

New Jersey Department of Health and Senior Services
Communicable Disease Service
Influenza Activity Summary
Week Ending November 21, 2009(MMWR Week 46)

Influenza Activity Level: **WIDESPREAD**

NOTE: No parameters are at or above state baseline. One county have 2 of 3 parameters above state baseline and 20 counties have had culture/PCR positive samples in the last 3 weeks. One county had both positive culture/PCR and 2 of 3 parameters above baseline.

No Activity- At least 2 of 3 parameters at or below state baseline **AND** no lab confirmed cases

Sporadic – At least 2 of 3 parameters above state baseline **AND** confirmed laboratory cases anywhere in the state within previous 3 weeks **OR** at least one laboratory confirmed outbreak in an institution anywhere in the state

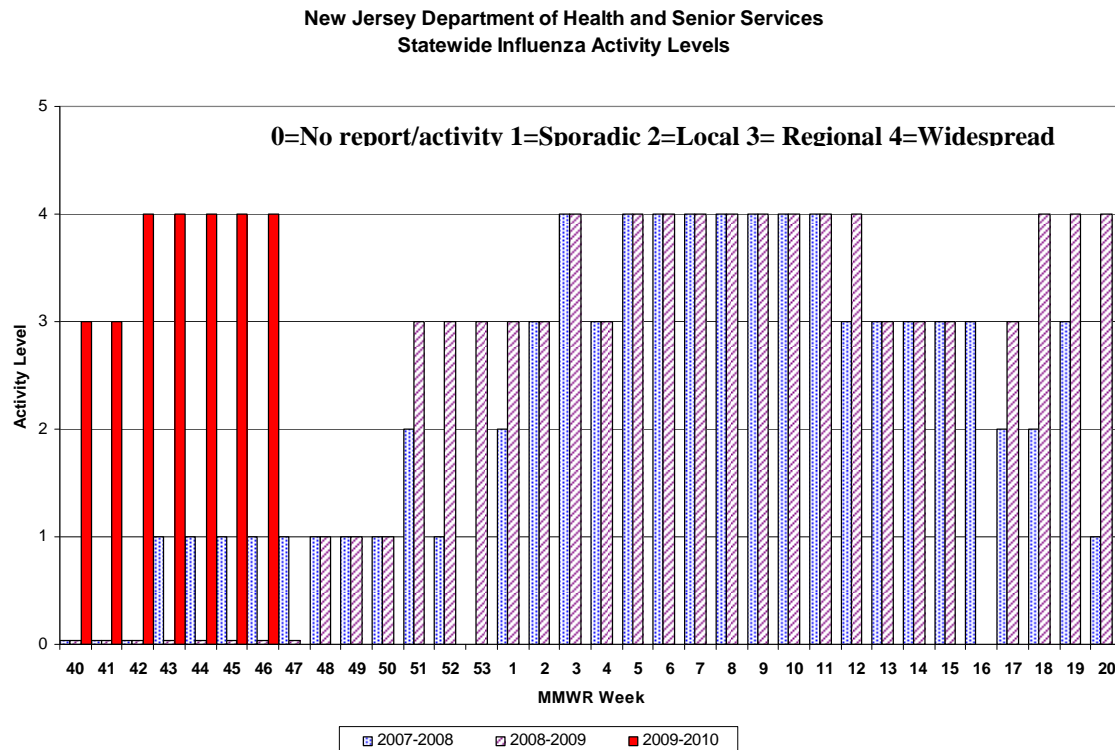
Local – At least 2 of 3 parameters above state baseline in a single county **AND** confirmed laboratory cases from that same county within the previous 3 weeks (other counties may be above baseline without lab confirmed cases) **OR** confirmed outbreaks in 2 or more institutions in a single county

Regional – At least 2 of 3 parameters above state baseline in ≥ 2 but ≤ 10 counties **AND** laboratory confirmed cases from these same counties in the past 3 weeks **OR** confirmed outbreaks institutions in ≥ 2 but ≤ 10 counties

Widespread – At least 2 of 3 parameters above state baseline in > 10 counties **OR** institutional outbreaks in > 10 counties **AND** lab confirmed influenza cases in previous 3 weeks.

Parameter = School, emergency department, or long term care weekly surveillance data

Off season baseline is calculated by taking the average of statewide percentages of ILI for a 4 year (2006, 2007, 2008, 2009) period during months when influenza is less likely to be circulating (May-August).



Regional Data

Region	Counties in Region	Activity Level
NW Region	Morris, Passaic, Sussex, Warren	REGIONAL
NE Region	Bergen, Essex, Hudson	REGIONAL
CW Region	Hunterdon, Mercer, Somerset	REGIONAL
CE Region	Middlesex, Monmouth, Ocean, Union	REGIONAL
South Region	Atlantic, Burlington, Camden, Cape May, Salem, Cumberland, Gloucester	REGIONAL

No Activity- At least 2 of 3 parameters at or below state baseline **AND** no lab confirmed cases in the public health region

Sporadic – At least 2 of 3 parameters above state baseline **AND** confirmed laboratory cases anywhere in the public health region **OR** at least one laboratory confirmed outbreak in an institution anywhere in the public health region

