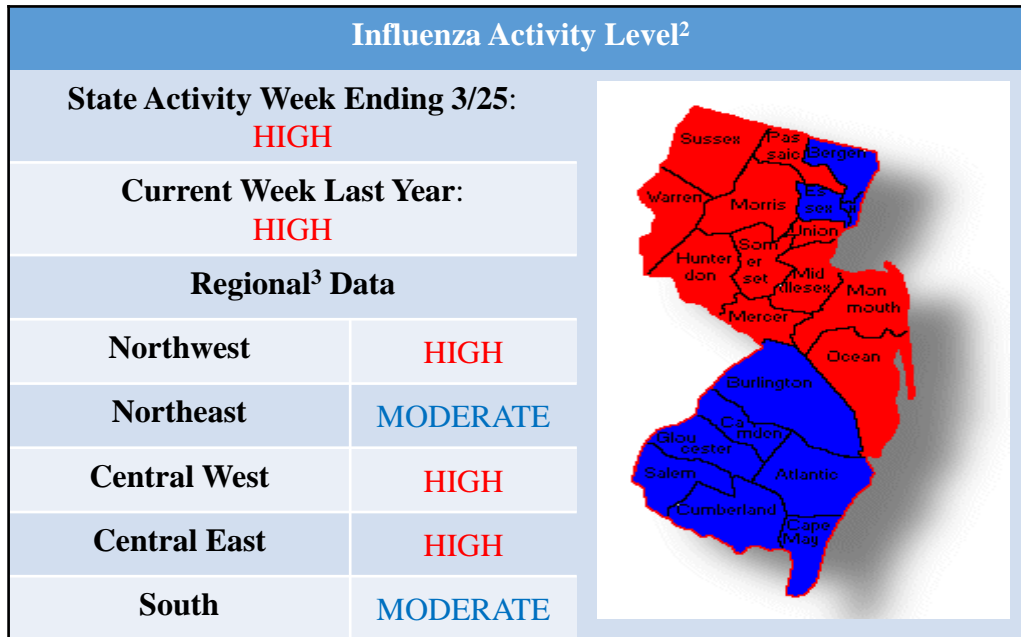


## Synopsis

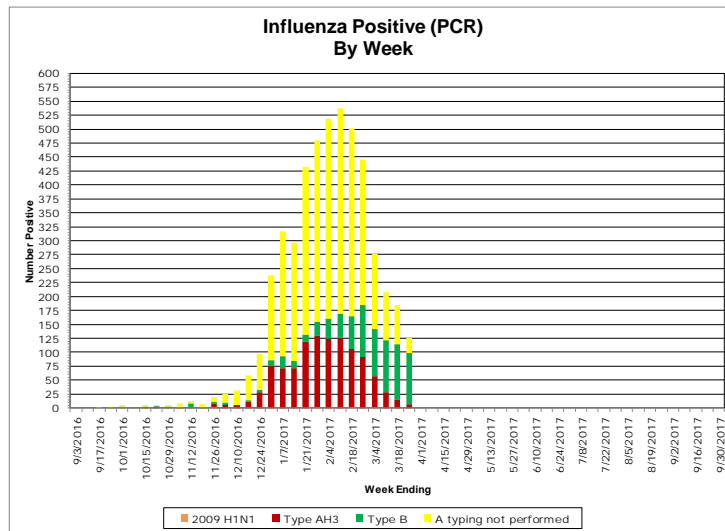


ILI Activity <sup>4</sup>				
	Percent ILI/Absenteeism			Baselines
	Current Week (range by county)	Last week Current year	Current week Last year	Non-season <sup>5</sup> Season <sup>6</sup> (3 low, 3 high)
<b>Long Term Care Facilities</b>	0.56 (0.00, 4.17)	0.56	0.50	0.56 (0.52, 0.76)
<b>Schools (Absenteeism)</b>	4.26 (2.59, 6.76)	14.08	4.91	3.42 (4.49, 4.81)
<b>Emergency Departments</b>	3.56 (0.00, 8.57)	3.48	4.81	2.35 (3.17, 3.81)

