




**New Jersey Department of Health and
Senior Services
Communicable Disease Service**



**Respiratory Virus Surveillance Report
Week ending October 22, 2011 (MMWR week 42)**

SYNOPSIS

State Activity Week ending 10/8:		
LOW		
Current week Last year: LOW		
Regional ³ Data		
Northwest	LOW	
Northeast	LOW	
Central West	LOW	
Central East	LOW	
South	LOW	

ILI Activity				
	Percent ILI/Absenteeism			Baselines
	Current week (range by county)	Last week Current year	Current week Last year	Non-season⁴ Season⁵ (3 low, 3 high)
Long Term Care Facilities	0.44 (0-2.50)	0.66	0.58	0.64 (0.66, 0.89)
Schools (absenteeism)	3.67 (2.34-5.35)	3.96	4.01	4.32 (4.86, 5.21)
Emergency Departments	2.37 (0-4.41)	2.71	2.60	2.68 (3.37, 3.89)

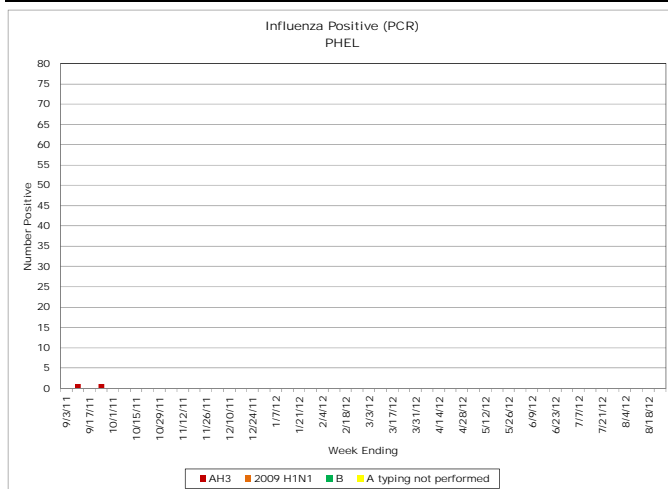
Viral Activity⁶			
	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	0	0	0
Influenza H3N2	0	0	0
Influenza B	0	0	0
Respiratory Syncytial Virus (RSV)	14	20	20

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

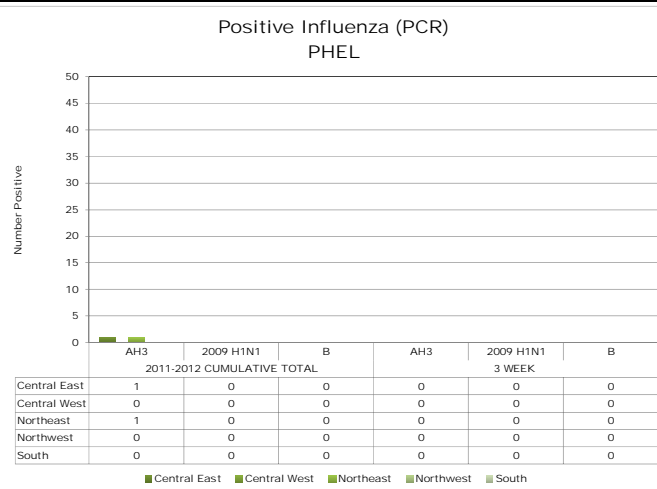
Virologic Surveillance⁶

NJ Public Health and Environmental Laboratory (PHEL) Influenza Positive (PCR)

