VECTOR SURVEILLANCE IN NEW JERSEY

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

Prepared by Lisa M. Reed, Diana Carle and Dina Fonseca Center for Vector Biology, Rutgers University CDC WEEK 37: 9 September to 15 September, 2018



This New Jersey Agricultural Experiment Station report is supported by Rutgers University, Hatch funds, funding from the NJ State Mosquito Control Commission and with the participation of the Department of Health, Department of Agriculture and of the 21 county mosquito control agencies of New Jersey.

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	1.08	0.00	3	2		
Green Bank (Burlington Co.)/25	Coastal	2.37	7.44	68 (254) [‡]	10 (13)		
Corbin City (Atlantic Co.)/25	Coastal	1.66	1.32	144 [‡] (177)	13 (14)		
Dennisville (Cape May Co.)/50	Coastal	4.53	0.02	291	16		
Winslow (Camden Co.)/50	Inland	1.21	1.50	2006	47	4	1.994
Centerton (Salem Co.)/50	Inland	3.26	0.64	323	16	2	6.192
Turkey Swamp (Monmouth Co.)/50	Inland	0.90	0.86	319 (362)‡	16 (17)	1	2.762
Glassboro (Gloucester Co.)/50	Inland	0.72	0.32	152	14		

Culiseta melanura and Eastern Equine Encephalitis

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

Remarks: Currently for the 2018 season, there are 12 detections of EEE among submitted mosquito pools, seven at resting box sites (4 at Winslow, 2 at Centerton, 1 at Turkey Swamp) and five from county-set traps, the latest from Burlington County. All positive pools are in the enzootic vector, *Culiseta melanura*. Four horses have tested positive for EEE; all were not vaccinated and all were euthanized.

Statewide, 6756 *Cs. melanura* from 425 pools have been tested, with 12 positive pools detected for an overall *Cs. melanura* MFIR of 1.776. 14143 specimens in 1293 pools from 20 other species have also been tested, with no positives detected. Overall MFIR for all species statewide is 0.574.

Traditional Resting Box Sites: 3344 *Cs. melanura* from 134 pools have been tested for EEE (plus five pools totaling 262 to be tested) in 2018. No additional positive pools were detected at the traditional resting box sites this past week. A total of 7 positive pools have been detected at the traditional resting box sites.

	Additional <i>Cs. melanura</i> trapped by counties *traps with positives indicated in BOLD UNDERLINED.							
County	Trap types*	Pools	Pools Mosquitoes Positives					
Atlantic	CO2, <u>GR</u> , RB	31	773	1	1.292			
Bergen	RB	7	21					
Burlington	CDCL	45	1848	4	2.165			
Cape May	GR, RB	150	404					
Cumberland	BGSCL, RB	13	74					
Middlesex	RB	2	21					
Monmouth	OTHER	1	2					
Morris	CDCL	1	1					
Ocean	CDCL, RB	24	140					
Passaic	RB	4	4					
Salem	CDCL	4	49					
Sussex	ABC	8	69					
Warren	CDCL	1 1	6					
TOTAL		291	3412	5	1.465			

Additional County-set Cs.

melanura: Counties maintain trap sites for *Cs. melanura* in other areas, using a variety of traps. One new positive pool was detected in Burlington County, for a total of 5 county-trapped positive pools.

Horses and Humans: Four horses have been reported with EEE. The fourth horse was reported with EEE in Ocean County. This gelding of unknown age and unknown vaccination history showed symptoms on the 3rd of September and was euthanized on the 4th. A third EEE horse was been reported in Ocean County. This seven year old had an unknown vaccination history, but had apparently been purchased 2 months prior. Date of onset and euthanasia was 4 Sept. The second reported horse with EEE was euthanized on 27 Aug in Camden County. This 12 year old gelding had not been vaccinated this year. The first horse case of EEE was reported in a 5 year-old mare in Monmouth County. This horse was reportedly vaccinated last year, but was not current for 2018. She was euthanized on 18 Aug. 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. *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: Twenty additional species were tested for EEE. No positives were detected.

