

VECTOR SURVEILLANCE IN NEW JERSEY

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

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 CDC WEEK 34: 20 August to 26 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	0.46	0.40	3 (5)	2 (3)		
Green Bank (Burlington Co.)/25	Coastal	3.24	0.52	76 (89)	6 (7)		
Corbin City (Atlantic Co.)/25	Coastal	1.59	1.40	167 (202)	12 (13)		
Dennisville (Cape May Co.)/50	Coastal	8.59	0.10	83	8		
Winslow (Camden Co.)/50	Inland	1.61	1.42	754	22		
Centerton (Salem Co.)/50	Inland	3.66	1.90	308	14	1	3.25
Turkey Swamp (Monmouth Co.)/50	Inland	1.69	0.74	137 (174)	11 (12)		
Glassboro (Gloucester Co.)/50	Inland	0.37	0.18	103	12		

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

Remarks: Three positive EEE pools have been detected in a *Culiseta melanura*, the latest two positives from a traditional resting box site in Salem County and from a county-set Burlington County trap. No horse cases reported to date.

Statewide, 4,239 *Cs. melanura* from 361 pools have been tested, with three positive pools detected for an overall *Cs. melanura* MFIR of 0.708. 8,433 specimens from 17 other species have also been tested, with no positives detected. Overall MFIR for all species statewide is 0.237.

Traditional Resting Box Sites: 1631 *Cs. melanura* from 87 pools have been tested for EEE, with 87 additional *Cs. melanura* from 4 pools to be tested. One positive pool was detected at the Centerton site, collected on 22 Aug.

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	24	282		
Burlington	CO₂, UVLT	42	1331	2	1.503
Cape May	GR, RB	110	387		
Cumberland	LT, RB	8	38		
Gloucester	RB	29	183		
Middlesex	RB	13	211		
Monmouth	CDC	1	1		
Morris	ABC	1	1		
Ocean	GR, LT, RB	13	26		
Passaic	RB	3	3		
Salem	LT	4	34		
Sussex	ABC, BGS, GR, RB	25	98		
Warren	LT	1	13		
TOTAL		274	2608	2	0.767

Additional County-set *Cs. melanura*: Counties maintain trap sites for *Cs. melanura* in other areas, using a variety of traps. A second positive pool from these sites was collected on 21 Aug in a Burlington County UVLT trap. One positive pool was previously detected in a Burlington County UVLT, collected 8 August. Both UVLT were with CO₂.

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.

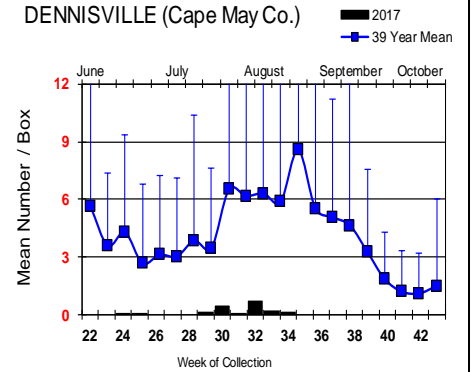
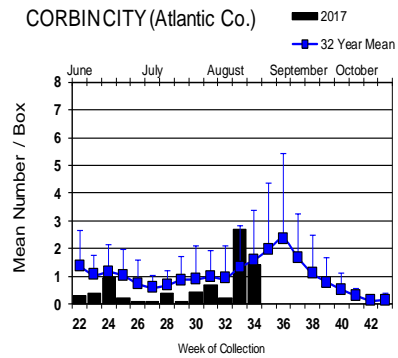
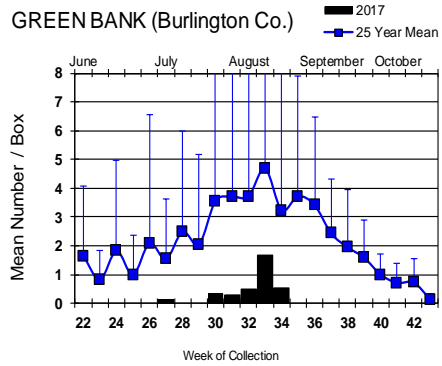
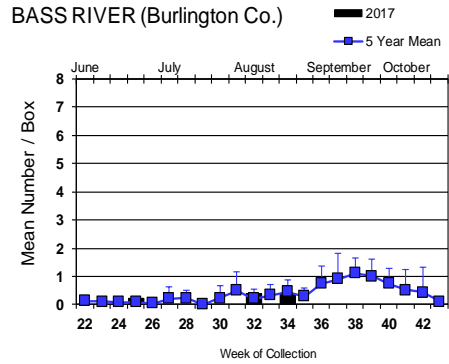
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aep.org/vaccination_guidelines.htm

