Respiratory Virus Surveillance Report[1]

New Jersey Department of Health

Communicable Disease Service

Week ending November 22, 2014 (MMWR week 47)

SYNOPSIS

Influenza Activity Level[2]	
State Activity Week ending 11/22: LOW	
Current week Last year: LOW	
Regional[3] Data	
Northwest	LOW
Northeast	LOW
Central West	LOW
Central East	LOW
South	LOW

ILI Activity[4]				
	Percent ILI/Absenteeism			Baselines
	Current week (range by county)	Last week Current year	Current week Last year	Non-season[5] Season[6] (3 low, 3 high)
Long Term Care Facilities	0.36 (0.00, 2.01)	0.51	0.53	0.59 (0.59, 0.78)
Schools (absenteeism)	3.84 (0.31, 8.41)	4.98	3.61	3.63 (4.56, 4.95)
Emergency Departments	2.82 (0.00, 7.72)	2.74	2.74	2.44 (3.17, 4.16)

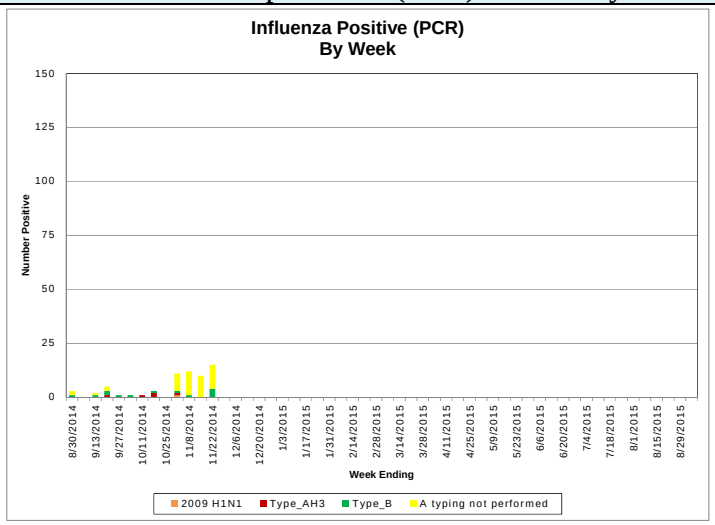
Viral Activity[7]			
	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	0	0	1
Influenza H3N2	0	0	4
Influenza B	4	5	8
Respiratory Syncytial Virus (RSV)	47	108	171
Rapid Influenza Tests	22	48	100

ILINet Providers			
Current Week		Previous Week	
#of reporters	%ILI	#of reporters	%ILI
6	1.04	22	2.01

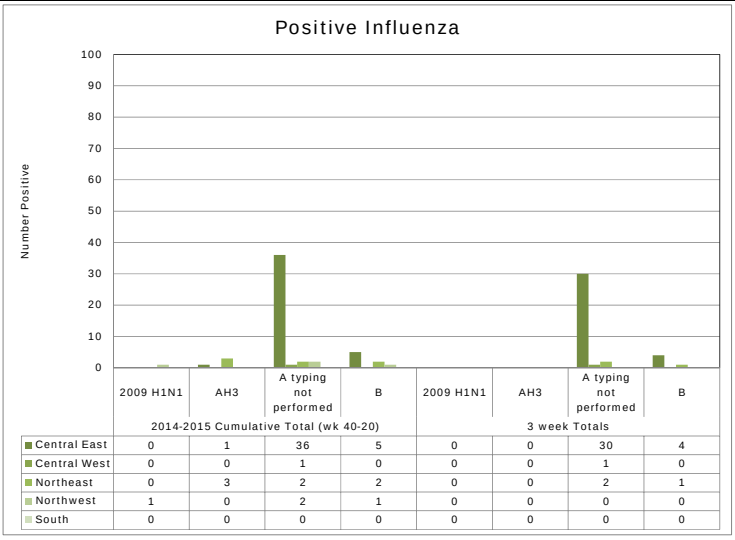
Report also available at: http://nj.gov/health/flu/fluinfo.shtml

Virologic Surveillance[7]