Species other than Cs. m	elanura	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus		7	34		
Aedes canadensis canadensi	is	1	10		
Aedes cantator		2	2		
Aedes infirmatus		1	1		
Aedes japonicus		1	1		
Aedes sollicitans		9	35		
Aedes taeniorhynchus		3	88		
Aedes triseriatus		1	1		
Aedes vexans		2	28		
Anopheles barberi		1	1		
Anopheles bradleyi		48	346		
Anopheles punctipennis		13	43		
Anopheles quadrimaculatus		1	1		
Coquillettidia perturbans		82	1761		
Culex erraticus		79	722		
Culex pipiens		710	9260		
Culex salinarius		278	1297		
<i>Culex</i> spp.		47	195		
Culiseta inornata		1	10		
Psorophora columbiae		2	7		
Psorophora ferox		4	300		
	State Total	1293	14143		

Culiseta melanura Populations



Populations exploded at Green Bank this past week. For the past two decades, Green Bank has been experiencing low population numbers as the canopy at the resting box site has opened up. Occasionally, abundances would soar, but in the 1980's and 1990's, populations were much higher overall, as evidenced by the large error bars in the historical averages.

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

- equine: AL(3) FL(51/2 mule & donkey) GA(6) NC(7) NJ(4)NY(1) SC(1) VA(2) WI(1) Ontario Canada(8)

- mosquito pools: FL(2) NJ(12) NY(17) RI(4) NC(1)
- sentinel: FL(141/6 owl emus & 5 emu flocks) DE(6)
- human: FL(3) GA(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 <u>here</u>.

	Birds	Mosquito Pools	Sentinels	Horses	Humans		Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama					13/ <mark>18</mark>	Montana		9		28	22
Alaska						Nebraska	1	67/ <mark>109</mark>			57/ <mark>79</mark>
Arizona		55			7	Nevada		Present			1
Arkansas						New Hampshire	4	13/ <mark>16</mark>			
California	397/ <mark>422</mark>	1,456/ <mark>1,606</mark>	84/104	6	42/ <mark>56</mark>	New Jersey		848/ <mark>929</mark>		1	9/ <mark>19</mark>
Colorado	Present	Present			16	New Mexico					
Connecticut		279/ <mark>334</mark>				New York		1,048 <mark>/1,066</mark>		2	11/12
Delaware	15/ <mark>27</mark>		28/47	3	2/5	North Carolina					3
DC	1	14			6	North Dakota	12	88		3/ <mark>4</mark>	86/108
Elorida	1	22/25	188/212	1/2	7/8	Ohio		2,592/ <mark>2,734</mark>		8/15	14/16
Coordia	•	Present			7	Oklahoma		17traps			2
Georgia		Tresent			1	Oregon	1	47			1
Hawaii				•	4/0	Pennsylvania	38	2,140		3	1
Idaho		39		2	4/9	Rhode Island		8			
Illinois	22/ <mark>24</mark>	2,699/ <mark>2,865</mark>		2	34/ <mark>5</mark> 1	South Carolina					2
Indiana		429/ <mark>490</mark>			4/ <mark>9</mark>	South Dakota		9counties			101/ <mark>124</mark>
Iowa		45/ <mark>70</mark>		4	18/ <mark>30</mark>	Tennessee	1	514/ <mark>545</mark>			6
Kansas					2	Texas		680 <mark>/713</mark>		1	32 <mark>/50</mark>
Kentucky		Present			1	Utah		138 <mark>/154</mark>			6/7
Louisiana	67/ <mark>73</mark>	948/ <mark>984</mark>		2	60/ <mark>72</mark>	Vermont		94/1 <mark>20</mark>		1	
Maine		1			2	Virginia					17
Maryland(+DC)	1	23			12	Washington		44/48		1/2	1
Mass.		499/ <mark>525</mark>		1	9/11	West Virginia		24			
Michigan	83/ <mark>93</mark>	141/ <mark>145</mark>			31/ <mark>37</mark>	Wisconsin	42/44	78/ <mark>79</mark>		1	1/2
Minnesota		Present		Present	4	Wyoming	2	5/10		6	1
Mississippi		108			31/32						
Missouri	1	3		3	7/10						

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.