Local – At least 2 of 3 parameters above state baseline in a single county of a public health region **AND** confirmed laboratory cases from that same county within the previous 3 weeks (other counties may be above baseline without lab confirmed cases) **OR** confirmed outbreaks in 2 or more institutions in a single county of a public health region

Regional – At least 2 of 3 parameters above state baseline in at least half of the counties of public health region **AND** laboratory confirmed cases from these same counties in the past 3 weeks **OR** confirmed outbreaks institutions in at least half of counties of public health region counties

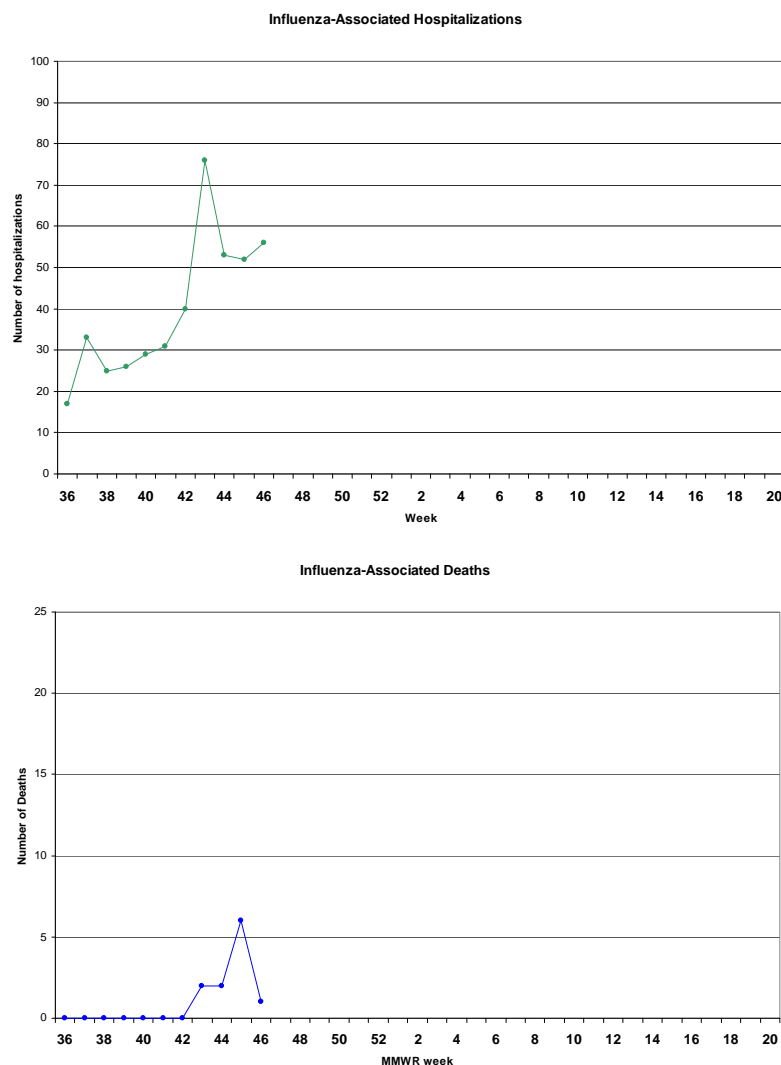
Widespread – Not used for public health region data

Influenza Hospitalizations/Deaths

Influenza-associated hospitalizations are reported weekly from a subset of hospital facilities. Facilities report patients hospitalized with either laboratory-confirmed (rapid, PCR, culture) influenza or patients admitted with influenza-like illness. Data from influenza-associated deaths are extracted from CDRSS. Only deaths with laboratory confirmed influenza are included in these statistics.

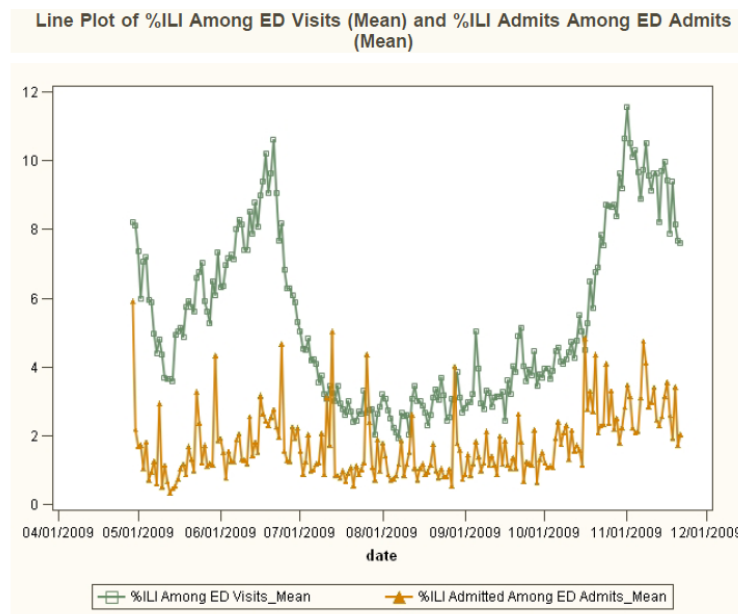
NJ Influenza-Associated Hospitalizations and Deaths by Current MMWR week and Cumulative Total (Week 36 to present)		
	Hospitalizations	Deaths
Week 46	56	1
Cumulative	438	11

Note: Due to a delayed report, four additional hospitalizations were added to week 45. Cumulative numbers presented above reflect this change.



