VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE, LAC, DENV and CHIK

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CDC WEEK 42: 12 October to 18 October, 2014

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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**	0.10	2.00	34 (44)	9 (10)		
Green Bank (Burlington Co.)/25	**Coastal**	0.78	0.56	377 (391)	20 (21)	1	2.65
Corbin City (Atlantic Co.)/25	**Coastal**	0.14	0.16	324 (328)	19 (20)		
Dennisville (Cape May Co.)/50	**Coastal**	1.68	0.22	464	21	5	10.77
Winslow (Camden Co.)/50	**Inland**	0.39	0.34	1276	36	3	2.35
Centerton (Salem Co.)/50	**Inland**	0.41	0.88	687	24	2	2.91
Turkey Swamp (Monmouth Co.)/50	**Inland**	0.10	0.00	220	19	1	4.55
Glassboro (Gloucester Co.)/50	**Inland**	0.08	0.06	560	22		

*Current week (in parentheses) results pending.

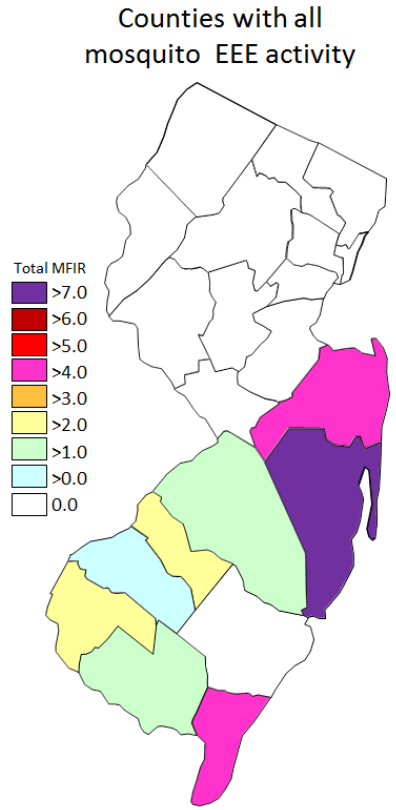
Remarks: No new EEE mosquito pools have been detected this past week in New Jersey. Total number of positive EEE pools is 33: 32 pools in *Cs. melanura* and 1 in *Culex salinarius.* Statewide, for all 16,897 mosquitoes tested, MFIR is 1.95, down from 2.03 of the previous week.

Traditional Resting Box Sites: No new EEE positive *Cs. melanura* pools were detected at the state resting box sites this past week. To date, 3942 *Cs. melanura* from 170 pools have been tested for EEE at the traditional resting box sites. Overall MFIR for these traditional sites is 3.04, down from 3.12 of the previous week. Three additional pools containing 32 *Cs. melanura* remain to be tested.

Additional *Cs. melanura* trapped by counties *traps with positives indicated in **BOLD.**				
County	**Trap types***	**Number collected (pools)**	**Number of positive pools**	**MFIR**
Atlantic	CO_2, Gravid	79 (10)		
Burlington	**CO_2**	5621 (136)	11	1.957
Cape May	**Gravid**, **RB**	428 (39)	5	11.682
Cumberland	CO_2, **RB**	178 (24)	1	5.618
Gloucester	**RB**	925 (82)	1	1.081
Monmouth	Other	4 (2)		
Ocean	**CO_2**, Gravid, **RB**	120 (27)	2	16.667
Salem	CO_2	9 (5)		
TOTAL		**7364 (325)**	**20**	**2.716**

Additional *Cs. melanura*: Counties submit additional pools of *Cs. melanura* caught in other trap types as well as resting boxes. No new positive pools were detected this past week. Virus was first detected in these additional pools from a Gloucester County resting box sampled on 23 July.

Graph to right illustrates MFIR values for counties with EEE positive mosquito pools. While Burlington County has detected 12 pools, and Ocean County has detected only two pools, Ocean County has the higher MFIR value for having a lower denominator (total number of mosquitoes) in the calculation.



Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	5	13		
Aedes atlanticus	1	5		
Aedes canadensis canadensis	20	327		
Aedes cantator	21	47		
Aedes cinereus	1	1		
Aedes japonicus	8	28		
Aedes mitchellae	1	1		
Aedes sollicitans	8	66		
Aedes taeniorhynchus	4	30		
Aedes triseriatus	10	34		
Aedes vexans	9	54		
Anopheles bradleyi	25	566		
Anopheles crucians	3	17		
Anopheles punctipennis	45	867		
Anopheles quadrimaculatus	35	902		
Coquillettidia perturbans	50	783		
Culex erraticus	34	233		
Culex pipiens	119	757		
Culex restuans	4	16		
Culex salinarius	52	732	1	1.366
Culex spp.	21	93		
Culex territans	1	1		
Culiseta morsitans	1	1		
Psorophora ciliata	1	1		
Psorophora columbiae	3	15		
Psorophora ferox	1	1		
State Total	**483**	**5591**	**1**	**0.179**

Additional Species: Counties submit additional pools of species other than *Cs. melanura* for EEE virus testing. First detection into non-*melanura* species has occurred with a positive pool of *Culex salinarius*, collected in Burlington County on 16 Sep. No additional positive pools have been detected.

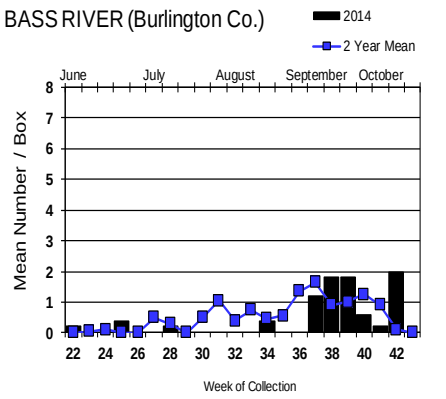
Horses and Humans: Four horses have been reported with EEE: Earliest onset date is on 11 Aug, 2014 for a 4 yo mare in Gloucester County, died 14 Sep. Second case with onset date of 11 Sep for a 2 yo mare in Ocean County, euthanized same date. Third case with onset date of 21 Sep for a 6 yo gelding in Burlington County, euthanized same date. Latest horse is a mare of unknown age, in Ocean County, euthanized 5 Oct. Vaccination history for all horses was either uncertain or not done.

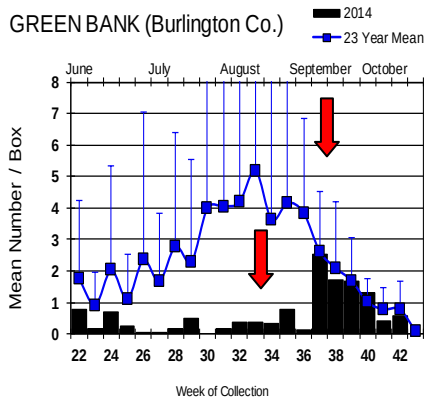
No human cases have been reported.

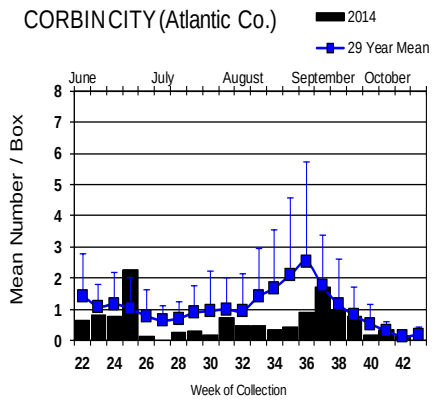
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

