VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE, LAC, DENV and CHIK

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CDC WEEK 42: 19 October to 25 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**	0.00	0.20	44 (45)	10 (11)		
Green Bank (Burlington Co.)/25	**Coastal**	0.08	0.36	391 (400)	21 (22)	1	2.56
Corbin City (Atlantic Co.)/25	**Coastal**	0.20	0.04	328 (329)	20 (21)		
Dennisville (Cape May Co.)/50	**Coastal**	0.00	0.00	464	21	5	10.77
Winslow (Camden Co.)/50	**Inland**	0.13	0.12	1282	37	3	2.34
Centerton (Salem Co.)/50	**Inland**	0.16	0.20	697	25	2	2.87
Turkey Swamp (Monmouth Co.)/50	**Inland**	0.07	0.04	220 (222)	19 (20)	1	4.55
Glassboro (Gloucester Co.)/50	**Inland**	0.06	0.08	564	23		

*Current week (in parentheses) results pending.

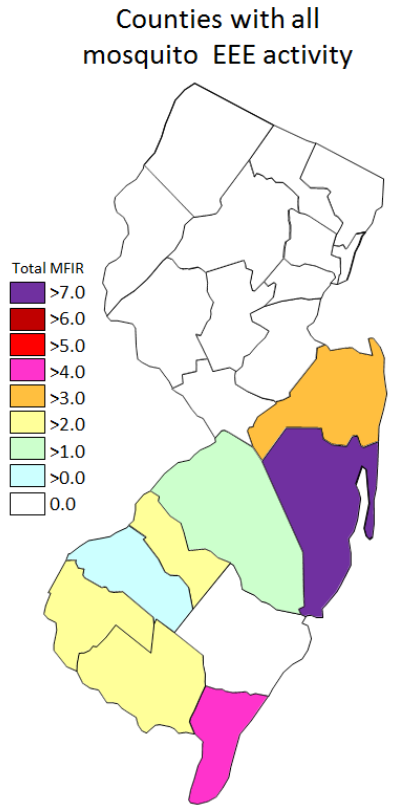
Remarks: Two positive EEE pools in *Cs. melanura* have been detected this past week in New Jersey, one each at additional county sites in Cumberland and Ocean counties. Total number of positive EEE pools is 35: 34 pools in *Cs. melanura* and 1 in *Culex salinarius.* Statewide, for all 17,444 mosquitoes tested, MFIR is 2.01, up from 1.95 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, 3990 *Cs. melanura* from 176 pools have been tested for EEE at the traditional resting box sites. Overall MFIR for these traditional sites is 3.01, down from 3.04 of the previous week. Change in declining MFIR is slowing down due to fewer mosquitoes being caught and tested. Four additional pools containing 13 *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**	5890 (144)	11	1.957
Cape May	**Gravid**, **RB**	428 (39)	5	11.682
Cumberland	**CO_2, RB**	191 (26)	2	5.618
Gloucester	**RB**	925 (82)	1	1.081
Monmouth	Other	4 (2)		
Ocean	**CO_2**, Gravid, **RB**	151 (31)	3	16.667
Salem	CO_2	9 (5)		
TOTAL		**7677 (339)**	**22**	**2.865**

Additional *Cs. melanura*: Counties submit additional pools of *Cs. melanura* caught in other trap types as well as resting boxes. Two new positive pools were detected this past week, one each in Cumberland and Ocean counties. 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	21	328		
Aedes cantator	21	47		
Aedes cinereus	1	1		
Aedes japonicus	9	30		
Aedes mitchellae	1	1		
Aedes sollicitans	10	72		
Aedes taeniorhynchus	4	30		
Aedes triseriatus	10	34		
Aedes vexans	11	59		
Anopheles bradleyi	27	658		
Anopheles crucians	4	19		
Anopheles punctipennis	47	871		
Anopheles quadrimaculatus	38	908		
Coquillettidia perturbans	50	783		
Culex erraticus	37	251		
Culex pipiens	119	757		
Culex restuans	4	16		
Culex salinarius	56	778	1	1.285
Culex spp.	23	97		
Culex territans	1	1		
Culiseta morsitans	1	1		
Psorophora ciliata	1	1		
Psorophora columbiae	3	15		
Psorophora ferox	1	1		
State Total	**506**	**5777**	**1**	**0.173**

Additional Species: Counties submit additional pools of species other than *Cs. melanura* for EEE virus testing. First and only detection into non-*melanura* species has occurred with a positive pool of *Culex salinarius*, collected in Burlington County on 16 Sep.