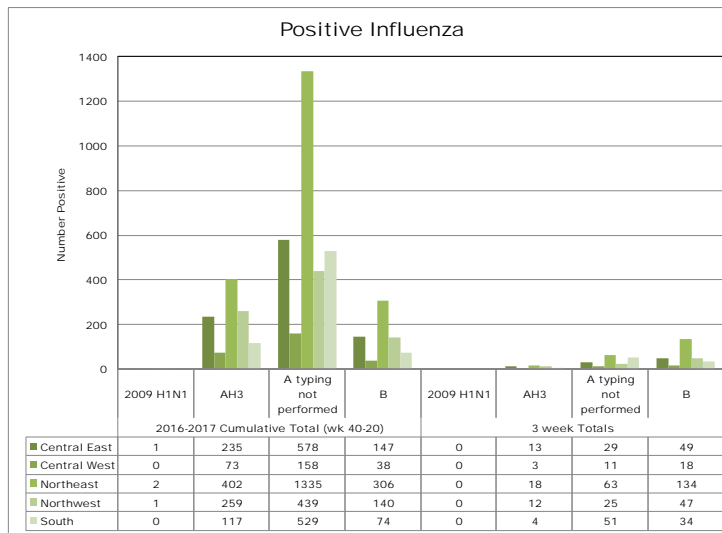
Viral Activity <sup>7</sup>			
	Current Week	Past 3 Weeks	Cumulative Total
<b>Influenza H1N1 (2009)</b>	0	0	4
<b>Influenza H3N2</b>	7	51	1087
<b>Influenza B</b>	92	284	703
<b>Respiratory Syncytial Virus (RSV)</b>	52	133	2776
<b>Rapid Influenza Tests</b>	453	1269	10289

# Virologic Surveillance<sup>7</sup>

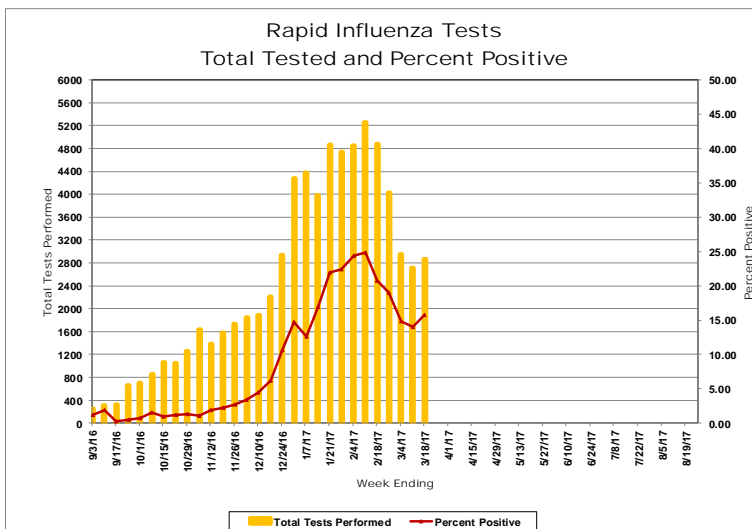
## Influenza Positive Specimens (PCR) – Result by Week



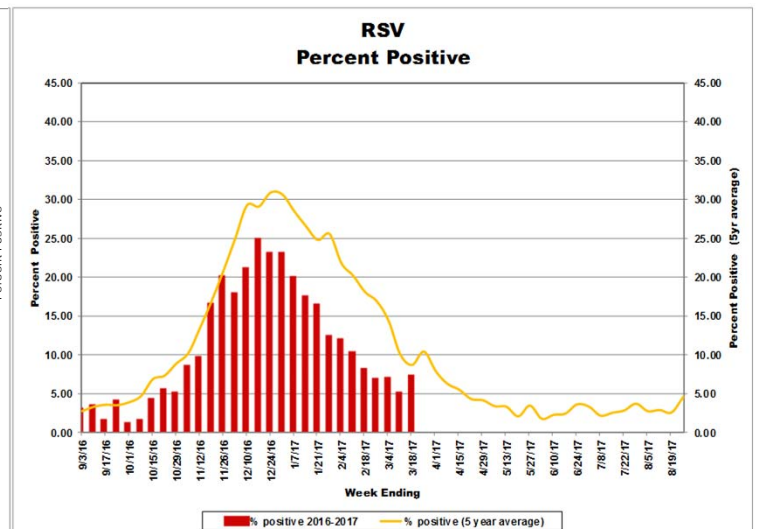
## Influenza Positive Specimens (PCR) – Result by Region<sup>3</sup>



