VECTOR SURVEILLANCE IN NEW JERSEY

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

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CDC WEEK 31: 29 July to 4 August, 2018

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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**	0.42	0.00	1	1		
Green Bank (Burlington Co.)/25	**Coastal**	3.58	0.32	27 (35)	5 (6)		
Corbin City (Atlantic Co.)/25	**Coastal**	0.97	0.24	53 (57) ‡	7 (8)		
Dennisville (Cape May Co.)/50	**Coastal**	6.03	0.04	262	12		
Winslow (Camden Co.)/50	**Inland**	1.06	2.16	1442	34	3	2.080
Centerton (Salem Co.)/50	**Inland**	1.45	0.38	171	10	1	5.848
Turkey Swamp (Monmouth Co.)/50	**Inland**	1.10	0.56	117	11		
Glassboro (Gloucester Co.)/48	**Inland**	0.39	0.12	116	9		

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

Remarks: Currently for the 2018 season, there are four detections of EEE among submitted mosquito pools, all at resting box sites (3 at Winslow and 1 at Centerton).

Statewide, 4145 *Cs. melanura* from 268 pools have been tested, with four positive pools detected for an overall *Cs. melanura* MFIR of 0.965. 8327 specimens in 683 pools from 14 other species have also been tested, with no positives detected. Overall MFIR for all species statewide is 0.321.

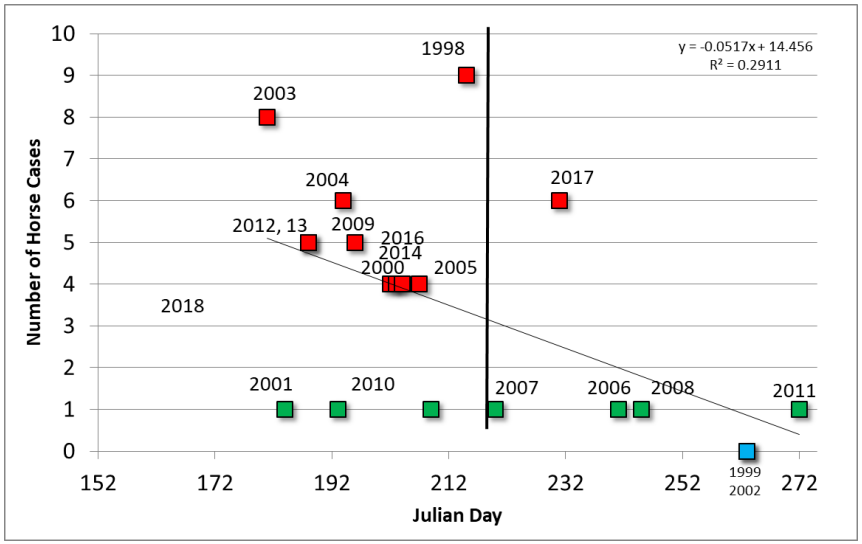
Traditional Resting Box Sites: 2193 *Cs. melanura* from 88 pools have been tested for EEE (plus two pools totaling 12 to be tested) in 2018. Four positive EEE pools have been detected from the Winslow and Centerton resting box site, the latest two from Winslow, collected 30 July.

	Additional *Cs. melanura* trapped by counties *traps with positives indicated in **BOLD.**				
County	**Trap types***	**Pools**	**Mosquitoes**	**Positives**	**MFIR**
Atlantic	CO2, RB	19	515		
Bergen	RB	4	11		
Burlington	CDCL	22	890		
Cape May	GR, RB	99	266		
Cumberland	BGSCL, RB	9	45		
Morris	CDCL	1	1		
Ocean	CDCL, RB	16	111		
Passaic	RB	1	1		
Salem	CDCL	3	46		
Sussex	ABC	5	60		
Warren	CDCL	1	6		
TOTAL		**180**	**1952**		

Additional County-set *Cs. melanura*: Counties maintain trap sites for *Cs. melanura* in other areas, using a variety of traps. No positives have been collected at these sites.