Species	Pools	Mosquitoes	Positives	MFIR
Aedes abserratus	1	11		
Aedes albopictus	1038	8620	31	3.596
Aedes atlanticus	4	9		
Aedes atropalpus	21	55		
Aedes canadensis canadensis	27	227		
Aedes cantator	7	52		
Aedes excrucians	1	2		
Aedes grossbecki	2	10		
Aedes infirmatus	2	2		
Aedes japonicus	572	3442	19	5.520
Aedes sollicitans	17	128		
Aedes sticticus	3	37		
Aedes taeniorhynchus	8	171	1	5.848
Aedes thibaulti	1	10		
Aedes triseriatus	224	574	3	5.226
Aedes trivittatus	15	145	1	6.897
Aedes vexans	102	1693	2	1.181
Anopheles barberi	2	8		
Anopheles bradleyi	53	367		
Anopheles crucians	1	2	1	500.0
Anopheles punctipennis	56	181	1	5.525
Anopheles quadrimaculatus	144	2391	1	0.418
Coquillettidia perturbans	106	2690	3	1.115
Culex erraticus	112	928	6	6.466
Culex pipiens	783	10830	27	2.493
Culex restuans	465	3839	6	1.563
Culex salinarius	310	2846	2	0.703
Culex spp.	2627	107172	811	7.567
Culex territans	14	63		
Culiseta inornata	1	10		
Culiseta melanura	426	6793	12	1.767
Orthopodomyia signifera	2	3		
Psorophora ciliata	3	62		
Psorophora columbiae	20	115	1	8.696
Psorophora cyanescens	1	14		
Psorophora ferox	38	609		
Psorophora howardii	1	2	1	500.0
Uranotaenia sapphirina	3	13		
Grand Total	7213	154126	929	6.028

Mosquito Species Submitted and Tested for West Nile Virus through 14 September 2018

Remarks: To date, 7213 pools of 154,126 mosquitoes from 37 species have been tested. A total of 929 positive WNV pools have been detected throughout the state. The bulk of new positives continue to be 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. Positive non-Culex species also include Aedes albopictus, Ae. taeniorhynchus, Ae. triseriatus, Ae. trivittatus, Ae. vexans, Anopheles crucians, An. punctipennis, An. quadrimaculatus, Coquillettidia perturbans, Culex erraticus, Culiseta melanura, Psorophora columbiae and Ps. howardii. The statewide MFIR rate for all mosquitoes is 6.028.

NOTE - Additional 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 nineteen human cases of WNV have been detected in the following counties: Bergen 4, Burlington 1, Camden 1, Cape May 1, Essex 1, Hudson 1, Hunterdon 2, Middlesex 2, Morris 1, Ocean 1, Passaic 1, Somerset 1, Union 1, and Warren 1. Despite the significant increase in human cases, the relationship between overall MFIR values and human cases (graph to right) suggest we can reasonably expect more cases.



The first WNV horse case has been reported, occurring in Burlington County. The 10 year old mare is currently being treated. For further information, see <u>http://www.nj.gov/health/cd/statistics/arboviral-stats/</u>.