Result by Week

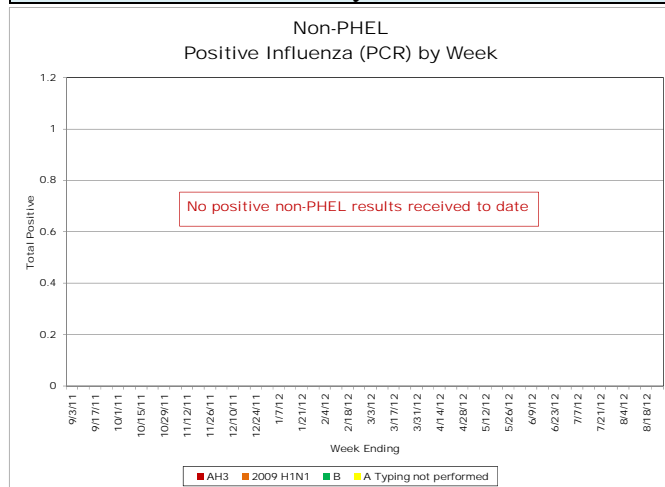


Result by Region³

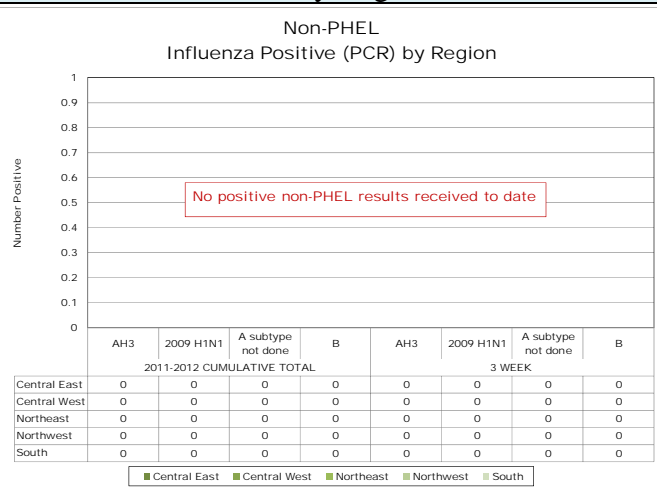


Influenza Positive (PCR) – Commercial/Acute Care Laboratories

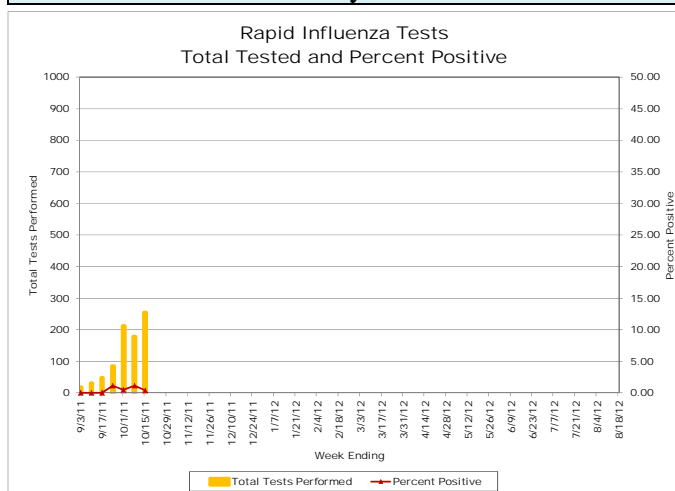
Result by Week



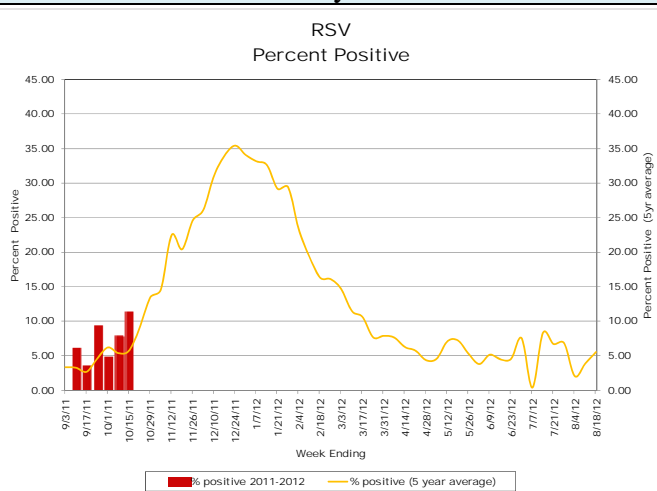
Result by Region³



Influenza Rapid Antigen Result by Week

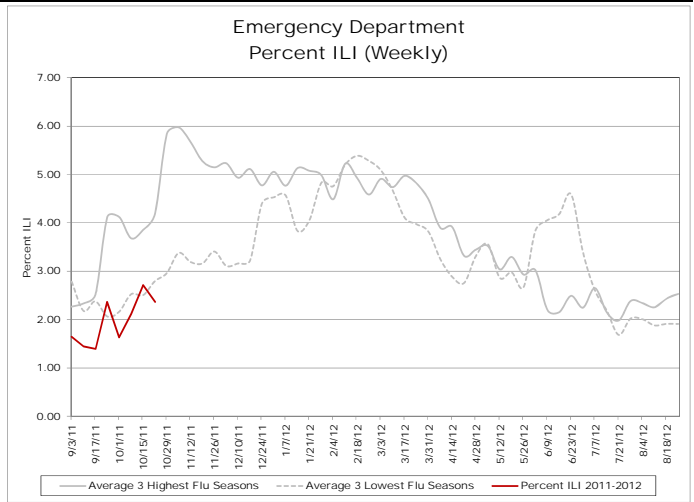
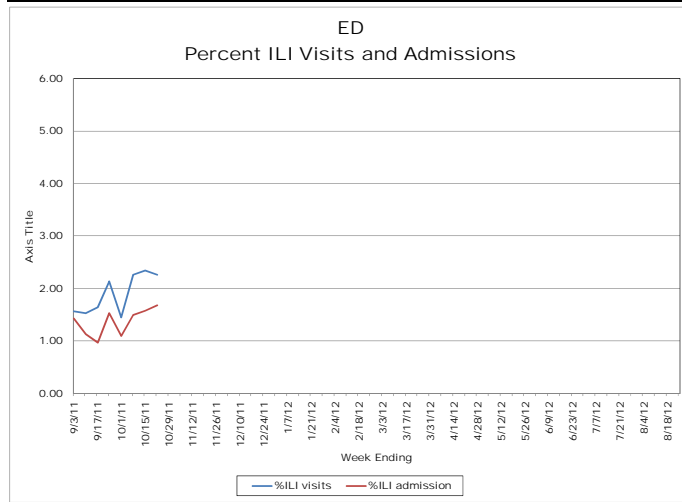


