VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE, LAC, DENV and CHIK

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CDC WEEK 38: 20 September to 26 September, 2015

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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**	1.20	1.00	19 (24)	11 (12)	1	52.63
Green Bank (Burlington Co.)/23	**Coastal**	2.08	0.72	111 (129)	14 (15)	1	9.01
Corbin City (Atlantic Co.)/25	**Coastal**	1.16	0.60	248 (263)	15 (16)		
Dennisville (Cape May Co.)/50	**Coastal**	3.45	0.00	222‡	12		
Winslow (Camden Co.)/50	**Inland**	0.65	0.60	1863	46	7	3.76
Centerton (Salem Co.)/50	**Inland**	2.40	1.02	797	25	1	1.25
Turkey Swamp (Monmouth Co.)/49	**Inland**	0.62	Not collected	397	19		
Glassboro (Gloucester Co.)/50	**Inland**	0.72	0.30	294	17	1	3.40

*Current week (in parentheses) results pending. ‡ corrected

Remarks: No new positive pools of EEE were detected in the current week. There have been a total of 21 positive pools detected statewide: 14 in *Culiseta* melanura, 6 in *Culex erraticus* and 1 in *Culex pipiens.* There has been one horse case reported previously. First detection of EEE in a pool of *Culiseta melanura* was collected at the Winslow resting box site on the 27th of July.

Traditional Resting Box Sites: Eleven EEE positive *Cs. melanura* pools have been detected at the state resting box sites to date. Five of the eight sites have now detected positive pools. 3951 *Cs. melanura* from 159 pools have been tested for EEE with an additional 3 pools containing 38 *Cs. melanura* to be tested. MFIR for the traditional resting box sites is 2.78 with a statewide MFIR of 1.74 for *Cs. melanura* and a statewide MFIR of 0.91 for all species tested.

	Additional *Cs. melanura* trapped by counties *traps with positives indicated in **BOLD.**				
County	**Trap types***	**Pools**	**Mosquitoes**	**Positives**	**MFIR**
Atlantic	CO_2	20	333		
Burlington	**CO_2**	68	2190	2	0.91
Cape May	GR, RB	128	711		
Cumberland	CO_2, **RB**	18	243	1	4.12
Gloucester		34	503		
Middlesex	RB	9	46		
Ocean	CO_2, GR, RB	19	85		
Salem	CO_2	2	2		
TOTAL		**298**	**4113**	**3**	**0.73**

Additional *Cs. melanura*: Counties maintain trap sites for *Cs. melanura* in other areas. Previous to the current week, three positive pools (two from Burlington County and one from Cumberland County) have been detected. The first county positive was collected from a CO_2 trap on 3 August.

Species other than *Cs. melanura*	**Pools**	**Mosquitoes**	**Positives**	**MFIR**
Aedes albopictus	3	3		
Aedes atlanticus	1	7		
Aedes canadensis canadensis	1	22		
Aedes cantator	39	54		
Aedes japonicus	3	5		
Aedes sollicitans	17	400		
Aedes taeniorhynchus	3	18		
Aedes triseriatus	2	2		
Aedes vexans	2	5		
Anopheles bradleyi	44	255		
Anopheles crucians	3	45		
Anopheles punctipennis	28	122		
Anopheles quadrimaculatus	5	57		
Coquillettidia perturbans	114	2139		
Culex erraticus	70	1831	6	3.277
Culex pipiens	706	7568	1	0.132
Culex restuans	2	2		
Culex salinarius	169	829		
Culex sp.	46	130		
Orthopodomyia signifera	1	1		
Psorophora ferox	1	1		
State Total	**1260**	**13496**	**7**	**0.519**

Additional Species: Nineteen additional species were tested for EEE. Previous to the current week, seven positive pools (6 from *Culex erraticus* collected on 18 Aug, in Cape May and the 6th from *Culex pipiens* collected in Gloucester County on 2 Sep).

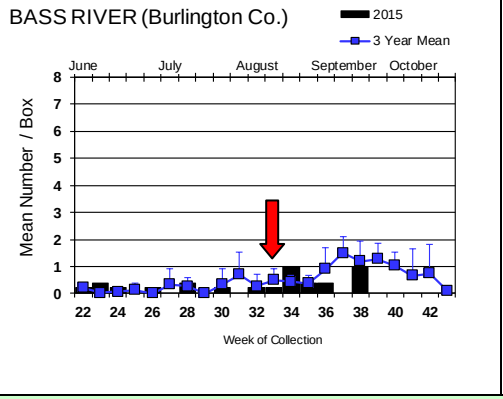
Horses and Humans: One horse, a 2 yo unvaccinated mare in Gloucester County, euthanized 25 Aug (no date of onset reported).