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 represents this year and is on track for very high activity, appearing to surpass 2012.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		183	4883	22	4.505
	Aedes albopictus	34	814	1	1.229
	Aedes canadensis canadensis	3	54		
	Aedes japonicus	6	64		
	Aedes sollicitans	2	57		
	Aedes sticticus	1	35		
	Aedes taeniorhvnchus	3	121		
	Aedes vexans	11	134	1	7.463
	Anopheles bradlevi	2	15	-	
	Coquillettidia perturbans	11	306	1	3,268
	Culex erraticus	8	91	1	10.989
	Culex pipiens	17	706	6	8,499
	Culex restuans	1	23	Ũ	01100
	Culex salinarius	1	24		
	Culex spp	30	1071	10	9 337
	Culiseta melanura	44	Q17	2	2 181
	Psoronhora ferox	44 0	151	2	2.101
		3	401		
Bergen		229	14692	110	7 487
	Aedes albonictus	17	438	110	1.401
	Aedes japonicus	5	20	1	50 000
	Coquillettidia perturbans	4	50		00.000
	Culex spp	195	14161	108	7 627
	Culiseta melanura	7	21	100	1.021
	Psorophora howardii	1	2	1	500 000
	r scrophola newaran		2	I I	000.000
Burlington		193	6105	31	5.078
	Aedes albopictus	15	163		
	Aedes albopictus Aedes canadensis canadensis	15 1	163 10		
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus	15 1 1	163 10 1		
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus	15 1 1 11	163 10 1 146	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus	15 1 1 11 11	163 10 1 146 42	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus	15 1 1 11 1 2	163 10 1 146 42 7	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans	15 1 1 11 1 2 2	163 10 1 146 42 7 28	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi	15 1 1 11 1 2 2 2	163 10 1 146 42 7 28 76	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans	15 1 11 1 2 2 2 2	163 10 1 146 42 7 28 76 127	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus	15 1 11 1 2 2 2 2 6	163 10 1 146 42 7 28 76 127 141	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens	15 1 11 1 2 2 2 6 1	163 10 1 146 42 7 28 76 127 141 1	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius	15 1 1 1 1 2 2 2 6 1 7	163 10 1 146 42 7 28 76 127 141 1 207	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp.	15 1 1 1 1 2 2 2 6 1 7 84	163 10 1 146 42 7 28 76 127 141 1 207 3253	2	13.699
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 11 1 2 2 2 6 1 7 84 57	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897	2 23 6	13.699 7.070 3.163
	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex salinarius Culex salinarius Culex spp. Culiseta melanura	15 1 11 1 2 2 2 6 1 7 84 57	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897	2 23 6	13.699 7.070 3.163
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 11 1 2 2 2 2 6 1 7 84 57 161	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312	2 23 6 29	13.699 7.070 3.163 5.459
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 1 11 2 2 2 2 6 1 7 84 57 161 24	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74	2 23 6 29 3	13.699 7.070 3.163 5.459 40.541
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 1 11 2 2 2 2 6 1 7 84 57 161 24 1	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2	2 23 6 29 3	13.699 7.070 3.163 5.459 40.541
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 1 11 2 2 2 2 2 6 1 7 84 57 161 24 1 24	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129	2 23 6 29 3 1	13.699 7.070 3.163 5.459 40.541 7.752
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura	15 1 1 11 2 2 2 2 2 2 2 2 6 1 7 84 57 161 24 1 24 1 24 1	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2	2 23 6 29 3 1	13.699 7.070 3.163 5.459 40.541 7.752
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura Aedes albopictus Aedes excrucians Aedes japonicus Aedes triseriatus Anopheles punctipennis	15 1 1 1 2 2 2 2 6 1 7 84 57 161 24 1 24 1 24 1 24 1 2	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2 3	2 23 6 29 3 1	13.699 7.070 3.163 5.459 40.541 7.752
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura Aedes albopictus Aedes excrucians Aedes triseriatus Aedes triseriatus Anopheles punctipennis Culex spp.	15 1 1 1 2 2 2 2 6 1 7 84 57 161 24 1 24 1 24 1 24 1 2 61	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2 3 3094	2 23 6 29 3 1 25	13.699 7.070 3.163 5.459 40.541 7.752 8.080
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura Aedes albopictus Aedes excrucians Aedes triseriatus Anopheles punctipennis Culex spp. Culiseta melanura	15 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2 3 3094 2006	2 23 6 29 3 1 25	13.699 7.070 3.163 5.459 40.541 7.752 8.080
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex spp. Culiseta melanura Aedes albopictus Aedes excrucians Aedes japonicus Aedes triseriatus Anopheles punctipennis Culex spp. Culiseta melanura Psorophora ferox	15 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2 3 3094 2006 2	2 23 6 29 3 1 25	13.699 7.070 3.163 5.459 40.541 7.752 8.080
Camden	Aedes albopictus Aedes canadensis canadensis Aedes infirmatus Aedes japonicus Aedes taeniorhynchus Aedes triseriatus Aedes vexans Anopheles bradleyi Coquillettidia perturbans Culex erraticus Culex pipiens Culex salinarius Culex sapp. Culiseta melanura Aedes albopictus Aedes excrucians Aedes iaponicus Aedes triseriatus Anopheles punctipennis Culex spp. Culiseta melanura Psorophora ferox	15 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	163 10 1 146 42 7 28 76 127 141 1 207 3253 1897 5312 74 2 129 2 3 3094 2006 2	2 23 6 29 3 1 25	13.699 7.070 3.163 5.459 40.541 7.752 8.080

WNV Results by County through 14 September 2018.

