NJ Health
New Jersey Department of Health

Respiratory Virus Surveillance Report[1]
New Jersey Department of Health
Communicable Disease Service
Week Ending November 5, 2016 (MMWR week 44)

CDS

Synopsis

Influenza Activity Level[2]

State Activity Week Ending 11/5:
LOW

Current Week Last Year:
LOW

Regional[3] Data

Northwest	LOW
Northeast	LOW
Central West	LOW
Central East	LOW
South	LOW

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	0.24 (0.00, 0.91)	0.20	0.47	0.56 (0.52, 0.76)
Schools (Absenteeism)	4.84 (2.13, 9.65)	3.38	5.27	3.42 (4.49, 4.81)
Emergency Departments	3.00 (0.00, 4.62)	2.59	2.17	2.35 (3.17, 3.81)

Viral Activity[7]

	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	0	0	0
Influenza H3N2	1	5	6
Influenza B	0	3	6
Respiratory Syncytial Virus (RSV)	17	59	64
Rapid Influenza Tests	17	39	51

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

Virologic Surveillance[7]

Influenza Positive Specimens (PCR) – Result by Week

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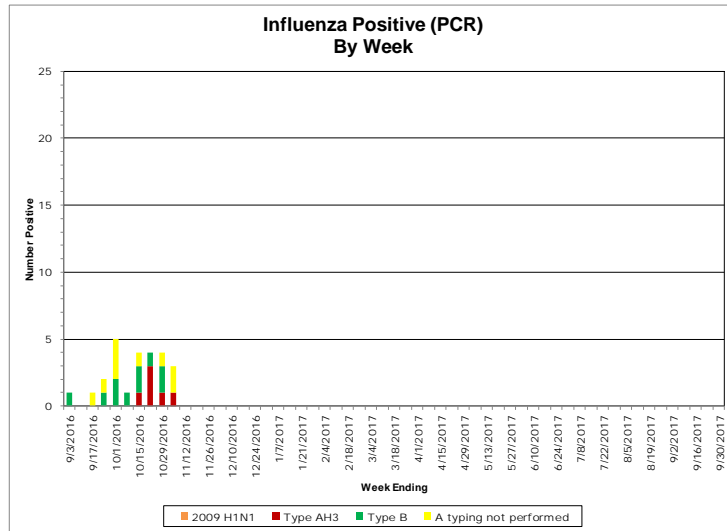
Influenza Positive Specimens (PCR) – Result by Region[3]

Positive Influenza

	2009 H1N1	AH3	A typing not performed	B	2009 H1N1	AH3	A typing not performed	B
	2016-2017 Cumulative Total (wk 40-20)				3 week Totals			
Central East	0	1	1	4	0	1	0	1
Central West	0	0	1	1	0	0	0	0
Northeast	0	3	2	4	0	2	1	2
Northwest	0	1	4	1	0	1	2	0
South	0	1	1	0	0	1	0	0
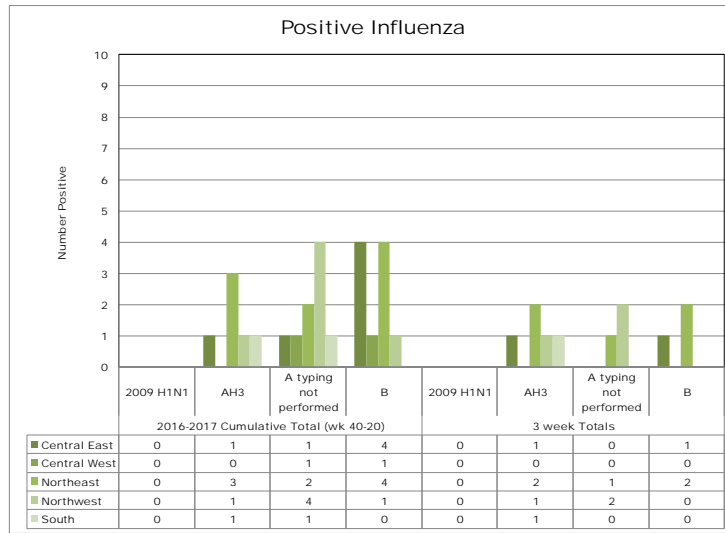
Influenza Rapid Antigen Result by Week
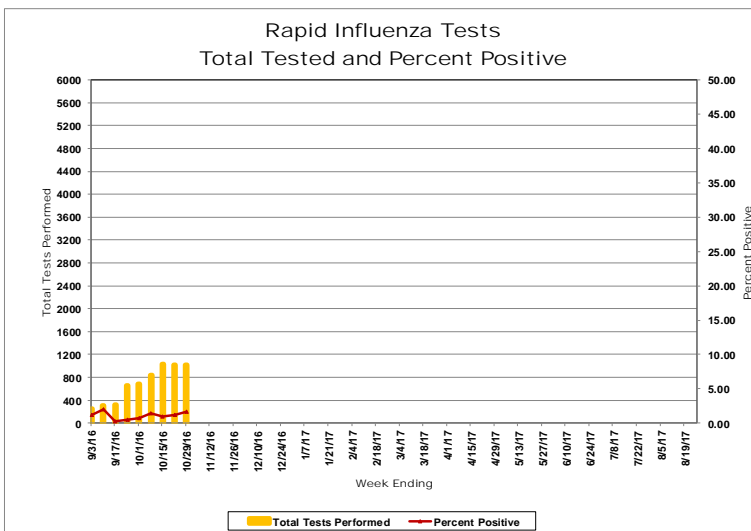
Repiratory Syncytial Virus (RSV) Result by Week

