



# Vector-borne Surveillance Report

CDC WEEK 28: July 9–15, 2017

## Report Highlight:

- To date in 2017, a total of 28 mosquito pools tested positive for WNV. This is higher than the number of positive pools reported during the same period in 2016.
- There have been no human cases of WNV in 2017.
- There have been no EEE human cases or positive mosquito pools in 2017.

## 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 <sup>b</sup>	2016 Cases		2017 <sup>b</sup>	2016 Cases
Chikungunya	3	11	Babesiosis	41	174
Dengue	2	92	Ehrlichiosis/Anaplasmosis	93	193
Eastern equine encephalitis	-	1	Lyme disease	1747	4350
West Nile	-	13	Powassan	1	-
Zika	10	238	Rocky Mountain spotted fever	34	64

<sup>a</sup> Data for 2017 reflect confirmed and probable cases that have been approved by NJDOH. This does not include cases under investigation.

All 2017 numbers are preliminary and are subject to change.

<sup>b</sup> Cumulative through week 28: July 9- 15, 2017.

## Mosquito Testing\*

The New Jersey Department of Health Public Health and Environmental Laboratories (PHEL) and the Cape May County Department of Mosquito Control Biosafety Level 3 Laboratory (CMBSL3) perform arboviral testing on mosquito pools collected by county mosquito control agencies throughout New Jersey.

### West Nile virus (WNV):

- To date in 2017, mosquito pools from all NJ counties have been tested for WNV. 28 mosquito pools in 13 counties have tested positive for WNV.
- The number of positive pools to date in 2017 is higher than the cumulative positive pools at week 28 last year.
- In week 28, Hunterdon and Ocean counties identified initial WNV positive mosquito pools. In 2016, the first WNV positive mosquito pool in Hunterdon County was identified in week 31; and in week 37 in Ocean County.
- 8 Counties (Cape May, Hunterdon, Morris, Ocean, Salem, Somerset, Sussex and Warren) have identified WNV positive pools earlier this season compared with 2016.

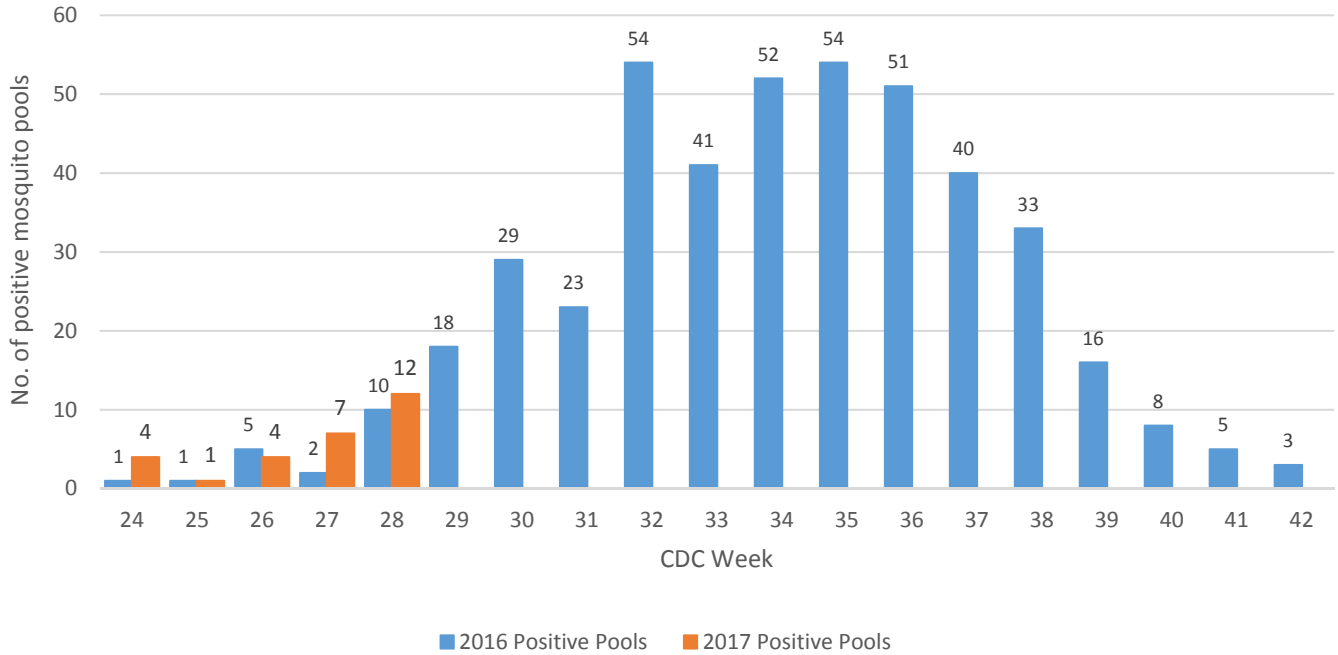
### WNV Positive Mosquito Pools

County	Week 28		Cumulative Total (week 28)	
	2017	2016	2017	2016
Atlantic		1		2
Bergen		2		3
Burlington	1	1	2	1
Camden				2
Cape May			1	
Cumberland				
Essex				
Gloucester	1	1	1	1
Hudson			4	1
Hunterdon	4		4	
Mercer				
Middlesex			2	1
Monmouth		1		4
Morris			2	
Ocean	1		1	
Passaic		4		4
Salem			1	
Somerset			1	
Sussex	1		1	
Union	3		3	1
Warren	1		3	
<b>Total</b>	<b>12</b>	10	<b>28</b>	20

\* Mosquito testing data reflects test results received from PHEL and CMBSL3 as of July 18, 2017

Week 28: July 10-16, 2016; July 9-15, 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, Cumberland, Cape May, Gloucester, Middlesex, Monmouth, Ocean, Passaic, Salem and Sussex).
- No EEE positive mosquito pools have been identified in 2017.

EEE Positive Mosquito Pools

County	Week 28		Cumulative Total (week 28)	
	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 28: July 10-16, 2016; July 9-15, 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	5		5	0						
Camden										
Cape May	241	0			117	0			117	0
Cumberland										
Essex										
Gloucester										
Hudson										
Hunterdon										
Mercer										
Middlesex										
Monmouth										
Morris										
Ocean										
Passaic										
Salem										
Somerset										
Sussex			12	0						
Union										
Warren										
<b>Total</b>	246	0	17	0	117	0			117	0

<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 in 2017  
 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**

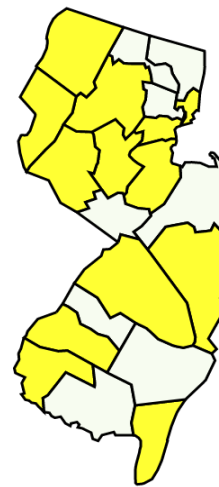
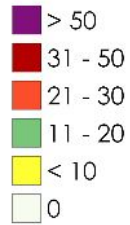
	Week 28		Cum. Total (Year)	
	2017	2016	2017	2016
Equine (EEE)				4
Avian				
Other				
<b>Total</b>	-	-	-	4

## Surveillance Maps

Week 28 WNV Activity (2017)

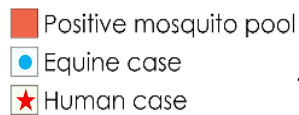
Cumulative WNV Activity 2017

### 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/>