



# Vector-borne Surveillance Report

CDC WEEK 26: JUNE 25–July 1, 2017

## Report Highlight:

- *New Jersey's first positive West Nile virus (WNV) mosquito pools in 2017 were confirmed on June 20, in Sussex and Warren counties. To date 7 mosquito pools have tested positive for WNV.*
- *Overall the number of reported human vector-borne diseases is lower compared to the same period last year.*

## Human Testing

New Jersey Administrative Code (N.J.A.C.) Title 8 Chapter 57 mandates public health reporting of specified vector-borne diseases to prevent further disease spread.

Human Cases <sup>a</sup>

Mosquito-borne diseases			Tick-borne Diseases		
	2017	2016		2017	2016
Chikungunya	3	2	Babesiosis	12	75
Dengue	1	25	Ehrlichiosis/Anaplasmosis	62	97
Eastern equine encephalitis	-	1	Lyme disease	1231	2154
West Nile	-	-	Powassan	1	-
Zika	10	85	Rocky Mountain spotted fever	21	25

<sup>a</sup> Cumulative through week 26: June 26-July 2, 2016; June 25-July 1, 2017. Data for 2017 are preliminary and subject to change. Includes confirmed and probable cases only.

## Mosquito Testing\*

The New Jersey Department of Health Public Health and Environmental Laboratories (PHEL) and the Cape May County Department of Mosquito Control Bio-safety Level 3 Laboratory (CMBLS3) perform arboviral testing on mosquito pools collected by county mosquito control agencies throughout New Jersey.

### West Nile virus (WNV):

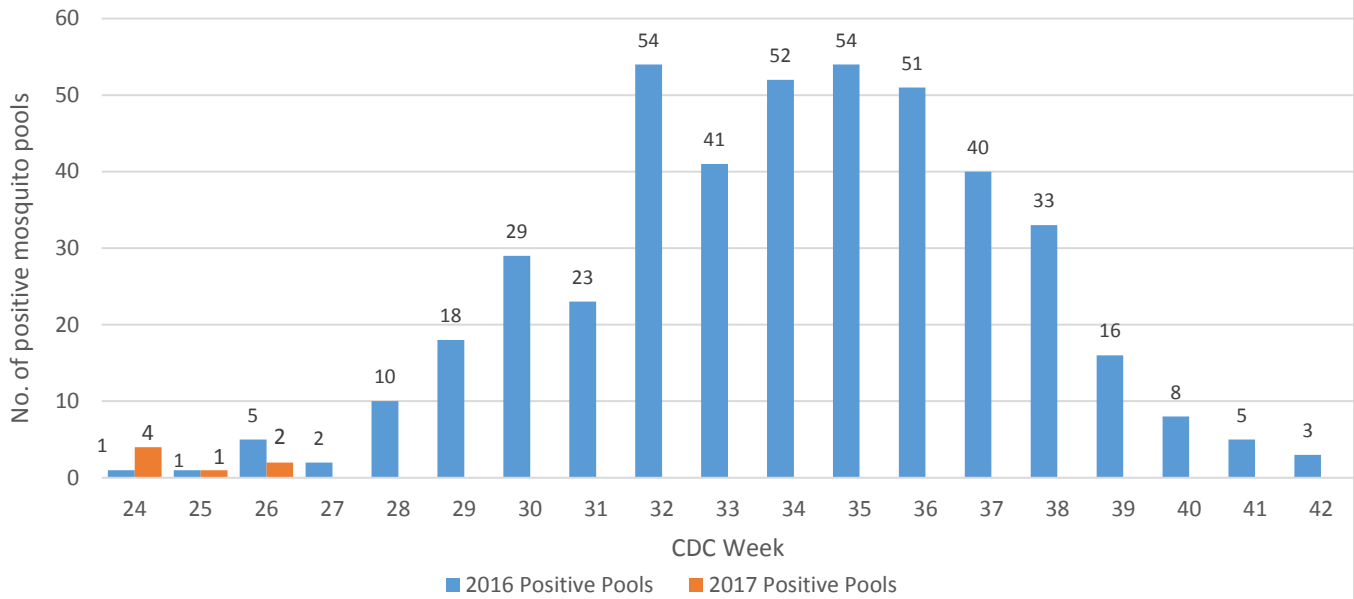
- To date, mosquito pools from 17 counties (Atlantic, Burlington, Camden, Cape May, Cumberland, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Salem, Somerset and Warren) have been tested for WNV.
- To date, 7 mosquito pools have tested positive for WNV. This is the same number of positive pools at week 26 last year but distributed in 6 counties compared with 4 counties from last year.