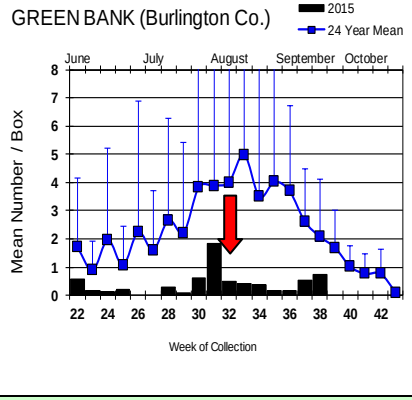
No humans have been reported with EEE.

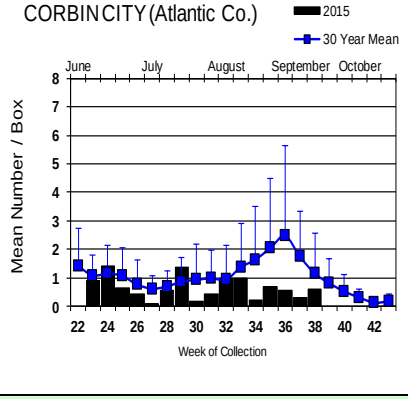
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

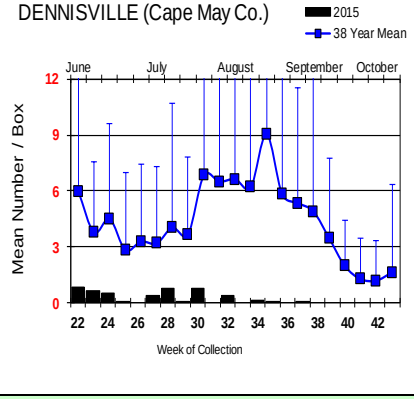
Culiseta melanura Population Graphs

Coastal

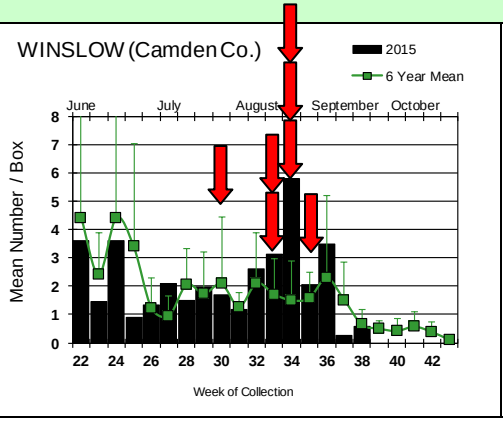


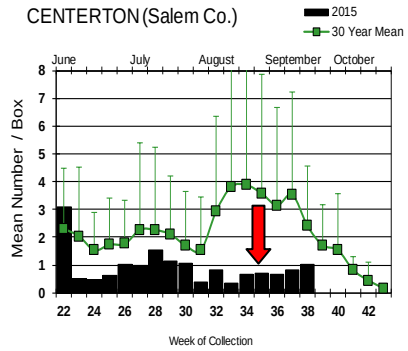


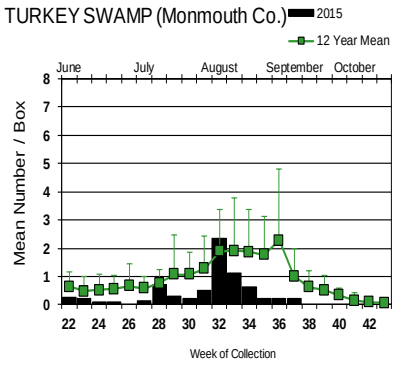


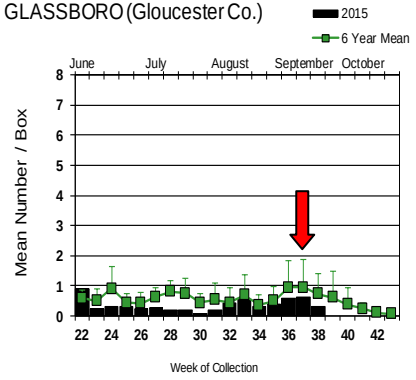


Inland









Populations of *Culiseta melanura* continue to be below or not significantly different from historical values. No new positive pools were detected at the traditional resting box sites during the past week.