Syndromic Surveillance – Enhanced Emergency Department (ED) Surveillance for Influenza-like Illness (ILI)

NOTE: *The number of ED visits, hospital admissions, ED visits due to ILI, and hospital admissions due to ILI are reported each day by acute care facilities statewide. These data are captured via daily surveys sent using the Hippocrates system.*



Summary of Emergency Department (ED) Visits and Admits Surveillance

The number of ED visits and hospital admissions are reported each day by New Jersey acute care facilities statewide via daily surveys sent using the Hippocrates system. Daily surveillance for ED visits and admissions from these hospital EDs resulted in three ED volume blips (Essex, Hudson and Middlesex) and four admission blips (Atlantic, Cumberland-Salem and Union) from 11/15/09 to 11/21/09. Four blip responses received and one was associated with increased ILI activities.

Summary of Enhanced Emergency Department (ED) Surveillance for Influenza-like Illness (ILI)

During 11/15/09-11/21/09, 80 acute care facilities in NJ reported an aggregate total of 5,519 ED visits due to ILI (8.7% of total ED visits) and an aggregate total of 329 admissions due to ILI (6% of total ILI ED visits). These reports resulted in two ED ILI visit blips (Bergen and Union). There was a decrease in ILI activity for the week ending 11/21/09 when compared to the previous week ending 11/14/09 ($p = 0.017$). The mean percentage of ED visits for ILI during the week ending 11/21/09 was 8.6%, compared to 9.5% for the previous week. The mean percentage of ED visits due to ILI ranged from 7.6% to 10% during 11/15/09 – 11/21/09. The mean percentage of ED visits due to ILI (averaged over the previous four influenza seasons) for this same week (MMWR Week 46) was approximately 4%.

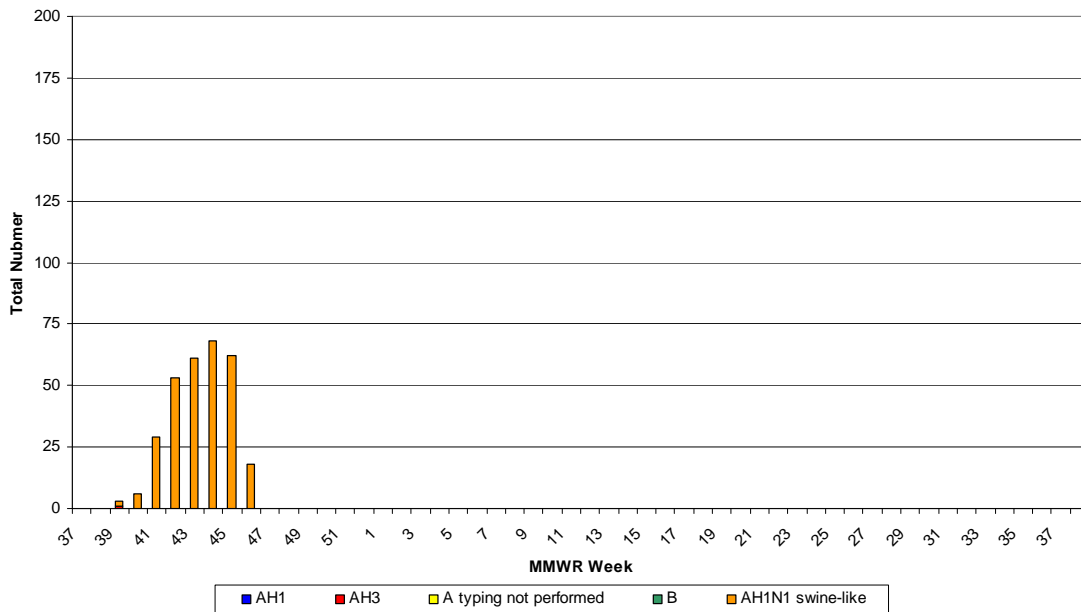
Laboratory Surveillance

As of week 46, 297 samples were found to be positive by viral culture or PCR for influenza AH1, AH3, novel AH1N1 and influenza B. Please see graph on next page for weekly distribution. Numbers of specimens tested and total number positive by rapid influenza testing are displayed by county at the end of this report.