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

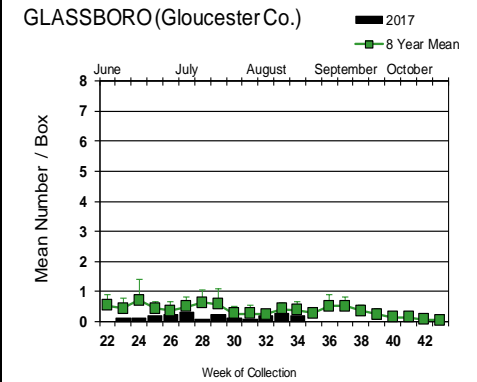
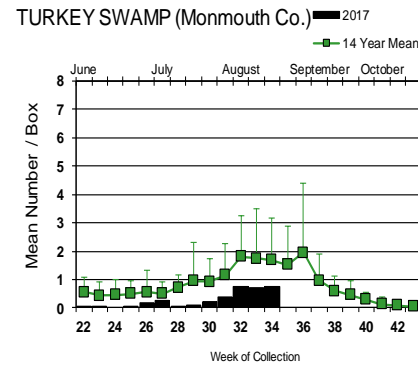
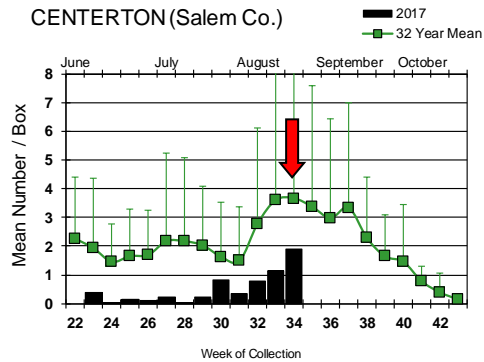
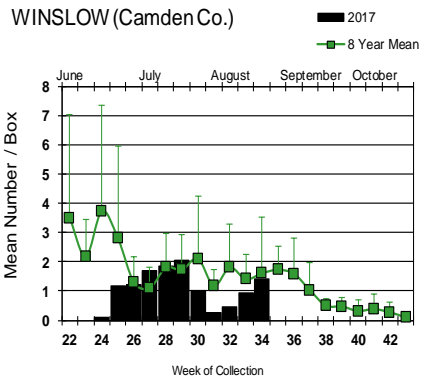
Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes canadensis canadensis</i>	5	59		
<i>Aedes cantator</i>	10	26		
<i>Aedes japonicus</i>	2	20		
(<i>Aedes provocans</i>)	1	14		
<i>Aedes sollicitans</i>	4	22		
<i>Aedes taeniorhynchus</i>	1	8		
<i>Aedes triseriatus</i>	1	4		
<i>Aedes vexans</i>	2	112		
<i>Anopheles bradleyi</i>	80	664		
<i>Anopheles crucians</i>	2	18		
<i>Anopheles punctipennis</i>	25	192		
<i>Anopheles quadrimaculatus</i>	10	153		
<i>Coquillettidia perturbans</i>	68	1339		
<i>Culex erraticus</i>	34	620		
<i>Culex pipiens</i>	466	3885		
<i>Culex salinarius</i>	175	1221		
<i>Culex</i> sp.	24	67		
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	2	8		
State Total	913	8433		

Culiseta melanura Population Graphs

Coastal



Inland



One detection of EEE has occurred at Centerton. Mosquito population continue to increase in about half the locations. Due diligence should be done in consideration of the increase in positive pools. Positive pools, at this time in reporting, remain in the southern half of the state.