Horses and Humans: Currently, there is no horse or human cases reported. Last year, there were 6 horses detected with EEE. EEE is nearly always fatal for those horses without a complete vaccination history. Horses in New Jersey that have gone down in the past with EEE have either an incomplete vaccination history or NO vaccination history. Note that Florida is experiencing early and continued EEE activity with horse and now 1 human case. ***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



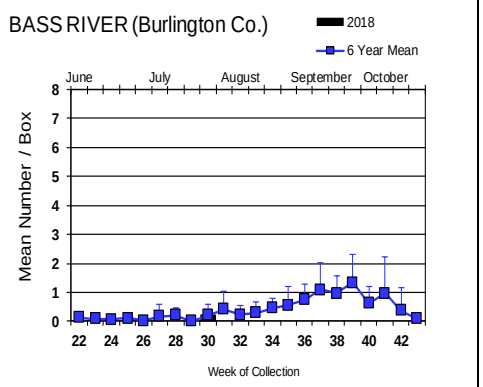
The graph to the right represents NJ EEE data with the first detection of the virus graphed as Julian date against the number of horse cases that occurred each year from 1998 to present. Around the beginning week of August, where the black line is drawn, we generally get one or no horse cases (exception was 2017, where a late detection was associated with 6 horse cases). This year, first detection occurred on 26 June – the PINK line. This line is the earliest for this graph, and may suggest that we may see multiple horse cases in NJ this year. Horse owners are urged to make sure their livestock/pets are up to date on vaccinations.

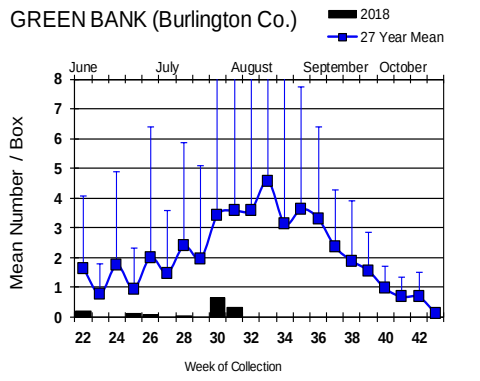
Additional Species: Fourteen additional species were tested for EEE. No positives were detected.

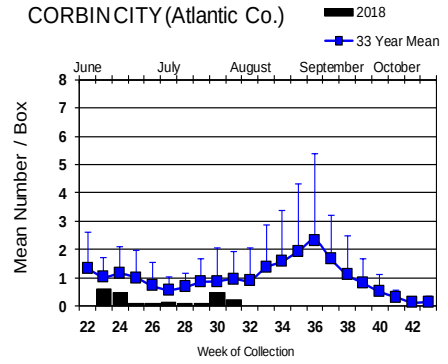
Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes canadensis canadensis	1	10		
Aedes cantator	2	2		
Aedes sollicitans	2	6		
Aedes taeniorhynchus	2	46		
Aedes vexans	1	6		
Anopheles bradleyi	11	48		
Anopheles punctipennis	6	21		
Anopheles quadrimaculatus	1	1		
Coquillettidia perturbans	51	1141		
Culex erraticus	23	110		
Culex pipiens	421	6075		
Culex salinarius	125	439		
Culex spp.	32	112		
Culiseta inornata	1	10		
Psorophora ferox	4	300		
State Total	**683**	**8327**		