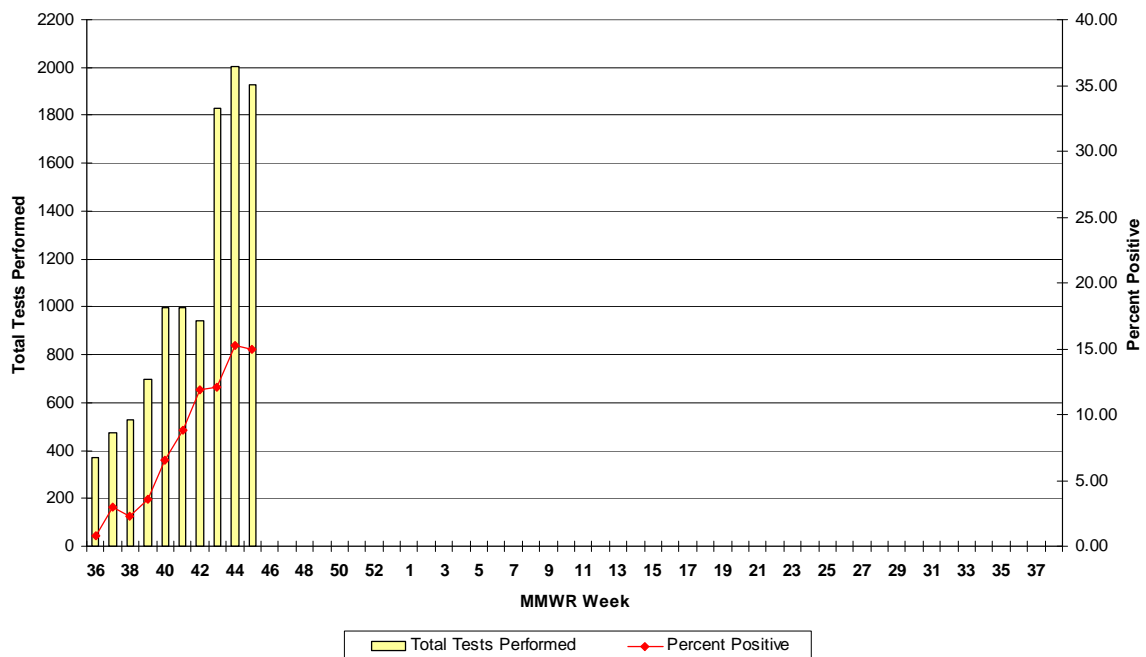
	MMWR Week 40 to present week					MMWR Week 44, 45, 46				
	A H1	A H3	A (subtyping not done)	B	2009 Influenza A H1N1	A H1	A H3	A (subtyping not done)	B	2009 Influenza A H1N1
Atlantic County	0	0	0	0	20	0	0	0	0	6
Bergen County	0	0	0	0	16	0	0	0	0	10
Burlington County	0	0	0	0	6	0	0	0	0	2
Camden County	0	0	0	0	42	0	0	0	0	17
Cape May County	0	0	0	0	17	0	0	0	0	6
Cumberland County	0	0	0	0	14	0	0	0	0	14
Essex County	0	0	0	0	3	0	0	0	0	1
Gloucester County	0	0	0	0	3	0	0	0	0	3
Hudson County	0	0	0	0	3	0	0	0	0	3
Hunterdon County	0	0	0	0	23	0	0	0	0	5
Mercer County	0	0	0	0	22	0	0	0	0	8
Middlesex County	0	0	0	0	30	0	0	0	0	17
Monmouth County	0	0	0	0	15	0	0	0	0	10
Morris County	0	0	0	0	25	0	0	0	0	14
Ocean County	0	0	0	0	2	0	0	0	0	2
Passaic County	0	0	0	0	11	0	0	0	0	7
Salem County	0	0	0	0	0	0	0	0	0	0
Somerset County	0	0	0	0	7	0	0	0	0	2
Sussex County	0	0	0	0	2	0	0	0	0	2
Union County	0	0	0	0	26	0	0	0	0	16
Warren County	0	0	0	0	10	0	0	0	0	3
Unknown	0	0	0	0	0	0	0	0	0	0
State Total	0	0	0	0	297	0	0	0	0	148

*Rapid data is acquired from facilities reporting rapid influenza tests via NREVSS or CDRSS ILI module. Culture/PCR results are obtained from the LIMS system at PHEL or hospital viral culture laboratories via NREVSS. County of residence as provided by the laboratory is used to assign culture results to a county. If county of residence is not available, the county of the facility reporting is utilized.