Rapid Influenza Tests
Total Tested and Percent Positive

RSV
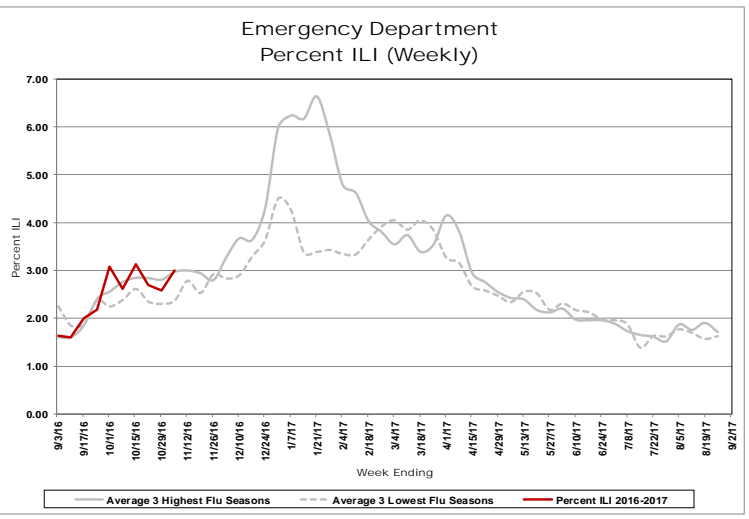**Percent Positive**
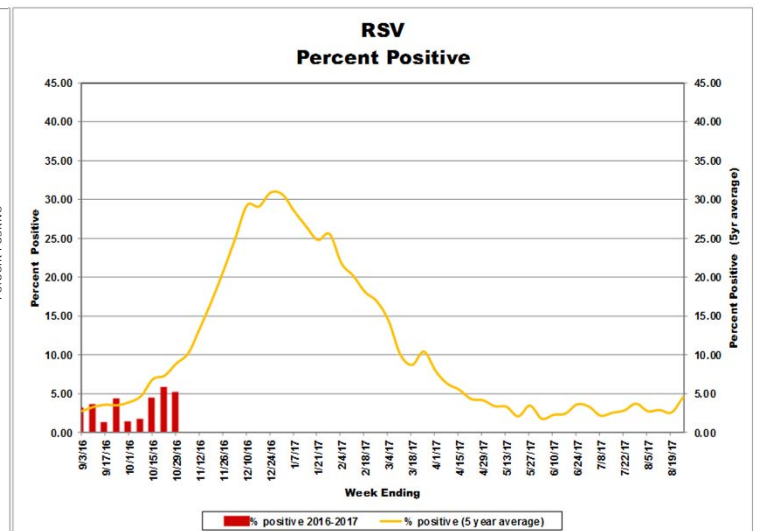
Influenza-Like Illness Surveillance

Emergency Department[8]

Daily Visits and Admission	Visits – Tuesday Only

Emergency Department
Percent ILI Visits/Admissions

Legend: 5 yr avg % ILI Visits — 5 yr avg % ILI Admissions — %ILI admission — %ILI visits

Emergency Department
Percent ILI (Weekly)

Legend: Average 3 Highest Flu Seasons — Average 3 Lowest Flu Seasons — Percent ILI 2016-2017
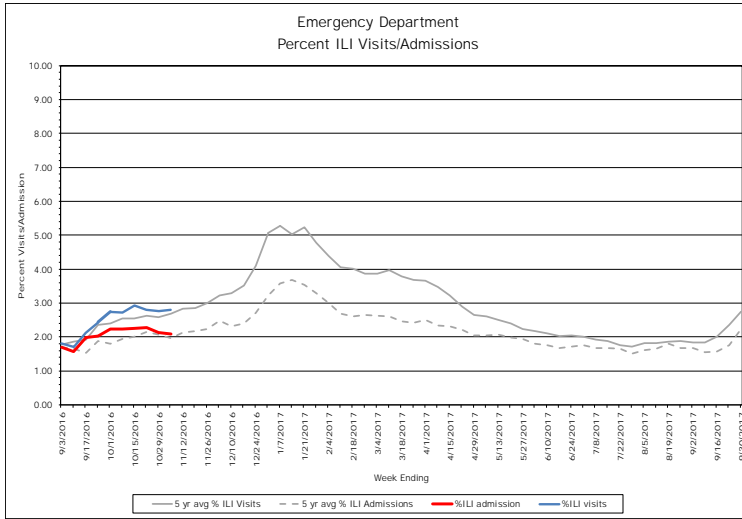
School Absenteeism	Long Term Care Facilities

