

VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE, LAC, DENV, CHIK and ZIKV

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 CDC WEEK 33: 13 August to 19 August, 2017



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Culiseta melanura and Eastern Equine Encephalitis

SITE/Boxes	Inland or Coastal	Historic Population Mean	Current Weekly Mean	Total Tested* (Collected)	Total Pools Tested* (Submitted)	EEE Isolation Pools	MFIR
Bass River (Burlington Co.)/5	Coastal	0.20	0.40	1 (3)	1 (2)		
Green Bank (Burlington Co.)/25	Coastal	3.72	0.48	22 (34)	4 (5)		
Corbin City (Atlantic Co.)/25	Coastal	0.94	0.24	94 (100)	10 (11)		
Dennisville (Cape May Co.)/50	Coastal	6.31	0.68	69	6		
Winslow (Camden Co.)/50	Inland	1.81	0.48	638	19		
Centerton (Salem Co.)/50	Inland	2.79	0.80	156	10		
Turkey Swamp (Monmouth Co.)/50	Inland	1.80	0.74	64 (101)	9 (10)		
Glassboro (Gloucester Co.)/50	Inland	0.23	0.18	81	10		

*Current week (in parentheses) results pending. ‡ corrected from previous week NC=no collection

Remarks: One positive EEE pool has been detected in a *Culiseta melanura* pool from Burlington County collected on 8 August. No horse cases reported to date.

Traditional Resting Box Sites: 1306 *Cs. melanura* from 78 pools have been tested for EEE, with 145 additional *Cs. melanura* from 3 pools to be tested. No positive pools were detected at these eight sites. Statewide, 3,652 *Cs. melanura* from 324 pools have been tested, with one positive pool detected for an overall *Cs. melanura* MFIR of 0.274. 7,650 specimens from 16 other species have also been tested, with no positives detected. Overall MFIR for all species statewide is 0.088.

Additional <i>Cs. melanura</i> trapped by counties					
*traps with positives indicated in BOLD .					
County	Trap types*	Pools	Mosquitoes	Positives	MFIR
Atlantic	GR, LT, RB	23	255		
Burlington	CO ₂ , UVLT	37	1199	1	0.834
Cape May	GR, RB	101	359		
Cumberland	LT, RB	8	38		
Gloucester	RB	22	152		
Middlesex	RB	11	194		
Monmouth	CDC	1	1		
Morris	ABC	1	1		
Ocean	GR, LT, RB	12	25		
Passaic	RB	3	3		
Salem	LT	3	33		
Sussex	ABC, BGS, GR, RB	23	73		
Warren	LT	1	13		
TOTAL		246	2346	1	0.426

Additional *Cs. melanura*: Counties maintain trap sites for *Cs. melanura* in other areas, using a variety of traps. One positive pool was detected in a Burlington County UVLT, collected 8 August.

Horses and Humans: No horses have been detected with EEE to date in New Jersey. Nearly all of the horse cases from previous years include those horses who were either not vaccinated or had incomplete vaccination histories. ***Horse owners are urged to make sure their horses are up to date on their vaccinations. Horse cases are known to occur through October and sometimes into November (see link below).*** Other sensitive species are non-native birds, such as Ostriches/Emus and Gallinaceous birds such as pheasants of Eurasian origins.

Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

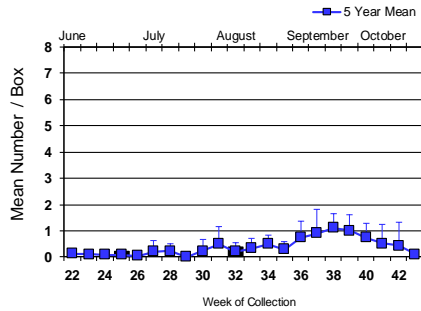
Additional Species: Sixteen additional species were tested for EEE. No additional positives were detected.

Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes canadensis canadensis</i>	4	41		
<i>Aedes cantator</i>	8	8		
<i>Aedes japonicus</i>	2	20		
<i>Aedes sollicitans</i>	2	14		
<i>Aedes taeniorhynchus</i>	1	8		
<i>Aedes vexans</i>	1	75		
<i>Anopheles bradleyi</i>	71	635		
<i>Anopheles crucians</i>	2	18		
<i>Anopheles punctipennis</i>	23	170		
<i>Anopheles quadrimaculatus</i>	6	37		
<i>Coquillettidia perturbans</i>	64	1308		
<i>Culex erraticus</i>	29	496		
<i>Culex pipiens</i>	445	3684		
<i>Culex salinarius</i>	163	1079		
<i>Culex</i> sp.	20	55		
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	1	1		
State Total	843	7650		

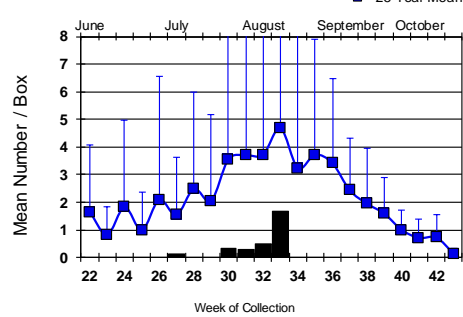
Culiseta melanura Population Graphs

Coastal

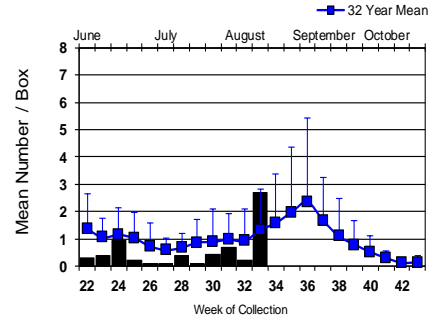
BASS RIVER (Burlington Co.)



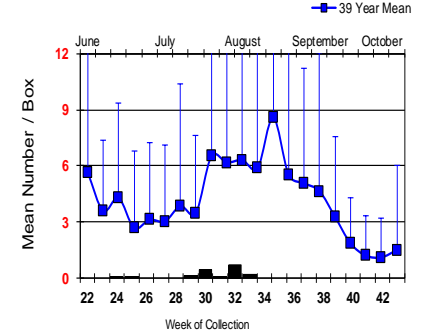
GREEN BANK (Burlington Co.)



CORBINCITY (Atlantic Co.)

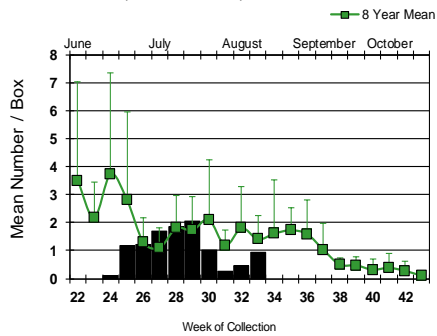


DENNISVILLE (Cape May Co.)

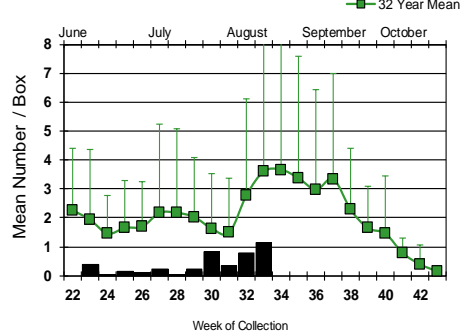


Inland

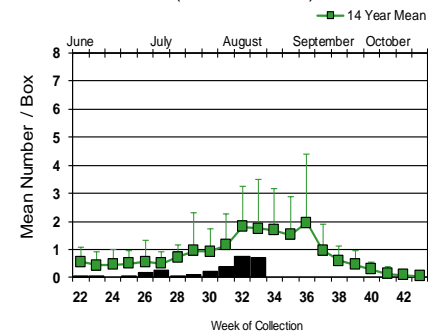
WINSLOW (Camden Co.)



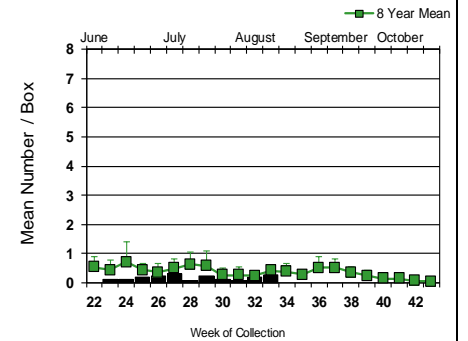
CENTERTON (Salem Co.)



TURKEY SWAMP (Monmouth Co.)



GLASSBORO (Gloucester Co.)



No detection of EEE has occurred at the traditional resting box sites. Mosquito population have increased in several locations, although they continue to be below historical averages. Corbin City numbers spiked well above the preceding weeks.

= Positive pool(s) detected (red = melanura, purple = other species).