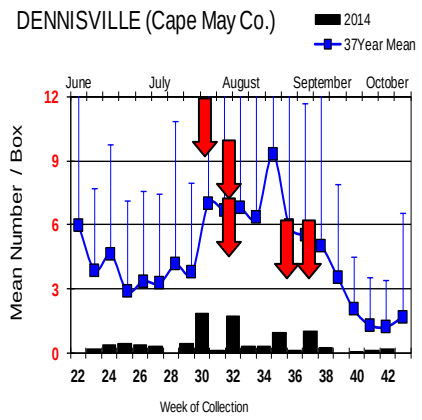
Culiseta melanura Population Graphs

Coastal

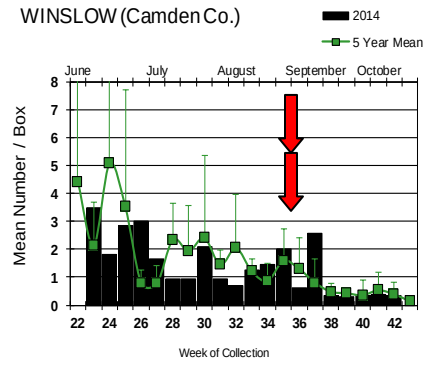


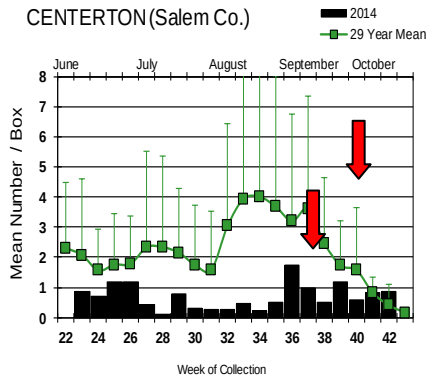


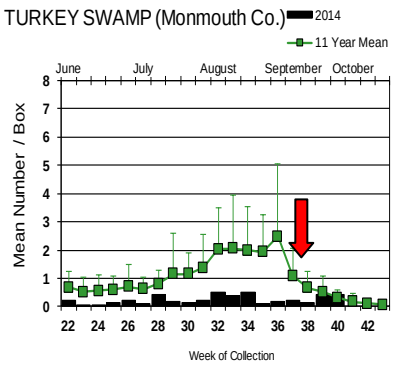


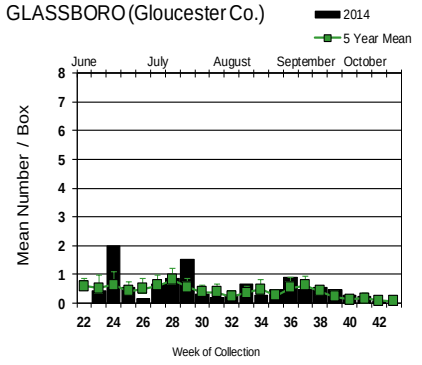


Inland









As the season comes to a close, populations of *Cs. melanura* continue to decline. A few days of unusually warm weather during the current week resulted in higher activity at some sites, particularly Bass River. However, the forecast calls for cooler weather as storm fronts move through and adults on the wing are less likely to occur, even those with relatively high cold tolerance.

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

EEE in US (2014 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: AL(5) FL (55 +2 deer) GA(8) LA(11) MA(2) ME(1) MI(5) MS(1) NC(9) NH(3) NJ(4) NY(11) OH(5) SC(7) TX(5) VA(1)
- mosquito pools: GA(1) LA(1) MA(33) MD(1) ME(22) NH(18) NJ(33) NY(87) VA(108) VT(8)
- sentinel: AL(3) FL(154) GA(1) ME(1 emu) NC(2) VA(33/3 cassowaries)
- human: AL(1) ME(1) MO(1-imported) NH(3) NY(2)

West Nile Virus Positive Organisms in US

West Nile in US (2014 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	1	1
Alaska					
Arizona	1	280		4/5	55
Arkansas					6
California	2314/2340	3210/3268	394/412	14	488/562
Colorado	3	195		4	99
Connecticut		66/68			4
Delaware	3		10		
DC					3
Florida			175	5	10
Georgia	0	36			11
Hawaii					
Idaho		62		6	19
Illinois	38	1245/1248			30/36
Indiana		163/174			6/7
Iowa		9		3	12
Kansas		1			28/36
Kentucky				3	
Louisiana		924	54	1	128/130
Maine		0		0	0
Maryland		33		1	4/5
Mass.		56		0	3/4
Michigan	19	9		1	1
Minnesota	2	21		2	10
Mississippi		67		1	44/45
Missouri	2	43		9/10	10