= 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(5) TX(1) WI(8)
- mosquito pools: MA(1) NJ(3) NY(4) RI(2)
- sentinel: FL(23) 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					1/9
Alaska					
Arizona	0	72/97		0	40
Arkansas				0	3
California	171/239	1814/2284	58/130	5/9	41/59
Colorado	2/5	64/70		1	3/6
Connecticut		34/55			0
Delaware					
DC					
Florida	1	2	19/22		0
Georgia		0		1	7
Hawaii					
Idaho		74/75		2	1
Illinois	10/11	798/1144			4/5
Indiana	0	176/388		4	2
Iowa		20/34		1	1/3
Kansas		13		0	4
Kentucky				3/5	
Louisiana	13/19	297/342			19/21
Maine		0		0	0
Maryland					
Mass.		127/170		0	0
Michigan				5	
Minnesota					3
Mississippi		184/207		1	31/37
Missouri		0		1	2/3

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					
Nebraska	1	40/43		0	8/14
Nevada					1/6
New Hampshire		3/4		0	0
New Jersey		236/306		0	0
New Mexico					2
New York		188/712			3
North Carolina					
North Dakota	5/11	9/15		1	16/35
Ohio		600			1
Oklahoma					7
Oregon		21/45		1/4	1/2
Pennsylvania	12/20	1277/1767		0	1
Rhode Island		1/2		0	0
South Carolina	7	42			
South Dakota		28/55			4/10
Tennessee					2/3
Texas		603/701			29/36
Utah		105/172		4	2
Vermont					
Virginia				1	1
Washington	1	17/22		2/6	0
West Virginia					
Wisconsin	63/65	20/28		6	1
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.

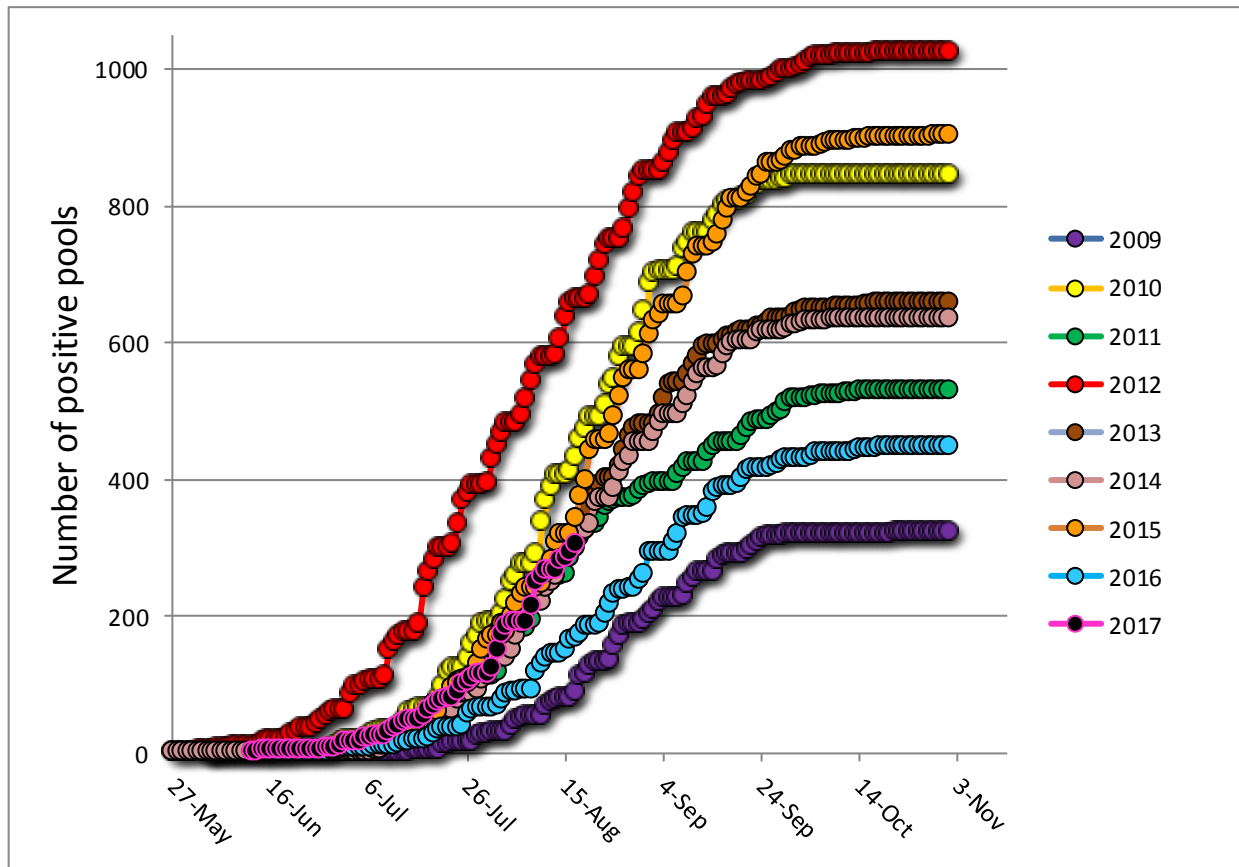
Mosquito Species Submitted and Tested for West Nile Virus Testing through 26 August 2017.