EEE in US (2017 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: FL(1/1 deer) GA(1) LA(2) NC(1) SC(2) TX(1) WI(2)
- mosquito pools: MA(1) NJ(1) NY(1) RI(2)
- sentinel: FL(18) TX(6)
- human:

West Nile Virus Positive Organisms in US, 2017

West Nile in US (2017 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/**New totals**. Note: Data reported by all states should be considered provisional and subject to change. Sources for this table can be found [here](#).

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama					1
Alaska					
Arizona	0	72		0	30/40
Arkansas				0	3
California	141/171	1470/1814	40/58	5	11/41
Colorado	2	35/64		1	2/3
Connecticut		22/34			0
Delaware					
DC					
Florida	1	1/2	13/19		0
Georgia		0		1	5/7
Hawaii					
Idaho		47/74		1/2	1
Illinois	10	607/798			2/4
Indiana	0	118/176		0	2
Iowa		20		1	1
Kansas		13		0	4
Kentucky				3	
Louisiana	13	258/297			19
Maine		0		0	0
Maryland					
Mass.		67/127		0	0
Michigan				3/5	
Minnesota					3
Mississippi		140/184		1	22/31
Missouri		0		1	2

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					
Nebraska	1	13/40		0	8
Nevada					1/6
New Hampshire		2/3		0	0
New Jersey		178/236		0	0
New Mexico					2
New York		137/188			1
North Carolina					
North Dakota	5	9		0	7/16
Ohio		322/600			1
Oklahoma					2/7
Oregon		9/21		1	1
Pennsylvania	3/12	912/1277		0	1
Rhode Island		1		0	0
South Carolina	5/7	14/42			
South Dakota		28/55			4/10
Tennessee					2/3
Texas		489/603			24/29
Utah		74/105		1	2
Vermont					
Virginia				1	1
Washington	1	11/17		1/2	0
West Virginia					
Wisconsin	57/63	14/20		3	0
Wyoming				1	

* Can include other species (e.g., dogs, cows) reported positive.

Protocol: New Jersey Department of Health (NJDH Public Health Environmental and Agricultural Laboratories, PHEAL) and the Cape May County Department of Mosquito Control tests mosquito pools using RT-PCR Taqman techniques.

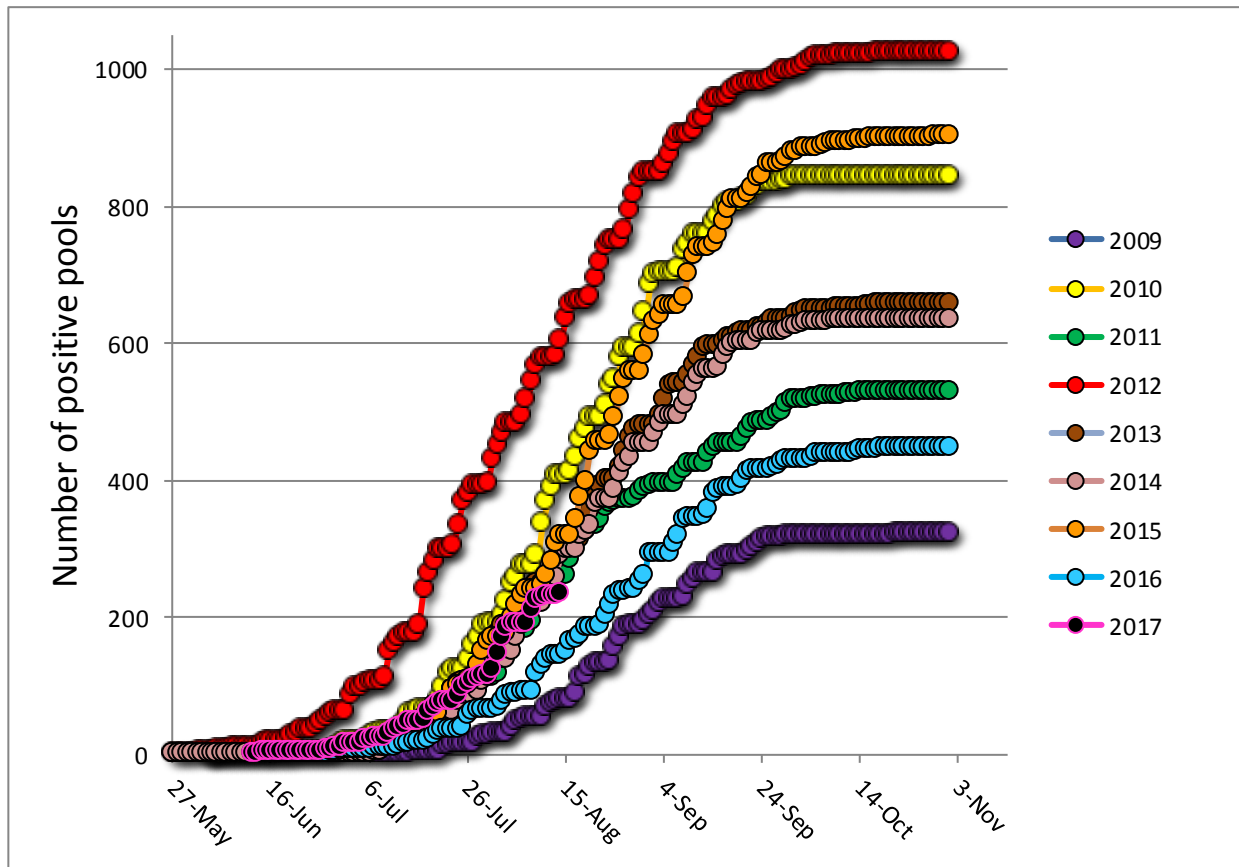
Mosquito Species Submitted and Tested for West Nile Virus Testing through 18 August 2017.