Cape May		2664	17709	14	0.791
	Aedes albopictus	466	1006		
	Aedes atlanticus	2	3		
	Aedes atropalpus	21	55		
	Aedes canadensis canadensis	7	11		
	Aedes cantator	2	2		
	Aedes infirmatus	1	1		
	Aedes japonicus	220	492		
	Aedes sollicitans	7	7		
	Aedes sticticus	1	1		
	Aedes taeniorhynchus	1	1		
	Aedes triseriatus	118	226		
	Aedes vexans	16	30		
	Anopheles bradleyi	46	270		
	Anopheles punctipennis	7	15		
	Anopheles quadrimaculatus	124	2121		
	Coquillettidia perturbans	10	33		
	Culex erraticus	30	303		
	Culex pipiens	710	9260	14	1.512
	Culex restuans	378	1886		_
	Culex salinarius	268	1080		
	Culex spp.	35	116		
	Culex territans	14	63		
	Culiseta melanura	166	695		
	Orthopodomyia signifera	2	3		
	Psorophora columbiae	5	10		
	Psorophora ferox	4	6		
	Uranotaenia sapphirina	3	13		
Cumberland		195	1977	10	5.058
Cumberland	Aedes albopictus	195 47	1977 646	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus	195 47 12	1977 646 47	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans	195 47 12 1	1977 646 47 3	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus	195 47 12 1 1	1977 646 47 3 1	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus	195 47 12 1 1 8	1977 646 47 3 1 16	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus	195 47 12 1 1 8 1	1977 646 47 3 1 16 8	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes vexans	195 47 12 1 1 8 1 19	1977 646 47 3 1 16 8 277	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes vexans Anopheles punctipennis	195 47 12 1 1 8 1 19 10	1977 646 47 3 1 16 8 277 43	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus	195 47 12 1 1 8 1 19 10 11	1977 646 47 3 1 16 8 277 43 252	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans	195 47 12 1 1 8 1 19 10 11 3	1977 646 47 3 1 16 8 277 43 252 3 101	10 3	5.058 4.644
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus	195 47 12 1 1 8 1 19 10 11 3 14	1977 646 47 3 1 16 8 277 43 252 3 124	10 3	5.058 4.644 16.129
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex pipiens	195 47 12 1 1 8 1 19 10 11 3 14 4	1977 646 47 3 1 16 8 277 43 252 3 124 39	10 3	5.058 4.644 16.129
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex restuans O de restuans	195 47 12 1 1 8 1 9 10 11 3 14 4 1	1977 646 47 3 1 16 8 277 43 252 3 124 39 1	10 3	5.058 4.644 16.129
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex restuans Culex restuans Culex salinarius	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 0.41	10 3	5.058 4.644 16.129
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex restuans Culex restuans Culex salinarius Culex spp.	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 5 12	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74	10 3 2 3	5.058 4.644 16.129 8.721
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex erraticus Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 0	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67	10 3 2 3 2	5.058 4.644 16.129 8.721 27.027
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes triseriatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex erraticus Culex restuans Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 5 13 6 0	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22	10 3 2 3 2	5.058 4.644 16.129 8.721 27.027
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex erraticus Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae Psorophora ferox	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22	10 3 2 3 2	5.058 4.644 16.129 8.721 27.027
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex erraticus Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae Psorophora ferox	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6 1 22	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573	10 3 2 3 2 12	5.058 4.644 16.129 8.721 27.027 20.942
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex restuans Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae Psorophora ferox	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6 6 1 22 33	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573 92	10 3 2 3 2 12	5.058 4.644 16.129 8.721 27.027 20.942
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex restuans Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae Psorophora ferox Aedes albopictus Aedes japonicus	195 47 12 1 1 8 1 9 10 11 3 14 4 1 3 35 13 6 6 6 122 33 18	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573 92 29	10 3 2 3 2 12 3	5.058 4.644 16.129 8.721 27.027 20.942 103.448
Cumberland	Aedes albopictus Aedes japonicus Aedes sollicitans Aedes sticticus Aedes triseriatus Aedes trivittatus Aedes trivittatus Aedes vexans Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex erraticus Culex restuans Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora columbiae Psorophora ferox Aedes albopictus Aedes japonicus Aedes trivittatus	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6 7 22 33 18 12	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573 92 29 15	10 3 2 3 2 12 3 1	5.058 4.644 16.129 8.721 27.027 20.942 103.448 66.667
Cumberland	Aedes albopictusAedes japonicusAedes sollicitansAedes sollicitansAedes sticticusAedes triseriatusAedes trivittatusAedes trivittatusAedes vexansAnopheles punctipennisAnopheles quadrimaculatusCoquillettidia perturbansCulex erraticusCulex restuansCulex salinariusCulex spp.Culiseta melanuraPsorophora columbiaePsorophora ferox	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6 7 2 33 18 12 2	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573 92 29 15 3 15 3	10 3 2 3 2 12 3 1	5.058 4.644 16.129 8.721 27.027 20.942 103.448 66.667
Cumberland	Aedes albopictusAedes japonicusAedes sollicitansAedes sollicitansAedes sticticusAedes triseriatusAedes trivittatusAedes trivittatusAedes vexansAnopheles punctipennisAnopheles quadrimaculatusCoquillettidia perturbansCulex erraticusCulex restuansCulex restuansCulex salinariusCulex spp.Culiseta melanuraPsorophora columbiaePsorophora feroxAedes trivittatusAedes vexansAnopheles quadrimaculatus	195 47 12 1 1 8 1 19 10 11 3 14 4 1 3 35 13 6 6 6 122 33 18 12 2 1	1977 646 47 3 1 16 8 277 43 252 3 124 39 1 10 344 74 67 22 573 92 29 15 3 1	10 3 2 3 2 12 3 1 1	5.058 4.644 16.129 8.721 27.027 20.942 103.448 66.667 1000.000