## Influenza Rapid Antigen Result by Week



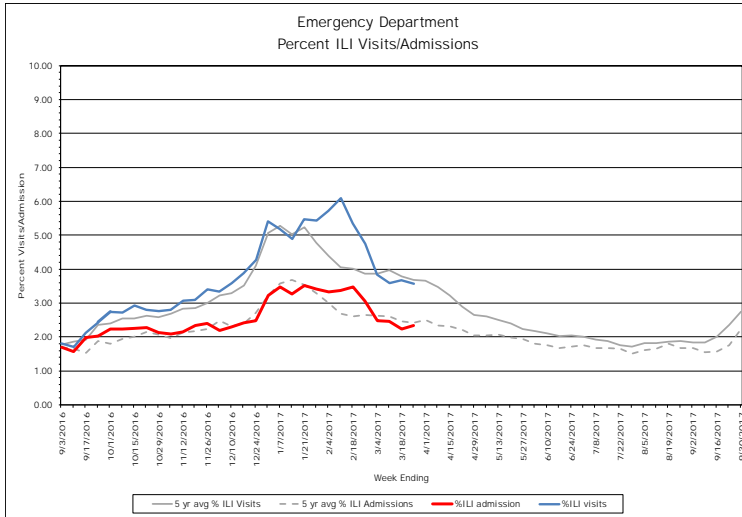
## Respiratory Syncytial Virus (RSV) Result by Week