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	660	6726	3	0.446
<i>Aedes atlanticus</i>	2	7		
<i>Aedes atropalpus</i>	14	77		
<i>Aedes canadensis canadensis</i>	40	429		
<i>Aedes cantator</i>	26	222		
<i>Aedes cinereus</i>	1	54		
<i>Aedes grossbecki</i>	2	4		
<i>Aedes japonicus</i>	257	1145		
<i>Aedes sollicitans</i>	17	529		
<i>Aedes stimulans</i>	1	10		
<i>Aedes taeniorhynchus</i>	8	84		
<i>Aedes triseriatus</i>	176	428		
<i>Aedes trivittatus</i>	3	5		
<i>Aedes vexans</i>	45	487		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles bradleyi</i>	79	910		
<i>Anopheles crucians</i>	2	18		
<i>Anopheles earlei</i>	1	1		
<i>Anopheles punctipennis</i>	56	264		
<i>Anopheles quadrimaculatus</i>	92	614		
<i>Coquillettidia perturbans</i>	74	1325		
<i>Culex erraticus</i>	40	564		
<i>Culex pipiens</i>	526	5770	8	1.386
<i>Culex restuans</i>	373	2037	1	0.491
<i>Culex salinarius</i>	175	1509		
<i>Culex spp.</i>	1479	64219	220	3.426
<i>Culex territans</i>	27	86		
<i>Culiseta inornata</i>	1	1		
<i>Culiseta melanura</i>	327	3659	3	0.820
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	2	2		
<i>Psorophora columbiae</i>	9	53	1	18.868
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	6	39		
<i>Uranotaenia sapphirina</i>	2	23		
Grand Total	4531	91309	236	2.585

Remarks: To date, 4,531 pools of 91,309 mosquitoes from 34 species have been tested. 236 positive pools have been detected. Most continue to be in the enzootic vector, *Culex* (*Mix*, *pipiens* or *restuans*). Overall MFIR for New Jersey is at 2.585, up from 2.208 of last week. First positive *Culex* Mix pool was detected in Sussex County on 12 June. Last year, the first positive pool of *Culex* Mix was collected on 14 June in Monmouth County. One additional positive *Culex* was detected in Monmouth County from a non-county collected source, and will be reported when incorporated into the database

Humans, Horses and Wild Birds: No human or horse cases have been detected. Last year, human cases were first reported in CDC week 20, but under unusual circumstances. First typical case occurred in CDC week 27. For further information, see <http://www.nj.gov/health/cd/statistics/arboviral-stats/>.

Birds are no longer routinely tested in New Jersey.



Above is a graph showing cumulative number of positive pools for the last 9 years, inclusive of the most active (2012) and least active (2009) years. While it is still early, there was a decrease in the cumulative positives, suggesting a possible low to moderate activity (black markers with pink borders for current year).

WNV Results by County through 18 August 2017.