School
Percent Absenteeism

Legend: Average 3 Highest Flu Seasons — Average 3 Lowest Flu Seasons — Percent Absent 2016-2017

Long Term Care Facility
Percent ILI

Legend: Average 3 Highest Flu Seasons — Average 3 Lowest Flu Seasons — Percent ILI 2016-2017
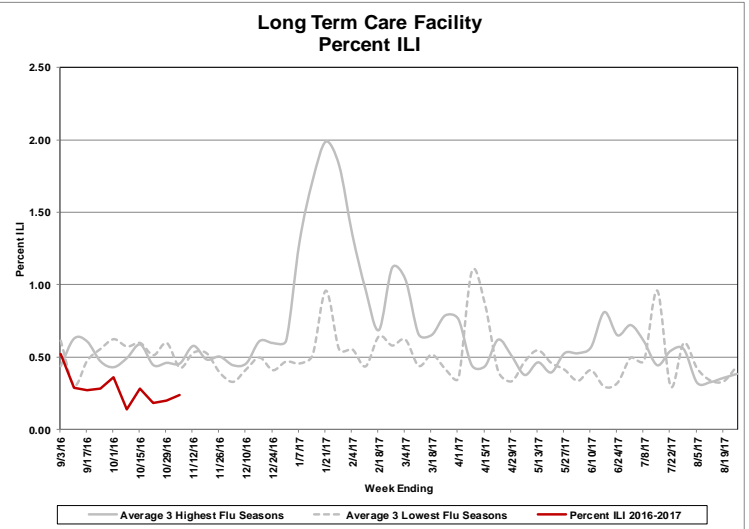
Respiratory Outbreaks in Long Term Care Facilities[9]	
Cumulative Outbreaks 2016-2017 season	4
No. outbreaks last 3 weeks	1
Regions with recent outbreaks	NE

ILINet Provider Percent ILI
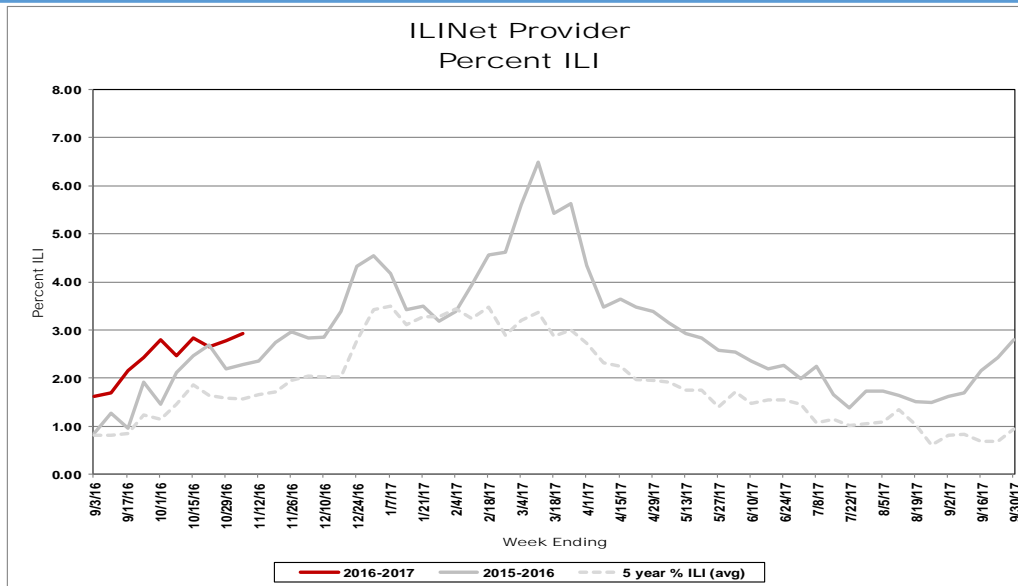
ILINet Providers			
Current Week		**Previous Week**	
# of reporters	% ILI	# of reporters	% ILI
19	2.92	21	2.78

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	0

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°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/.

NJ Level	CSTE Level	Definition		
Table 1 **Influenza Activity Level – Definitions for State Activity**				
NJ Level	CSTE Level	ILI Activity/Outbreaks		Lab Activity
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**			
NJ Level	Definition		
NJ Level	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.