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

EEE in US (2015 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: FL(19/1goat) GA(2) LA(2) MI(1) MS(2) NC(1) NJ(1) NY(2) SC(3) TX(8) VA(2)
- mosquito pools: ME(1) NJ (21) NY(13) VT(1)
- sentinel: FL(66), TX(24)
- human: LA (1), NY(2)

West Nile Virus Positive Organisms in US, 2015

West Nile in US (2015 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					3
Alaska					
Arizona	0	78		3	65
Arkansas				3	11/14
California	855/967	2568/2768	269/314	14/15	157/201
Colorado	12	108/164		11/12	61/74
Connecticut		146/153			1/5
Delaware	2				4
DC					1
Florida		8	120/169		6/7
Georgia	0	24		0	5
Hawaii					
Idaho	0	13		4/5	7/13
Illinois	42/50	1471/1613		6/8	22/30
Indiana	0	414/437			8/12
Iowa		7		2	4
Kansas		1			11/14
Kentucky				4	
Louisiana	52/65	461/483		1	44/54
Maine					1
Maryland					2
Mass.		153/159		0	3/5
Michigan	10	9		1	1/7
Minnesota	3	2		1	4
Mississippi		44		1	27/32
Missouri		452		13/14	16/19

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					1/2
Nebraska	1	79/86		0	39/50
Nevada		104			3/7
New Hampshire		0		0	0
New Jersey	24/28	721/817		0	16/18
New Mexico				1	7/8
New York		36		1	12/15
North Carolina					
North Dakota	0	4		2	12
Ohio		309/486			19/26
Oklahoma		2			42/53
Oregon	10	53/56	0	3/4	1
Pennsylvania	25/29	2443/2653		1	18/27
Rhode Island		1/3		0	0
South Carolina					1
South Dakota		7			29/31
Tennessee		117			3
Texas	14	1206/1328	1	7/11	111/151
Utah		238/249	4	0	3
Vermont		67/90			
Virginia				1	
Washington	7	153/157		31	21/22
West Virginia					
Wisconsin	38/43	11/13		1	3
Wyoming					4

* 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 29 September 2015

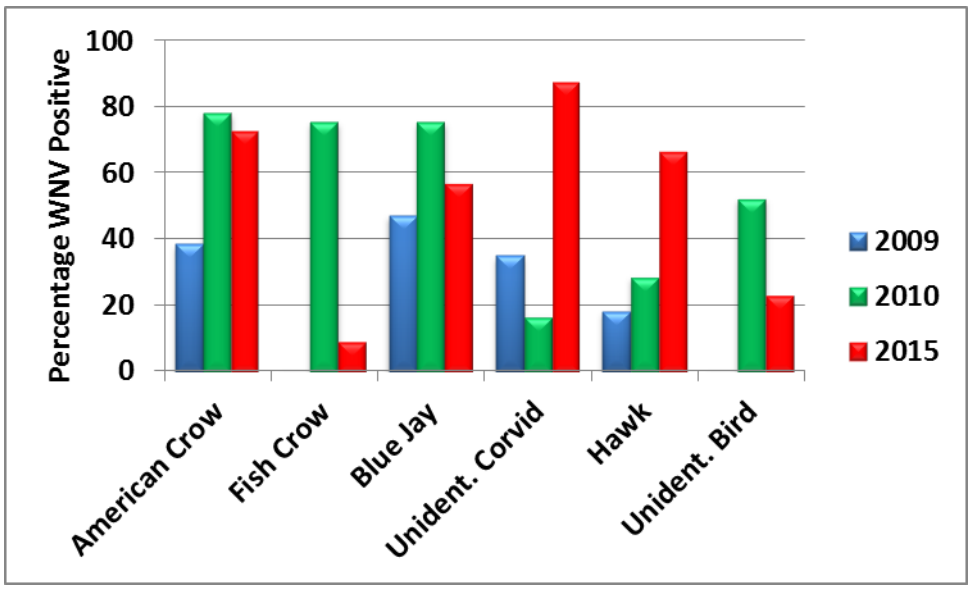
Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	1309	9638	22	2.283
Aedes atlanticus	2	13		
Aedes atropalpus	11	18		
Aedes aurifer	1	1		
Aedes canadensis canadensis	22	261	1	3.831
Aedes cantator	45	224		
Aedes grossbecki	9	40		
Aedes japonicus	485	2101	9	4.284
Aedes sollicitans	17	400		
Aedes sticticus	1	1		
Aedes taeniorhynchus	12	68		
Aedes triseriatus	281	812	3	3.695
Aedes trivittatus	6	17		
Aedes vexans	91	1439	2	1.390
Anopheles atropos	1	1		
Anopheles barberi	2	2		
Anopheles bradleyi	47	274		
Anopheles crucians	4	46		
Anopheles punctipennis	103	351		
Anopheles quadrimaculatus	222	4830		
Coquillettidia perturbans	121	2220		
Culex erraticus	106	2143	2	0.933
Culex pipiens	1083	25445	152	5.974
Culex restuans	597	3116	6	1.926
Culex salinarius	177	896	2	2.232
Culex sp.	2584	95026	603	6.346
Culex territans	21	60		
Culiseta melanura	464	8075	15	1.858
Orthopodomyia signifera	2	2		
Psorophora ciliata	3	20		
Psorophora columbiae	19	236		
Psorophora ferox	11	20		
Psorophora howardii	1	1		
Uranotaenia sapphirina	3	7		
Grand Total	**7863**	**157804**	**817**	**5.177**