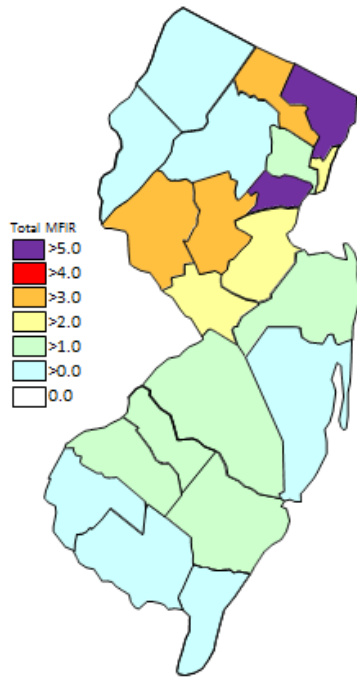
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		109	3011	1	0.332
	<i>Aedes japonicus</i>	3	118		
	<i>Aedes sollicitans</i>	6	318		
	<i>Aedes taeniorhynchus</i>	3	71		
	<i>Aedes triseriatus</i>	1	12		
	<i>Aedes vexans</i>	5	224		
	<i>Anopheles bradleyi</i>	6	255		
	<i>Coquillettidia perturbans</i>	11	447		
	<i>Culex erraticus</i>	6	153		
	<i>Culex pipiens</i>	20	673		
	<i>Culex salinarius</i>	1	9		
	<i>Culex spp.</i>	11	345		
	<i>Culiseta melanura</i>	34	355	1	2.817
	<i>Psorophora columbiae</i>	1	1		
	<i>Psorophora ferox</i>	1	30		
Bergen		80	3596	30	8.343
	<i>Aedes albopictus</i>	2	75		

<i>Aedes japonicus</i>	9	86		
<i>Culex</i> spp.	69	3435	30	8.734
Burlington	151	5448	15	2.753
<i>Aedes albopictus</i>	8	164		
<i>Aedes canadensis canadensis</i>	2	35		
<i>Aedes cantator</i>	1	1		
<i>Aedes japonicus</i>	4	92		
<i>Aedes taeniorhynchus</i>	1	8		
<i>Aedes triseriatus</i>	2	30		
<i>Aedes vexans</i>	1	75		
<i>Anopheles bradleyi</i>	2	150		
<i>Anopheles crucians</i>	2	18		
<i>Coquillettidia perturbans</i>	1	49		
<i>Culex erraticus</i>	1	65		
<i>Culex salinarius</i>	7	492		
<i>Culex</i> spp.	74	3032	13	4.288
<i>Culiseta melanura</i>	44	1236	2	1.618
<i>Orthopodomyia signifera</i>	1	1		
Camden	94	3819	7	1.833
<i>Aedes albopictus</i>	4	26		
<i>Aedes japonicus</i>	9	38		
<i>Culex</i> spp.	61	3072	7	2.279
<i>Culiseta melanura</i>	20	683		
Cape May	1836	7987	5	0.626
<i>Aedes albopictus</i>	290	608		
<i>Aedes atlanticus</i>	2	7		
<i>Aedes atropalpus</i>	14	77		
<i>Aedes canadensis canadensis</i>	16	24		
<i>Aedes cantator</i>	7	7		
<i>Aedes japonicus</i>	127	272		
<i>Aedes sollicitans</i>	1	1		
<i>Aedes taeniorhynchus</i>	1	1		
<i>Aedes triseriatus</i>	121	205		
<i>Aedes vexans</i>	12	15		
<i>Anopheles bradleyi</i>	70	430		
<i>Anopheles punctipennis</i>	6	9		
<i>Anopheles quadrimaculatus</i>	71	526		
<i>Coquillettidia perturbans</i>	13	15		
<i>Culex erraticus</i>	18	303		
<i>Culex pipiens</i>	446	3685	5	1.357
<i>Culex restuans</i>	316	883		
<i>Culex salinarius</i>	150	341		
<i>Culex</i> spp.	13	24		
<i>Culex territans</i>	27	86		
<i>Culiseta melanura</i>	109	438		
<i>Orthopodomyia signifera</i>	2	2		
<i>Psorophora columbiae</i>	1	1		
<i>Psorophora ferox</i>	1	4		
<i>Uranotaenia sapphirina</i>	2	23		
Cumberland	89	938		
<i>Aedes albopictus</i>	11	97		
<i>Aedes japonicus</i>	8	36		