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	759	8324	3	0.360
<i>Aedes atlanticus</i>	2	7		
<i>Aedes atropalpus</i>	16	79		
<i>Aedes canadensis canadensis</i>	41	447		
<i>Aedes cantator</i>	28	240		
<i>Aedes cinereus</i>	1	54		
<i>Aedes grossbecki</i>	2	4		
<i>Aedes japonicus</i>	270	1177		
(<i>Aedes provocans</i>)	1	14		
<i>Aedes sollicitans</i>	21	618		
<i>Aedes stimulans</i>	1	10		
<i>Aedes taeniorhynchus</i>	10	86		
<i>Aedes triseriatus</i>	184	461		
<i>Aedes trivittatus</i>	3	5		
<i>Aedes vexans</i>	56	565		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles bradleyi</i>	89	950		
<i>Anopheles crucians</i>	2	18		
<i>Anopheles earlei</i>	1	1		
<i>Anopheles punctipennis</i>	61	289		
<i>Anopheles quadrimaculatus</i>	101	758		
<i>Coquillettidia perturbans</i>	79	1366		
<i>Culex erraticus</i>	45	688		
<i>Culex pipiens</i>	553	6032	8	1.326
<i>Culex restuans</i>	406	2177	1	0.459
<i>Culex salinarius</i>	190	1738	1	0.575
<i>Culex</i> spp.	1674	71896	289	4.020
<i>Culex territans</i>	29	88		
<i>Culiseta inornata</i>	1	1		
<i>Culiseta melanura</i>	364	4246	3	0.707
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	3	3		
<i>Psorophora columbiae</i>	15	68	1	14.706
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	10	112		
<i>Uranotaenia sapphirina</i>	2	23		
Grand Total	5028	102553	306	2.984

Remarks: To date, 5,028 pools of 102,553 mosquitoes from 35 species have been tested. 306 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 2.984, up from 2.585 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.

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 26 August 2017.

