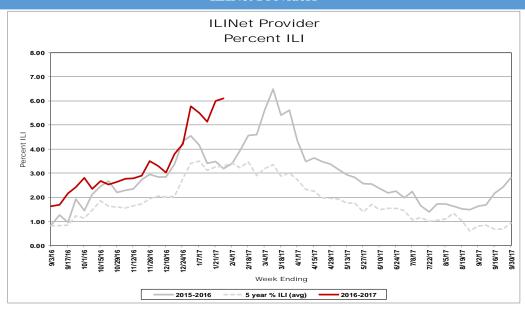
#### **Long Term Care Facilities**





Respiratory Outbreaks in	Long Term Care Facilities <sup>9</sup>
Cumulative Outbreaks 2016-2017 season	40
No. outbreaks last 3 weeks	16
Regions with recent outbreaks	NE, NW, CE, S

#### **ILINet Providers**



	ILINet P	roviders	
Curren	t Week	Previou	s Week
# of reporters	% ILI	# of reporters	% ILI
27	6.10	29	6.00

]	Pediatric Influenza Mortality <sup>1</sup>	0
Num	ber of Pediatric Influenza D Reported to CDC	eaths
Influenza Season	New Jersey	US (includes NJ)
2010 – 2011	4	123
2011 – 2012	1	35
2012 – 2013	7	171
2013 – 2014	6	108
2014 – 2015	1	146
2015 – 2016	1	85
2016 – 2017	0	8

For additional information regarding influenza surveillance please visit the following websites.

http://nj.gov/health/flu/surveillance.shtml http://www.cdc.gov/flu/

#### Footnotes:

- 1. This report represents activity occurring in New Jersey related to influenza and RSV. In addition, reports of other circulating respiratory viruses or regarding illness severity (i.e., hospitalization) will be included when available.
- 2. Activity levels for the state and region are defined in Table 1 and 2 at the end of this document.
- 3. 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
- 4. Influenza-like illness (ILI) is defined as fever (> 100°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.
- 5. Non-season baseline is calculated by taking the average of statewide percentages of ILI for a 11 year (2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014,2015 and 2016) period during months when influenza is less likely to be circulating (May-August).
- 6. Three year seasonal averages are determined by calculating the average percent ILI/absenteeism for each influenza season (October to May). 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, 13-14, 15-16), ED (High: 12-13, 13-14, 14-15; Low: 10-11, 11-12, 15-16) and schools (High: 10-11, 12-13, 15-16; 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.
- 7. Viral activity: Real-time polymerase chain reaction (PCR) results 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 rapid influenza tests via the National Respiratory and Enteric Virus Surveillance System (NREVSS) or CDRSS ILI module. Counts for cumulative totals begin with week ending October 8, 2016. Three week count data includes current week and two prior weeks. Data presented for RSV and rapid influenza testing represent information for the week prior to the current report week.
- 8. Daily visits and admissions associated with ILI from emergency department data is collected via EpiCenter and Hippocrates. Prior to these systems, data on ILI visits were only recorded one day per week usually on Tuesday. This system is maintained as a large amount of historical data allows for better seasonal comparisons.
- 9. Only LTCF outbreaks reported to NJDOH that receive an outbreak number are recorded in this report.
- 10. Data presented for New Jersey are for cases confirmed as of the current reporting week. Data presented for the United States represent data reported for the prior MMWR week. This data can be viewed at: <a href="http://www.cdc.gov/flu/weekly/">http://www.cdc.gov/flu/weekly/</a>.

	Influenza Activity	<u>Table 1</u> Level – Definitions for State <i>i</i>	Activity	
NJ Level	CSTE Level	_	<u>Definition</u>	
		ILI Activity/Outbreaks		Lab Activity
	No Activity	ILI activity at or below baseline AND no detected outbreaks	AND	No lab confirmed cases
Low	Sporadic	Low ILI activity detected OR one lab confirmed outbreaks anywhere in the state	AND	Sporadic isolation of laboratory confirmed influenza
	Local	Increase in ILI activity OR two or more 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
Moderate	Regional	Increase in ILI activity OR two or more lab confirmed outbreaks in at least 2 public health regions (Other regions not experiencing increased 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

	<u>Table 2</u> Influenza Activity Level – Definitions for Publ	ic Health	Regions
	<u> </u>	<u>Definition</u>	<u>1</u>
NJ Level	ILI Activity/Outbreaks		<u>Lab Activity</u>
Low	Low ILI activity detected OR one lab confirmed outbreaks 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 same counties of the region with increased ILI
High	Increased ILI activity in more than half of the counties in the region OR three or more 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 Hippocrates and EpiCenter systems, LTCF ILI data, LTCF outbreak data, and information on influenza mortality (122 city, influenza associated death report).