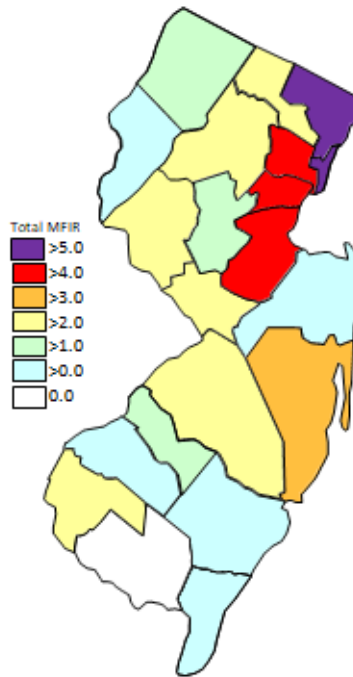
	<i>Aedes sollicitans</i>	1	13		
	<i>Aedes triseriatus</i>	1	2		
	<i>Aedes vexans</i>	9	55		
	<i>Anopheles bradleyi</i>	1	75		
	<i>Anopheles punctipennis</i>	1	5		
	<i>Anopheles quadrimaculatus</i>	8	39		
	<i>Coquillettidia perturbans</i>	8	102		
	<i>Culex erraticus</i>	1	11		
	<i>Culex salinarius</i>	6	246		
	<i>Culex spp.</i>	24	197		
	<i>Culiseta melanura</i>	8	38		
	<i>Psorophora columbiae</i>	2	22		
Essex		87	653	3	4.594
	<i>Aedes albopictus</i>	33	120		
	<i>Aedes japonicus</i>	8	13		
	<i>Culex spp.</i>	46	520	3	5.769
Gloucester		222	8569	12	1.400
	<i>Aedes albopictus</i>	45	880	1	1.136
	<i>Aedes japonicus</i>	10	112		
	<i>Aedes triseriatus</i>	2	26		
	<i>Anopheles punctipennis</i>	17	139		
	<i>Anopheles quadrimaculatus</i>	5	36		
	<i>Coquillettidia perturbans</i>	2	7		
	<i>Culex pipiens</i>	11	700	1	1.429
	<i>Culex spp.</i>	96	6422	10	1.557
	<i>Culiseta melanura</i>	33	246		
	<i>Psorophora ferox</i>	1	1		
Hudson		98	4903	37	7.546
	<i>Culex spp.</i>	98	4903	37	7.546
Hunterdon		158	7338	21	2.862
	<i>Culex spp.</i>	158	7338	21	2.862
Mercer		114	1977	4	2.023
	<i>Aedes albopictus</i>	8	87		
	<i>Aedes japonicus</i>	27	98		
	<i>Culex pipiens</i>	3	127		
	<i>Culex restuans</i>	34	788	1	1.269
	<i>Culex spp.</i>	42	877	3	3.421
Middlesex		111	5384	23	4.272
	<i>Culex spp.</i>	100	5190	23	4.432
	<i>Culiseta melanura</i>	11	194		
Monmouth	<i>*One additional Culex positive pool</i>	364	4972	2	0.402
	<i>Aedes albopictus</i>	155	3135		
	<i>Aedes canadensis canadensis</i>	22	370		
	<i>Aedes cantator</i>	17	176		
	<i>Aedes grossbecki</i>	2	4		
	<i>Aedes japonicus</i>	19	83		
	<i>Aedes sollicitans</i>	9	197		
	<i>Aedes taeniorhynchus</i>	3	4		