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana		12		3	5
Nebraska	6	248		0	99/114
Nevada		96			3
New Hampshire		1		0	0
New Jersey	18	625/630		0	3/5
New Mexico		2		4	14
New York		750/752		1	16/17
North Carolina					
North Dakota	0	6		4*	22
Ohio		313		1	6/9
Oklahoma		5/9		7	14/16
Oregon	7	58	0	3	7
Pennsylvania	15	1435		1/2	8
Rhode Island		2			
South Carolina	1				2
South Dakota	1	75		1	49/51
Tennessee	0	694/710		0	13/14
Texas	76	1978			212
Utah	2	159/160	1	4	2
Vermont		8		0	0
Virginia		130	15/21		¾
Washington	0	80		5	8/12
West Virginia	1	6/7		0	0
Wisconsin	25/26	3		2	8
Wyoming	1	12		3/4	5

* 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 20 October 2014

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	951	8765	11	1.255
Aedes atlanticus	5	13		
Aedes atropalpus	1	5		
Aedes canadensis canadensis	60	748		
Aedes cantator	34	251		
Aedes cinereus	1	1		
Aedes japonicus	585	3284	5	1.523
Aedes mitchellae	1	1		
Aedes sollicitans	14	116		
Aedes sticticus	3	7		
Aedes taeniorhynchus	17	364		
Aedes triseriatus	177	623	1	1.605
Aedes trivittatus	16	68		
Aedes vexans	72	455		
Anopheles bradleyi	46	1009		
Anopheles crucians	3	17		
Anopheles punctipennis	115	1250		
Anopheles quadrimaculatus	106	2058		
Coquillettidia perturbans	96	1206		
Culex erraticus	99	634	1	1.577
Culex pipiens	730	19497	56	2.872
Culex restuans	373	6082	24	3.946
Culex salinarius	59	755		
Culex spp.	3520	129704	523	4.032
Culex territans	12	32		
Culiseta melanura	526	11363	8	0.704
Culiseta morsitans	1	1		
Orthopodomyia signifera	3	3		
Psorophora ciliata	4	4		
Psorophora columbiae	18	178		
Psorophora ferox	15	213	1	4.695
State Total	**7663**	**188707**	**630**	**3.339**

Remarks: To date, 7663 pools of 188,707 mosquitoes from 30 species have been tested, with 630 positive pools detected. First positive was detected in a Mixed *Culex* pool collected on 20 May in Camden County. Nineteen counties have detected positive pools, including Atlantic, Bergen, Burlington, Camden, Cape May, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren Counties. Overall MFIR for the state is 3.339.

Humans, Horses and Wild Birds: Five human cases of WNV have occurred, one each in Gloucester, Monmouth and Union counties and two in Hudson County. 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. First positive bird (Fish Crow in Mercer County collected 8 July) has been reported. No new positive birds have been reported. To date, 110 birds have been tested, with 18 positives (no new tested from previous week). Species includes: American Crow (*Corvis brachyrhynchos* 3/3) Fish Crow (*Corvus ossifragus* 10/34), Blue Jay

(*Cyanocitta cristata* 2/12), Hawk/Raptor (1/7), unidentified corvid (1/4) and other avian species (1/50). Counties (positives) submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem, Sussex, Union and Warren.

