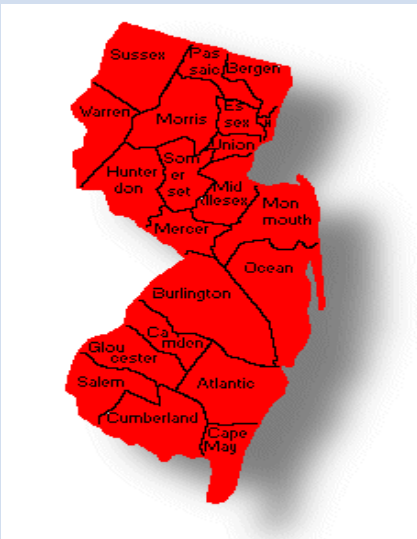


Synopsis

Influenza Activity Level ²	
State Activity Week Ending 2/4:	HIGH
Current Week Last Year:	MODERATE
Regional³ Data	
Northwest	HIGH
Northeast	HIGH
Central West	HIGH
Central East	HIGH
South	HIGH

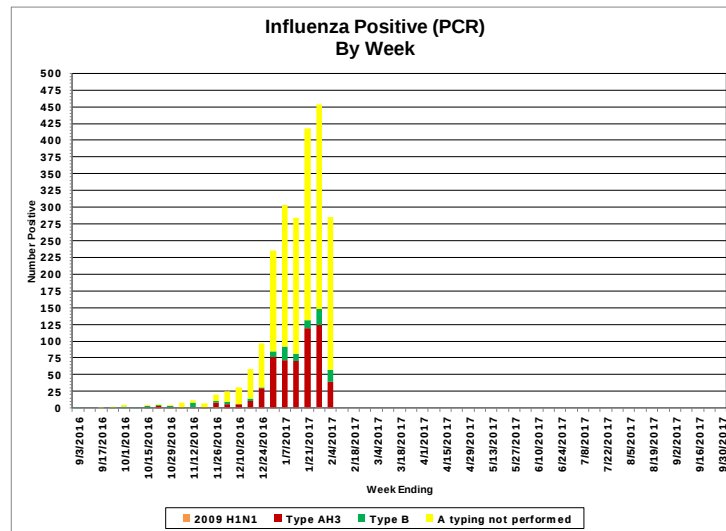


ILI Activity ⁴				
	Percent ILI/Absenteeism			Baselines
	Current Week (range by county)	Last week Current year	Current week Last year	Non-season ⁵ Season ⁶ (3 low, 3 high)
Long Term Care Facilities	0.86 (0.00, 4.00)	1.14	0.46	0.56 (0.52, 0.76)
Schools (Absenteeism)	5.54 (3.23, 10.57)	5.94	4.45	3.42 (4.49, 4.81)
Emergency Departments	5.94 (1.05, 11.29)	5.45	3.30	2.35 (3.17, 3.81)

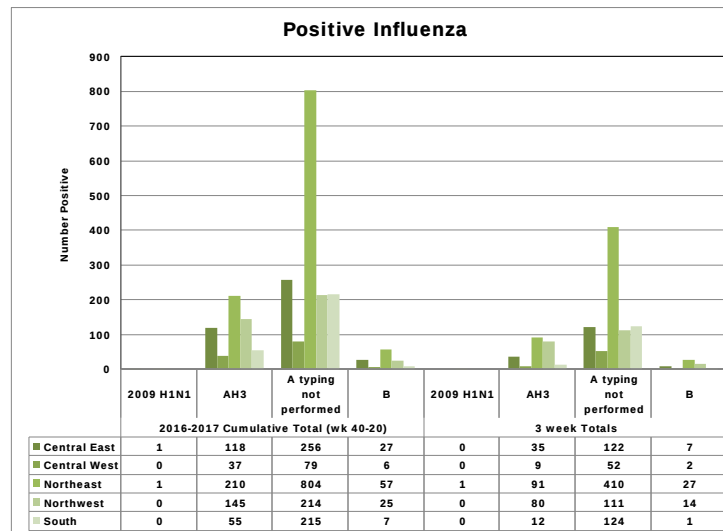
Viral Activity ⁷			
	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	0	1	2
Influenza H3N2	39	281	565
Influenza B	18	54	119
Respiratory Syncytial Virus (RSV)	133	507	2246
Rapid Influenza Tests	1042	2779	4735