<i>Aedes triseriatus</i>	9	9		
<i>Aedes trivitattus</i>	2	2		
<i>Aedes vexans</i>	13	24		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles earlei</i>	1	1		
<i>Anopheles punctipennis</i>	27	79		
<i>Anopheles quadrimaculatus</i>	4	6		
<i>Coquillettidia perturbans</i>	7	8		
<i>Culex erraticus</i>	4	9		
<i>Culex salinarius</i>	2	14		
<i>Culex</i> spp.	42	710	2	2.817
<i>Culiseta inornata</i>	1	1		
<i>Culiseta melanura</i>	13	108		
<i>Orthopodomyia signifera</i>	1	1		
<i>Psorophora ciliata</i>	2	2		
<i>Psorophora columbiae</i>	4	24		
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	1	1		
Morris	157	6345	17	2.679
<i>Aedes albopictus</i>	8	53		
<i>Coquillettidia perturbans</i>	12	429		
<i>Culex</i> spp.	136	5862	17	2.900
<i>Culiseta melanura</i>	1	1		
Ocean	129	1760	6	3.409
<i>Aedes albopictus</i>	43	751	1	1.332
<i>Aedes japonicus</i>	6	40		
<i>Aedes triseriatus</i>	4	12		
<i>Anopheles punctipennis</i>	1	1		
<i>Coquillettidia perturbans</i>	5	103		
<i>Culex erraticus</i>	3	8		
<i>Culex</i> spp.	55	820	5	6.098
<i>Culiseta melanura</i>	12	25		
Passaic	91	819	2	2.442
<i>Aedes albopictus</i>	2	7		
<i>Aedes japonicus</i>	15	99		
<i>Aedes triseriatus</i>	3	11		
<i>Coquillettidia perturbans</i>	8	12		
<i>Culex erraticus</i>	2	4		
<i>Culex pipiens</i>	45	584	2	3.425
<i>Culex restuans</i>	9	61		
<i>Culex</i> spp.	4	38		
<i>Culiseta melanura</i>	3	3		
Salem	93	977	2	2.047
<i>Aedes albopictus</i>	19	135		
<i>Aedes japonicus</i>	4	6		
<i>Aedes triseriatus</i>	11	27		
<i>Aedes vexans</i>	3	6		
<i>Anopheles quadrimaculatus</i>	3	4		
<i>Coquillettidia perturbans</i>	5	39		
<i>Culex erraticus</i>	5	11		
<i>Culex pipiens</i>	1	1		
<i>Culex restuans</i>	1	3		

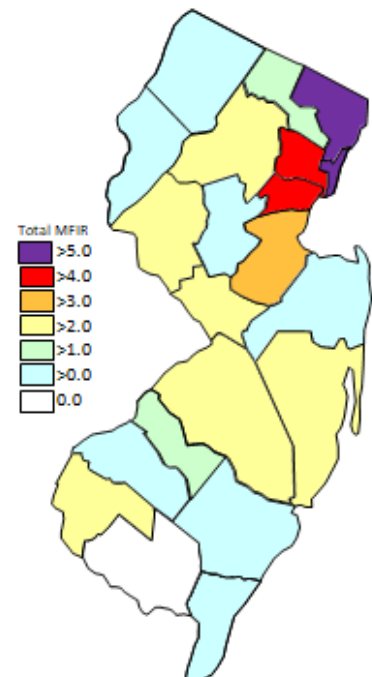
	<i>Culex</i> spp.	24	492	1	2.033
	<i>Culiseta melanura</i>	15	246		
	<i>Psorophora columbiae</i>	1	5	1	200.000
	<i>Psorophora ferox</i>	1	2		
Somerset		131	4049	8	1.976
	<i>Aedes albopictus</i>	6	32		
	<i>Aedes japonicus</i>	5	38		
	<i>Aedes triseriatus</i>	2	6		
	<i>Anopheles punctipennis</i>	3	21		
	<i>Culex</i> spp.	115	3952	8	2.024
Sussex		137	2794	3	1.074
	<i>Aedes albopictus</i>	6	14		
	<i>Aedes triseriatus</i>	20	88		
	<i>Culex restuans</i>	13	302		
	<i>Culex salinarius</i>	9	407		
	<i>Culex</i> spp.	66	1910	3	1.571
	<i>Culiseta melanura</i>	23	73		
Union		84	4848	29	5.982
	<i>Aedes albopictus</i>	20	542	1	1.845
	<i>Culex</i> spp.	64	4306	28	6.503
Warren		196	11122	9	0.809
	<i>Aedes cantator</i>	1	38		
	<i>Aedes cinereus</i>	1	54		
	<i>Aedes japonicus</i>	3	14		
	<i>Aedes stimulans</i>	1	10		
	<i>Aedes trivittatus</i>	1	3		
	<i>Aedes vexans</i>	2	88		
	<i>Anopheles punctipennis</i>	1	10		
	<i>Anopheles quadrimaculatis</i>	1	3		
	<i>Coquillettidia perturbans</i>	2	114		
	<i>Culex</i> spp.	181	10774	9	0.835
	<i>Culiseta melanura</i>	1	13		
	<i>Psorophora ferox</i>	1	1		
Grand Total		4531	91309	236	2.585



Cumulative WNV activity in 2016.



WNV activity to 18 August 2017.



WNV activity last week, 2017

Saint Louis Encephalitis (SLE) to 18 August 2017.

