

Report Highlight:

- To date in 2017, a total of 209 mosquito pools in 20 Counties have tested positive for WNV. This is 45% higher than the number of positive pools reported during the same period in 2016.
- There have been no human cases of WNV in 2017.
- The first EEE positive mosquito pool in 2017 has been reported in Burlington County. There have been no human or animal cases of EEE 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	94	174
Dengue	2	92	Ehrlichiosis/Anaplasmosis	139	193
Eastern equine encephalitis	-	1	Lyme disease	2584	4350
West Nile	-	13	Powassan	1	-
Zika	13	238	Rocky Mountain spotted fever	65	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 32: August 6-12, 2017.

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 (CMBSL3) perform arboviral testing on mosquito pools collected by county mosquito control agencies throughout New Jersey.

West Nile virus (WNV):

- To date this year, 209 mosquito pools in 20 counties have tested positive for WNV. This is 45% higher than the cumulative number of positive pools at week 32 last year. Cumberland County has not reported any WNV positive pools.
- 93% ($n=194$) of the pools positive were *Culex spp.*
- A record number of 73 WNV positive pools was reported in week 31. This is significantly higher than the 23 pools reported at the same time last year but comparable to the 5-year average of WNV positive pools at week 31.
- As of week 32, Bergen, Union, Hudson and Middlesex Counties have the highest number of WNV positive pools identified to date.

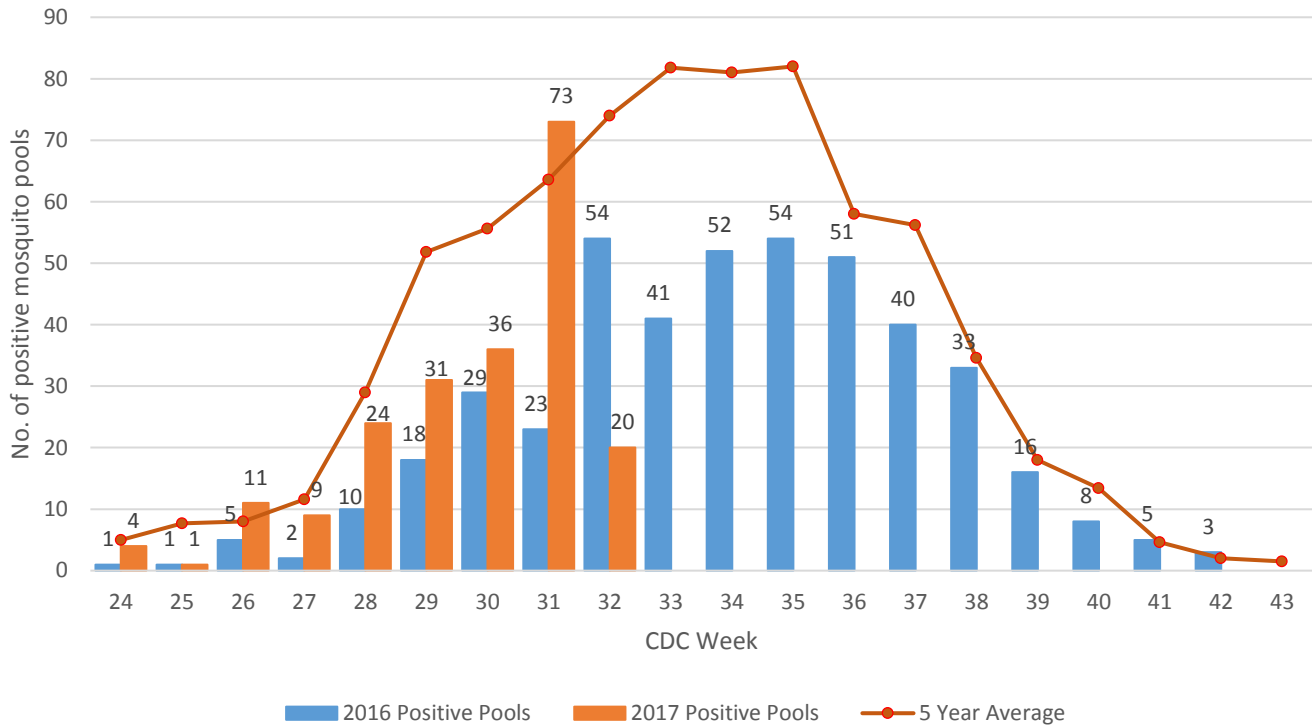
* Test results maybe incomplete; Counties submit pools for testing on specific weekdays. Mosquito testing data reflects test results received from PHEL, CMBSL3 and US Army Public Health as of Aug 15, 2017

WNV Positive Mosquito Pools

County	Week 32		Cumulative Total (week 32)	
	2017*	2016	2017*	2016
Bergen		11	30	27
Union	9	21	29	32
Hudson		4	27	15
Middlesex	5	3	23	11
Hunterdon		4	16	5
Burlington	5		13	3
Gloucester		4	12	9
Morris		2	10	2
Warren	1		9	
Somerset		1	8	2
Camden			7	3
Cape May			5	
Mercer		1	4	6
Ocean			4	
Essex			3	1
Sussex		1	3	3
Monmouth		1	2	11
Salem			2	
Atlantic			1	5
Passaic		1	1	9
Cumberland				
Total	20	54	209	144

Week 32: August 7-13, 2016; August 6-12, 2017

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



Eastern equine encephalitis virus (EEE):

- To date, mosquito pools from 14 counties have been tested for EEE (Atlantic, Burlington, Cumberland, Camden, Cape May, Cumberland, Gloucester, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem and Sussex).
- As of week 32, one EEE positive mosquito pool was reported in Burlington county.

EEE Positive Mosquito Pools

County	Week 32		Cumulative Total (week 32)	
	2017	2016	2017	2016
Atlantic				
Bergen				
Burlington	1		1	
Camden				
Cape May				2
Cumberland				
Essex				
Gloucester				
Hudson				
Hunterdon				
Mercer				
Middlesex		1		2
Monmouth				1
Morris				
Ocean				
Passaic				
Salem				
Somerset				
Sussex				
Union				
Warren				
Total	1	1	1	5

Week 32: August 7-13, 2016; August 6-12, 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	11	0	12	0						
Camden										
Cape May	436	0			270	0	270	0	270	0
Cumberland										
Essex										
Gloucester										
Hudson										
Hunterdon										
Mercer					1	0	1	0	1	0
Middlesex										
Monmouth										
Morris										
Ocean										
Passaic										
Salem										
Somerset										
Sussex			20	0						
Union										
Warren										
Total	447	0	32	0	271	0	271	0	271	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

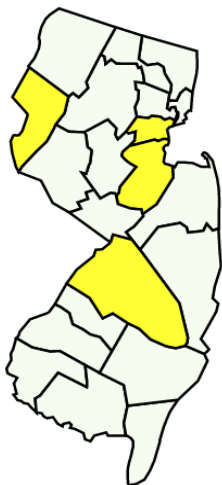
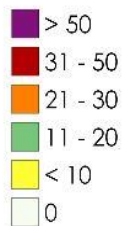
	Week 32		Cum. Total (Year)	
	2017	2016	2017	2016
Equine (EEE)				4
Avian				
Other				
Total	-	-	-	4

Surveillance Maps*

Week 32 WNV Activity (2017)

Cumulative WNV Activity 2017

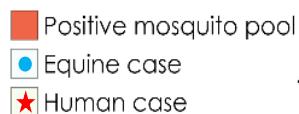
WNV Positive Pools



* Data reflects mosquito test results received from PHEL, CMBSL3 and US Army Public Health as of Aug 15, 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/>