Remarks: To date, 7863 pools of 157,804 mosquitoes from 33 species have been tested, with 817 positive pools detected, most in ornithophilic *Culex/Culiseta* pools (95%). No detection in new species from the previous week has occurred. First positive of the season occurred in Middlesex County, in a pool of mixed *Culex*, collected on the 22nd of June. First positive pool in non-*Culex* was in an *Aedes albopictus* pool, collected in Monmouth County on 10 July. First positive pool in a non-*Culex* ornithophilic species was found in *Culiseta melanura* in Cape May 21 July. Overall state MFIR is 5.177, up from the previous week of 5.016.

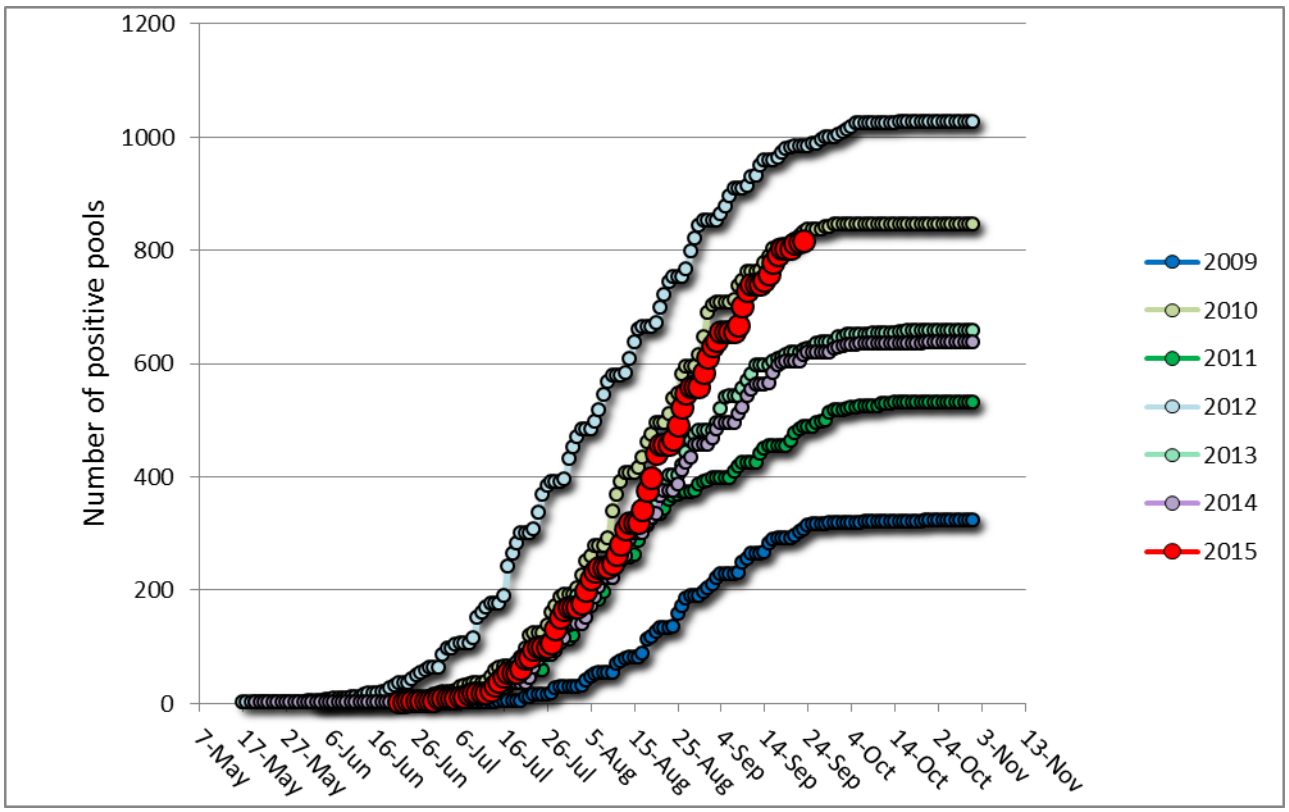
Humans, Horses and Wild Birds: Eighteen human cases (2 fatalities) of WNV have been reported in Bergen (2), Burlington (3), Camden (1), Cumberland (2), Essex (1), Gloucester (3), Middlesex (2), Monmouth (2), Ocean (1) and Passaic (1) counties. For further information, see http://www.state.nj.us/health/cd/westnile/techinfo.shtml.