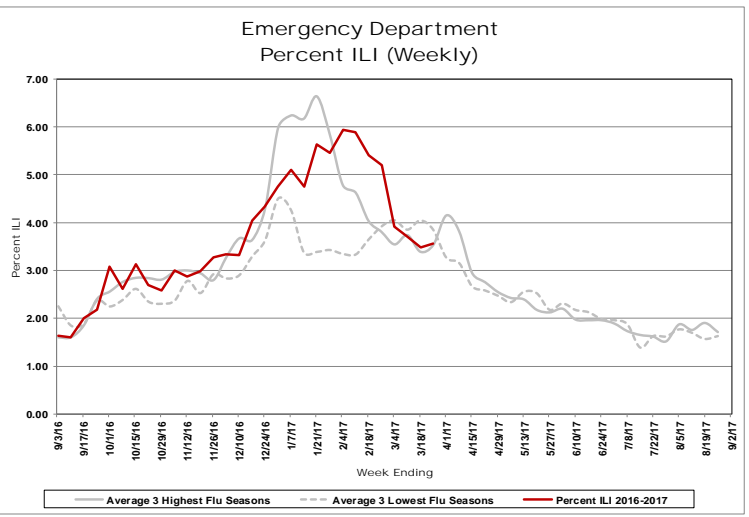
# Influenza-Like Illness Surveillance

## Emergency Department<sup>8</sup>

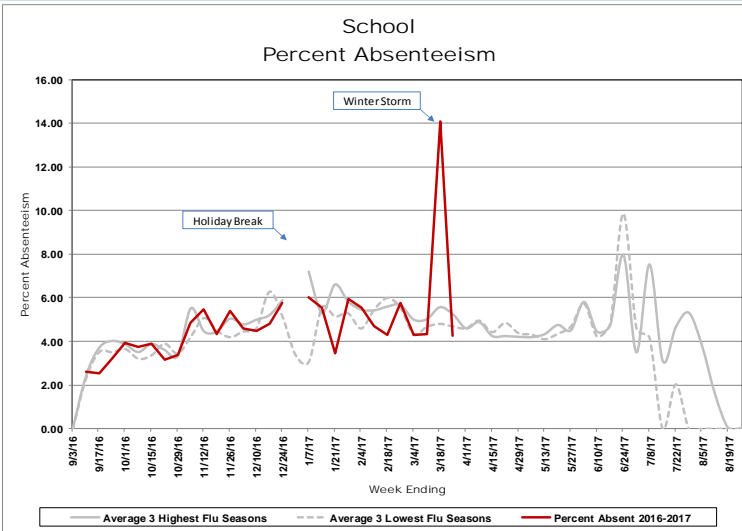
### Daily Visits and Admission



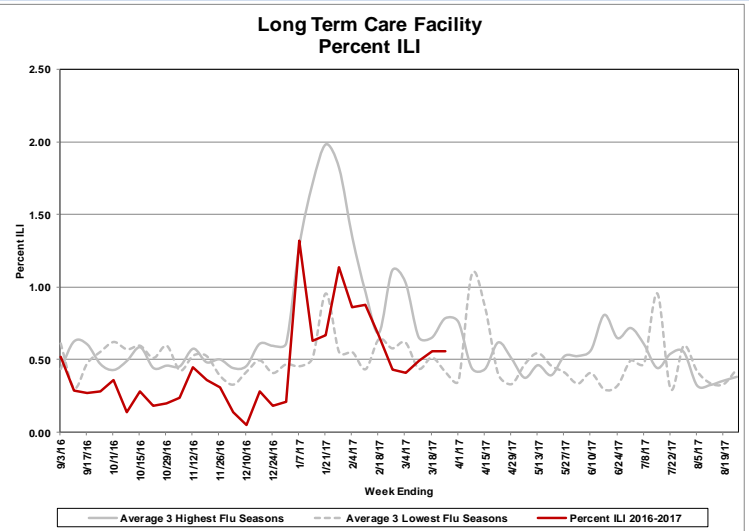
### Visits – Tuesday Only



### School Absenteeism



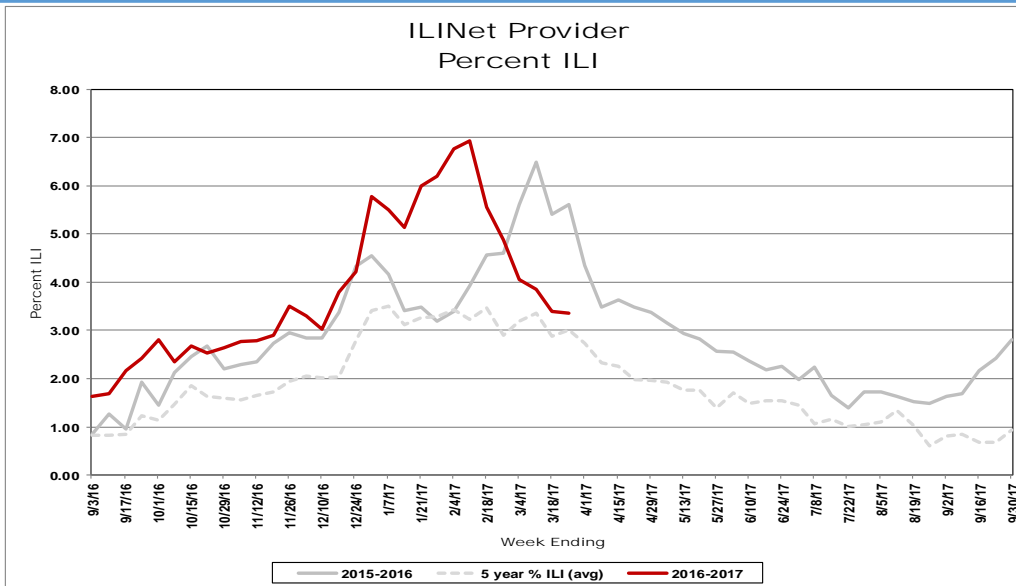
### Long Term Care Facilities



### Respiratory Outbreaks in Long Term Care Facilities<sup>9</sup>

<b>Cumulative Outbreaks 2016-2017 season</b>	87
<b>No. outbreaks last 3 weeks</b>	3
<b>Regions with recent outbreaks</b>	NW, S

## ILINet Providers



ILINet Providers			
Current Week		Previous Week	
# of reporters	% ILI	# of reporters	% ILI
23	3.36	28	3.40

Pediatric Influenza Mortality <sup>10</sup>		
Number of Pediatric Influenza Deaths Reported to CDC		
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	55

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 ( $> 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ], 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  $2^{\circ}\text{F}$  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: <http://www.cdc.gov/flu/weekly/>.

**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 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	COUNTY(COUNTY)	RESULT				Total
		Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	
	ATLANTIC	580	0	38	106	724
	BERGEN	1451	1	252	297	2001
	BURLINGTON	360	0	8	61	429
	CAMDEN	822	0	36	68	926
	CAPE MAY	22	0	1	15	38
	CUMBERLAND	15	0	4	3	22
	ESSEX	411	1	69	91	572
	GLOUCESTER	218	0	48	27	293
	HUDSON	628	0	83	102	813
	HUNTERDON	136	0	33	31	200
	MERCER	256	0	23	38	317
	MIDDLESEX	333	0	59	84	476
	MONMOUTH	848	0	26	136	1010
	MORRIS	467	0	89	84	640
	OCEAN	639	0	14	78	731
	PASSAIC	787	0	80	158	1025
	SALEM	6	0	1	1	8
	SOMERSET	78	0	33	18	129
	SUSSEX	70	0	24	19	113
	UNION	493	1	137	112	743
	WARREN	122	1	66	26	215
	<b>Total</b>	<b>8742</b>	<b>4</b>	<b>1124</b>	<b>1555</b>	<b>11425</b>

## 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 by RESULT					
REGION	RESULT					Total
	Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B		
Central East	2313	1	236	410		2960
Central West	470	0	89	87		646
Northeast	2490	2	404	490		3386
Northwest	1446	1	259	287		1993
South	2023	0	136	281		2440
<b>Total</b>	<b>8742</b>	<b>4</b>	<b>1124</b>	<b>1555</b>		<b>11425</b>