WNV Positive Mosquito Pools

County	Week 26		Cumulative Total (week 26)	
	2017	2016	2017	2016
Atlantic		1		1
Bergen		1		
Burlington			1	
Camden		1		2
Cape may				
Cumberland				
Essex				
Gloucester				
Hudson				
Hunterdon				
Mercer				
Middlesex	1		1	
Monmouth		2		3
Morris			1	
Ocean				
Passaic				
Salem	1		1	
Somerset				
Sussex			1	
Union				1
Warren			2	
<b>Total</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>7</b>

Week 26: June 26-July 2, 2016; June 25-July 1, 2017

West Nile Virus Positive Mosquito Pools, NJ (2016 -2017)



**Eastern equine encephalitis virus (EEE):**

- To date, mosquito pools from 12 counties have been tested for EEE (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Middlesex, Monmouth, Ocean, Passaic, Salem and Sussex).
- No EEE positive mosquito pools have been identified in 2017.

EEE Positive Mosquito Pools

County	Week 26		Cumulative Total (week 26)	
	2017	2016	2017	2016
Atlantic				
Bergen				
Burlington				
Camden				
Cape may				
Cumberland				
Essex				
Gloucester				
Hudson				
Hunterdon				
Mercer				
Middlesex				
Monmouth				
Morris				
Ocean				
Passaic				
Salem				
Somerset				
Sussex				
Union				
Warren				
<b>Total</b>	-	-	-	-

Week 26: June 26-July 2, 2016; June 25-July 1, 2017

**Other viruses:**

To date in 2017, mosquito pools from 3 counties (Burlington, Cape May and Sussex) have been tested for other arboviruses. No positive mosquito pools were identified.

**Cumulative 2017 Mosquito Pool Testing (Other Viruses<sup>a</sup>)**

County	SLE		LAC		CHIKV		DENV		ZIKV	
	Pools	Positives	Pools	Positives	Pools	Positives	Pools	Positives	Pools	Positives
Atlantic										
Bergen										
Burlington			3	0						
Camden										
Cape may	118	0			54	0			54	0
Cumberland										
Essex										
Gloucester										
Hudson										
Hunterdon										
Mercer										
Middlesex										
Monmouth										
Morris										
Ocean										
Passaic										
Salem										
Somerset										
Sussex			6	0						
Union										
Warren										
<b>Total</b>	<b>118</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>54</b>	<b>0</b>			<b>54</b>	<b>0</b>

Week 26: June 25-July 1, 2017

<sup>a</sup> St. Louis encephalitis virus (SLE), La Crosse encephalitis virus (LAC), Chikungunya virus (CHIKV), Dengue virus (DENV), Zika Virus (ZIKV)

Numbers in white columns represent number of pools tested to date  
 Numbers in blue shaded columns represent positive pools in 2017

**Equine/Avian /Other Animal Testing**

- Equine testing for WNV and EEE is conducted at the New Jersey Department of Agriculture's Animal Health and Diagnostic Laboratory.
- No animals have tested positive for WNV or EEE in 2017.
- Routine avian testing was discontinued in 2016 but is available upon request at PHEL. In 2017, 2 birds tested negative for WNV.

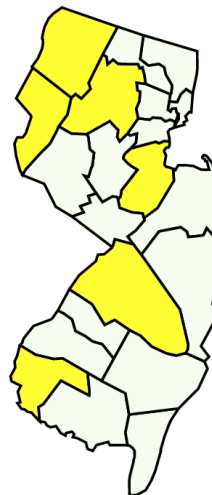
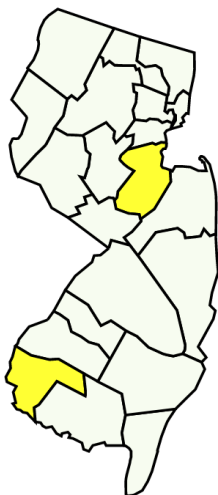
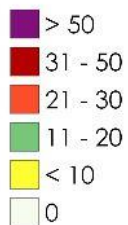
**WNV/EEE Positive Test Results**

	Week 26		Cum. Total (Year)	
	2017	2016	2017	2016
Equine (EEE)				4
Avian				
Other				
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>

Week 26 WNV Activity (2017)

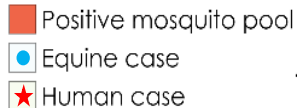
Cumulative WNV Activity 2017

WNV Positive Pools



2016 EEE Activity

Cumulative EEE Activity 2017



For More Information

- NJDOH Communicable Disease Service: <http://nj.gov/health/cd/topics/vectorborne.shtml>
- NJDEP Office of Mosquito Control Coordination: <http://www.nj.gov/dep/mosquito/>
- NJDA Division of Animal Health: <http://www.nj.gov/agriculture/divisions/ah/>
- Rutgers Center for Vector Biology: <http://vectorbio.rutgers.edu/>

\* Mosquito testing data reflects test results received from PHEL and CMBS3 as of July 3, 2017