WNV Results by County through 20 October 2014

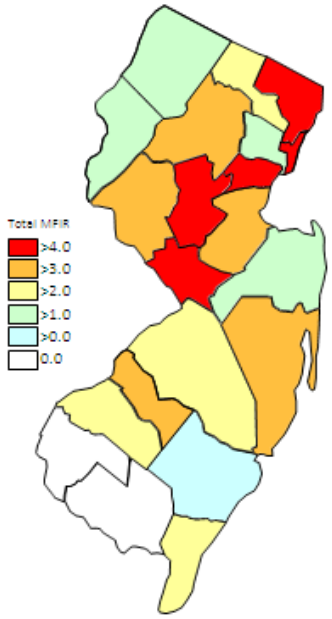
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**192**	**3867**	**19**	**4.913**
	Aedes albopictus	31	279	1	3.584
	Aedes atlanticus	1	1		
	Aedes canadensis canadensis	4	27		
	Aedes cantator	3	10		
	Aedes japonicus	9	44		
	Aedes sollicitans	2	6		
	Aedes sticticus	1	1		
	Aedes taeniorhynchus	6	247		
	Aedes vexans	8	58		
	Anopheles bradleyi	5	15		
	Anopheles punctipennis	2	4		
	Anopheles quadrimaculatus	3	10		
	Coquillettidia perturbans	5	24		
	Culex erraticus	4	27		
	Culex spp.	70	2578	18	6.982
	Culex territans	1	1		
	Culiseta melanura	30	405		
	Psorophora ferox	7	130		
Bergen		**244**	**17577**	**138**	**7.851**
	Aedes albopictus	9	52	1	19.231
	Aedes japonicus	3	199		
	Anopheles punctipennis	1	1		
	Culex spp.	231	17325	137	7.908
Burlington		**516**	**12125**	**16**	**1.320**
	Aedes albopictus	48	334		
	Aedes atlanticus	1	5		
	Aedes canadensis canadensis	17	320		
	Aedes cantator	3	21		
	Aedes cinereus	1	1		
	Aedes japonicus	38	295		
	Aedes mitchellae	1	1		
	Aedes sollicitans	1	6		
	Aedes taeniorhynchus	4	30		
	Aedes triseriatus	16	80		
	Aedes trivittatus	1	41		
	Aedes vexans	12	104		
	Anopheles bradleyi	15	397		
	Anopheles punctipennis	3	13		
	Anopheles quadrimaculatus	2	23		
	Coquillettidia perturbans	8	143		
	Culex erraticus	9	59		
	Culex pipiens	3	3		
	Culex restuans	1	1		
	Culex salinarius	32	574		
	Culex spp.	130	3625	11	3.034
	Culiseta melanura	165	6032	5	0.829

	Psorophora ciliata	1	1		
	Psorophora columbiae	4	16		
Camden		**428**	**10511**	**37**	**3.520**
	Aedes albopictus	26	53		
	Aedes japonicus	117	466	1	2.146
	Culex spp.	249	8716	36	4.130
	Culiseta melanura	36	1276		
Cape May		**833**	**7308**	**7**	**0.958**
	Aedes albopictus	55	326		
	Aedes atropalpus	1	5		
	Aedes canadensis canadensis	16	20		
	Aedes cantator	18	26		
	Aedes japonicus	48	136		
	Aedes taeniorhynchus	1	50		
	Aedes triseriatus	37	117		
	Aedes vexans	1	1		
	Anopheles bradleyi	9	168		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	34	875		
	Coquillettidia perturbans	5	54		
	Culex erraticus	12	104		
	Culex pipiens	286	3066	4	1.305
	Culex restuans	211	1326	1	0.754
	Culex salinarius	14	82		
	Culex spp.	10	20		
	Culex territans	10	30		
	Culiseta melanura	61	898	2	2.227
	Orthopodomyia signifera	3	3		
Cumberland		**236**	**3322**		
	Aedes albopictus	7	13		
	Aedes atlanticus	3	7		
	Aedes canadensis canadensis	2	3		
	Aedes japonicus	5	5		
	Aedes sollicitans	7	60		
	Aedes taeniorhynchus	3	32		
	Aedes triseriatus	1	12		
	Aedes vexans	18	159		
	Anopheles bradleyi	15	427		
	Anopheles punctipennis	27	208		
	Anopheles quadrimaculatus	11	121		
	Coquillettidia perturbans	11	334		
	Culex erraticus	3	36		
	Culex pipiens	2	11		
	Culex salinarius	7	86		
	Culex spp.	76	1464		
	Culiseta melanura	26	194		
	Psorophora ciliata	3	3		
	Psorophora columbiae	7	145		
	Psorophora ferox	2	2		
Essex		**265**	**2795**	**5**	**1.789**
	Aedes albopictus	22	78		
	Aedes japonicus	39	125		