No horse cases have been detected.

Bird testing began in mid-April. Twenty-eight positive birds have been reported, mostly corvids. To date, 66 birds have been tested. Species includes: American Crow (*Corvus brachyrhynchos* 8/11) Fish Crow (*Corvus ossifragus* 1/11), Blue Jay (*Cyanocitta cristata* 4/7), unidentified corvid (7/8), Hawk/Raptor (2/3) and other avian species (6/26). Counties (positives) submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Gloucester, Hunterdon, Mercer, Monmouth, Morris, Ocean, Passaic, Salem and Warren.



The figure above shows the percent positive birds for a low year activity (2009 in blue), a high year activity (2010 in green) and the current year (2015 in red). Some indicators (American Crow percentage) are similar to high year activity while others (Blue Jay) are less indicative. Some unidentified corvids are likely Fish Crows.



The figure above shows WNV activity as the accumulation of positive pools over the season. This year is on pace to be as active as one of the more active years, 2010. At the same CDC week in 2010, there were twenty human cases, with a total of twenty-nine human cases by CDC week 44.

WNV Results by County through 29 September 2015

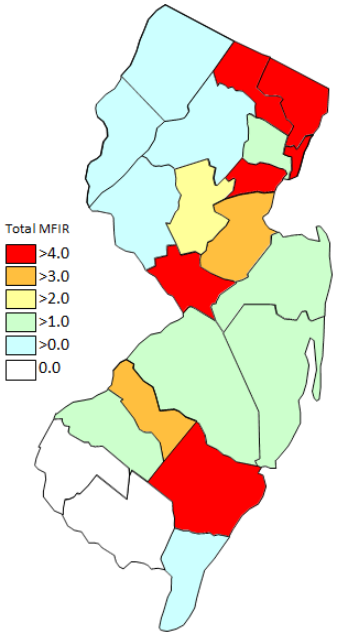
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**225**	**6590**	**15**	**2.276**
	Aedes albopictus	41	324	1	3.086
	Aedes japonicus	13	60		
	Aedes sollicitans	3	136		
	Aedes taeniorhynchus	1	5		
	Aedes triseriatus	1	2		
	Aedes vexans	6	238		
	Anopheles bradleyi	2	4		
	Anopheles quadrimaculatus	2	24		
	Coquillettidia perturbans	26	943		
	Culex erraticus	9	126		
	Culex pipiens	16	946	10	10.571
	Culex restuans	3	9		
	Culex salinarius	1	15		
	Culex spp.	65	3176	3	0.945
	Culiseta melanura	35	581	1	1.721
	Psorophora ferox	1	1		
Bergen		**167**	**7417**	**94**	**12.674**
	Aedes albopictus	8	16	1	62.500
	Aedes japonicus	13	350		
	Aedes triseriatus	1	1		
	Culex spp.	145	7050	93	13.191
Burlington		**240**	**5291**	**18**	**3.402**
	Aedes albopictus	20	200	2	10.000
	Aedes atlanticus	1	7		
	Aedes atropalpus	1	4		
	Aedes canadensis canadensis	1	22		
	Aedes japonicus	11	80		
	Aedes sollicitans	2	25		
	Aedes sticticus	1	1		
	Aedes taeniorhynchus	3	18		
	Aedes triseriatus	3	13		
	Aedes vexans	6	37		
	Anopheles bradleyi	4	180		
	Anopheles crucians	2	44		
	Anopheles punctipennis	6	27		
	Coquillettidia perturbans	6	100		
	Culex erraticus	4	9	1	111.111
	Culex pipiens	5	11	1	90.909
	Culex restuans	3	15		
	Culex salinarius	9	216		
	Culex spp.	58	1961	11	5.609
	Culiseta melanura	93	2320	3	1.293
	Orthopodomyia signifera	1	1		
Camden		**274**	**8964**	**64**	**7.140**
	Aedes albopictus	23	47	2	42.553
	Aedes canadensis canadensis	3	15		
	Aedes cantator	1	1		
	Aedes japonicus	49	376	3	7.979
	Anopheles punctipennis	2	6		
	Coquillettidia perturbans	2	2		