**Influenza Laboratory Report
Positive Specimens by PCR and Culture by Week
2009-2010 Influenza Season**



**Influenza Rapid Antigen Tests
Total and Percent Positive
2008-2009 Influenza Season**

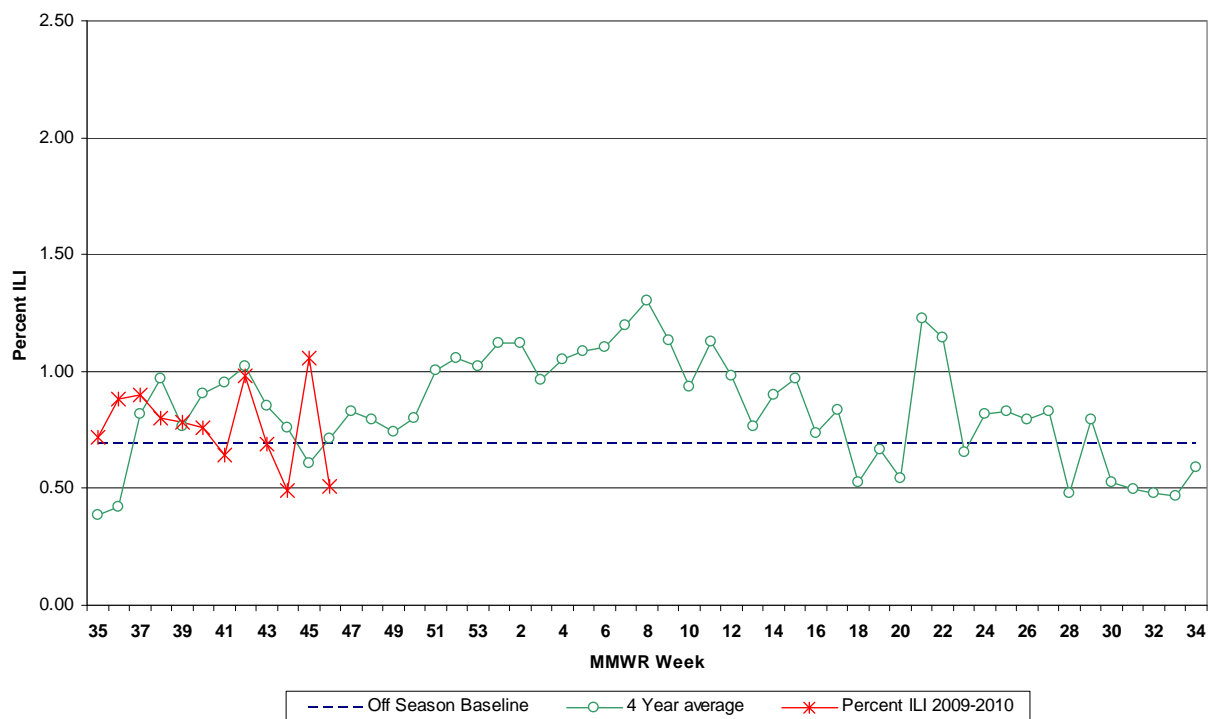


Influenza-like Illness (ILI) Surveillance*

Long-term Care Facilities

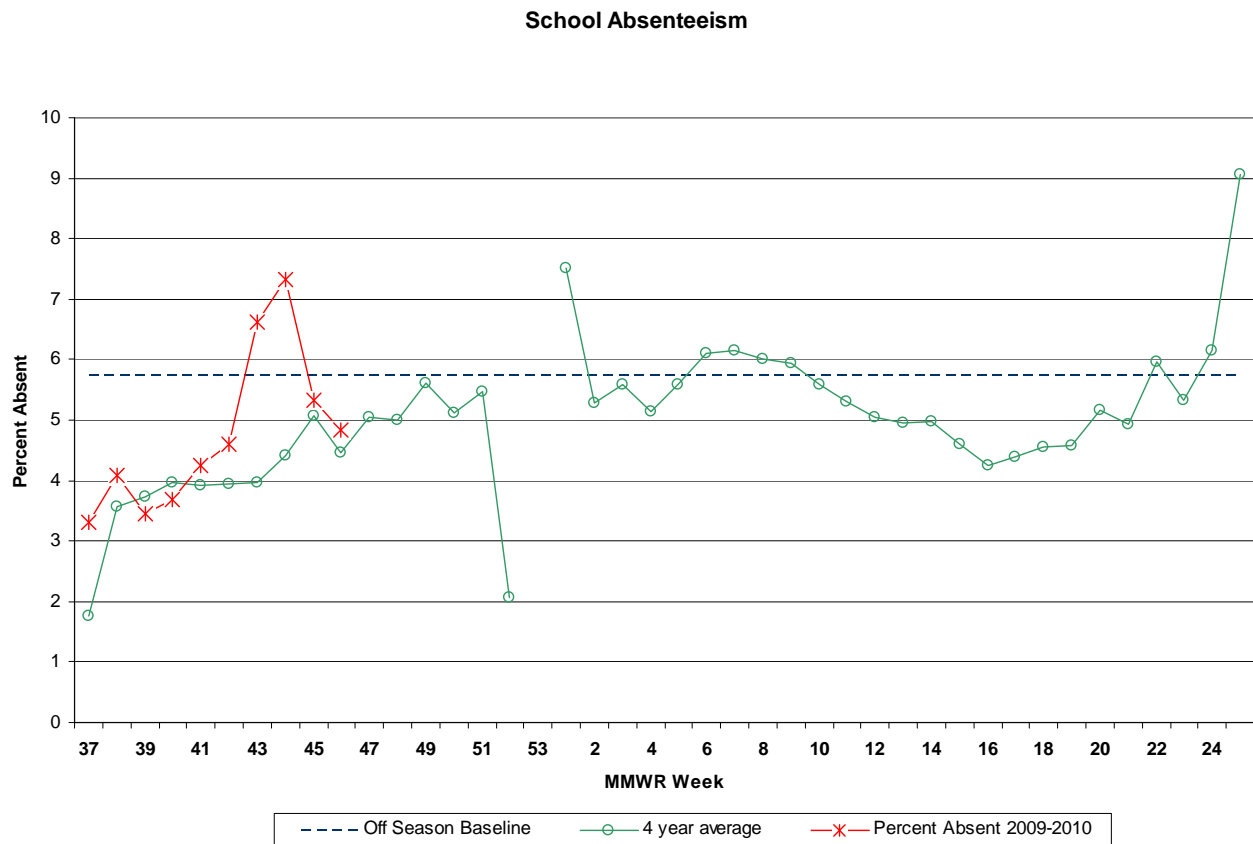
During week 46, 0.51% ILI was reported statewide from long term care facilities. This is a decrease over the previous week (1.06%). The percent ILI for each county ranged from 0.00% to 1.79%. The percent ILI for this same week last year was 0.54% in long-term care facilities. The percent ILI for the northeast (1.37%) public health region was above the state baseline (0.69%). No new respiratory outbreaks in an institutional setting were received in week 46.

