Respiratory Virus Surveillance Report[1]

New Jersey Department of Health
Communicable Disease Service

Week ending January 25, 2014 (MMWR week 4)

SYNOPSIS

Influenza Activity Level[2]	
State Activity Week ending 1/25: **HIGH**	
Current week Last year: HIGH	
Regional[3] Data	
Northwest	**HIGH**
Northeast	**HIGH**
Central West	**HIGH**
Central East	**HIGH**
South	**HIGH**

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	0.44 (0.00, 1.41)	1.20	2.36	0.59 (0.62, 0.87)
Schools (absenteeism)	7.85 (1.56, 20.80)	5.20	4.94	3.79 (4.70, 4.90)
Emergency Departments	4.20 (0.00, 6.67)	4.49	7.23	2.49 (3.28, 4.31)

Viral Activity[7]	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	52	216	378
Influenza H3N2	1	4	14
Influenza B	1	2	9
Respiratory Syncytial Virus (RSV)	117	337	1227
Rapid Influenza Tests	264	555	784

ILINet Providers			
Current Week		**Previous Week**	
#of reporters	**%ILI**	**#of reporters**	**%ILI**
18	2.67	20	3.24

Report also available at: http://nj.gov/health/flu/fluinfo.shtml
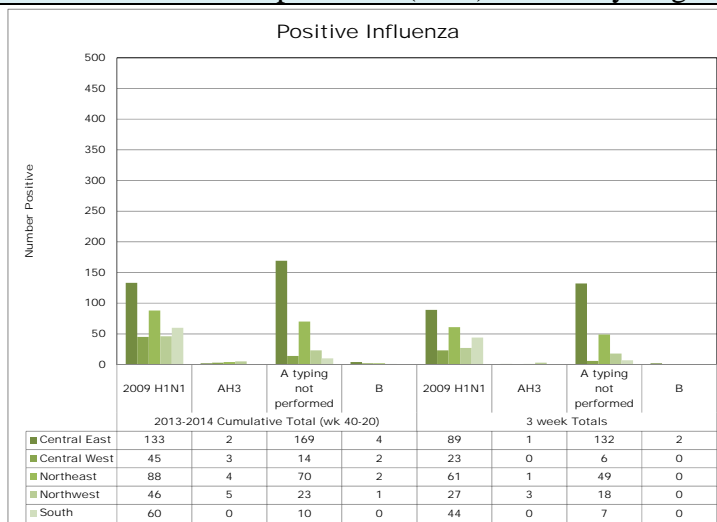
Virologic Surveillance[7]

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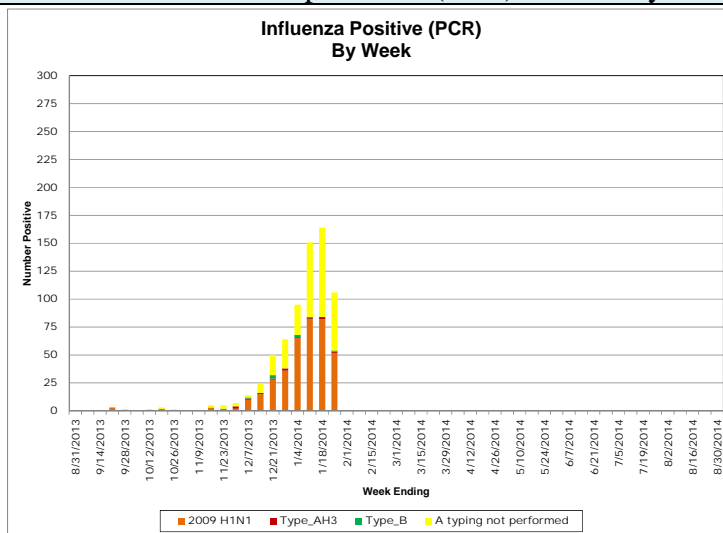
Influenza Positive Specimens (PCR)- Result by Region[3]

|	2009 H1N1	AH3	A typing not performed	B	2009 H1N1	AH3	A typing not performed	B
	2013-2014 Cumulative Total (wk 40-20)				3 week Totals			
Central East	133	2	169	4	89	1	132	2
Central West	45	3	14	2	23	0	6	0
Northeast	88	4	70	2	61	1	49	0
Northwest	46	5	23	1	27	3	18	0
South	60	0	10	0	44	0	7	0