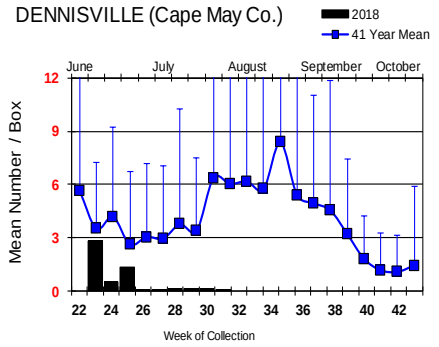
Culiseta melanura Populations

Coastal

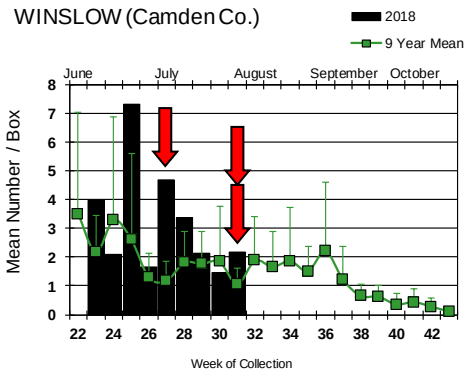


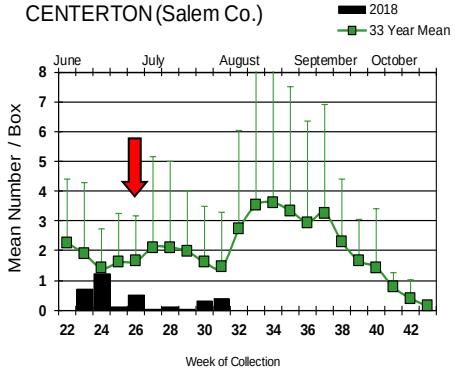


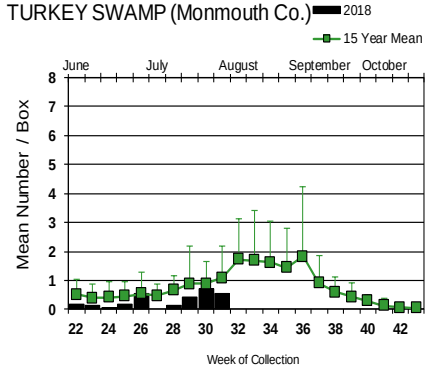


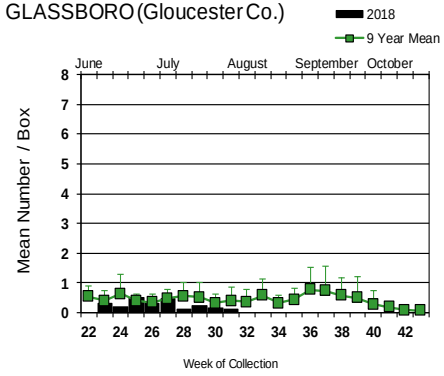


Inland









Most sites continue to show low population numbers, except for Winslow, which not only had higher than average numbers several times during this season, but also now has three positive EEE pools. On the other extreme, Centerton has shown low population levels, but detected a opsitive pool despite the decreased abundances. This pattern of detection with low numbers has occurred previously, particularly at the Green Bank site.

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

EEE in US (2018 cumulative cases): (Black or Red = previous + new reported cases occurring)

- **equine: FL(44/2 mule & donkey)**
- **mosquito pools: FL(2) NJ(2) RI(4)**
- **sentinel: FL(96/6 owl emus & 5 emu flocks)**
- **human: FL(1)**

West Nile Virus Positive Organisms in US, 2018

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		20			1
Arkansas					
California	108/167	315/480	11		10/12
Colorado					
Connecticut		30/62			
Delaware	2				
DC					
Florida	1	6/11	37/50		1
Georgia		Present			
Hawaii					
Idaho		7/8			1
Illinois	6/8	523/803			2
Indiana		63/122			
Iowa		Present			2
Kansas					
Kentucky		present			
Louisiana	7	253			13
Maine					
Maryland					1
Mass.		74/120			
Michigan	13/28	17/26			
Minnesota		Present			
Mississippi		43/65			4/11
Missouri	1			1	

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					
Nebraska		2/6			2
Nevada		Present			
New Hampshire		1			
New Jersey		127/212			
New Mexico					Present
New York		130/175			1
North Carolina					1
North Dakota	8	10/17		1	3/4
Ohio		479/822			2
Oklahoma		9/10			1
Oregon		8/11			
Pennsylvania	12/23	1100/2700			1
Rhode Island					
South Carolina					
South Dakota		7			1/10
Tennessee					1
Texas		245/315			6
Utah		9			
Vermont		20/26			
Virginia					
Washington		16/21			
West Virginia		1			
Wisconsin	14/19	8/13			
Wyoming					