Influenza-like Activity - Long Term Care Facilities



School Absenteeism

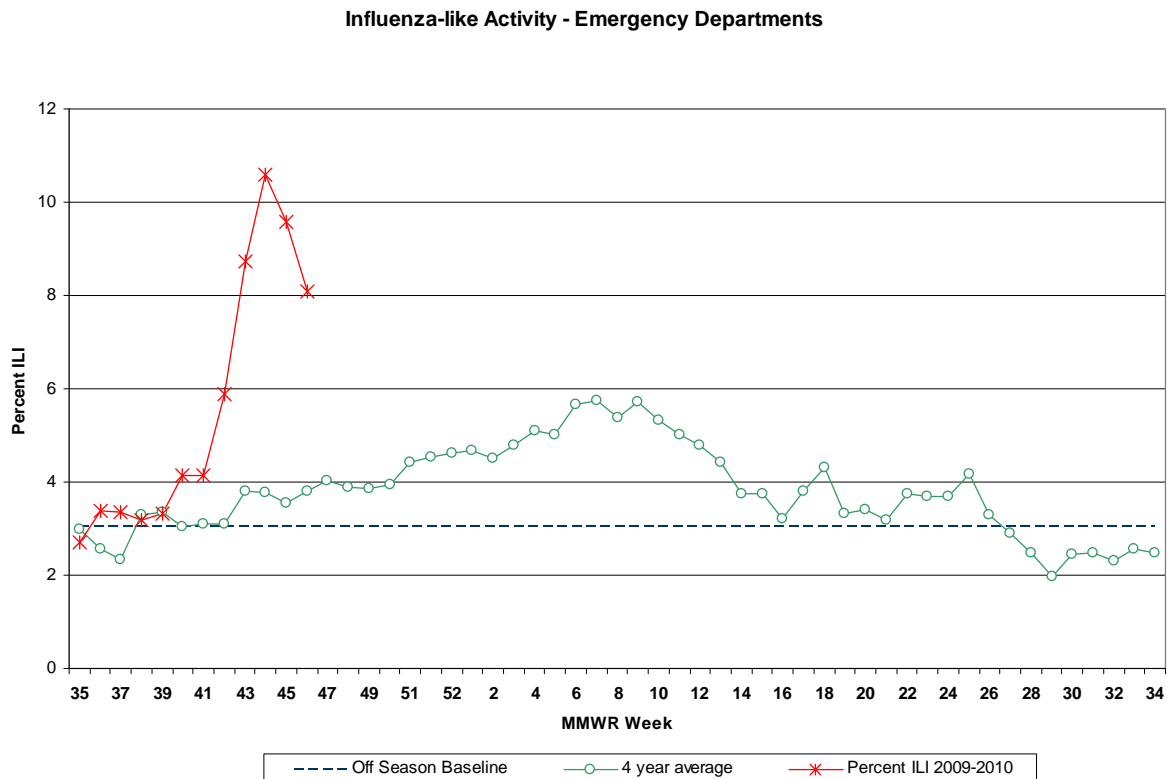
During week 46, schools reported 4.83% absenteeism. This is a decrease over the previous week (5.33%). The percent ILI for each county ranged from 2.96 to 6.50%. The percent absent for this same week last year was 4.27%. The percent ILI for the northwest (5.89%) public health region was found to be above the state baseline (5.73%).



Emergency Departments

NOTE: Data presented below is from daily ED data extracted from Hippocrates survey responses for Tuesday of each week. Because this data only represents one day of data, it is likely less accurate for detecting true trends than the syndromic data presented above.