Gloucester		314	9204	72	7.823
	Aedes albopictus	71	589	5	8.489
	Aedes japonicus	59	752	9	11.968
	Aedes triseriatus	11	61		
	Aedes vexans	1	24		
	Anopheles barberi	1	7		
	Anopheles punctipennis	6	30	1	33.333
	Anopheles quadrimaculatus	1	3		
	Culex pipiens	18	317	5	15.773
	<i>Culex</i> spp.	131	7204	52	7.218
	Culiseta melanura	14	152		
	Psorophora ferox	1	65		
Hudson		155	7561	54	7 142
nuuson	Culeyspp	155	7561	54	7.142
	Culex spp.	155	7501	54	7.142
Hunterdon		264	12563	89	7.084
	Culex spp.	264	12563	89	7.084
Mercer		249	4848	42	8.663
	Aedes albopictus	49	473	3	6.342
	Aedes canadensis canadensis	1	6		0.000
	Aedes japonicus	61	287	1	3.484
	Aedes triseriatus	2	7		
	Aedes vexans	15	157	1	6.369
	Coquillettidia perturbans	1	3	1	333.333
	Culex erraticus	1	6		
	Culex pipiens	5	59	1	16.949
	Culex restuans	37	1100	6	5.455
	<i>Culex</i> spp.	77	2750	29	10.545
Middlesex		191	5661	48	8.479
	Aedes albopictus	5	59		
	Aedes japonicus	1	64		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	3	9		
	Culex spp.	180	5518	48	8.699
	Culiseta inornata	1	10		
Monmouth		396	8038	51	6.345
	Aedes albopictus	85	1865	5	2.681
	Aedes atlanticus	1	5	_	
	Aedes canadensis canadensis	12	102		
	Aedes cantator	5	50		
	Aedes grossbecki	2	10		
	Aedes japonicus	17	47		
	Aedes sollicitans	5	37		
	Aedes taeniorhynchus	2	3		
	Aedes triseriatus	14	102		
	Aedes trivittatus	6	55		
	Aedes vexans	14	79		
	Anopheles barberi	1	1		
	Anopheles bradleyi	1	1		
	Anopheles punctipennis	1	2	1	500.000