Respiratory Syncytial Virus (RSV) Results by Week

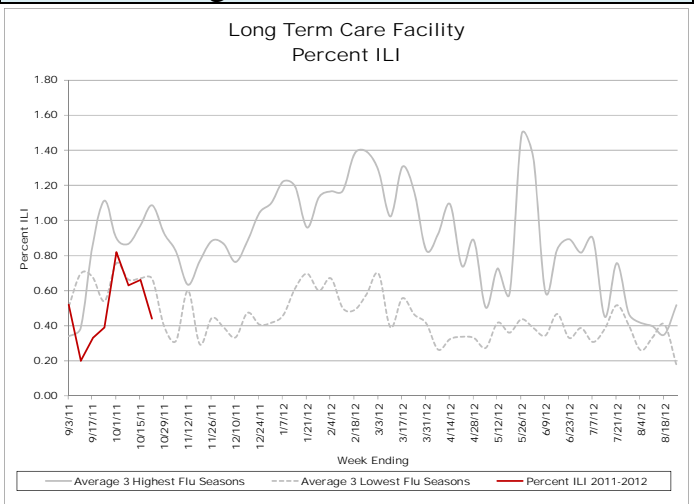
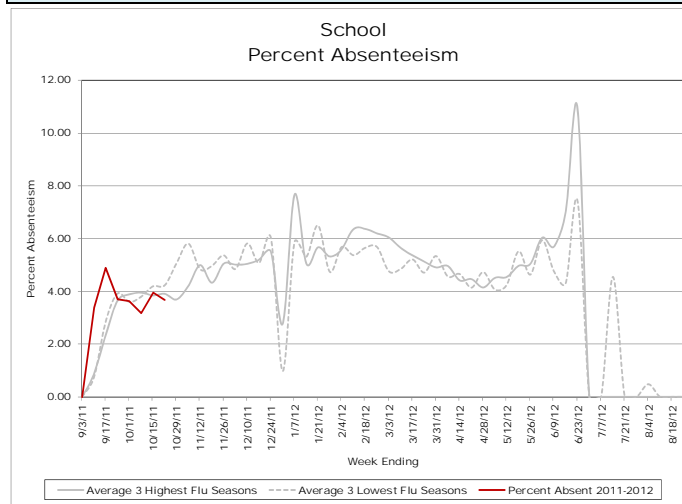


Influenza-like Illness Surveillance

Emergency Department ⁷	
Daily Visits and Admission	Visits – Tuesday Only



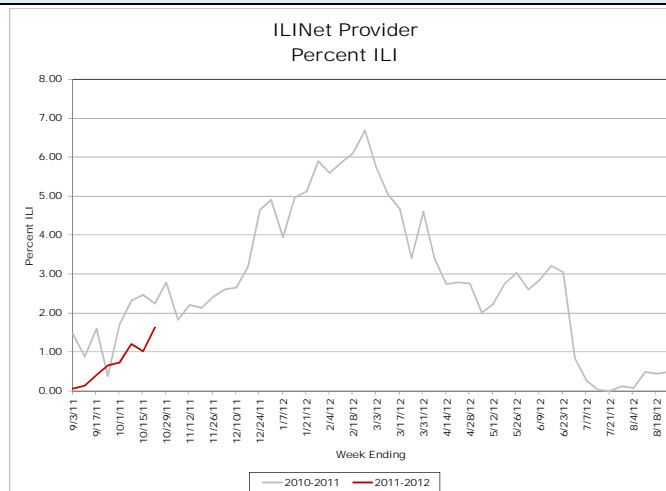
School Absenteeism	Long Term Care Facilities
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Respiratory Outbreaks in Long Term Care Facilities⁸

Cumulative outbreaks 2011-2012 season	1
No. outbreaks last 3 weeks	1
Regions with recent outbreaks	1

ILINet Providers



Additional Information

A second report containing information about age specific illness, hospitalization and deaths will be produced on a monthly basis or as needed when important information needs to be disseminated.