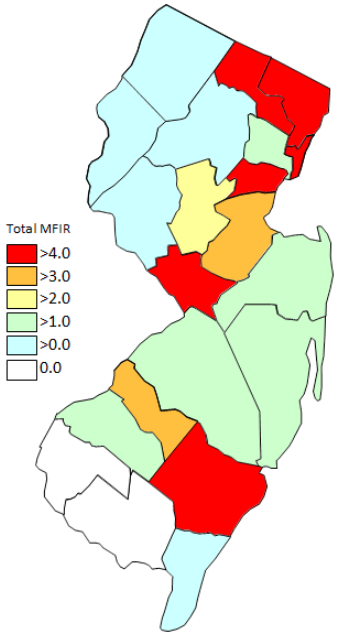
	Aedes triseriatus	5	9		
	Aedes trivittatus	7	17		
	Aedes vexans	1	4		
	Anopheles quadrimaculatus	6	7		
	Coquillettidia perturbans	1	1		
	Culex spp.	182	2552	5	1.959
	Psorophora ferox	2	2		
Gloucester		**631**	**19256**	**37**	**1.921**
	Aedes albopictus	106	1369	2	1.461
	Aedes japonicus	17	201	1	4.975
	Aedes triseriatus	9	70		
	Aedes vexans	1	4		
	Anopheles punctipennis	37	868		
	Anopheles quadrimaculatus	29	889		
	Coquillettidia perturbans	6	41		
	Culex pipiens	321	14328	32	2.233
	Culiseta melanura	104	1485	1	0.673
	Psorophora ferox	1	1	1	1000
Hudson		**198**	**9202**	**80**	**8.694**
	Aedes albopictus	14	220	2	9.091
	Culex spp.	184	8982	78	8.684
Hunterdon		**314**	**13507**	**11**	**0.814**
	Culex spp.	314	13507	11	0.814
Mercer		**544**	**10449**	**64**	**6.125**
	Aedes albopictus	130	965		
	Aedes canadensis canadensis	2	5		
	Aedes japonicus	57	183	1	5.464
	Aedes triseriatus	10	28	1	35.714
	Aedes vexans	5	48		
	Culex erraticus	8	28	1	35.714
	Culex pipiens	114	2083	20	9.602
	Culex restuans	157	4750	23	4.842
	Culex salinarius	2	8		
	Culex spp.	59	2351	18	7.656
Middlesex		**389**	**13535**	**53**	**3.916**
	Aedes albopictus	69	502	3	5.976
	Aedes triseriatus	2	14		
	Culex spp.	318	13019	50	3.841
Monmouth		**551**	**7413**	**10**	**1.349**
	Aedes albopictus	188	2366		
	Aedes canadensis canadensis	14	273		
	Aedes cantator	7	59		
	Aedes japonicus	55	177		
	Aedes sollicitans	4	44		
	Aedes taeniorhynchus	3	5		
	Aedes triseriatus	18	44		
	Aedes trivitattus	8	10		
	Aedes vexans	16	45		
	Anopheles punctipennis	23	35		

	Anopheles quadrimaculatus	8	14		
	Coquillettidia perturbans	6	6		
	Culex erraticus	10	21		
	Culex restuans	2	2		
	Culex salinarius	1	1		
	Culex spp.	158	4085	10	2.448
	Culex territans	1	1		
	Culiseta melanura	23	219		
	Culiseta morsitans	1	1		
	Psorophora columbiae	4	4		
	Psorophora ferox	1	1		
Morris		**298**	**11884**	**9**	**0.757**
	Aedes albopictus	6	81		
	Coquillettidia perturbans	4	200		
	Culex spp.	288	11603	9	0.776
Ocean		**435**	**4817**	**7**	**1.453**
	Aedes albopictus	106	1251		
	Aedes canadensis canadensis	4	97		
	Aedes cantator	3	135		
	Aedes japonicus	72	302	2	6.623
	Aedes sticticus	2	6		
	Aedes triseriatus	19	56		
	Aedes vexans	9	29		
	Anopheles bradleyi	1	1		
	Anopheles crucians	3	17		
	Anopheles punctipennis	1	3		
	Anopheles quadrimaculatus	2	4		
	Coquillettidia perturbans	21	106		
	Culex erraticus	12	16		
	Culex salinarius	3	4		
	Culex spp.	123	2555	5	1.957
	Culiseta melanura	52	158		
	Psorophora ferox	2	77		
Passaic		**174**	**4536**	**19**	**4.189**
	Aedes albopictus	17	50		
	Aedes japonicus	40	353		
	Aedes triseriatus	10	18		
	Aedes vexans	1	3		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	1	1		
	Coquillettidia perturbans	2	12		
	Culex spp.	102	4098	19	4.636
Salem		**384**	**3574**		
	Aedes albopictus	81	479		
	Aedes japonicus	35	75		
	Aedes triseriatus	32	60		
	Anopheles bradleyi	1	1		
	Anopheles punctipennis	13	78		
	Anopheles quadrimaculatus	6	80		
	Coquillettidia perturbans	26	268		
	Culex erraticus	41	343		
	Culex pipiens	4	6		