Influenza Positive Specimens (PCR) - Result by Week

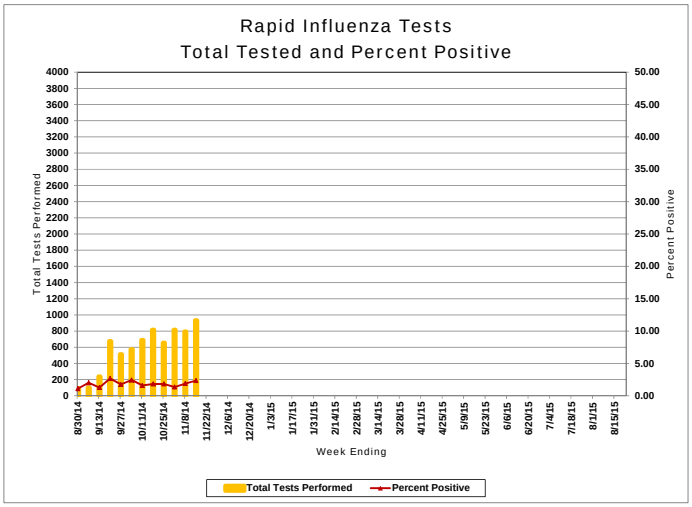


Influenza Positive Specimens (PCR)- Result by Region[3]

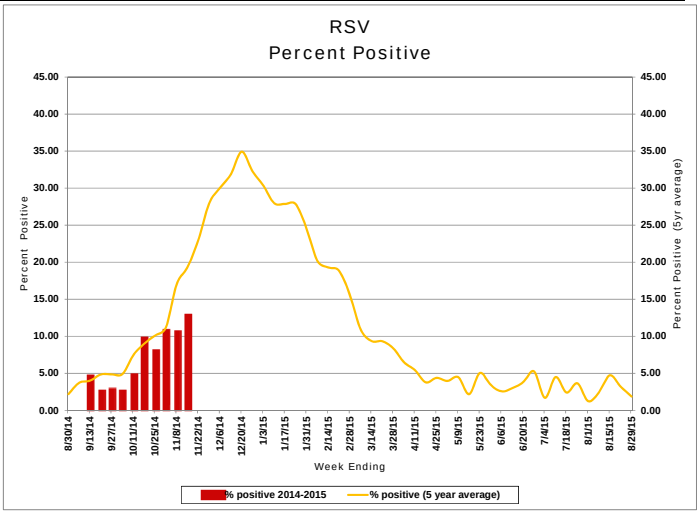


	2014-2015 Cumulative Total (wk 40-20)				3 week Totals			
	2009 H1N1	AH3	A typing not performed	B	2009 H1N1	AH3	A typing not performed	B
Central East	0	1	36	5	0	0	30	4
Central West	0	0	1	0	0	0	1	0
Northeast	0	3	2	2	0	0	2	1
Northwest	1	0	2	1	0	0	0	0
South	0	0	0	0	0	0	0	0

Influenza Rapid Antigen Result by Week



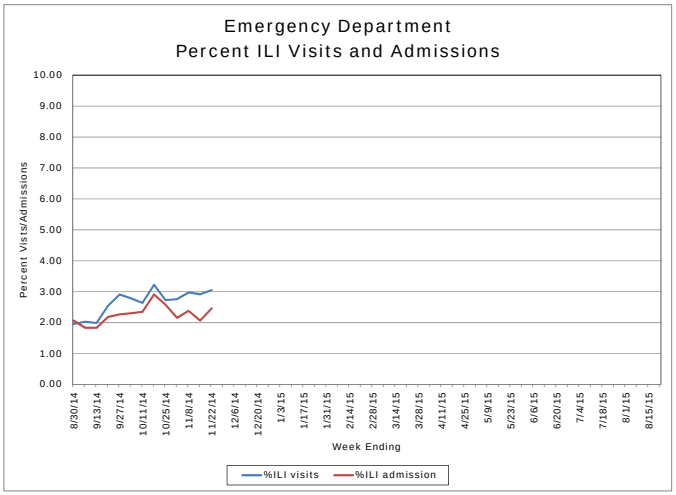
Respiratory Syncytial Virus (RSV) Results by Week



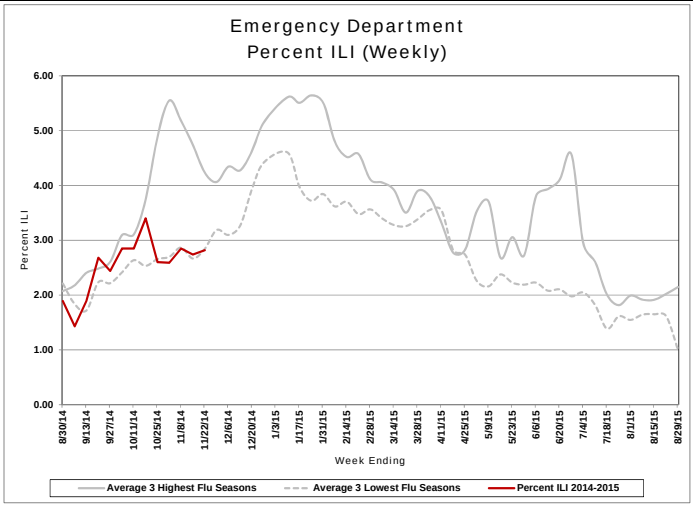
Influenza-like Illness Surveillance

Emergency Department[8]