* 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 through 3 August 2018

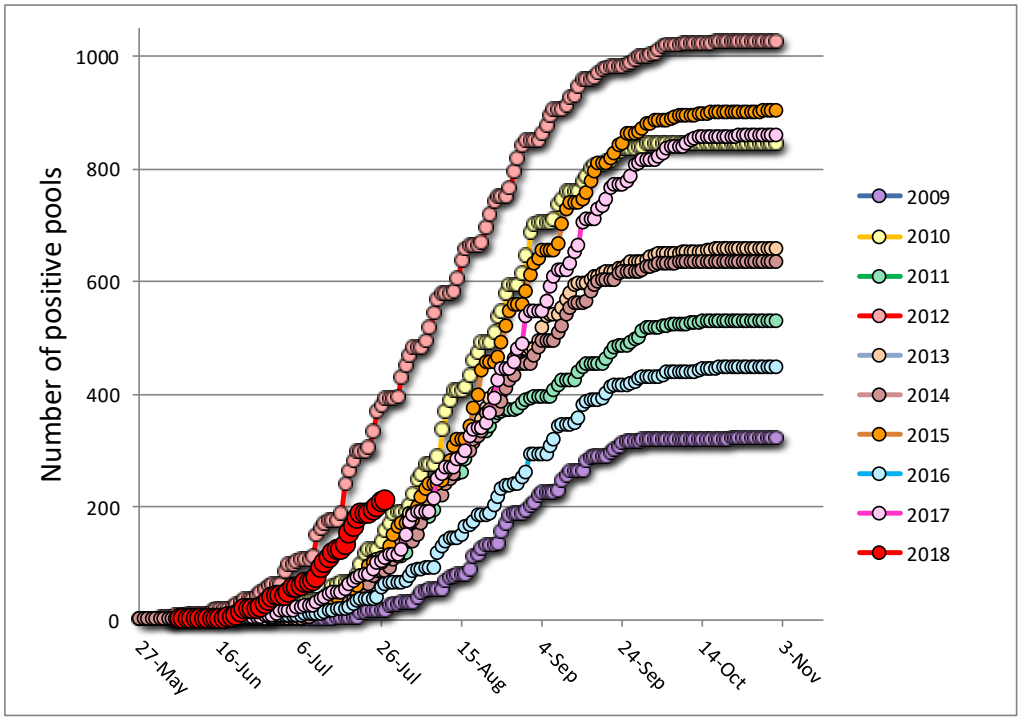
Species	Pools	Mosquitoes	Positives	MFIR
Aedes abserratus	1	11		
Aedes albopictus	399	1933	7	3.621
Aedes atropalpus	15	45		
Aedes canadensis canadensis	24	194		
Aedes cantator	7	52		
Aedes excrucians	1	2		
Aedes grossbecki	2	10		
Aedes infirmatus	1	1		
Aedes japonicus	355	2383	8	3.357
Aedes sollicitans	6	42		
Aedes sticticus	3	37		
Aedes taeniorhynchus	3	47		
Aedes thibaulti	1	10		
Aedes triseriatus	132	384		
Aedes trivittatus	11	68		
Aedes vexans	29	331	1	3.021
Anopheles barberi	1	7		
Anopheles bradleyi	15	65		
Anopheles punctipennis	32	104		
Anopheles quadrimaculatus	94	1602		
Coquillettidia perturbans	71	1950	1	0.513
Culex erraticus	33	154	1	6.494
Culex pipiens	459	6816	6	0.880
Culex restuans	360	3438	4	1.163
Culex salinarius	138	757		
Culex spp.	1466	64084	179	2.793
Culex territans	11	51		
Culiseta inornata	1	10		
Culiseta melanura	269	4146	5	1.206
Orthopodomyia signifera	1	2		
Psorophora columbiae	4	19		
Psorophora ferox	28	488		
Grand Total	**3973**	**89243**	**212**	**2.376**