Influenza Rapid Antigen Result by Week
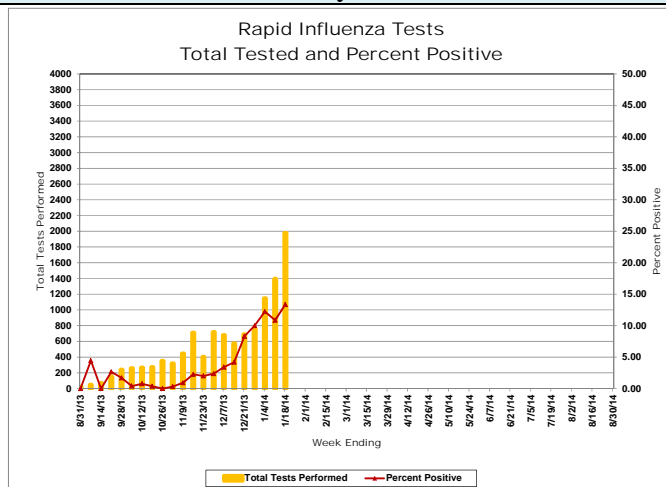
Respiratory Syncytial Virus (RSV) Results by Week
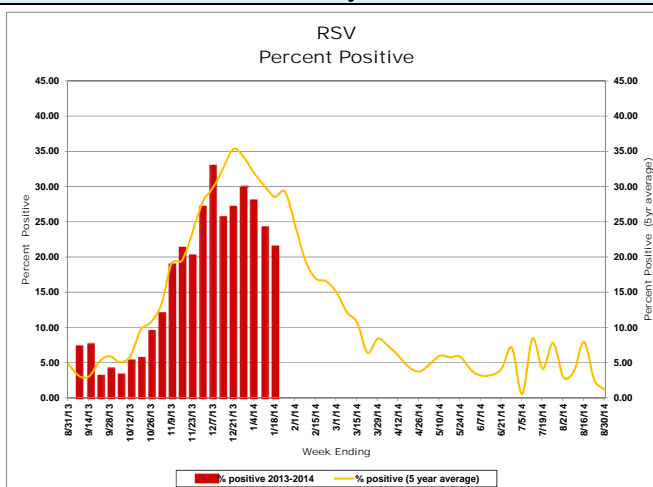
Influenza-like Illness Surveillance
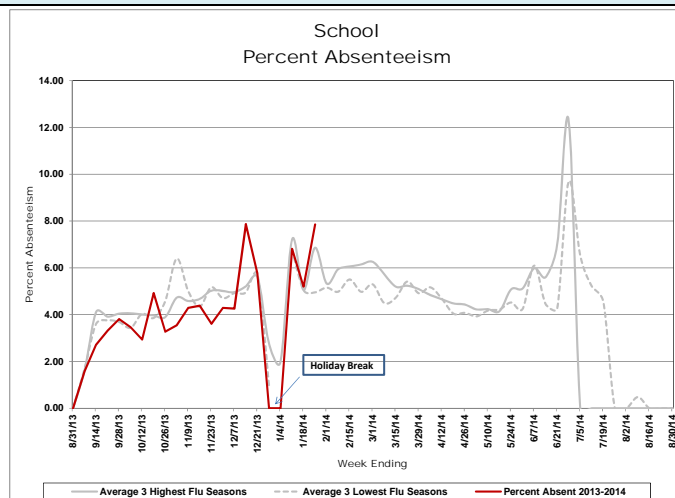
Emergency Department[8]	
Daily Visits and Admission	Visits – Tuesday Only

Emergency Department
Percent ILI Visits and Admissions
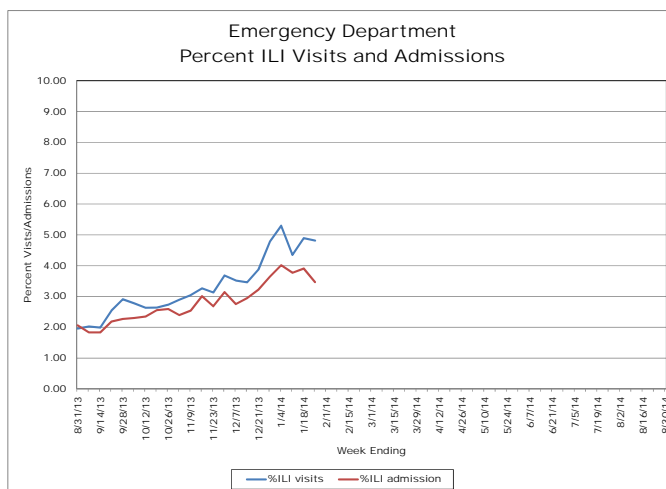
Emergency Department
Percent ILI (Weekly)