Lab Activity: Virologic surveillance data from PHEL and commercial laboratories 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, 2016 to current MMWR week

**Source: CDRSS** 

Frequency

		R	ESULT		
COUNTY(COUNTY)	Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	Total
ATLANTIC	143	0	14	6	163
BERGEN	743	0	115	37	895
BURLINGTON	94	0	4	10	108
CAMDEN	341	0	16	10	367
CAPE MAY	6	0	1	0	7
CUMBERLAND	6	0	1	0	7
ESSEX	151	0	25	18	194
GLOUCESTER	90	0	15	4	109
HUDSON	308	0	35	12	355
HUNTERDON	49	0	12	1	62
MERCER	102	0	6	5	113
MIDDLESEX	118	0	18	7	143
MONMOUTH	394	0	13	17	424
MORRIS	172	0	53	10	235
OCEAN	307	0	6	17	330
PASSAIC	295	0	34	9	338
SALEM	4	0	0	0	4
SOMERSET	26	0	9	2	37
SUSSEX	27	0	11	1	39
UNION	161	1	61	19	242
WARREN	32	0	20	4	56
Total	3569	1	469	189	4228

#### **INFLUENZA LABORATORY REPORTS BY REGION**

### Counts represent total positive specimens from week ending October 7, 2016 to current MMWR week

**Source: CDRSS** 

**Frequency** 

	Table of	REGION b	y RESULT		
		R	ESULT		
REGION	Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	Total
Central East	980	1	98	60	1139
<b>Central West</b>	177	0	27	8	212
Northeast	1202	0	175	67	1444
Northwest	526	0	118	24	668
South	684	0	51	30	765
Total	3569	1	469	189	4228

Communicable Disease Reporting and Surveillance System

# NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS SURVEILLANCE DATE: 01/24/2017



01/30/2017 9:09 AM

		Long Term Car	re		Schools		Hospi	tal Emergency	Dept
COUNTY	# Enrolled	# Reports Rec'd	∏ %	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	∏ %
January 24, 2017 MMWR WEEK 4									
ATLANTIC	6	0	0.00	43	27	9.86	4	4	3.15
BERGEN	10	5	0.77	37	21	5.86	6	6	4.70
BURLINGTON	8	5	2.14	95	55	4.73	4	3	4.43
CAMDEN	1	0	0.00	1	0	0.00	7	7	5.72
CAPE MAY	3	0	0.00	14	8	7.26	1	1	2.54
CUMBERLAND	5	4	3.13	11	10	10.43	3	3	4.02
ESSEX	7	2	0.00	4	2	5.95	8	7	7.62
GLOUCESTER	3	1	0.00	4	2	6.33	2	2	4.13
HUDSON	4	1	0.00	14	6	6.85	6	6	4.27
HUNTERDON	4	4	0.97	8	6	5.26	1	1	1.05
MERCER	3	0	0.00	22	14	4.34	5	4	5.98
MIDDLESEX	11	5	1.57	22	19	5.11	6	6	5.29
MONMOUTH	6	2	0.00	16	8	4.88	5	5	5.36
MORRIS	2	0	0.00	9	4	6.30	4	4	3.29
OCEAN	8	3	0.00	5	3	7.51	4	4	7.29
PASSAIC	10	2	0.18	29	12	5.27	3	3	8.81
SALEM	0	0	0.00	3	2	6.17	1	1	7.25
SOMERSET	4	0	0.00	23	17	4.63	1	1	6.75
SUSSEX	2	1	0.00	5	1	10.48	2	2	0.00
UNION	1	0	0.00	51	23	3.85	5	5	2.94
WARREN	5	3	1.17	20	9	6.31	2	2	7.80
NW Region	19	6	0.48	63	26	5.73	11	11	6.14
NE Region	21	8	0.54	55	29	6.12	20	19	5.95
CW Region	11	4	0.97	53	37	4.66	7	6	5.59
CE Region	26	10	1.02	94	53	4.62	20	20	5.34
South Region	26	10	2.72	171	104	7.16	22	21	4.63
State Total	103	38	1.14	436	249	5.94	80	77	5.45

User Name: HALDEMAN, ANNMARIE Page 1 of 1

Communicable Disease Reporting and Surveillance System

# NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS SURVEILLANCE DATE: 01/24/2017



NJ Health New Jersey Department of Health
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	RSV Tests		Rapid I	Flu Tests
County	# Positive	Total Tests Performed	# Positive	Total Tests Performed
January 24, 2017 MMWR WEEK			,,	
ATLANTIC	4	22	43	229
BERGEN	1	34	209	620
BURLINGTON	0	0	5	31
CAMDEN	0	4	41	357
CAPE MAY	2	7	6	49
CUMBERLAND	11	25	0	0
ESSEX	27	222	181	924
GLOUCESTER	10	33	39	323
HUDSON	4	9	25	81
HUNTERDON	5	11	33	143
MERCER	5	15	88	326
MIDDLESEX	3	53	12	79
MONMOUTH	22	158	146	771
MORRIS	35	183	39	152
OCEAN	4	19	58	246
PASSAIC	8	46	87	264
SALEM	0	0	0	0
SOMERSET	0	0	0	0
SUSSEX	11	89	30	93
UNION	26	131	0	21
WARREN	9	81	21	150
NW Region	63	399	177	659
NE Region	32	265	415	1625
CW Region	10	26	121	469
CE Region	55	361	216	1117
South Region	27	91	134	989
State Total	187	1142	1063	4859