Remarks: To date, 3973 pools of 89,243 mosquitoes from 31 species have been tested. A total of 212 positive WNV pools have been throughout the state. The bulk of new positives were in the enzootic vector(s) *Culex* spp. First positive WNV pool detected has been revised from 7 June 2018 in Warren County to 5 June in Gloucester County, in *Culex pipiens*. Last year, the first positive *Culex* Mix pool was detected in Sussex County on 12 June and the first non-*Culex* positive was collected in *Aedes albopictus* on 14 July in Gloucester County. This year, the first non-*Culex* positive species was *Aedes japonicus*, also collected in Gloucester County on 7 JUNE, more than one month earlier. Other positive non-*Culex* species include *Aedes albopictus, Ae. vexans, Coquillettidia perturbans, Culex erraticus,* and *Culiseta melanura*.

***NOTE* - A*dditional* WNV pools have been reported to the counties, but are not yet in the database. This report should be considered up for revision as necessary.**

Humans, Horses and Wild Birds: Currently, no horse or human cases of WNV have been detected. In 2017, eight human cases of WNV were detected and two horse cases were detected. 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 previous 9 years, inclusive of the most active (2012) and least active (2009) years. The red series near the bottom of the graph represents this year, suggestive of increased activity.

WNV Results by County through 3 August 2018.

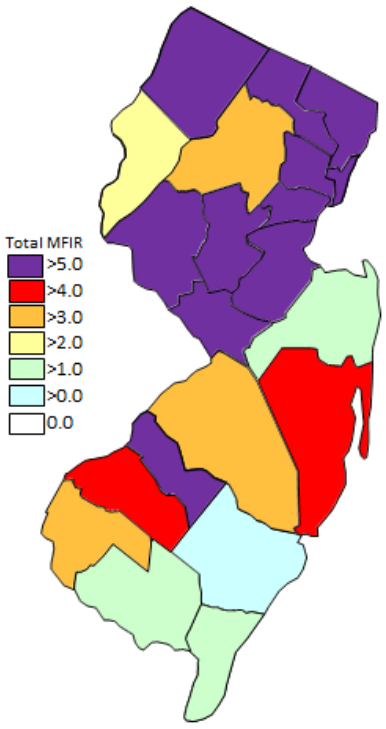
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**87**	**2483**	**5**	**2.014**
	Aedes albopictus	6	94	1	10.638
	Aedes canadensis canadensis	3	54		
	Aedes japonicus	4	43		
	Aedes sollicitans	1	5		
	Aedes sticticus	1	35		
	Aedes taeniorhynchus	2	46		
	Aedes vexans	4	37		
	Anopheles bradleyi	2	15		
	Coquillettidia perturbans	7	253		
	Culex erraticus	2	11		
	Culex pipiens	5	304		
	Culex restuans	1	23		
	Culex salinarius	1	24		
	Culex spp.	13	536	4	7.463
	Culiseta melanura	27	572		
	Psorophora ferox	8	431		
Bergen		**123**	**8665**	**42**	**4.847**
	Coquillettidia perturbans	2	34		