Virologic Surveillance⁷

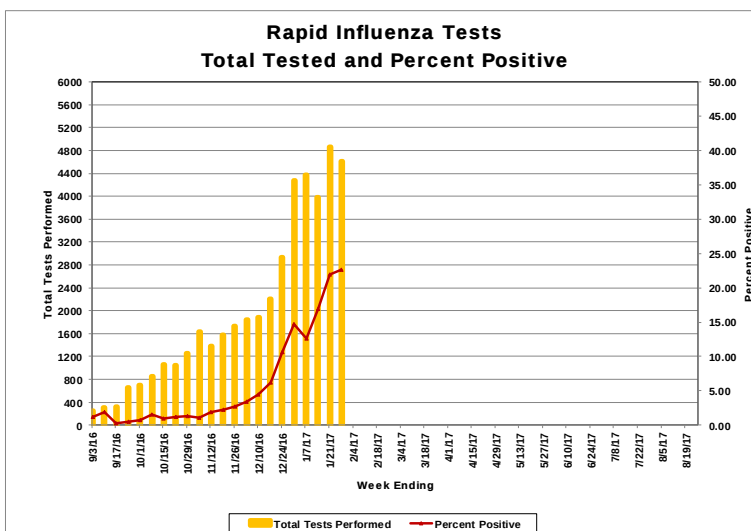
Influenza Positive Specimens (PCR) – Result by Week



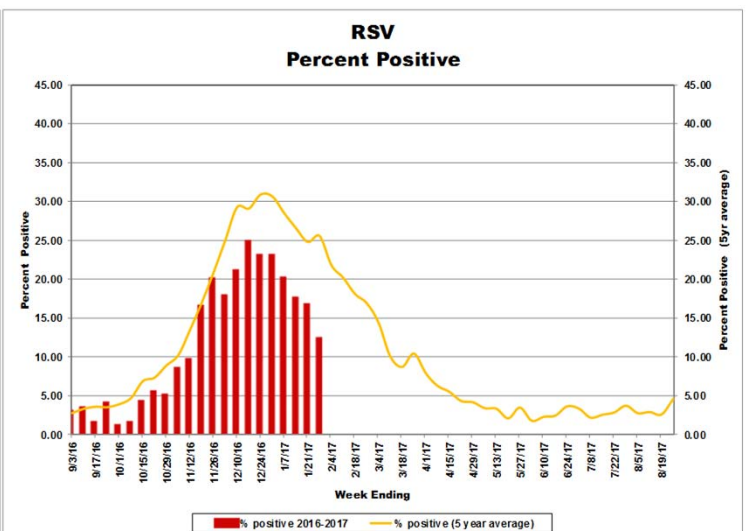
Influenza Positive Specimens (PCR) – Result by Region³



Influenza Rapid Antigen Result by Week



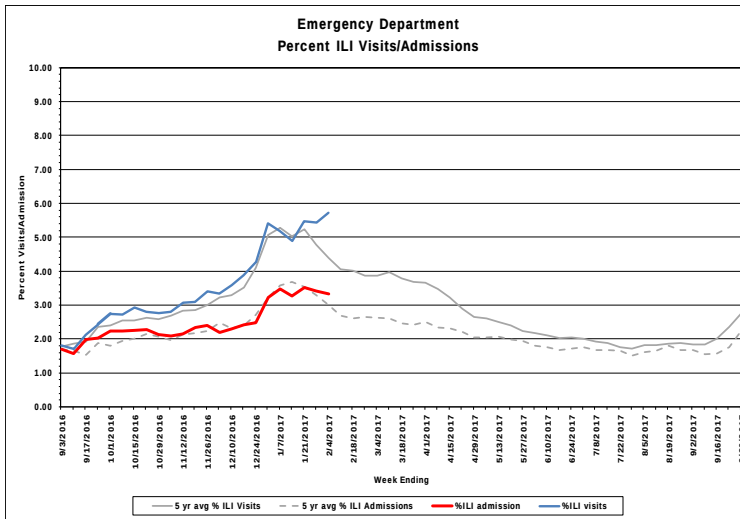
Respiratory Syncytial Virus (RSV) Result by Week