School Absenteeism	Long Term Care Facilities
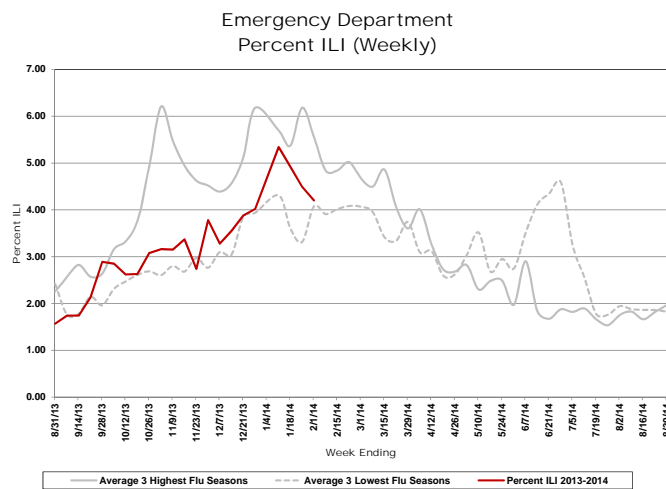
School
Percent Absenteeism

Long Term Care Facility
Percent ILI
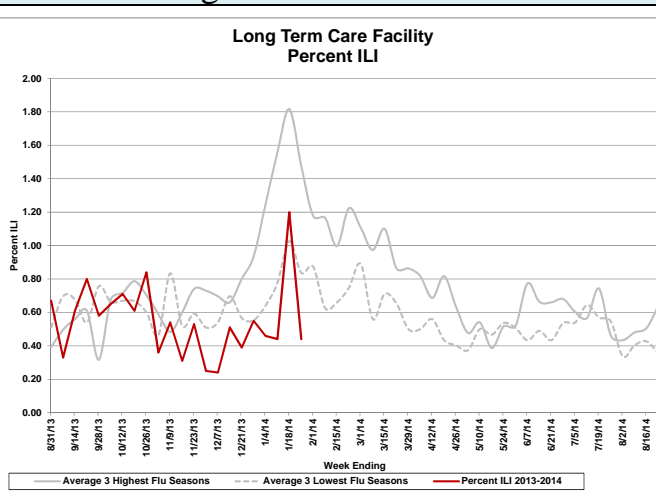
Respiratory Outbreaks in Long Term Care Facilities[9]

Cumulative outbreaks 2013-2014 season	3
No. outbreaks last 3 weeks	3
Regions with recent outbreaks	CW(2), CE(1)

ILINet Providers

ILINet Provider Percent ILI
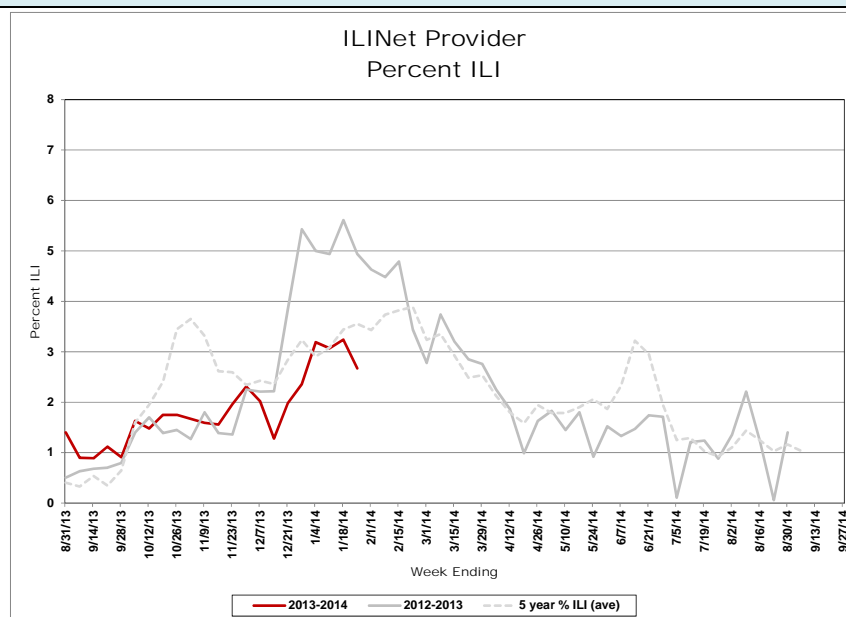
For additional information regarding influenza surveillance please visit the following websites.
http://nj.gov/health/flu/surveillance.shtml
http://www.cdc.gov/flu/