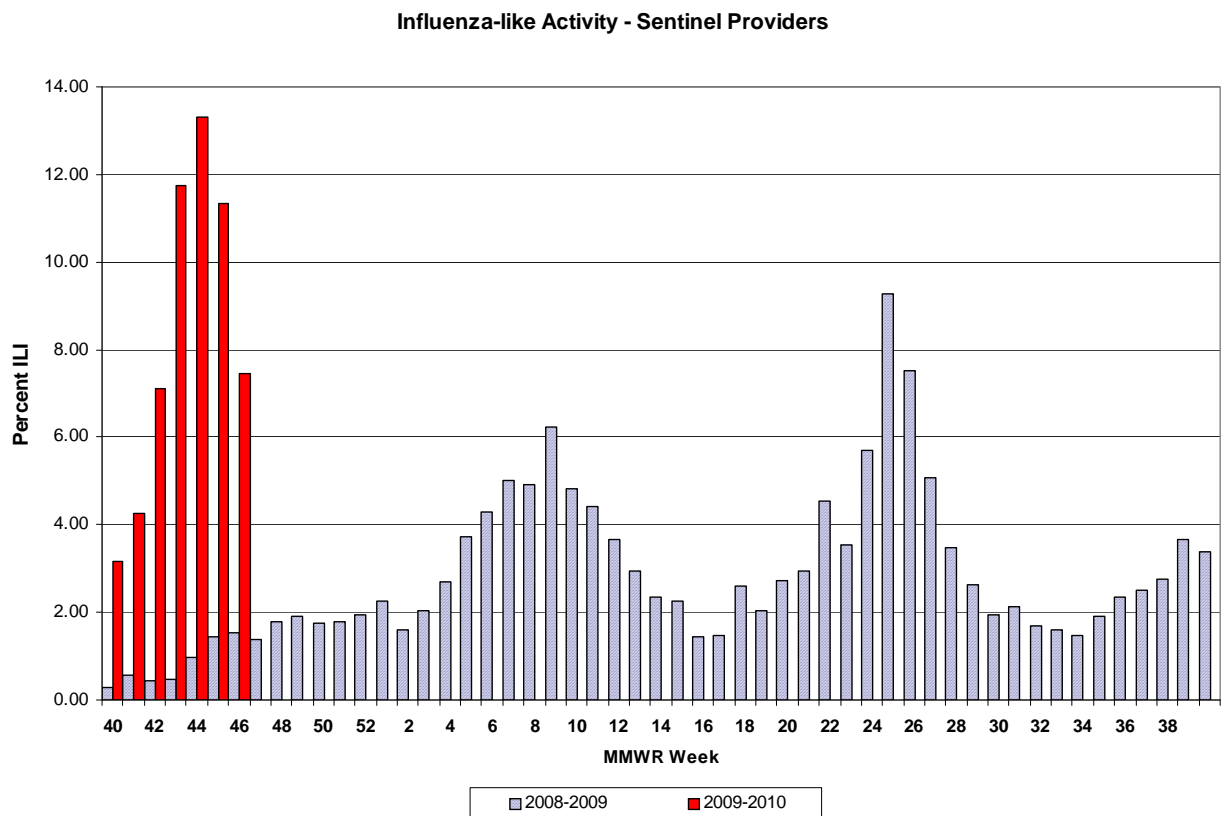
During week 46, 8.09% of ILI was reported statewide from emergency departments. This is a decrease over the previous week (9.59%). The percent ILI for each county ranged from 1.11 to 26.40%. The percent ILI for this same week last year was 3.42% in emergency departments. The percent ILI for the northwest (12.78%), northeast (6.29%), central west (7.97%), central east (10.75%), and south (4.98%) public health regions were found to be above the state baseline (3.04%).



Sentinel Provider Surveillance

During week 46, 7.44% of sentinel provider patient visits were due to ILI. These data reflect reports from twenty-one (30%) of the enrolled sentinel providers.

During week 45, 11.35% of sentinel provider patient visits were due to ILI. These data reflect reports from thirty-six (51%) of the enrolled sentinel providers.



Pediatric Influenza Surveillance

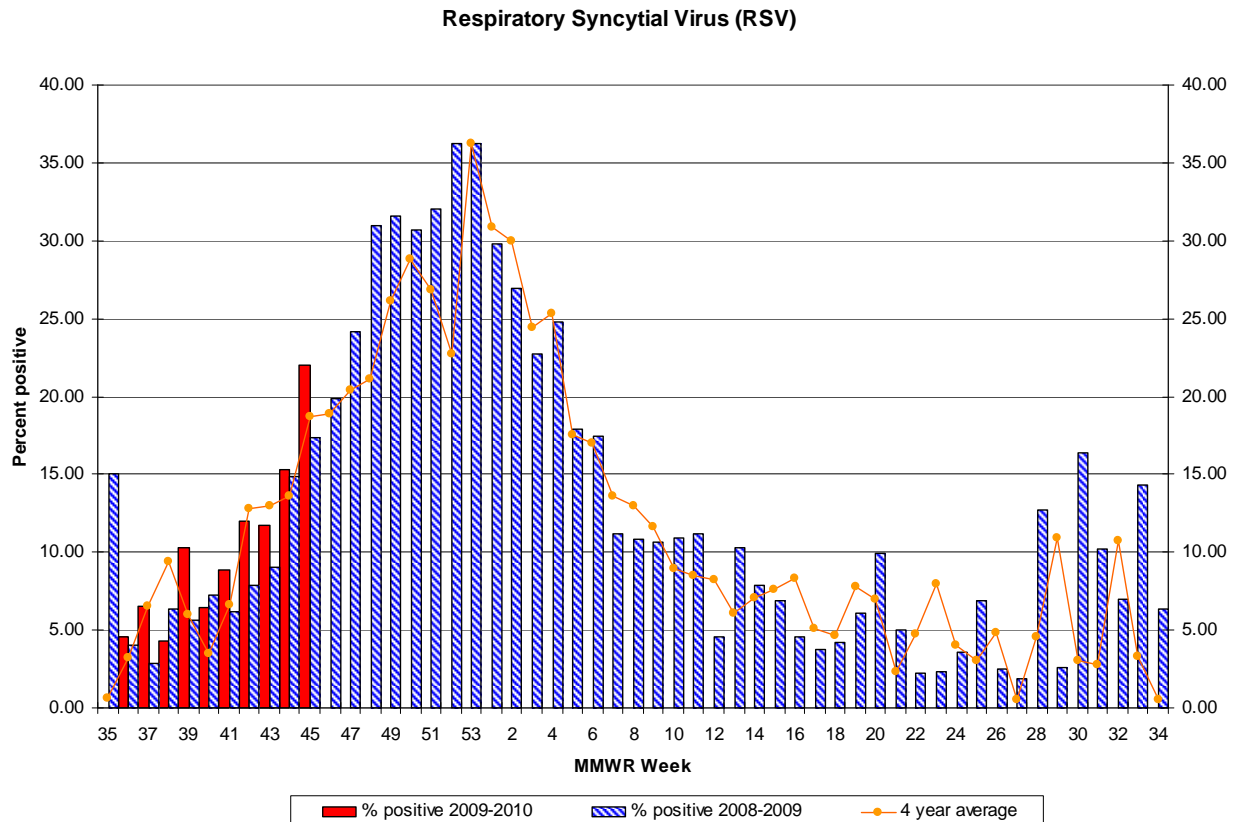
To date, NJDHSS has received 39 reports of pediatric influenza meeting the case definition.