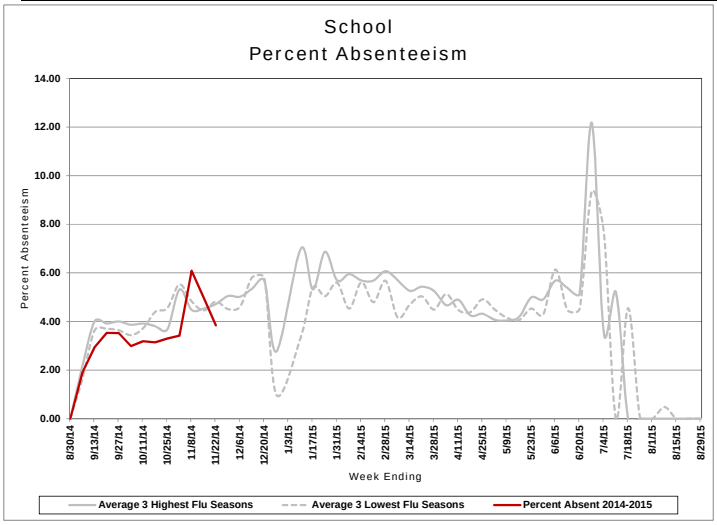
Daily Visits and Admission



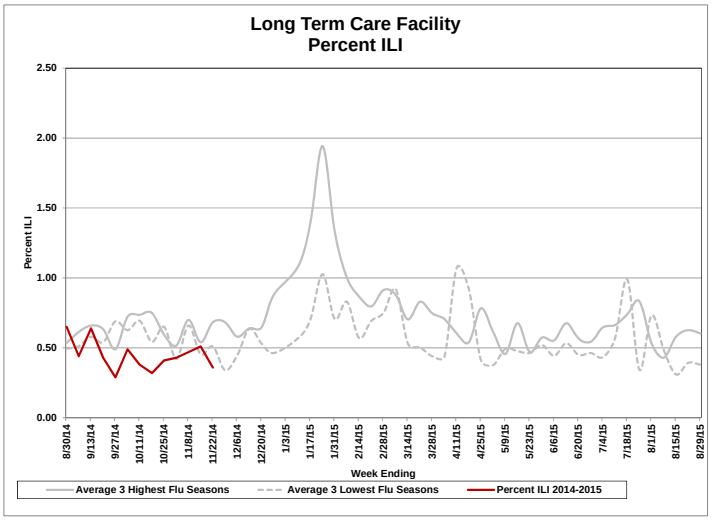
Visits – Tuesday Only



School Absenteeism



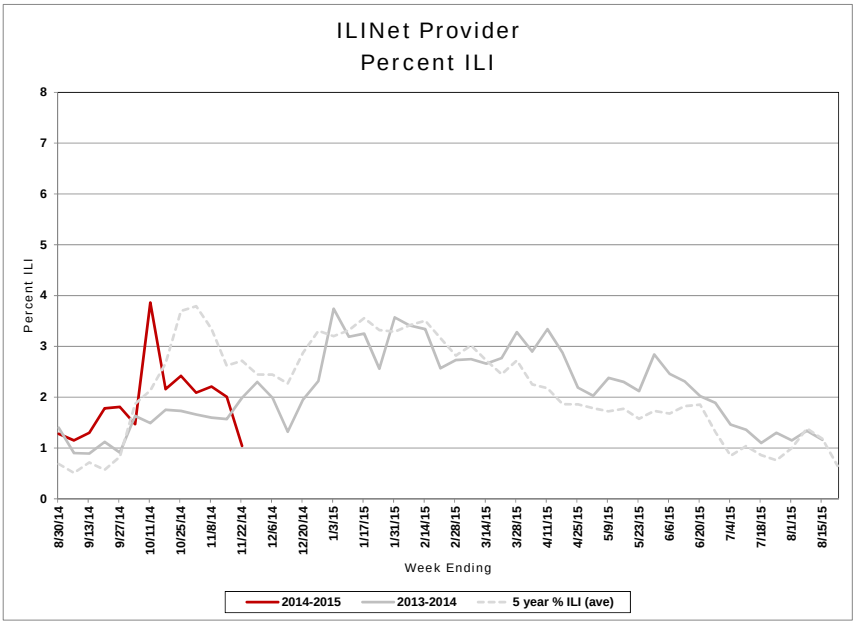
Long Term Care Facilities



Respiratory Outbreaks in Long Term Care Facilities[9]