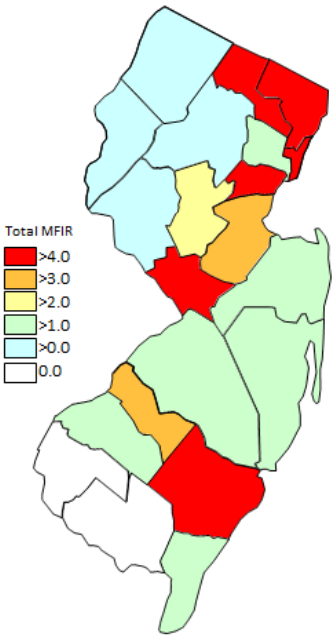
	Culex restuans	2	3		
	Culex spp.	111	1472		
	Culiseta melanura	29	696		
	Psorophora columbiae	3	13		
Somerset		**267**	**5081**	**13**	**2.559**
	Aedes albopictus	10	39		
	Aedes canadensis canadensis	1	3		
	Aedes japonicus	20	238		
	Aedes triseriatus	5	21		
	Anopheles punctipennis	1	2		
	Culex spp.	230	4778	13	2.721
Sussex		**269**	**7102**	**4**	**0.563**
	Aedes japonicus	14	301		
	Aedes triseriatus	8	77		
	Anopheles punctipennis	3	11		
	Anopheles quadrimaculatus	2	27		
	Coquillettidia perturbans	1	17		
	Culex spp.	241	6669	4	0.600
Union		**209**	**10518**	**94**	**8.937**
	Aedes albopictus	16	191	2	10.471
	Aedes japonicus	6	84		
	Culex spp.	187	10243	92	8.982
Warren		**286**	**10328**	**7**	**0.678**
	Aedes albopictus	10	117		
	Aedes japonicus	10	100		
	Aedes triseriatus	5	17		
	Anopheles punctipennis	2	25		
	Anopheles quadrimaculatus	2	7		
	Culex spp.	257	10062	7	0.696
Grand Total		**7663**	**188707**	**630**	**3.339**



Cumulative WNV activity in 2013.



WNV activity to 20 October 2014.



WNV activity last week, 2014.

Saint Louis Encephalitis (SLE) to 20 October 2014.

New Jersey will be selectively testing for SLE this year. 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 have been detected positive for SLE in 2014.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		**169**	**3896**		
	Aedes albopictus	6	48		
	Aedes japonicus	32	261		
	Aedes triseriatus	1	1		
	Culex erraticus	1	3		
	Culex pipiens	3	3		
	Culex restuans	1	1		
	Culex spp.	125	3579		
Cape May		**127**	**764**		
	Culex pipiens	117	744		
	Culex spp.	10	20		
Grand Total		**296**	**4660**		

La Crosse Encephalitis (LAC) through 20 October 2014.

New Jersey will be selectively testing for La Crosse (LAC) virus this year. 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 have been detected positive for LAC in 2014.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		**63**	**550**		
	Aedes albopictus	26	190		
	Aedes canadensis canadensis	14	233		
	Aedes japonicus	7	47		
	Aedes triseriatus	16	80		
Cape May		**37**	**123**		
	Aedes triseriatus	36	116		
	Culex pipiens	1	7		
Salem		**14**	**29**		
	Aedes triseriatus	14	29		
Grand Total		**114**	**702**		

Dengue (DENV) to 20 October 2014.

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 32 imported human cases in New Jersey, no local transmission.

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

No pools have been detected positive for DENV in 2014.