New Jersey will be primarily testing for SLE this year only when adjacent states show human activity (Cape May tests mosquitoes in the Cape May lab independently). SLE has had previous activity in New Jersey, most notably in 1964 and 1975 (CDC's SLE [website](#)), the latter prompting the surveillance reporting by Rutgers. SLE is a flavivirus and has a similar transmission pattern to West Nile, with *Culex* species as the predominant vectors.

No pools of SLE have tested positive for 2017. No human cases have been reported.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		12	721		
	<i>Culex</i> spp.	12	721		
Cape May		458	3708		
	<i>Culex pipiens</i>	445	3684		
	<i>Culex</i> spp.	13	24		
Grand Total		470	4429		

La Crosse Encephalitis (LAC) to 18 August 2017.

New Jersey will be primarily testing for LAC this year only when adjacent states show human activity (Cape May tests mosquitoes in the Cape May lab independently). New Jersey has had 3 cases of this encephalitic disease since 1964 (see CDC's LAC [website](#)). The mortality is low but like other encephalitides, LAC can have both personal (lasting neurological sequelae) and economic impacts. LAC is a bunyavirus with a transmission cycle involving mosquitoes such as *Aedes triseriatus* and small mammals such as squirrels and chipmunks. LAC can not only infect *Aedes albopictus* but transovarial transmission was also demonstrated. (Tesh and Gubler 1975 Laboratory studies of transovarial transmission of La Crosse and other arboviruses by *Aedes albopictus* and *Culex fatigans*. American Journal of Tropical Medicine and Hygiene 24(5):876-880).

No pools of SLE have tested positive for 2017. No human cases have been reported.

County	Species			Positives	MFIR
Burlington		13	275		
	<i>Aedes albopictus</i>	7	153		
	<i>Aedes japonicus</i>	4	92		
	<i>Aedes triseriatus</i>	2	30		
Sussex		20	88		
	<i>Aedes triseriatus</i>	20	88		
Grand Total		33	363		

Dengue (DENV) to 18 August 2017.

New Jersey will be selectively testing for DENV (including serotypes) this year. Dengue has not had a history of local transmission here in New Jersey, but each year, travelers can bring virus back from areas in the world with virus activity. This is significant as humans are NOT dead-end hosts and thus there is the potential for local transmission (i.e., New Jersey mosquitoes biting a sick person and then biting and transmitting the disease to someone else) to be established. DENV is a flavivirus but unlike WNV, *Aedes* mosquitoes are predominant vectors. In New Jersey, *Aedes albopictus* is a candidate for local transmission. There are 4 serotypes tested for Dengue.

Note Same pools of *Ae. albopictus* are tested for the four serotypes of Dengue as well as Chikungunya.

No pools of Dengue have tested positive in 2017. There are two travel-related human cases in NJ.

County	Species	DENV1		DENV2		DENV3		DENV4		Pos.	MFIR
		Pool	Mos.	Pool	Mos.	Pool	Mos.	Pool	Mos.		
Mercer		8	87	8	87	8	87	8	87		
	<i>Aedes albopictus</i>	8	87	8	87	8	87	8	87		
Grand Total		8	87	8	87	8	87	8	87		

Chikungunya (CHIK) to 18 August 2017.

New Jersey will be selectively testing for CHIK this year. Chikungunya is similar in symptoms to Dengue, a “breakbone” fever and has a low mortality rate. But this virus has had recent worldwide activity, and in the past year has come to the Western Hemisphere. As with Dengue, transmission can occur when a mosquito bites an infected human, then bites an uninfected human who subsequently becomes ill. CHIK is an alphavirus with *Aedes* mosquitoes as potential vectors. In New Jersey, *Aedes albopictus* is the mosquito of interest.

No pools of CHIK have tested positive in 2017. There are 3 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		290	608		
	<i>Aedes albopictus</i>	290	608		
Mercer		8	87		
	<i>Aedes albopictus</i>	8	87		
Grand Total		298	695		

Zika (ZIKV) to 18 August 2017.

New Jersey will be selectively testing for ZIKV this year. Zika is an emerging arboviral threat with significant health consequences for fetuses and recent activity in the Western Hemisphere. Humans are potential hosts that can transmit through sexual activity. ZIKV is a flavivirus with *Aedes* mosquitoes as potential vectors. In New Jersey, *Aedes albopictus* is the mosquito of interest.

No pools have tested positive in 2017. There are 13 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		290	608		
	<i>Aedes albopictus</i>	290	608		
Mercer		8	87		
	<i>Aedes albopictus</i>	8	87		
Grand Total		298	695		