	Culex spp.	117	8620	42	4.872
	Culiseta melanura	4	11		
Burlington		**86**	**3473**	**11**	**3.167**
	Aedes albopictus	1	12		
	Aedes canadensis canadensis	1	10		
	Aedes japonicus	5	112	1	8.929
	Aedes triseriatus	1	6		
	Aedes vexans	1	6		
	Coquillettidia perturbans	1	52		
	Culex erraticus	1	7		
	Culex salinarius	3	63		
	Culex spp.	44	2287	8	3.498
	Culiseta melanura	28	918	2	2.179
Camden		**103**	**4048**	**14**	**3.458**
	Aedes albopictus	11	17	2	117.647
	Aedes excrucians	1	2		
	Aedes japonicus	13	109	1	9.174
	Anopheles punctipennis	2	3		
	Culex spp.	41	2473	11	4.448
	Culiseta melanura	34	1442		
	Psorophora ferox	1	2		
Cape May		**1551**	**11252**	**4**	**0.355**
	Aedes albopictus	189	318		
	Aedes atropalpus	15	45		
	Aedes canadensis canadensis	7	11		
	Aedes cantator	2	2		
	Aedes infirmatus	1	1		
	Aedes japonicus	156	385		
	Aedes sollicitans	1	1		
	Aedes sticticus	1	1		
	Aedes triseriatus	77	155		
	Aedes vexans	3	3		
	Anopheles bradleyi	11	48		
	Anopheles punctipennis	6	8		
	Anopheles quadrimaculatus	83	1451		
	Coquillettidia perturbans	6	8		
	Culex erraticus	9	47		
	Culex pipiens	424	6078	4	0.658
	Culex restuans	286	1630		
	Culex salinarius	121	379		
	Culex spp.	27	95		
	Culex territans	11	51		
	Culiseta melanura	111	528		
	Orthopodomyia signifera	1	2		
	Psorophora ferox	3	5		
Cumberland		**106**	**874**	**4**	**4.577**
	Aedes albopictus	26	190		
	Aedes japonicus	8	41		
	Aedes sticticus	1	1		
	Aedes triseriatus	6	13		
	Aedes trivittatus	1	8		
	Aedes vexans	9	148		

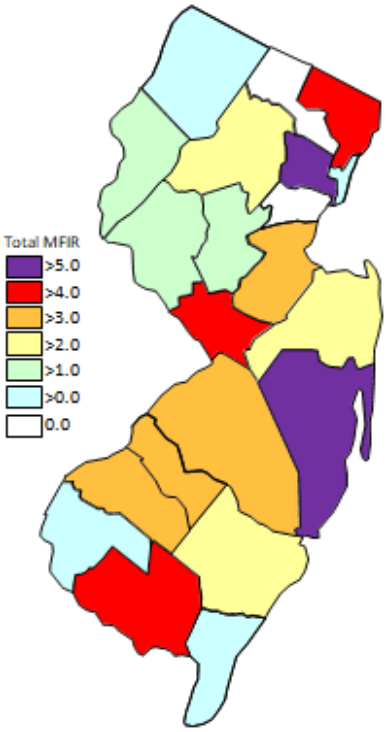
	Anopheles punctipennis	6	34		
	Anopheles quadrimaculatus	6	141		
	Coquillettidia perturbans	1	1		
	Culex erraticus	5	37	1	27.027
	Culex pipiens	4	39		
	Culex restuans	1	1		
	Culex salinarius	2	2		
	Culex spp.	14	149	1	6.711
	Culiseta melanura	9	45	2	44.444
	Psorophora columbiae	2	8		
	Psorophora ferox	5	16		
Essex		**68**	**416**	**4**	**9.615**
	Aedes albopictus	14	22		0.000
	Aedes japonicus	9	18	2	111.111
	Aedes trivvitatus	6	9		
	Culex spp.	39	367	2	5.450
Gloucester		**114**	**3754**	**14**	**3.729**
	Aedes albopictus	22	90		
	Aedes japonicus	25	347	4	11.527
	Aedes triseriatus	8	40		
	Anopheles barberi	1	7		
	Culex pipiens	2	21	1	47.619
	Culex spp.	47	3133	9	2.873
	Culiseta melanura	9	116		
Hudson		**81**	**4520**	**8**	**1.770**
	Culex spp.	81	4520	8	1.770
Hunterdon		**144**	**7183**	**14**	**1.949**
	Culex spp.	144	7183	14	1.949
Mercer		**140**	**3273**	**16**	**4.888**
	Aedes albopictus	18	207		
	Aedes canadensis canadensis	1	6		
	Aedes japonicus	38	185		
	Aedes triseriatus	2	7		
	Aedes vexans	6	101	1	9.901
	Culex pipiens	5	59	1	16.949
	Culex restuans	31	1025	4	3.902
	Culex spp.	39	1683	10	5.942
Middlesex		**112**	**4340**	**16**	**3.687**
	Aedes albopictus	3	36		
	Aedes japonicus	1	64		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	1	1		
	Culex spp.	105	4228	16	3.784
	Culiseta inornata	1	10		
Monmouth		**239**	**4714**	**12**	**2.546**
	Aedes albopictus	43	612	1	1.634
	Aedes canadensis canadensis	10	100		
	Aedes cantator	5	50		