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. 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° above baseline temperature.
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. Non-season baseline is calculated by taking the average of statewide percentages of ILI for a 6 year (2006, 2007, 2008, 2009, 2010, 2011) period during months when influenza is less likely to be circulating (May-August).
5. 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: 05-06, 06-07, 07-08; Low: 08-09, 09-10, 10-11), ED (High: 05-06, 06-07, 09-10; Low: 07-08, 08-09, 10-11) and schools (High: 06-07, 07-08, 08-09 ;Low: 05-06, 09-10, 10-11). A week by week average was also calculated using the average of the seasons listed above for each entity type.
6. 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, 2011. 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.
7. Daily visits and admission 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.
8. Only LTCF outbreaks reported to NJDHSS that received an outbreak number are recorded in this report.

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 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			
<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 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 admission 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 will be used as the primary data source for the above levels. However, rapid influenza test data and commercial laboratory data will also be considered when determining the appropriate activity levels.

	Long Term Care			Schools			Hospital Emergency Department		
County	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
October, 18, 2011 12:00 AM	MMRW WEEK 42								
ATLANTIC	3	0	0.00	13	13	4.69	5	4	0.80
BERGEN	4	2	0.00	36	23	3.05	5	5	2.56
BURLINGTON	6	1	0.00	115	12	2.99	3	3	1.09
CAMDEN	5	0	0.00	17	0	0.00	7	7	2.39
CAPE MAY	7	3	0.00	11	7	3.60	1	1	0.83
CUMBERLAND	2	1	2.50	11	7	5.35	3	3	2.61
ESSEX	25	6	0.32	48	5	2.53	11	7	3.17
GLOUCESTER	5	5	0.00	6	5	3.33	2	2	1.93
HUDSON	16	7	0.54	82	64	4.27	6	6	2.94
HUNTERDON	4	4	0.23	8	8	2.61	1	1	1.20
MERCER	11	1	0.00	26	14	2.89	5	3	0.82
MIDDLESEX	12	8	0.43	27	14	2.34	5	5	3.04
MONMOUTH	15	6	0.78	24	22	4.42	5	5	3.46
MORRIS	4	0	0.00	5	0	0.00	4	4	0.96
OCEAN	16	0	0.00	94	21	4.42	4	3	4.41
PASSAIC	9	2	1.15	31	14	3.75	3	1	3.13
SALEM	2	0	0.00	5	4	4.76	1	1	0.00
SOMERSET	6	0	0.00	85	30	2.42	2	1	2.94
SUSSEX	5	4	0.00	22	22	4.14	2	2	1.79
UNION	4	1	0.00	195	9	2.51	5	5	0.84
WARREN	4	3	1.21	19	12	4.43	2	2	0.60
NW Region	22	9	0.49	77	48	4.07	11	9	1.23
NE Region	45	15	0.35	166	92	3.99	22	18	2.92
CW Region	21	5	0.18	119	52	2.57	8	5	1.37
CE Region	47	15	0.50	340	66	3.74	19	18	3.03
South Region	30	10	0.60	178	48	4.13	22	21	1.74
State Total	165	54	0.44	880	306	3.67	82	71	2.37

County	RSV Tests		Flu Tests		
	# Positive	Total Tests Performed	# Positive	Total Tests Performed	
October, 18, 2011 12:00 AM	MMRW WEEK 42				
ATLANTIC	0	5	0	6	
BERGEN	2	8	0	17	
BURLINGTON	1	2	0	14	
CAMDEN	1	8	0	6	
CAPE MAY	0	4	0	4	
CUMBERLAND	2	10	0	0	
ESSEX	5	20	0	54	
GLOUCESTER	0	5	1	13	
HUDSON	0	0	0	0	
HUNTERDON	1	9	0	19	
MERCER	0	6	0	5	
MIDDLESEX	0	0	0	0	
MONMOUTH	2	28	0	66	
MORRIS	0	8	0	29	
OCEAN	0	0	0	0	
PASSAIC	0	0	0	0	
SALEM	0	0	0	0	
SOMERSET	0	0	0	0	
SUSSEX	0	3	0	6	
UNION	0	8	0	10	
WARREN	0	3	0	6	
NW Region	0	14	0	41	
NE Region	7	28	0	71	
CW Region	1	15	0	24	
CE Region	2	36	0	76	
South Region	4	34	1	43	
State Total	14	127	1	255	