122 City Mortality Report

During week 45, 2.65% of all deaths reported by the vital statistics offices in 6 New Jersey cities (i.e., Camden, Elizabeth, Jersey City, Newark, Paterson, Trenton) were due to pneumonia or influenza. This is a decrease over the previous week (5.22%). The percentage of death due to pneumonia or influenza for this same week last year was 8.70%.

RSV Reports

During week 45, 18.67% of all RSV samples tested were positive. This is an increase over the previous week 13.61%. The percent of samples positive for RSV for this same week last year was 17.39%.



Additional Information

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

<http://nj.gov/health/flu/surveillance.shtml>

<http://www.cdc.gov/flu/>

* Off Season baseline is calculated by taking the average of statewide percentages of ILI for a 3 year (2006, 2007, 2008, 2009) period during months when influenza is less likely to be circulating (May-August).

**Four year average is an average of the 2005-2006, 2006-2007, 2007-2008, 2008-2009 influenza seasons.

	Long Term Care			Schools			Hospital Emergency Department		
County	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
November, 17, 2009 12:00 AM	MMRW WEEK 46								
ATLANTIC	4	1	0.00	19	13	5.61	4	4	3.18
BERGEN	3	1	0.00	25	7	5.02	6	5	6.74
BURLINGTON	6	2	0.00	115	79	4.34	3	2	5.42
CAMDEN	7	0	0.00	17	0	0.00	7	5	5.86
CAPE MAY	6	4	0.27	11	11	5.81	1	1	3.23
CUMBERLAND	6	2	0.44	19	7	6.22	3	3	5.33
ESSEX	18	6	1.61	45	18	3.54	11	10	4.71
GLOUCESTER	5	5	0.24	4	4	3.31	2	2	4.93
HUDSON	10	3	1.79	119	87	4.72	6	6	8.92
HUNTERDON	4	4	0.45	49	47	3.02	1	1	1.11
MERCER	11	8	0.35	26	25	6.24	5	5	8.98
MIDDLESEX	2	0	0.00	134	6	3.08	5	5	11.61
MONMOUTH	14	3	0.00	24	19	6.50	5	5	14.48
MORRIS	2	0	0.00	13	0	0.00	4	2	26.40
OCEAN	6	1	0.00	81	61	5.47	4	4	9.94
PASSAIC	9	4	0.20	28	8	5.38	6	1	3.47
SALEM	4	2	0.00	19	2	2.96	1	1	11.11
SOMERSET	6	3	0.26	81	51	4.06	2	1	7.56
SUSSEX	5	5	0.48	22	22	6.44	2	2	20.16
UNION	4	1	0.00	153	59	5.30	5	5	5.48
UNKNOWN	0	0	0.00	1	0	0.00	0	0	0.00
WARREN	8	2	0.00	36	20	5.23	2	2	12.02
NW Region	24	11	0.35	99	50	5.89	14	7	12.78
NE Region	31	10	1.37	189	112	4.58	23	21	6.29
CW Region	21	15	0.36	156	123	4.29	8	7	7.97
CE Region	26	5	0.00	392	145	5.38	19	19	10.75
South Region	38	16	0.20	204	116	4.73	21	18	4.98
State Total	140	57	0.51	1040	546	4.83	85	72	8.09

County	RSV Tests		Flu Tests		
	# Positive	Total Tests Performed	# Positive	Total Tests Performed	
November, 17, 2009 12:00 AM	MMRW WEEK 46				
ATLANTIC	7	50	12	76	
BERGEN	1	10	11	115	
BURLINGTON	0	10	16	87	
CAMDEN	1	15	0	0	
CAPE MAY	0	7	0	44	
CUMBERLAND	0	9	0	0	
ESSEX	8	31	30	291	
GLOUCESTER	0	6	0	0	
HUDSON	4	21	7	81	
HUNTERDON	1	9	4	50	
MERCER	1	24	0	0	
MIDDLESEX	18	87	5	45	
MONMOUTH	18	80	115	602	
MORRIS	2	6	32	163	
OCEAN	2	4	0	0	
PASSAIC	36	86	23	136	
SALEM	0	0	0	0	
SOMERSET	2	5	0	0	
SUSSEX	0	9	33	210	
UNION	11	40	0	26	
WARREN	0	0	0	0	
NW Region	38	101	88	509	
NE Region	13	62	48	487	
CW Region	4	38	4	50	
CE Region	49	211	120	673	
South Region	8	97	28	207	
State Total	112	509	288	1926	