	Aedes grossbecki	2	10		
	Aedes japonicus	13	43		
	Aedes sollicitans	4	36		
	Aedes taeniorhynchus	1	1		
	Aedes triseriatus	6	73		
	Aedes trivittatus	4	51		
	Aedes vexans	4	14		
	Anopheles bradleyi	1	1		
	Anopheles punctipennis	15	56		
	Anopheles quadrimaculatus	1	1		
	Coquillettidia perturbans	3	4		
	Culex erraticus	1	1		
	Culex salinarius	7	243		
	Culex spp.	99	3267	11	3.367
	Culiseta melanura	10	118		
	Psorophora ferox	10	33		
Morris		**199**	**8019**	**19**	**2.369**
	Coquillettidia perturbans	6	300		
	Culex spp	192	7718	19	2.462
	Culiseta melanura	1	1		
Ocean		**136**	**921**	**5**	**5.429**
	Aedes albopictus	37	235	3	12.766
	Aedes japonicus	16	49		
	Aedes triseriatus	11	33		
	Aedes vexans	1	2		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	2	5		
	Coquillettidia perturbans	15	145	1	6.897
	Culex erraticus	2	2		
	Culex salinarius	2	3		
	Culex spp.	32	334	1	2.994
	Culiseta melanura	16	111		
	Psorophora ferox	1	1		
Passaic		**94**	**908**		
	Aedes abserratus	1	11		
	Aedes albopictus	4	10		
	Aedes japonicus	22	130		
	Aedes thibaulti	1	10		
	Aedes triseriatus	2	6		
	Coquillettidia perturbans	4	34		
	Culex erraticus	4	6		
	Culex pipiens	11	202		
	Culex restuans	9	95		
	Culex spp.	35	403		
	Culiseta melanura	1	1		
Salem		**176**	**4340**	**1**	**0.230**
	Aedes albopictus	20	43		
	Aedes canadensis canadensis	1	1		
	Aedes japonicus	20	140		
	Aedes triseriatus	14	19		
	Anopheles bradleyi	1	1		
	Anopheles punctipennis	1	1		

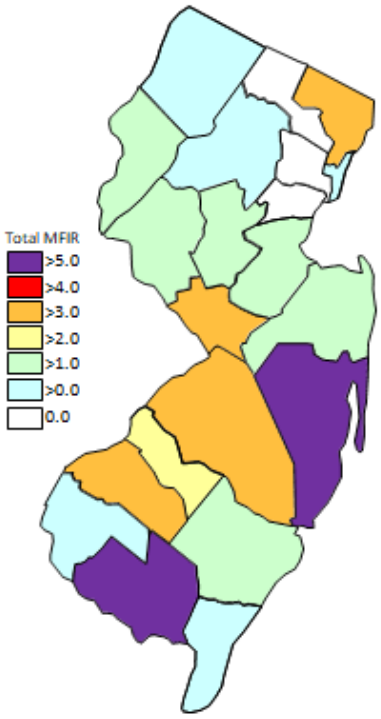
	Anopheles quadrimaculatus	2	4		
	Coquillettidia perturbans	16	468		
	Culex erraticus	9	43		
	Culex pipiens	4	5		
	Culex restuans	2	13		
	Culex spp.	72	3383		
	Culiseta melanura	13	217	1	4.608
	Psorophora columbiae	1	2		
Somerset		**110**	**4282**	**7**	**1.635**
	Aedes albopictus	1	2		
	Aedes canadensis canadensis	1	12		
	Aedes japonicus	9	119		
	Aedes triseriatus	1	3		
	Culex spp.	98	4146	7	1.688
Sussex		**139**	**4094**	**2**	**0.489**
	Aedes albopictus	1	3		
	Aedes japonicus	2	56		
	Aedes triseriatus	3	27		
	Coquillettidia perturbans	9	650		
	Culex pipiens	4	108		
	Culex restuans	30	651		
	Culex salinarius	2	43		
	Culex spp.	83	2496	2	0.801
	Culiseta melanura	5	60		
Warren		**165**	**7684**	**14**	**1.822**
	Aedes albopictus	3	42		
	Aedes japonicus	14	542		
	Aedes triseriatus	1	2		
	Aedes vexans	1	20		
	Culex spp.	144	7063	14	1.982
	Culiseta melanura	1	6		
	Psorophora columbiae	1	9		
Grand Total		**3973**	**89243**	**212**	**2.376**



