

Report Highlight:

- As of week 35, a total of 446 mosquito pools in 20 Counties have tested positive for WNV.
- One human case of WNV was reported from Atlantic County; investigation determined the case exposure occurred out of state.
- To date in 2017, five mosquito pools have tested positive for EEE.
- One equine case of EEE was reported in Cumberland County; there have been no human 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	120	174
Dengue	3	92	Ehrlichiosis/Anaplasmosis	165	193
Eastern equine encephalitis	-	1	Lyme disease	3113	4350
West Nile	1	13	Powassan	2	-
Zika	21	238	Rocky Mountain spotted fever	75	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 35: August 27- September 2, 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, 446 mosquito pools in 20 Counties have tested positive for WNV. This matches the total number of positive pools reported in 2016 ($n=447$).
- 92% ($n=412$) of the pools positive were *Culex spp.*
- A record number of 83 WNV positive pools was reported in week 34. This is 60 percent higher than the 52 pools reported at the same time last year and higher than the 5-year average of WNV positive pools at week 34.
- Compared with 2016, Counties reporting positive pools are detecting a moderate increase in WNV positive pools this season except for Atlantic, Monmouth and Passaic Counties. Cumberland County has not reported any WNV positive pools.

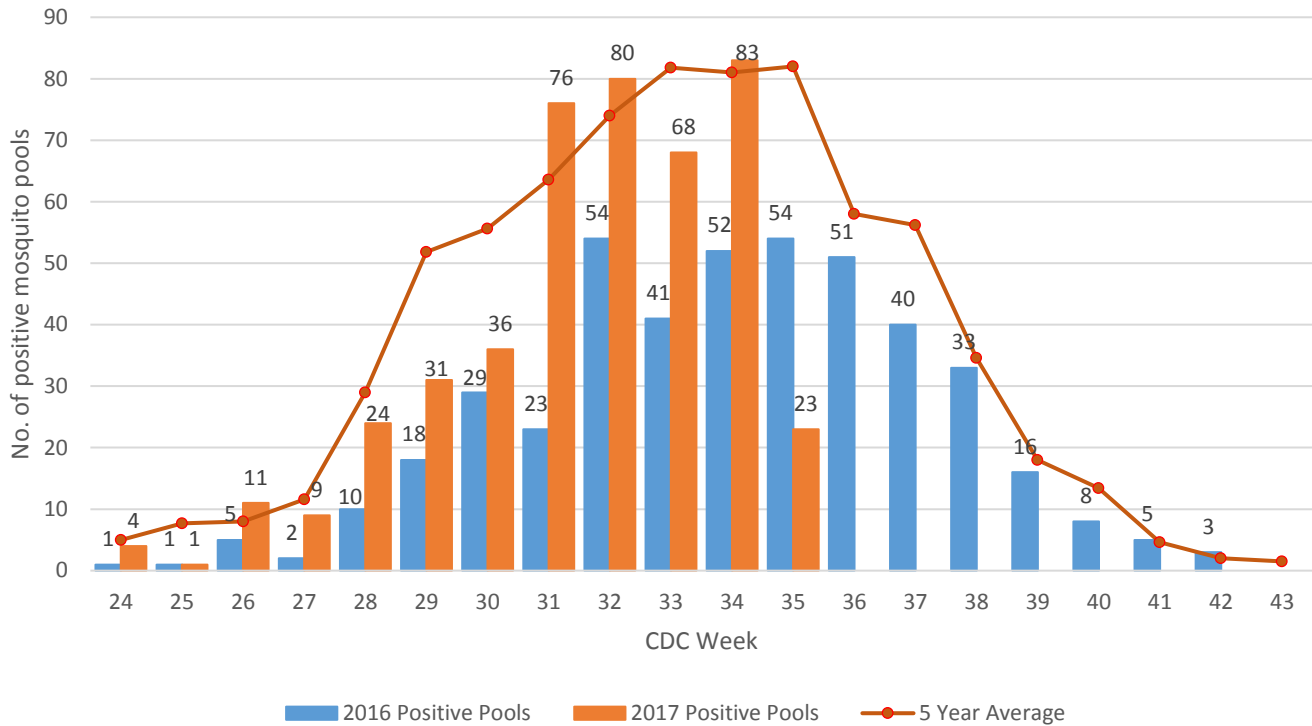
* Test results may be incomplete; Counties submit pools for testing on specific weekdays. Mosquito testing data reflects test results received from PHEL, CMBSL3 and US Army Public Health as of Sep 6, 2017