	Anopheles crucians Anopheles quadrimaculatus	24 1	81 1		
	Coquillettidia perturbans Culex erraticus Culex salinarius	3 7 7	4 30 243	2	66.667
	Culex spp. Culiseta melanura	, 150 19	4868 383	42	8.628
	Psorophora ciliata Psorophora columbiae	1 4	1 17	1	58.824
	Psorophora ferox	14	51		
Morris		324	12684	110	8.672
	Aedes albopictus	6	39 24		
	Coquillettidia perturbans	3 6	34 300		
	Culex spp	308	12310	110	8 936
	Culiseta melanura	1	1		0.000
Ocean		248	1947	22	11.299
	Aedes albopictus	74	628	5	7.962
	Aedes japonicus	29	74	_	
	Aedes triseriatus	23	61	2	32.787
	Aedes Vexans	1	2		
	Anopheles quadrimaculatus	2	2		
	Coquillettidia perturbans	21	168	1	5 952
	Culex erraticus	7	9	•	0.002
	Culex salinarius	2	3		
	Culex spp.	61	853	13	15.240
	Culiseta melanura	24	140	1	7.143
	Psorophora ferox	1	1		
Passaic		177	1627	13	7.990
	Aedes abserratus	1	11		
	Aedes albopictus	17	82		0.040
	Aedes japonicus	38	260	1	3.846
	Aeues inibaulu Aedes triseriatus	1	10		
	Aedes vexans	4	34		
	Coquillettidia perturbans	5	40		
	Culex erraticus	10	17		
	Culex pipiens	11	202		
	Culex restuans	9	95		
	Culex spp.	75	844	12	14.218
	Culiseta melanura	4	4		
	Psorophora cyanescens	1	14		
Salem		325	6832	7	1.025
	.				
	Aedes albopictus	59	830		
	Aedes albopictus Aedes atlanticus	59 1	830 1	-	
	Aedes albopictus Aedes atlanticus Aedes canadensis canadensis Aedes iaponicus	59 1 1	830 1 1	-	
	Aedes albopictus Aedes atlanticus Aedes canadensis canadensis Aedes japonicus Aedes sollicitans	59 1 1 31 2	830 1 1 154 24		
	Aedes albopictus Aedes atlanticus Aedes canadensis canadensis Aedes japonicus Aedes sollicitans Aedes taeniorhynchus	59 1 31 2 1	830 1 154 24 4	1	250.000
	Aedes albopictus Aedes atlanticus Aedes canadensis canadensis Aedes japonicus Aedes sollicitans Aedes taeniorhynchus Aedes triseriatus	59 1 1 31 2 1 22	830 1 154 24 4 29	1	250.000