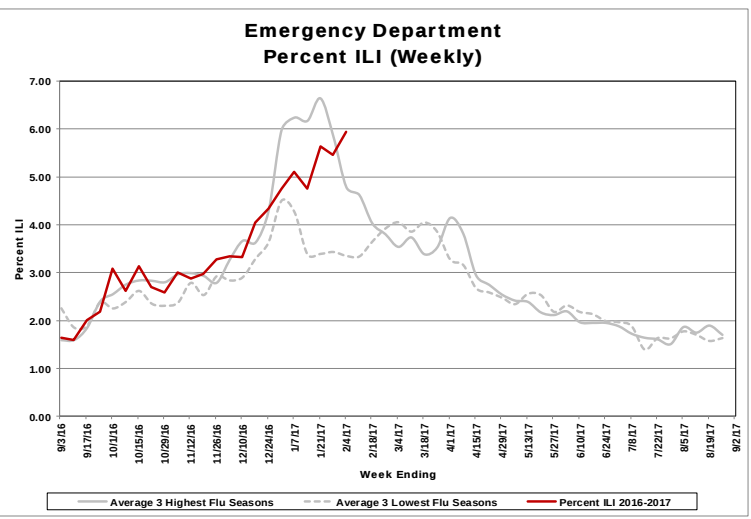
Influenza-Like Illness Surveillance

Emergency Department⁸

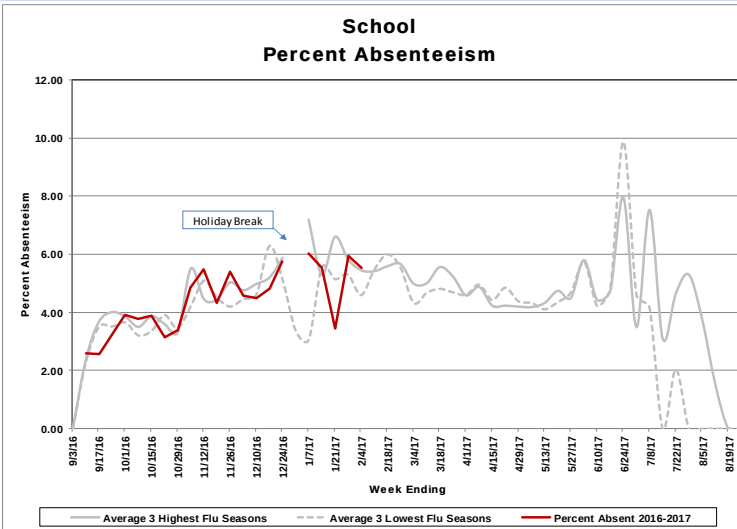
Daily Visits and Admission



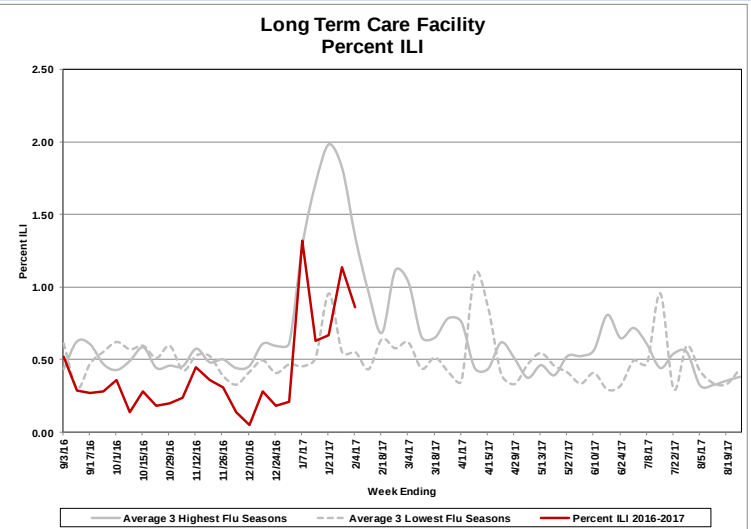
Visits – Tuesday Only



School Absenteeism



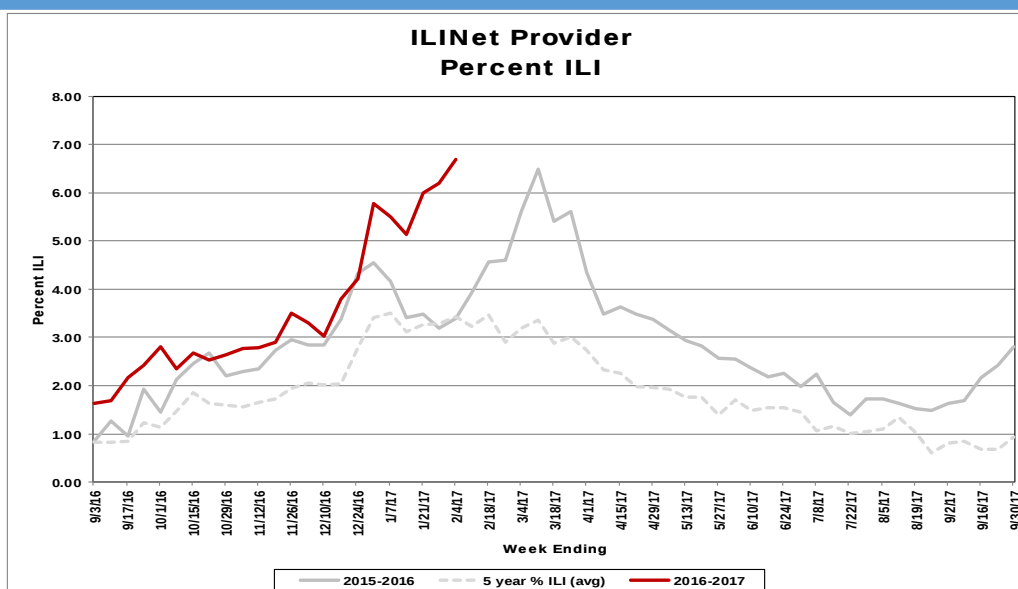
Long Term Care Facilities



Respiratory Outbreaks in Long Term Care Facilities⁹

Cumulative Outbreaks 2016-2017 season	49
No. outbreaks last 3 weeks	19
Regions with recent outbreaks	NW, NE, CW, CE, S

ILINet Providers



ILINet Providers			
Current Week		Previous Week	
# of reporters	% ILI	# of reporters	% ILI
28	6.69	30	6.20

Pediatric Influenza Mortality ¹⁰		
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	15

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°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°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			
		Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B Total
	ATLANTIC	207	0	17	10 234
	BERGEN	925	0	134	55 1114
	BURLINGTON	135	0	4	12 151
	CAMDEN	426	0	19	13 458
	CAPE MAY	6	0	1	0 7
	CUMBERLAND	6	0	1	0 7
	ESSEX	205	1	30	22 258
	GLOUCESTER	120	0	25	4 149
	HUDSON	348	0	46	16 410
	HUNTERDON	61	0	16	2 79
	MERCER	144	0	13	6 163
	MIDDLESEX	159	0	21	14 194
	MONMOUTH	470	0	15	20 505
	MORRIS	226	0	59	11 296
	OCEAN	361	0	8	19 388
	PASSAIC	455	0	43	18 516
	SALEM	4	0	0	0 4
	SOMERSET	43	0	13	2 58
	SUSSEX	33	0	13	2 48
	UNION	198	1	75	22 296
	WARREN	46	0	30	6 82
	Total	4578	2	583	254 5417