Cumulative WNV activity in 2017.



WNV activity to 3 August 2018.



WNV activity last week, 2018

Saint Louis Encephalitis (SLE) to 3 August 2018.

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 2018. No human cases have been reported.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		**29**	**1665**		
	Culex spp	29	1665		
Cape May		**447**	**6168**		
	Culex pipiens	421	6075		
	Culex spp.	26	93		
Grand Total		**476**	**7833**		

La Crosse Encephalitis (LAC) to 3 August 2018.

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 LAC have been tested yet for 2018. No human cases have been reported.

County	Species			Positives	MFIR
Burlington		**6**	**118**		
	Aedes japonicus	5	112		
	Aedes triseriatus	1	6		
Ocean		**4**	**9**		
	Aedes albopictus	2	3		
	Aedes japonicus	1	1		
	Aedes triseriatus	1	5		
Salem		**1**	**1**		
	Aedes triseriatus	1	1		
Sussex		**3**	**27**		
	Aedes triseriatus	3	27		
Grand Total		**14**	**155**		

Dengue (DENV) to 3 August 2018.

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 been tested yet in 2018. There are currently 4 travel-related human cases in NJ.

County	Species	DENV1		DENV2		DENV3		DENV4		Pos.	MFIR
		Pool	Mos.	Pool	Mos.	Pool	Mos.	Pool	Mos.		
Atlantic		**6**	**94**	**6**	**94**	**6**	**94**	**6**	**94**		
	Aedes albopictus	6	94	6	94	6	94	6	94		
Middlesex		**2**	**12**	**2**	**12**	**2**	**12**	**2**	**12**		
	Aedes albopictus	2	12	2	12	2	12	2	12		
Ocean		**19**	**172**	**19**	**172**	**19**	**172**	**19**	**172**		
	Aedes albopictus	19	172	19	172	19	172	19	172		
Sussex		**1**	**3**	**1**	**3**	**1**	**3**	**1**	**3**		
	Aedes albopictus	1	3	1	3	1	3	1	3		
Grand Total		**28**	**281**	**28**	**281**	**28**	**281**	**28**	**281**		

Chikungunya (CHIK) to 3 August 2018.

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 been tested yet in 2018. There are currently 5 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**6**	**94**		
	Aedes albopictus	6	94		
Middlesex		**2**	**12**		
	Aedes albopictus	2	12		
Ocean		**19**	**172**		
	Aedes albopictus	19	172		
Sussex		**1**	**3**		
	Aedes albopictus	1	3		
Grand Total		**28**	**281**		

Zika (ZIKV) to 3 August 2018.

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 2018. There are currently 6 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**6**	**94**		
	Aedes albopictus	6	94		
Cape May		**185**	**313**		
	Aedes albopictus	185	313		
Middlesex		**2**	**12**		
	Aedes albopictus	2	12		
Ocean		**19**	**172**		
	Aedes albopictus	19	172		
Sussex		**1**	**3**		
	Aedes albopictus	1	3		
Grand Total		**213**	**594**		