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 8 year (2006, 2007, 2008, 2009, 2010, 2011, 2012, and 2013) 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: 07-08, 08-09, 12-13; Low: 09-10, 10-11,11-12), ED (High:07-08, 09-10,12-13; Low: 08-09, 10-11, 11-12) and schools (High: 07-08, 08-09,10-11; Low: 09-10, 11-12,12-13). 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 5, 2013. 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
Low	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
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

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: 01/21/2014

NJ Health — New Jersey Department of Health

COUNTY	Long Term Care			Schools			Hospital Emergency Dept		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
January 21, 2014 MMRW WEEK 4									
ATLANTIC	7	3	0.26 %	68	24	10.24 %	4	4	1.9 %
BERGEN	5	4	0.17 %	125	54	5.12 %	5	5	7 %
BURLINGTON	8	0	0 %	115	34	7.38 %	3	3	4.57 %
CAMDEN	5	0	0 %	17	0	0 %	7	7	3.81 %
CAPE MAY	7	2	0 %	11	8	13.02 %	1	1	2.17 %
CUMBERLAND	2	2	0.85 %	24	11	20.8 %	3	3	3.98 %
ESSEX	13	2	0.41 %	27	0	0 %	8	7	3.9 %
GLOUCESTER	4	1	0 %	7	5	8.4 %	2	1	1.46 %
HUDSON	15	3	0.38 %	91	7	7.95 %	6	6	4.4 %
HUNTERDON	4	4	0.9 %	8	7	4.52 %	1	1	0 %
MERCER	10	0	0 %	28	10	8.73 %	5	4	3.32 %
MIDDLESEX	20	2	0.25 %	35	9	7.06 %	6	6	6.22 %
MONMOUTH	15	1	0 %	26	12	9.68 %	5	5	2.94 %
MORRIS	4	0	0 %	5	0	0 %	4	4	3.5 %
OCEAN	22	0	0 %	24	0	0 %	4	4	5.2 %
PASSAIC	14	5	0.7 %	69	5	5.21 %	3	3	6.65 %
SALEM	1	0	0 %	13	0	0 %	1	1	6.67 %
SOMERSET	7	1	1.41 %	91	10	3.31 %	1	1	5.51 %
SUSSEX	6	1	0 %	24	1	10.2 %	2	2	0 %
UNION	4	0	0 %	197	1	1.56 %	5	5	2.19 %
WARREN	4	3	0.5 %	27	6	11.08 %	2	2	4.23 %
NW Region	28	9	0.63 %	125	12	6.46 %	11	11	4.71 %
NE Region	33	9	0.26 %	243	61	5.50 %	19	18	4.77 %
CW Region	21	5	1.02 %	127	27	5.17 %	7	6	3.58 %
CE Region	61	3	0.19 %	282	22	8.65 %	20	20	4.15 %
South Region	34	8	0.43 %	255	82	10.12 %	21	20	3.40 %
State Total	**177**	**34**	**0.44 %**	**1032**	**204**	**7.85 %**	**78**	**75**	**4.20 %**

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS
SURVEILLANCE DATE: 01/21/2014

NJ Health — New Jersey Department of Health

County	RSV Tests # Positive	RSV Tests Total Tests Performed	Flu Tests # Positive	Flu Tests Total Tests Performed
January 21, 2014 MMRW WEEK 4				
ATLANTIC	10	35	16	148
BERGEN	11	50	84	430
BURLINGTON	0	0	0	0
CAMDEN	3	23	3	162
CAPE MAY	1	4	3	44
CUMBERLAND	12	42	0	0
ESSEX	13	76	39	368
GLOUCESTER	5	18	3	60
HUDSON	12	60	21	78
HUNTERDON	2	12	11	77
MERCER	0	0	0	0
MIDDLESEX	7	55	0	0
MONMOUTH	16	99	30	244
MORRIS	13	29	24	113
OCEAN	0	0	0	0
PASSAIC	0	0	8	35
SALEM	0	0	0	0
SOMERSET	0	0	0	0
SUSSEX	0	0	0	2
UNION	7	39	15	146
WARREN	5	10	7	67
NW Region	18	39	39	217
NE Region	36	186	144	876
CW Region	2	12	11	77
CE Region	30	193	45	390
South Region	31	122	25	414
State Total	117	552	264	1974