

Report Highlight:

- To date in 2017, a total of 136 mosquito pools in 20 Counties have 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^a

Mosquito-borne diseases			Tick-borne Diseases		
	2017 ^b	2016 Cases		2017 ^b	2016 Cases
Chikungunya	3	11	Babesiosis	79	174
Dengue	2	92	Ehrlichiosis/Anaplasmosis	127	193
Eastern equine encephalitis	-	1	Lyme disease	2347	4350
West Nile	-	13	Powassan	1	-
Zika	13	238	Rocky Mountain spotted fever	47	64

^a 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.

^b Cumulative through week 31: July 30- August 5, 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 this year, 136 mosquito pools in 20 counties have tested positive for WNV. Cumberland County has not reported any WNV positive pools.
- The number of positive pools in 2017 is higher than the cumulative positive pools at week 31 last year.
- 92% ($n=125$) of the pools positive were *Culex spp.*
- As of week 31 Bergen, Middlesex and Union Counties have the highest number of WNV positive pools identified to date.
- 8 Counties (Cape May, Hunterdon, Morris, Ocean, Salem, Somerset, Sussex and Warren) have identified WNV positive pools earlier this season compared with 2016.

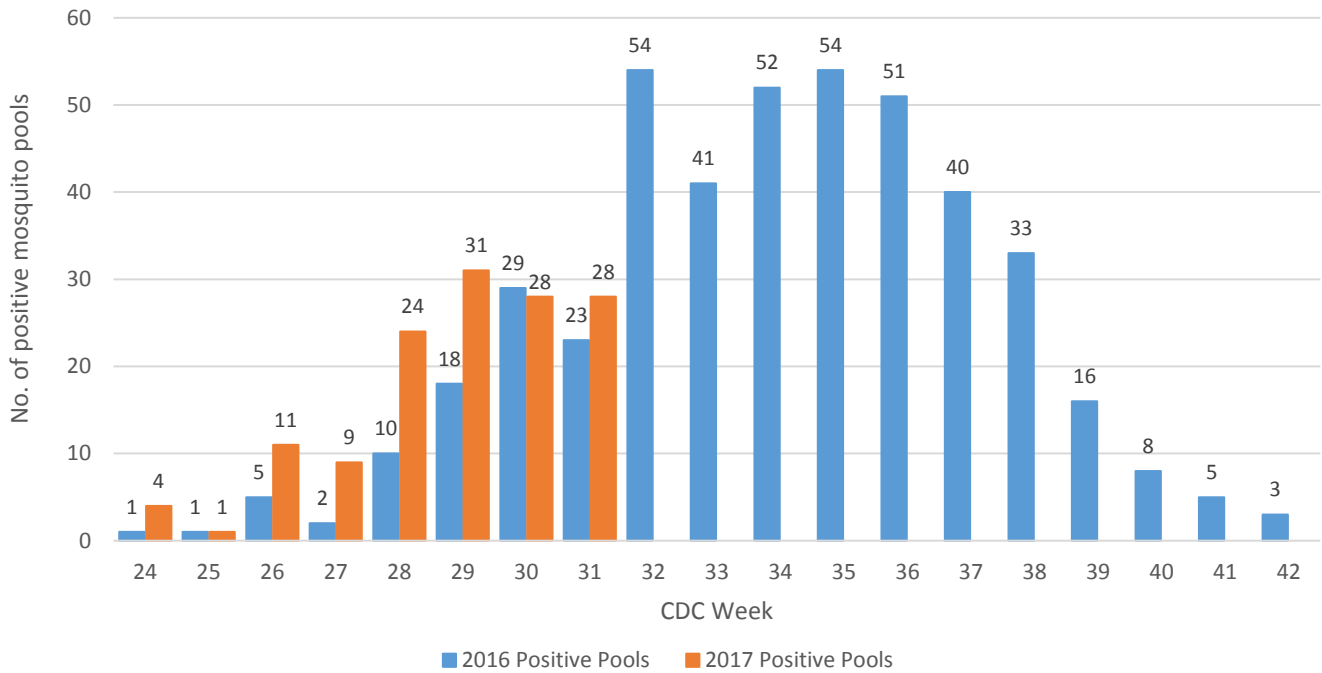
* Mosquito testing data reflects test results received from PHEL, CMBSL3 and US Army Public Health as of Aug 8, 2017

WNV Positive Mosquito Pools

County	Week 31		Cumulative Total (week 31)	
	2017*	2016	2017*	2016
Atlantic	1		1	5
Bergen		3	19	16
Burlington	2	1	6	3
Camden		1	1	3
Cape May			4	
Cumberland				
Essex			1	1
Gloucester	3	3	5	5
Hudson		5	16	11
Hunterdon	3	1	16	1
Mercer		2	1	5
Middlesex		4	18	8
Monmouth		3	1	10
Morris	4		10	
Ocean	2		4	
Passaic			1	8
Salem	1		2	
Somerset			3	1
Sussex			2	2
Union	10		17	11
Warren	2		8	
Total	28	23	136	90

Week 31: July 31 –August 6, 2016; July 30-August 5, 2017

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



Eastern equine encephalitis virus (EEE):

- To date, mosquito pools from 13 counties have been tested for EEE (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem and Sussex).
- No EEE positive mosquito pools have been identified in 2017.

EEE Positive Mosquito Pools

County	Week 31		Cumulative Total (week 31)	
	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				
Total	-	-	-	-

Week 31: July 31 –August 6, 2016; July 30–August 5, 2017

Other viruses:

To date in 2017, mosquito pools from 4 counties (Burlington, Cape May, Mercer and Sussex) have been tested for other arboviruses. No positive mosquito pools were identified.

Cumulative 2017 Mosquito Pool Testing (Other Viruses^a)

County	SLE		LAC		CHIKV		DENV		ZIKV	
	Pools	Positives	Pools	Positives	Pools	Positives	Pools	Positives	Pools	Positives
Atlantic										
Bergen										
Burlington	10	0	10	0						
Camden										
Cape May	359	0			205	0			205	0
Cumberland										
Essex										
Gloucester										
Hudson										
Hunterdon										
Mercer					1	0	1	0	1	0
Middlesex										
Monmouth										
Morris										
Ocean										
Passaic										
Salem										
Somerset										
Sussex			18	0						
Union										
Warren										
Total	369	0	28	0	206	0	1	0	206	0

^a 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

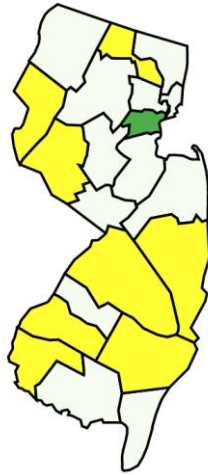
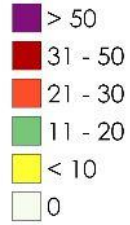
	Week 31		Cum. Total (Year)	
	2017	2016	2017	2016
Equine (EEE)				4
Avian				
Other				
Total	-	-	-	4

Surveillance Maps*

Week 31 WNV Activity (2017)

Cumulative WNV Activity 2017

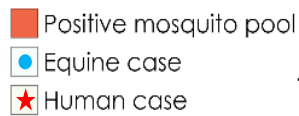
WNV Positive Pools



* Data reflects mosquito test results received from PHEL, CMBSL3 and US Army Public Health as of Aug 8, 2017

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/>