	Culex spp.	143	6644	52	7.827
	Culiseta melanura	47	1864	7	3.755
	Psorophora ferox	4	9		
Cape May		**2796**	**19429**	**32**	**1.647**
	Aedes albopictus	311	651		
	Aedes atropalpus	10	14		
	Aedes aurifer	1	1		
	Aedes canadensis canadensis	7	7		
	Aedes cantator	39	54		
	Aedes japonicus	236	466		
	Aedes sollicitans	6	8		
	Aedes taeniorhynchus	6	15		
	Aedes triseriatus	211	467		
	Aedes vexans	18	44		
	Anopheles atropos	1	1		
	Anopheles barberi	1	1		
	Anopheles bradleyi	40	75		
	Anopheles punctipennis	23	27		
	Anopheles quadrimaculatus	194	4702		
	Coquillettidia perturbans	50	817		
	Culex erraticus	51	1719		
	Culex pipiens	690	7103	26	3.660
	Culex restuans	530	1790	2	1.117
	Culex salinarius	159	366	2	5.464
	Culex spp.	37	90		
	Culex territans	21	60		
	Culiseta melanura	142	935	2	2.139
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	5	5		
	Psorophora ferox	2	2		
	Psorophora howardii	1	1		
	Uranotaenia sapphirina	3	7		
Cumberland		**232**	**3530**	**9**	**2.550**
	Aedes albopictus	31	295		
	Aedes atlanticus	1	6		
	Aedes canadensis canadensis	3	54		
	Aedes cantator	1	2		
	Aedes grossbecki	9	40		
	Aedes japonicus	7	16		
	Aedes sollicitans	6	231		
	Aedes taeniorhynchus	2	30		
	Aedes triseriatus	3	7		
	Aedes trivitattus	2	3		
	Aedes vexans	31	963	2	2.077
	Anopheles bradleyi	1	15		
	Anopheles punctipennis	9	84		
	Anopheles quadrimaculatus	6	40		
	Coquillettidia perturbans	11	68		
	Culex erraticus	11	87		
	Culex pipiens	5	23	1	43.478
	Culex restuans	1	1		
	Culex salinarius	5	256		
	Culex spp.	55	847	6	7.084
	Culiseta melanura	18	243		

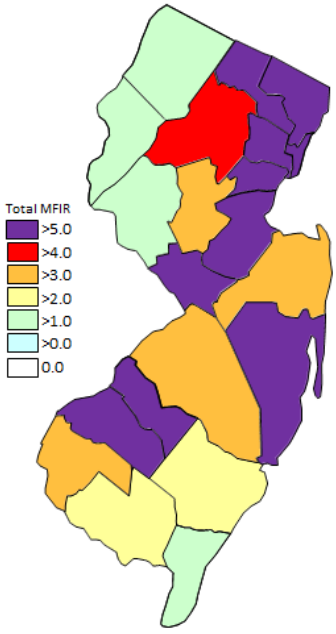
	Psorophora ciliata	3	20		
	Psorophora columbiae	11	199		
Essex		**145**	**2114**	**12**	**5.676**
	Aedes albopictus	6	10		
	Aedes japonicus	23	53		
	Aedes triseriatus	3	3	1	333.333
	Aedes trivittatus	1	1		
	Anopheles punctipennis	2	3		
	Anopheles quadrimaculatus	5	22		
	Culex spp.	103	2016	11	5.456
	Psorophora ferox	2	6		
Gloucester		**558**	**17887**	**113**	**6.317**
	Aedes albopictus	179	1222	8	6.547
	Aedes japonicus	16	118		
	Aedes triseriatus	5	18		
	Aedes vexans	4	9		
	Anopheles punctipennis	19	92		
	Anopheles quadrimaculatus	2	3		
	Coquillettidia perturbans	3	5		
	Culex pipiens	278	15622	104	6.657
	Culiseta melanura	51	797	1	1.255
	Psorophora ferox	1	1		
Hudson		**194**	**7722**	**71**	**9.195**
	Aedes albopictus	24	380		
	Culex spp.	170	7342	71	9.670
Hunterdon		**213**	**9936**	**19**	**1.912**
	Culex spp.	213	9936	19	1.912
Mercer		**410**	**8675**	**47**	**5.418**
	Aedes albopictus	135	1645		
	Aedes japonicus	19	80	1	12.500
	Aedes vexans	17	111		
	Coquillettidia perturbans	6	54		
	Culex erraticus	5	30		
	Culex pipiens	87	1738	10	5.754
	Culex restuans	56	1294	4	3.091
	Culex spp.	85	3723	32	8.595
Middlesex		**382**	**11579**	**84**	**7.255**
	Aedes albopictus	132	426	4	9.390
	Culex spp.	241	11107	80	7.203
	Culiseta melanura	9	46		
Monmouth		**544**	**8586**	**30**	**3.494**
	Aedes albopictus	275	3178	2	0.629
	Aedes canadensis canadensis	6	93		
	Aedes cantator	4	167		
	Aedes japonicus	17	58		
	Aedes triseriatus	5	13		
	Aedes trivittatus	1	1		
	Aedes vexans	3	5		