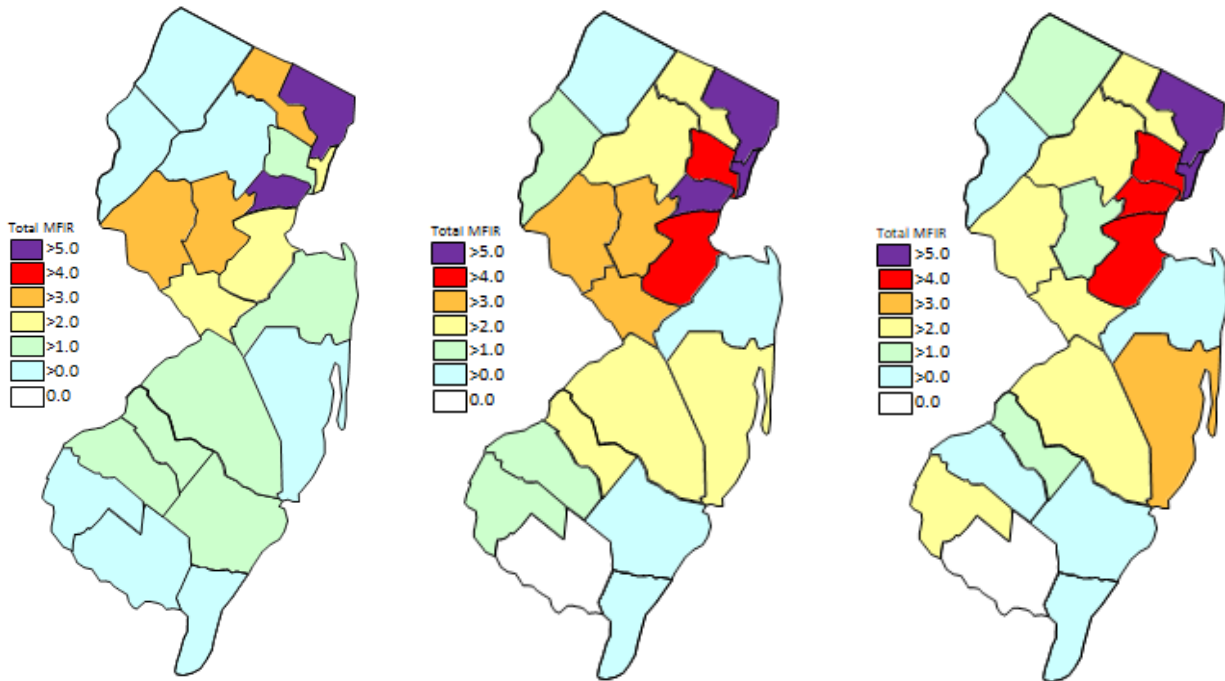
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		122	3195	1	0.313
	<i>Aedes albopictus</i>	6	43		
	<i>Aedes japonicus</i>	3	118		
	<i>Aedes sollicitans</i>	6	318		
	<i>Aedes taeniorhynchus</i>	3	71		
	<i>Aedes triseriatus</i>	1	12		
	<i>Aedes vexans</i>	5	224		
	<i>Anopheles bradleyi</i>	6	255		
	<i>Coquillettidia perturbans</i>	11	447		
	<i>Culex erraticus</i>	6	153		
	<i>Culex pipiens</i>	23	710		
	<i>Culex salinarius</i>	1	9		
	<i>Culex spp.</i>	13	355		
	<i>Culiseta melanura</i>	36	449	1	2.227
	<i>Psorophora columbiae</i>	1	1		
	<i>Psorophora ferox</i>	1	30		
Bergen		95	4324	44	10.176