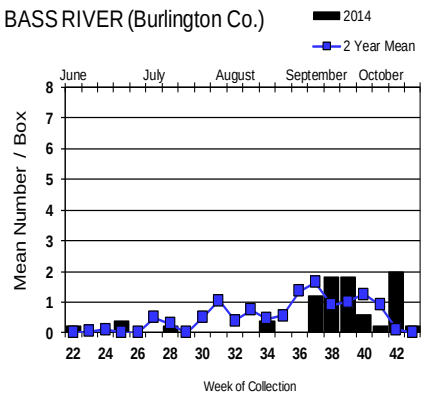
Horses and Humans: Four horses have been reported with EEE: Earliest onset date is on 11 Aug, 2014 for a 4 yo mare in Gloucester County, died 14 Sep. Second case with onset date of 11 Sep for a 2 yo mare in Ocean County, euthanized same date. Third case with onset date of 21 Sep for a 6 yo gelding in 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.

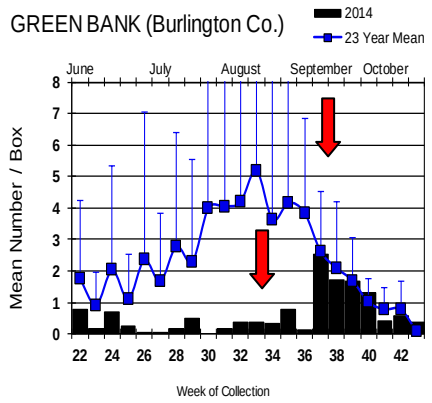
No human cases have been reported.

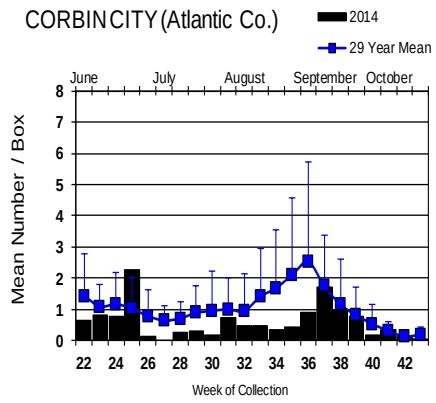
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