	Anopheles barberi	1	1		
	Anopheles crucians	2	2		
	Anopheles punctipennis	26	68		
	Anopheles quadrimaculatus	5	11		
	Coquillettidia perturbans	1	1		
	Culex erraticus	13	89		
	Culex restuans	1	1		
	Culex salinarius	3	43		
	Culex spp.	159	4422	28	6.332
	Culiseta melanura	20	402		
	Psorophora columbiae	2	31		
Morris		**303**	**12325**	**61**	**4.949**
	Aedes albopictus	28	368		
	Culex spp.	275	11957	61	5.102
Ocean		**249**	**3660**	**23**	**6.284**
	Aedes albopictus	69	683	2	2.928
	Aedes canadensis canadensis	1	3		
	Aedes japonicus	39	142	3	21.127
	Aedes triseriatus	8	25	1	40.000
	Aedes vexans	2	3		
	Anopheles punctipennis	2	5		
	Anopheles quadrimaculatus	1	3		
	Coquillettidia perturbans	5	129		
	Culex erraticus	2	4		
	Culex spp.	98	2575	17	6.602
	Culiseta melanura	22	88		
Passaic		**20**	**313**	**4**	**12.780**
	Aedes albopictus	2	3		
	Aedes japonicus	4	8	1	125.000
	Aedes triseriatus	2	3		
	Aedes vexans	1	1		
	Culex spp.	11	298	3	10.067
Salem		**152**	**1557**	**5**	**3.211**
	Aedes albopictus	19	143		
	Aedes japonicus	12	22	1	45.455
	Aedes triseriatus	13	19	1	52.632
	Aedes vexans	1	2		
	Anopheles punctipennis	7	12		
	Anopheles quadrimaculatus	6	23		
	Coquillettidia perturbans	9	26		
	Culex erraticus	11	79	1	12.658
	Culex pipiens	2	2		
	Culex restuans	3	6		
	Culex spp.	40	422	1	2.370
	Culiseta melanura	27	799	1	1.252
	Psorophora columbiae	1	1		
	Psorophora ferox	1	1		
Somerset		**196**	**2849**	**11**	**3.861**
	Aedes albopictus	2	8		
	Aedes japonicus	8	121		

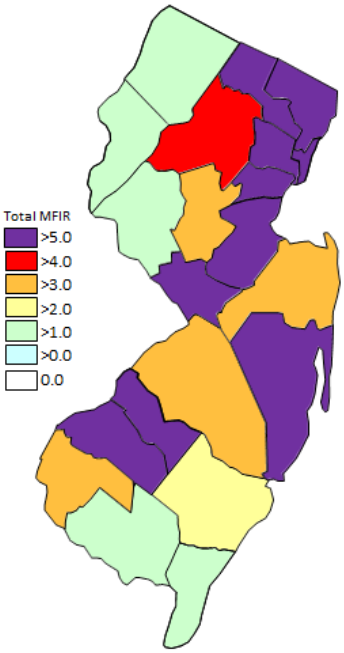
	Aedes triseriatus	8	84		
	Anopheles punctipennis	1	4		
	Coquillettidia perturbans	1	29		
	Culex spp.	176	2603	11	4.226
Sussex		**197**	**3743**	**6**	**1.603**
	Aedes japonicus	15	129		
	Aedes triseriatus	13	135		
	Anopheles punctipennis	5	21		
	Coquillettidia perturbans	1	46		
	Culex spp.	163	3412	6	1.758
Union		**163**	**10369**	**89**	**8.583**
	Aedes canadensis canadensis	1	67	1	14.925
	Culex spp.	162	10302	88	8.542
Warren		**203**	**5268**	**10**	**1.898**
	Aedes albopictus	4	39		
	Aedes japonicus	3	22		
	Aedes triseriatus	5	22		
	Aedes trivittatus	2	12		
	Aedes vexans	2	26		
	Anopheles punctipennis	1	2		
	Anopheles quadrimaculatus	1	2		
	Culex spp.	185	5143	10	1.944
Grand Total		**7863**	**157804**	**817**	**5.177**



Cumulative WNV activity in 2014.