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				
		Influenza A - Typing not performed	Influenza A 2009 H1N1	Influenza AH3	Influenza B	Total
	Central East	1188	1	119	75	1383
	Central West	248	0	42	10	300
	Northeast	1478	1	210	93	1782
	Northwest	760	0	145	37	942
	South	904	0	67	39	1010
	Total	4578	2	583	254	5417

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

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS

SURVEILLANCE DATE: 01/31/2017



COUNTY	Long Term Care			Schools			Hospital Emergency Dept		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
January 31, 2017 MMWR WEEK 5									
ATLANTIC	6	0	0.00	43	15	6.51	4	4	5.22
BERGEN	10	5	0.00	37	23	6.30	6	6	5.04
BURLINGTON	8	5	1.42	95	61	5.33	4	3	5.66
CAMDEN	1	0	0.00	1	0	0.00	7	7	6.32
CAPE MAY	3	1	0.00	14	9	5.91	1	1	10.71
CUMBERLAND	5	4	0.78	12	9	10.57	3	3	7.69
ESSEX	7	4	1.01	4	2	5.26	8	7	5.98
GLOUCESTER	3	1	0.00	4	2	3.23	2	2	2.85
HUDSON	4	2	0.61	14	4	5.22	6	6	4.85
HUNTERDON	4	4	2.02	8	5	5.18	1	1	2.41
MERCER	3	2	0.00	22	14	4.77	5	4	7.68
MIDDLESEX	11	6	0.00	22	17	4.42	6	6	5.04
MONMOUTH	6	1	0.90	16	8	7.10	5	5	6.56
MORRIS	2	0	0.00	9	5	5.75	4	4	5.73
OCEAN	8	3	4.00	5	4	6.34	4	4	6.10
PASSAIC	10	2	2.21	29	16	3.60	3	3	10.66
SALEM	0	0	0.00	3	2	6.46	1	1	11.29
SOMERSET	4	0	0.00	23	17	4.75	1	1	7.65
SUSSEX	2	1	0.00	5	3	9.00	2	2	1.05
UNION	1	0	0.00	51	20	5.35	5	4	2.83
WARREN	5	1	1.06	20	10	5.98	2	2	4.69
NW Region	19	4	1.97	63	34	4.73	11	11	7.57
NE Region	21	11	0.38	55	29	6.03	20	19	5.43
CW Region	11	6	1.63	53	36	4.83	7	6	7.11
CE Region	26	10	0.85	94	49	5.18	20	19	5.33
South Region	26	11	0.86	172	98	6.13	22	21	6.02
State Total	103	42	0.86	437	246	5.54	80	76	5.94

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS

SURVEILLANCE DATE: 01/31/2017



County	RSV Tests		Rapid Flu Tests		
	# Positive	Total Tests Performed	# Positive	Total Tests Performed	
January 31, 2017 MMWR WEEK 5					
ATLANTIC	3	27	64	250	
BERGEN	12	68	233	677	
BURLINGTON	0	0	9	41	
CAMDEN	0	8	46	408	
CAPE MAY	2	11	6	51	
CUMBERLAND	0	0	0	0	
ESSEX	23	184	168	778	
GLOUCESTER	3	8	18	161	
HUDSON	2	9	11	48	
HUNTERDON	6	7	26	131	
MERCER	2	13	94	309	
MIDDLESEX	1	52	17	101	
MONMOUTH	12	106	109	634	
MORRIS	24	215	31	174	
OCEAN	2	29	60	287	
PASSAIC	6	54	98	324	
SALEM	0	0	0	0	
SOMERSET	0	0	0	0	
SUSSEX	11	105	26	105	
UNION	18	135	2	17	
WARREN	6	59	24	112	
NW Region	47	433	179	715	
NE Region	37	261	412	1503	
CW Region	8	20	120	440	
CE Region	33	322	188	1039	
South Region	8	54	143	911	
State Total	133	1090	1042	4608	