County	Species	DENV1		DENV2		DENV3		DENV4		Positives	MFIR
		Pool	Mos.	Pool	Mos.	Pool	Mos.	Pool	Mos.		
Atlantic		**28**	**270**	**28**	**270**	**28**	**270**	**27**	**264**		
	Aedes albopictus	28	270	28	270	28	270	27	264		
Bergen		**9**	**52**	**9**	**52**	**9**	**52**	**9**	**52**		
	Aedes albopictus	9	52	9	52	9	52	9	52		
Burlington		**20**	**128**	**20**	**128**	**20**	**128**	**20**	**128**		
	Aedes albopictus	20	128	20	128	20	128	20	128		
Camden		**18**	**43**	**18**	**43**	**18**	**43**	**18**	**43**		
	Aedes albopictus	18	43	18	43	18	43	18	43		
Cape May		**27**	**277**	**27**	**277**	**27**	**277**	**27**	**277**		

	Aedes albopictus	27	277	27	277	27	277	27	277		
Cumberland		**6**	**12**	**6**	**12**	**6**	**12**	**6**	**12**		
	Aedes albopictus	6	12	6	12	6	12	6	12		
Gloucester		**94**	**1124**	**94**	**1124**	**94**	**1124**	**94**	**1124**		
	Aedes albopictus	94	1124	94	1124	94	1124	94	1124		
Hudson		**14**	**220**	**14**	**220**	**14**	**220**	**14**	**220**		
	Aedes albopictus	14	220	14	220	14	220	14	220		
Mercer		**113**	**892**	**113**	**892**	**113**	**892**	**113**	**892**		
	Aedes albopictus	113	892	113	892	113	892	113	892		
Middlesex		**68**	**502**	**68**	**502**	**68**	**502**	**68**	**502**		
	Aedes albopictus	67	494	67	494	67	494	67	494		
	Culex spp.	1	8	1	8	1	8	1	8		
Monmouth		**131**	**2080**	**131**	**2080**	**131**	**2080**	**131**	**2080**		
	Aedes albopictus	131	2080	131	2080	131	2080	131	2080		
Morris		**2**	**24**	**2**	**24**	**2**	**24**	**2**	**24**		
	Aedes albopictus	2	24	2	24	2	24	2	24		
Ocean		**1**	**25**	**1**	**25**	**1**	**25**	**1**	**25**		
	Aedes albopictus	1	25	1	25	1	25	1	25		
Passaic		**1**	**2**	**1**	**2**	**1**	**2**	**1**	**2**		
	Aedes albopictus	1	2	1	2	1	2	1	2		
Salem		**77**	**467**	**77**	**467**	**77**	**467**	**77**	**467**		
	Aedes albopictus	77	467	77	467	77	467	77	467		
Somerset		**4**	**10**	**4**	**10**	**4**	**10**	**4**	**10**		
	Aedes albopictus	4	10	4	10	4	10	4	10		
Warren		**9**	**100**	**9**	**100**	**9**	**100**	**9**	**100**		
	Aedes albopictus	9	100	9	100	9	100	9	100		
Grand Total		**622**	**6228**	**622**	**6228**	**622**	**6228**	**621**	**6222**		

Chikungunya (CHIK) to 20 October 2014.

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. There are currently 109 imported human cases in New Jersey, no local transmission.

No pools have been detected positive for CHIK in 2014.

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**28**	**270**		
	Aedes albopictus	28	270		
Bergen		**9**	**52**		
	Aedes albopictus	9	52		
Burlington		**20**	**128**		
	Aedes albopictus	20	128		
Camden		**18**	**43**		
	Aedes albopictus	18	43		
Cape May		**27**	**277**		
	Aedes albopictus	27	277		
Cumberland		**6**	**12**		
	Aedes albopictus	6	12		
Gloucester		**94**	**1124**		
	Aedes albopictus	94	1124		
Hudson		**14**	**220**		
	Aedes albopictus	14	220		
Mercer		**113**	**892**		
	Aedes albopictus	113	892		
Middlesex		**68**	**502**		
	Aedes albopictus	67	494		
	Culex spp.	1	8		
Monmouth		**131**	**2080**		
	Aedes albopictus	131	2080		
Morris		**2**	**24**		
	Aedes albopictus	2	24		
Ocean		**1**	**25**		
	Aedes albopictus	1	25		
Passaic		**1**	**2**		
	Aedes albopictus	1	2		
Salem		**77**	**467**		
	Aedes albopictus	77	467		
Somerset		**4**	**10**		
	Aedes albopictus	4	10		
Warren		**9**	**100**		

	Aedes albopictus	9	100		
Grand Total		**622**	**6228**		