WNV activity to 29 September 2015.



WNV activity last week, 2015.

**NOTE* New scale on activity maps – addition of MFIR 5.0 and above in purple*

Saint Louis Encephalitis (SLE) 2015.

New Jersey will be testing for SLE this year only when adjacent states show human activity (Cape May tests its own 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
Cape May		**725**	**7273**		
	Culex pipiens	687	7182		
	Culex restuans	1	1		
	Culex spp.	37	90		
Grand Total		**725**	**7273**		

La Crosse Encephalitis (LAC) 2015.

New Jersey will be testing for LAC this year only when adjacent states show human activity (Cape May tests its own 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
Cape May		**212**	**472**		
	Aedes albopictus	1	1		
	Aedes japonicus	1	5		
	Aedes triseriatus	210	466		
Grand Total		**212**	**472**		

Dengue (DENV) to 29 September 2015.

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. There are currently 40 imported human cases in New Jersey, no local transmission.

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

No pools have tested positive in 2015. Currently, there are 27 imported human cases reported in New Jersey.

County	Species	DENV1		DENV2		DENV3		DENV4		Positives	MFIR
		Pool	Mos.	Pool	Mos.	Pool	Mos.	Pool	Mos.		
Atlantic		**41**	**324**	**41**	**324**	**41**	**324**	**41**	**324**		

	41	324	41	324	41	324	41	324		
Burlington	**20**	**200**	**20**	**200**	**20**	**200**	**20**	**200**		
	20	200	20	200	20	200	20	200		
Camden	**22**	**45**	**22**	**45**	**22**	**45**	**22**	**45**		
	22	45	22	45	22	45	22	45		
Cumberland	**31**	**295**	**31**	**295**	**31**	**295**	**31**	**295**		
	31	295	31	295	31	295	31	295		
Gloucester	**175**	**1211**	**176**	**1219**	**176**	**1219**	**176**	**1219**		
	175	1211	176	1219	176	1219	176	1219		
Hudson	**24**	**380**	**24**	**380**	**24**	**380**	**24**	**380**		
	24	380	24	380	24	380	24	380		
Mercer	**135**	**1645**	**135**	**1645**	**135**	**1645**	**135**	**1645**		
	135	1645	135	1645	135	1645	135	1645		
Middlesex	**132**	**426**	**132**	**426**	**132**	**426**	**132**	**426**		
	132	426	132	426	132	426	132	426		
Monmouth	**244**	**2951**	**244**	**2951**	**244**	**2951**	**225**	**2840**		
	244	2951	244	2951	244	2951	225	2840		
Morris	**28**	**368**	**28**	**368**	**28**	**368**	**28**	**368**		
	28	368	28	368	28	368	28	368		
Salem	**19**	**143**	**19**	**143**	**19**	**143**	**19**	**143**		
	19	143	19	143	19	143	19	143		
Warren	**4**	**39**	**4**	**39**	**4**	**39**	**4**	**39**		
	4	39	4	39	4	39	4	39		
Grand Total	**875**	**8027**	**876**	**8035**	**876**	**8035**	**857**	**7924**		

Chikungunya (CHIK) to 29 September 2015.

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 have tested positive in 2015. Currently, there are 23 imported human cases reported in New Jersey.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**41**	**324**		
	Aedes albopictus	41	324		

Burlington		**20**	**200**		
	Aedes albopictus	20	200		
Camden		**22**	**45**		
	Aedes albopictus	22	45		
Cape May		**307**	**645**		
	Aedes albopictus	306	644		
	Aedes japonicus	1	1		
Cumberland		**31**	**295**		
	Aedes albopictus	31	295		
Gloucester		**176**	**1219**		
	Aedes albopictus	176	1219		
Hudson		**24**	**380**		
	Aedes albopictus	24	380		
Mercer		**135**	**1645**		
	Aedes albopictus	135	1645		
Middlesex		**132**	**426**		
	Aedes albopictus	132	426		
Monmouth		**244**	**2951**		
	Aedes albopictus	244	2951		
Morris		**28**	**368**		
	Aedes albopictus	28	368		
Salem		**19**	**143**		
	Aedes albopictus	19	143		
Warren		**4**	**39**		
	Aedes albopictus	4	39		
Grand Total		**1183**	**8680**		