INFLUENZA LABORATORY REPORTS BY COUNTY

Counts represent total positive specimens
from week ending October 7, 2016 to current MMWR week

Source: CDRSS

Frequency	RESULT			
COUNTY(COUNTY)	Influenza A - Typing not performed	Influenza AH3	Influenza B	Total
ATLANTIC	3	0	0	3
BERGEN	1	2	4	7
CAMDEN	6	1	0	7
HUDSON	1	1	0	2
HUNTERDON	1	0	0	1
MERCER	1	0	0	1
MIDDLESEX	0	0	1	1
MONMOUTH	10	0	0	10
MORRIS	2	1	1	4
OCEAN	6	0	3	9
PASSAIC	3	0	0	3
SOMERSET	2	0	1	3
UNION	1	1	3	5
Total	37	6	13	56

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			
	RESULT			
REGION	**Influenza A - Typing not performed**	**Influenza AH3**	**Influenza B**	**Total**
Central East	17	1	7	25
Central West	4	0	1	5
Northeast	2	3	4	9
Northwest	5	1	1	7
South	9	1	0	10
Total	37	6	13	56

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

Communicable Disease Reporting and Surveillance System

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS
SURVEILLANCE DATE: 11/01/2016

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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
November 1, 2016 MMWR WEEK 44									
ATLANTIC	6	0	0.00	42	24	7.21	4	4	1.94
BERGEN	8	5	0.00	35	18	2.93	5	5	1.93
BURLINGTON	8	4	0.00	92	55	5.21	4	3	3.86
CAMDEN	1	0	0.00	1	0	0.00	7	6	2.98
CAPE MAY	3	0	0.00	14	8	5.71	1	1	1.90
CUMBERLAND	5	4	0.91	11	7	9.65	3	3	3.47
ESSEX	6	3	0.00	4	0	0.00	8	7	4.62
GLOUCESTER	3	1	0.00	4	2	6.58	2	2	3.27
HUDSON	4	0	0.00	14	6	5.02	6	6	3.09
HUNTERDON	4	4	0.68	8	7	3.16	1	1	1.04
MERCER	3	1	0.00	22	13	3.59	5	4	3.75
MIDDLESEX	10	4	0.20	22	18	3.37	6	6	2.90
MONMOUTH	6	1	0.00	16	7	4.89	5	5	2.97
MORRIS	2	1	0.00	9	3	2.13	4	4	1.64
OCEAN	7	1	0.00	5	4	6.33	4	4	2.96
PASSAIC	9	6	0.00	29	15	4.47	3	3	3.73
SALEM	0	0	0.00	3	3	6.64	1	1	0.00
SOMERSET	4	1	0.00	22	17	4.02	1	1	4.32
SUSSEX	2	1	0.00	5	2	4.29	2	2	0.91
UNION	1	0	0.00	49	13	2.65	5	5	1.66
WARREN	5	0	0.00	20	8	3.50	2	2	2.19
NW Region	18	8	0.00	63	28	4.14	11	11	2.53
NE Region	18	8	0.00	53	24	3.43	19	18	3.48
CW Region	11	6	0.52	52	37	3.73	7	6	3.53
CE Region	24	6	0.18	92	42	3.64	20	20	2.67
South Region	26	9	0.64	167	99	6.20	22	20	2.92
State Total	**97**	**37**	**0.24**	**427**	**230**	**4.84**	**79**	**75**	**3.00**

Communicable Disease Reporting and Surveillance System

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS
SURVEILLANCE DATE: 11/01/2016

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NJ Health
New Jersey Department of Health

County	RSV Tests		Rapid Flu Tests	
	# Positive	Total Tests Performed	# Positive	Total Tests Performed
November 1, 2016 MMWR WEEK 44				
ATLANTIC	2	11	3	88
BERGEN	0	4	0	74
BURLINGTON	0	0	0	10
CAMDEN	0	0	0	56
CAPE MAY	0	2	0	11
CUMBERLAND	0	4	0	0
ESSEX	1	26	1	88
GLOUCESTER	0	0	0	0
HUDSON	1	11	2	39
HUNTERDON	0	8	1	43
MERCER	0	3	1	58
MIDDLESEX	2	16	0	28
MONMOUTH	8	109	8	438
MORRIS	0	85	0	30
OCEAN	1	8	1	43
PASSAIC	0	0	0	0
SALEM	0	0	0	0
SOMERSET	0	0	0	0
SUSSEX	0	0	0	1
UNION	2	60	0	10
WARREN	0	0	0	0
NW Region	0	85	0	31
NE Region	2	41	3	201
CW Region	0	11	2	101
CE Region	13	193	9	519
South Region	2	17	3	165
State Total	17	347	17	1017