<i>Aedes albopictus</i>	3	103		
<i>Aedes japonicus</i>	9	86		
<i>Culex</i> spp.	83	4135	44	10.641
Burlington	167	5874	15	2.554
<i>Aedes albopictus</i>	9	182		
<i>Aedes canadensis canadensis</i>	3	53		
<i>Aedes cantator</i>	2	18		
<i>Aedes japonicus</i>	4	92		
<i>Aedes taeniorhynchus</i>	1	8		
<i>Aedes triseriatus</i>	3	34		
<i>Aedes vexans</i>	2	112		
<i>Anopheles bradleyi</i>	2	150		
<i>Anopheles crucians</i>	2	18		
<i>Coquillettidia perturbans</i>	1	49		
<i>Culex erraticus</i>	2	140		
<i>Culex salinarius</i>	10	569		
<i>Culex</i> spp.	75	3038	13	4.279
<i>Culiseta melanura</i>	50	1410	2	1.418
<i>Orthopodomyia signifera</i>	1	1		
Camden	122	4670	13	2.784
<i>Aedes albopictus</i>	11	61		
<i>Aedes japonicus</i>	13	59		
<i>Culex</i> spp.	76	3796	13	3.425
<i>Culiseta melanura</i>	22	754		
Cape May	1980	8548	5	0.585
<i>Aedes albopictus</i>	320	697		
<i>Aedes atlanticus</i>	2	7		
<i>Aedes atropalpus</i>	16	79		
<i>Aedes canadensis canadensis</i>	16	24		
<i>Aedes cantator</i>	8	8		
<i>Aedes japonicus</i>	134	281		
<i>Aedes sollicitans</i>	2	2		
<i>Aedes taeniorhynchus</i>	2	2		
<i>Aedes triseriatus</i>	124	210		
<i>Aedes vexans</i>	17	22		
<i>Anopheles bradleyi</i>	79	459		
<i>Anopheles punctipennis</i>	7	10		
<i>Anopheles quadrimaculatus</i>	74	536		
<i>Coquillettidia perturbans</i>	15	18		
<i>Culex erraticus</i>	20	305		
<i>Culex pipiens</i>	467	3886	5	1.287
<i>Culex restuans</i>	345	974		
<i>Culex salinarius</i>	159	406		
<i>Culex</i> spp.	16	30		
<i>Culex territans</i>	29	88		
<i>Culiseta melanura</i>	119	471		
<i>Orthopodomyia signifera</i>	2	2		
<i>Psorophora columbiae</i>	3	3		
<i>Psorophora ferox</i>	2	5		
<i>Uranotaenia sapphirina</i>	2	23		
Cumberland	101	1127		
<i>Aedes albopictus</i>	13	155		

	<i>Aedes japonicus</i>	8	36		
	<i>Aedes sollicitans</i>	2	20		
	<i>Aedes triseriatus</i>	1	2		
	<i>Aedes vexans</i>	10	67		
	<i>Anopheles bradleyi</i>	1	75		
	<i>Anopheles punctipennis</i>	1	5		
	<i>Anopheles quadrimaculatus</i>	8	39		
	<i>Coquillettidia perturbans</i>	9	103		
	<i>Culex erraticus</i>	2	13		
	<i>Culex salinarius</i>	6	246		
	<i>Culex</i> spp.	27	234		
	<i>Culiseta melanura</i>	8	38		
	<i>Psorophora columbiae</i>	2	22		
	<i>Psorophora ferox</i>	3	72		
Essex		103	741	3	4.049
	<i>Aedes albopictus</i>	42	165		
	<i>Aedes japonicus</i>	8	13		
	<i>Culex</i> spp.	53	563	3	5.329
Gloucester		260	9971	16	1.605
	<i>Aedes albopictus</i>	54	1301	1	0.769
	<i>Aedes japonicus</i>	10	112		
	<i>Aedes provocans</i>	1	14		
	<i>Aedes triseriatus</i>	3	34		
	<i>Anopheles punctipennis</i>	18	157		
	<i>Anopheles quadrimaculatus</i>	9	152		
	<i>Coquillettidia perturbans</i>	2	7		
	<i>Culex pipiens</i>	12	717	1	1.395
	<i>Culex</i> spp.	109	7190	14	1.947
	<i>Culiseta melanura</i>	41	286		
	<i>Psorophora ferox</i>	1	1		
Hudson		111	5207	43	8.258
	<i>Culex</i> spp.	111	5207	43	8.258
Hunterdon		173	8088	27	3.338
	<i>Culex</i> spp.	173	8088	27	3.338
Mercer		129	2070	7	3.382
	<i>Aedes albopictus</i>	8	87		
	<i>Aedes japonicus</i>	29	100		
	<i>Culex pipiens</i>	4	130		
	<i>Culex restuans</i>	36	799	1	1.252
	<i>Culex</i> spp.	52	954	6	6.289
Middlesex		127	5722	28	4.893
	<i>Culex</i> spp.	114	5511	28	5.081
	<i>Culiseta melanura</i>	13	211		
Monmouth		398	5725	3	0.524
	<i>Aedes albopictus</i>	168	3644		
	<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>	11	278		
<i>Aedes taeniorhynchus</i>	4	5		
<i>Aedes triseriatus</i>	10	10		
<i>Aedes trivittatus</i>	2	2		
<i>Aedes vexans</i>	17	46		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles bradleyi</i>	1	11		
<i>Anopheles earlei</i>	1	1		
<i>Anopheles punctipennis</i>	30	85		
<i>Anopheles quadrimaculatus</i>	5	20		
<i>Coquillettidia perturbans</i>	8	18		
<i>Culex erraticus</i>	4	9		
<i>Culex salinarius</i>	3	58	1	17.241
<i>Culex</i> spp.	43	716	2	2.793
<i>Culiseta inornata</i>	1	1		
<i>Culiseta melanura</i>	14	144		
<i>Orthopodomyia signifera</i>	1	1		
<i>Psorophora ciliata</i>	3	3		
<i>Psorophora columbiae</i>	7	35		
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	1	1		
Morris	177	6874	17	2.473
<i>Aedes albopictus</i>	13	69		
<i>Coquillettidia perturbans</i>	12	429		
<i>Culex</i> spp.	151	6375	17	2.667
<i>Culiseta melanura</i>	1	1		
Ocean	142	2127	6	2.821
<i>Aedes albopictus</i>	49	964	1	1.037
<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>	4	53		
<i>Culex</i> spp.	60	928	5	5.388
<i>Culiseta melanura</i>	13	26		
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	113	1576	2	1.269
<i>Aedes albopictus</i>	24	142		
<i>Aedes japonicus</i>	4	6		
<i>Aedes triseriatus</i>	11	27		
<i>Aedes vexans</i>	3	6		
<i>Anopheles quadrimaculatus</i>	4	8		