	Aedes vexans Anopheles bradleyi Anopheles punctipennis Anopheles quadrimaculatus Coquillettidia perturbans Culex erraticus Culex pipiens Culex restuans Culex salinarius Culex spp. Culiseta melanura Psorophora ciliate Psorophora columbiae Psorophora ferox	2 2 3 20 29 9 3 11 99 20 1 3 2	79 5 2 7 550 207 11 14 759 3757 372 6 6 11	1 1 3 1	4.831 1.318 0.799 2.688
Somerset		214	7645	70	9.156
	Aedes albopictus	1	2		
	Aedes canadensis canadensis	1	12		
	Aedes japonicus	11	142		
	Aeues insendius Anonheles nunctinennis	い 2	5		
	Culey spp	2 196	4 7/80	70	0 358
		130	7400	70	9.000
Sussex		231	7039	16	2.273
	Aedes albopictus	1	3		
	Aedes canadensis canadensis	1	31		
	Aedes japonicus	2	56		
	Aedes triseriatus	3	27		
	Aedes vexans	9	600		
	Coquillettidia perturbans	15	1008		
	Culex pipiens	8	235	1	4.255
	Culex restuans	36	720		
	Culex salinarius	11	520	1	1.923
	Culex spp.	137	3770	14	3.714
	Culiseta melanura	8	69		
Union		111	6005	61	10,158
	Aedes albopictus	22	560	5	8.929
	Culex spp	89	5445	56	10.285
Warren		267	11221	45	4.010
	Aedes albopictus	12	257	1	3.891
	Aedes japonicus	24	645	1	1.550
	Aedes triseriatus	1	2		40.050
	Aedes trivittatus	6	79	1	12.658
	Aeues vexans	9	246		
	Coquiliettidia perturbaris	2	89	40	4 206
	Culies spp.	209	9///	42	4.290
	Cuilsela Illelallula Deorophora ciliata	∠ 1	02 55		
	r suiupiiuid Ullidid Psoronhore columbian	1	55 0		
	r sorophora columbiae		3		
Grand Total		7213	154126	929	6.028



Saint Louis Encephalitis (SLE) to 14 September 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.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		36	1987		
	Culex spp	36	1987		
Cape May		744	9374		
	Culex pipiens	710	9260		
	Culex spp.	34	114		
Grand Total		780	11361		

No pools of SLE have tested positive for 2018. No human cases have been reported.

La Crosse Encephalitis (LAC) to 14 September 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).

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		12	197		
	Aedes albopictus	4	73		
	Aedes japonicus	6	117		
	Aedes triseriatus	2	7		
Ocean		4	9		
	Aedes albopictus	2	3		
	Aedes japonicus	1	1		
	Aedes triseriatus	1	5		
Salem		3	4		
	Aedes triseriatus	3	4		
Sussex		3	27		
	Aedes triseriatus	3	27		
Grand Total		22	237		

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

Dengue (DENV) to 14 September 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 6 travel-related human cases in NJ.

County	Species	DENV1		DENV2		DENV3		DENV4		Pos.	MFIR
		Pool	Mos.	Pool	Mos.	Pool	Mos.	Pool	Mos.		
Atlantic		34	814	34	814	34	814	34	814		
	Aedes albopictus	34	814	34	814	34	814	34	814		
Bergen		1	14	1	14	1	14	1	14		
	Aedes albopictus	1	14	1	14	1	14	1	14		
Gloucester		7	20	7	20	7	20	7	20		
	Aedes albopictus	5	18	5	18	5	18	5	18		
	Aedes japonicus	2	2	2	2	2	2	2	2		
Middlesex		2	12	2	12	2	12	2	12		

	Aedes albopictus	2	12	2	12	2	12	2	12	
Ocean		44	485	44	485	44	485	44	485	
	Aedes albopictus	44	485	44	485	44	485	44	485	
Sussex		1	3	1	3	1	3	1	3	
	Aedes albopictus	1	3	1	3	1	3	1	3	
Grand Total		89	1348	89	1348	89	1348	89	1348	

Chikungunya (CHIK) to 14 September 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 6 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		34	814		
	Aedes albopictus	34	814		
Bergen		1	14		
	Aedes albopictus	1	14		
Gloucester		7	20		
	Aedes albopictus	5	18		
	Aedes japonicus	2	2		
Middlesex		2	12		
	Aedes albopictus	2	12		
Ocean		44	485		
	Aedes albopictus	44	485		
Sussex		1	3		
	Aedes albopictus	1	3		
Grand Total		89	1348		

Zika (ZIKV) to 14 September 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 7 travel-related human cases in NJ.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		34	814		
	Aedes albopictus	34	814		
Bergen		1	14		
_	Aedes albopictus	1	14		
Cape May		448	959		

	Aedes albopictus	448	959	
Gloucester		7	20	
	Aedes albopictus	5	18	
	Aedes japonicus	2	2	
Middlesex		2	12	
	Aedes albopictus	2	12	
Ocean		44	485	
	Aedes albopictus	44	485	
Sussex		1	3	
	Aedes albopictus	1	3	
Grand Total		537	2307	