WNV Positive Mosquito Pools

County	Week 35		Cumulative Total (week 35)	
	2017*	2016	2017*	2016
Bergen	2	9	74	60
Union	11		69	55
Hudson		5	43	23
Gloucester	5		37	28
Middlesex	4	5	36	20
Hunterdon		3	35	13
Camden	1		30	5
Somerset			21	9
Morris		1	18	5
Burlington		1	16	7
Warren		11	15	1
Mercer		2	13	14
Cape May		1	9	1
Ocean			7	
Sussex		2	7	3
Salem		2	6	1
Essex		1	4	2
Monmouth		4	3	15
Passaic		3	2	19
Atlantic		3	1	9
Cumberland		1		1
Total	23	54	446	291

Week 35: Aug 28- Sep 3, 2016; Aug 27- Sep 2, 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.
- To date, 5 mosquito pools in 4 Counties (Burlington, Cape May, Cumberland and Salem) have tested positive for EEE.

EEE Positive Mosquito Pools

County	Week 35		Cumulative Total (week 35)	
	2017	2016	2017	2016
Atlantic				1
Bergen				
Burlington			2	
Camden		1		1
Cape May			1	2
Cumberland			1	
Essex				
Gloucester		1		1
Hudson				
Hunterdon				
Mercer				
Middlesex				2
Monmouth				1
Morris				
Ocean				
Passaic				
Salem			1	
Somerset				
Sussex				
Union				
Warren				
Total		2	5	8

Week 35: Aug 28- Sep 3, 2016; Aug 27- Sep 2, 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	13	0	14	0						
Camden										
Cape May	544	0			390	0		0	390	0
Cumberland										
Essex										
Gloucester										
Hudson										
Hunterdon										
Mercer					8	0	8	0	8	0
Middlesex										
Monmouth										
Morris										
Ocean										
Passaic										
Salem										
Somerset										
Sussex			23	0						
Union										
Warren										
Total	557	0	37	0	398	0	8	0	398	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.

- One unvaccinated horse from Cumberland County tested positive for EEE in week 34. The was euthanized August 28.
- Routine avian testing was discontinued in 2016 but is available upon request at PHEL. In 2017, 2 birds tested negative for WNV.

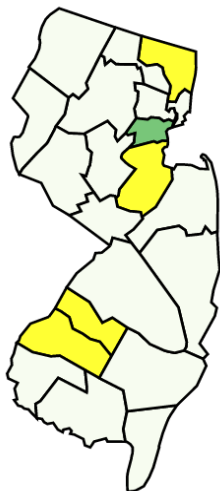
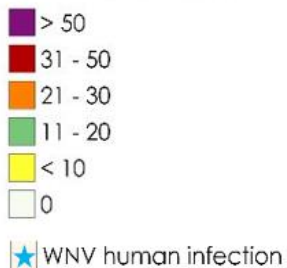
WNV/EEE Positive Test Results

	Week 35		Cum. Total (Year)	
	2017	2016	2017	2016
Equine (EEE)			1	4
Avian				
Other				
Total	-	-	1	4

Week 35 WNV Activity (2017)

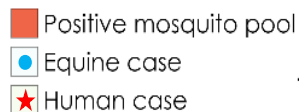
Cumulative WNV Activity 2017

WNV Positive Pools



2016 EEE Activity

Cumulative EEE Activity 2017



* Data reflects mosquito test results received from PHEL, CMBSL3 and US Army Public Health as of Sep 6, 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/>