<i>Coquillettidia perturbans</i>	6	66		
<i>Culex erraticus</i>	5	11		
<i>Culex pipiens</i>	1	1		
<i>Culex restuans</i>	1	3		
<i>Culex</i> spp.	33	955	1	1.047
<i>Culiseta melanura</i>	18	342		
<i>Psorophora columbiae</i>	2	7	1	142.857
<i>Psorophora ferox</i>	1	2		
Somerset	146	4520	14	3.097
<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.	130	4423	14	3.165
Sussex	153	3084	3	0.973
<i>Aedes albopictus</i>	7	16		
<i>Aedes triseriatus</i>	22	103		
<i>Culex pipiens</i>	1	4		
<i>Culex restuans</i>	15	340		
<i>Culex salinarius</i>	11	450		
<i>Culex</i> spp.	72	2073	3	1.447
<i>Culiseta melanura</i>	25	98		
Union	107	6373	45	7.061
<i>Aedes albopictus</i>	24	656	1	1.524
<i>Culex</i> spp.	83	5717	44	7.696
Warren	211	11918	12	1.007
<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.	196	11570	12	1.037
<i>Culiseta melanura</i>	1	13		
<i>Psorophora ferox</i>	1	1		
Grand Total	5028	102553	306	2.984



Cumulative WNV activity in 2016. WNV activity to 26 August 2017. WNV activity last week, 2017

Saint Louis Encephalitis (SLE) to 26 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		13	725		
	<i>Aedes triseriatus</i>	1	4		
	<i>Culex</i> spp.	12	721		
Cape May		482	3915		
	<i>Culex pipiens</i>	466	3885		
	<i>Culex</i> spp.	16	30		
Grand Total		495	4640		

La Crosse Encephalitis (LAC) to 26 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		14	293		
	<i>Aedes albopictus</i>	8	171		
	<i>Aedes japonicus</i>	4	92		
	<i>Aedes triseriatus</i>	2	30		
Sussex		22	103		
	<i>Aedes triseriatus</i>	22	103		
Grand Total		36	396		

Dengue (DENV) to 26 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 2 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 26 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		320	697		
	<i>Aedes albopictus</i>	320	697		
Mercer		8	87		
	<i>Aedes albopictus</i>	8	87		
Grand Total		328	784		

Zika (ZIKV) to 26 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 16 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		320	697		
	<i>Aedes albopictus</i>	320	697		
Mercer		8	87		
	<i>Aedes albopictus</i>	8	87		
Grand Total		328	784		