Cumulative outbreaks 2014-2015 season	1
No. outbreaks last 3 weeks	1
Regions with recent outbreaks	NW

ILINet Providers



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° above baseline temperature.
5. Non-season baseline is calculated by taking the average of statewide percentages of ILI for an 9 year (2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014) 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: 08-09,09-10, 12-13; Low: 10-11,11-12,13-14), ED (High:08-09, 09-10,12-13; Low: 10-11, 11-12,13-14) and schools (High: 08-09, 10-11, 12-13; Low: 09-10, 11-12,13-14). 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 4, 2014. 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.

Table 1 **Influenza Activity Level – Definitions for State Activity**				
NJ Level	**CSTE Level**	**Definition**		
		ILI Activity/Outbreaks		**Lab Activity**
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 outbreaks anywhere in the state	AND	Sporadic isolation of laboratory confirmed influenza
Moderate	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
	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

Table 2 **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 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.

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS
SURVEILLANCE DATE: 11/18/2014

COUNTY	Long Term Care			Schools			Hospital Emergency Dept		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
November 18, 2014 MMWR WEEK 47									
ATLANTIC	7	1	2.01	71	29	5.23	4	4	1.11
BERGEN	5	4	0.08	128	21	2.76	5	5	2.57
BURLINGTON	8	2	0.00	122	46	4.28	4	4	3.05
CAMDEN	5	0	0.00	17	0	0.00	7	7	3.18
CAPE MAY	7	2	0.00	11	8	5.25	1	1	3.81
CUMBERLAND	4	2	1.55	24	12	5.94	3	3	2.27
ESSEX	13	0	0.00	27	0	0.00	8	7	4.06
GLOUCESTER	4	1	0.00	7	2	8.41	2	2	0.58
HUDSON	16	1	0.38	92	17	4.36	6	6	1.45
HUNTERDON	4	3	0.88	8	8	3.34	1	1	1.92
MERCER	8	0	0.00	32	19	0.31	5	4	7.72
MIDDLESEX	20	1	0.00	37	15	2.73	6	6	4.30
MONMOUTH	15	2	0.00	24	15	6.58	5	5	4.02
MORRIS	4	0	0.00	5	0	0.00	4	4	0.60
OCEAN	23	0	0.00	24	6	5.39	4	4	2.25
PASSAIC	14	3	0.25	72	8	0.36	3	3	3.33
SALEM	1	0	0.00	15	1	5.77	1	1	1.64
SOMERSET	7	1	0.00	92	17	2.40	1	1	2.58
SUSSEX	6	1	0.00	24	1	6.67	2	2	0.00
UNION	4	0	0.00	197	1	7.27	5	5	2.00
WARREN	4	2	0.00	27	8	4.05	2	2	0.77
NW Region	28	6	0.17	128	17	1.80	11	11	1.74
NE Region	34	5	0.14	247	38	3.67	19	18	2.97
CW Region	19	4	0.66	132	44	1.70	7	6	5.15
CE Region	62	3	0.00	282	37	4.53	20	20	3.22
South Region	36	8	0.81	267	98	5.04	22	22	2.33
State Total	**179**	**26**	**0.36**	**1056**	**234**	**3.84**	**79**	**77**	**2.82**

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS
SURVEILLANCE DATE: 11/18/2014

County	RSV Tests		Flu Tests	
	# Positive	Total Tests Performed	# Positive	Total Tests Performed
November 18, 2014 MMWR WEEK 47				
ATLANTIC	0	3	0	23
BERGEN	2	6	0	75
BURLINGTON	0	0	0	64
CAMDEN	0	15	0	101
CAPE MAY	0	5	0	8
CUMBERLAND	1	14	0	0
ESSEX	12	84	4	204
GLOUCESTER	0	10	2	92
HUDSON	12	45	3	52
HUNTERDON	1	11	3	36
MERCER	1	5	0	25
MIDDLESEX	5	64	0	0
MONMOUTH	12	101	8	212
MORRIS	0	7	2	24
OCEAN	0	0	0	0
PASSAIC	0	0	0	8
SALEM	0	0	0	0
SOMERSET	0	0	0	0
SUSSEX	0	0	0	0
UNION	1	3	0	7
WARREN	0	0	0	0
NW Region	0	7	2	32
NE Region	26	135	7	331
CW Region	2	16	3	61
CE Region	18	168	8	219
South Region	1	47	2	288
State Total	47	373	22	931