***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***



**SURVEILLANCE DATE: 03/21/2017**



COUNTY	Long Term Care			Schools			Hospital Emergency Dept		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
<b>March 21, 2017 MMWR WEEK 12</b>									
ATLANTIC	6	0	0.00	43	24	6.03	4	4	2.08
BERGEN	10	4	0.11	37	16	3.65	6	6	2.21
BURLINGTON	8	5	1.07	96	49	4.35	4	4	3.57
CAMDEN	1	0	0.00	1	0	0.00	7	7	3.29
CAPE MAY	3	1	0.00	14	10	4.26	1	1	2.13
CUMBERLAND	5	4	1.17	12	10	6.56	3	3	2.50
ESSEX	7	2	0.00	4	2	2.89	8	6	3.66
GLOUCESTER	3	1	0.00	4	1	2.82	2	2	3.16
HUDSON	4	3	0.67	14	8	4.13	6	6	4.01
HUNTERDON	4	4	0.68	8	6	3.35	1	1	4.49
MERCER	3	0	0.00	22	8	3.97	5	4	7.40
MIDDLESEX	11	7	0.09	22	17	3.68	6	6	2.50
MONMOUTH	6	2	0.00	16	5	4.83	5	5	4.28
MORRIS	2	0	0.00	9	3	2.59	4	4	2.36
OCEAN	8	3	0.00	5	4	6.76	4	4	3.56
PASSAIC	10	2	1.54	29	11	3.00	3	3	5.31
SALEM	0	0	0.00	3	3	5.47	1	1	8.57
SOMERSET	4	0	0.00	23	15	3.27	1	1	8.44
SUSSEX	3	2	4.17	5	2	4.20	2	2	0.00
UNION	1	0	0.00	51	18	3.30	5	5	2.01
WARREN	5	3	0.00	20	9	4.62	2	2	5.37
<b>NW Region</b>	<b>20</b>	<b>7</b>	<b>1.43</b>	<b>63</b>	<b>25</b>	<b>3.41</b>	<b>11</b>	<b>11</b>	<b>3.83</b>
<b>NE Region</b>	<b>21</b>	<b>9</b>	<b>0.29</b>	<b>55</b>	<b>26</b>	<b>3.78</b>	<b>20</b>	<b>18</b>	<b>3.30</b>
<b>CW Region</b>	<b>11</b>	<b>4</b>	<b>0.68</b>	<b>53</b>	<b>29</b>	<b>3.44</b>	<b>7</b>	<b>6</b>	<b>7.29</b>
<b>CE Region</b>	<b>26</b>	<b>12</b>	<b>0.06</b>	<b>94</b>	<b>44</b>	<b>3.87</b>	<b>20</b>	<b>20</b>	<b>3.07</b>
<b>South Region</b>	<b>26</b>	<b>11</b>	<b>1.03</b>	<b>173</b>	<b>97</b>	<b>5.07</b>	<b>22</b>	<b>22</b>	<b>3.13</b>
<b>State Total</b>	<b>104</b>	<b>43</b>	<b>0.56</b>	<b>438</b>	<b>221</b>	<b>4.26</b>	<b>80</b>	<b>77</b>	<b>3.56</b>

**SURVEILLANCE DATE: 03/21/2017**



County	RSV Tests		Rapid Flu Tests	
	# Positive	Total Tests Performed	# Positive	Total Tests Performed
March 21, 2017 MMWR WEEK 12				
ATLANTIC	1	22	48	257
BERGEN	1	15	78	326
BURLINGTON	0	0	4	32
CAMDEN	1	7	7	195
CAPE MAY	0	5	2	52
CUMBERLAND	0	13	11	78
ESSEX	2	145	70	520
GLOUCESTER	0	6	9	118
HUDSON	0	3	8	38
HUNTERDON	0	7	6	71
MERCER	9	9	52	213
MIDDLESEX	4	23	7	70
MONMOUTH	7	92	81	469
MORRIS	10	136	0	9
OCEAN	1	8	21	136
PASSAIC	5	44	38	183
SALEM	0	0	0	0
SOMERSET	0	0	0	0
SUSSEX	4	71	9	71
UNION	5	97	1	12
WARREN	2	29	1	16
<b>NW Region</b>	21	280	48	279
<b>NE Region</b>	3	163	156	884
<b>CW Region</b>	9	16	58	284
<b>CE Region</b>	17	220	110	687
<b>South Region</b>	2	53	81	732
<b>State Total</b>	52	732	453	2866