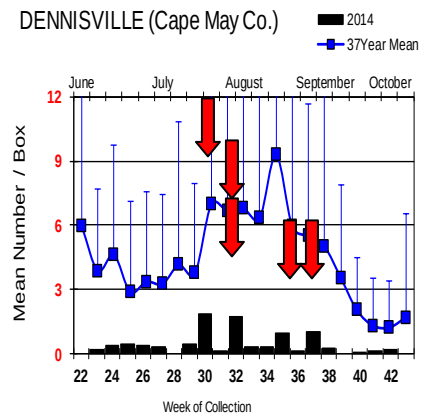
Culiseta melanura Population Graphs

Coastal

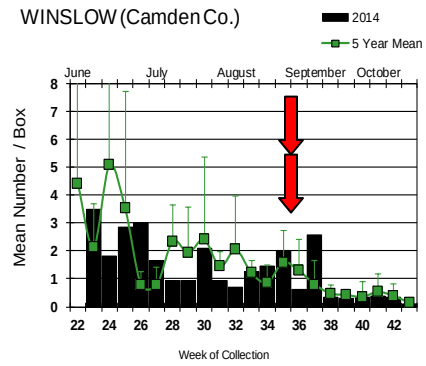


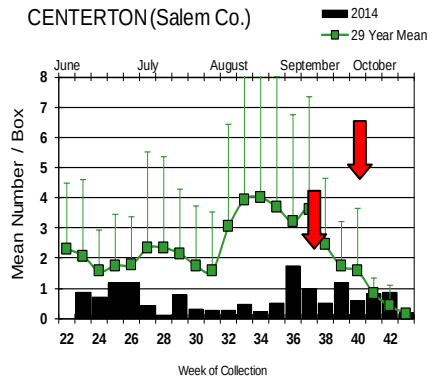


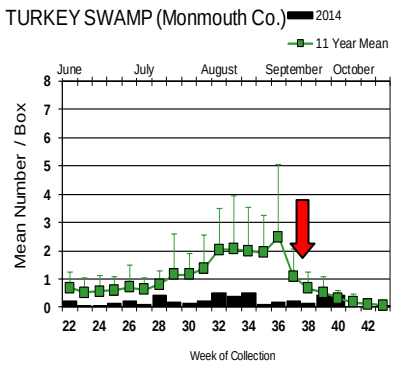


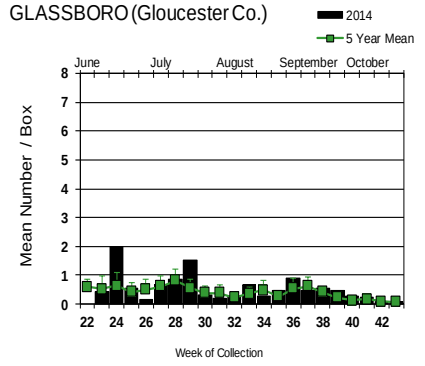


Inland









Populations of *Cs. melanura* continue to decrease, following historical trends at most sites. Warmer weather has persisted, punctuated with the occasional few nights of cold temperatures. EEE activity continues for this cold-tolerant species.

= 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(6) MS(1) NC(11) NH(3) NJ(4) NY(12) OH(5) SC(7) TX(5) VA(1)
- mosquito pools: GA(1) LA(1) MA(33) MD(1) ME(22) NH(18) NJ(35) NY(87) VA(201) VT(8)
- sentinel: AL(3) FL(154) GA(1) ME(1 emu) NC(2) VA(39/3 cassowaries)
- human: AL(1) ME(1) MI(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	1/2
Alaska					
Arizona	1	280		5/6	55/60
Arkansas					6
California	2340/2376	3268/3282	412/423	14	562/608
Colorado	3/4	195/196		4	99/108
Connecticut		68			4/5
Delaware	3		10		
DC					3
Florida			175/199	5	10/11
Georgia	0	36			11
Hawaii					
Idaho		62		6	19
Illinois	38	1248			36/39
Indiana		174/176			7/8
Iowa		9		3	12
Kansas		1			36/38
Kentucky				3	
Louisiana		924/926	54/59	1	130/135
Maine		0		0	0
Maryland		33		1	5
Mass.		56		0	4
Michigan	19/22	9/10		1	1
Minnesota	2	21		2	10/14
Mississippi		67		1	45/46
Missouri	2	43		10	10/12

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana		12		3	5
Nebraska	6	248		0	114/120
Nevada		96/97		1	3
New Hampshire		1		0	0
New Jersey	18	630/633		0	5
New Mexico		2		4	14
New York		752		1	17
North Carolina					
North Dakota	0	6		4*	22
Ohio		313		1	6/9
Oklahoma		5/9		7	16
Oregon	7	58	0	3	7
Pennsylvania	15/16	1435		2	8/10
Rhode Island		2			
South Carolina	1				2
South Dakota	1	75		1	51/57
Tennessee	0	710/721		0	14
Texas	76	1978/1996		6	212/239
Utah	2	160	1	4	2
Vermont		8		0	0
Virginia		130	15/21		4
Washington	0	80		5	12
West Virginia	0	7/17		0	0
Wisconsin	26	3		2	8
Wyoming	1	12		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 27 October 2014

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	955	8788	11	1.252
Aedes atlanticus	5	13		
Aedes atropalpus	1	5		
Aedes canadensis canadensis	61	749		
Aedes cantator	34	251		
Aedes cinereus	1	1		
Aedes japonicus	595	3321	5	1.506
Aedes mitchellae	1	1		
Aedes sollicitans	16	122		
Aedes sticticus	3	7		
Aedes taeniorhynchus	17	364		
Aedes triseriatus	177	623	1	1.605
Aedes trivittatus	16	68		
Aedes vexans	77	478		
Anopheles bradleyi	50	1200		
Anopheles crucians	4	19		
Anopheles punctipennis	118	1261		
Anopheles quadrimaculatus	110	2066		
Coquillettidia perturbans	96	1206		
Culex erraticus	102	652	1	1.534
Culex pipiens	730	19497	56	2.872
Culex restuans	374	6084	24	3.945
Culex salinarius	63	801		
Culex spp.	3565	130484	526	4.031
Culex territans	12	32		
Culiseta melanura	546	11724	8	0.682
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	**7770**	**190216**	**633**	**3.328**

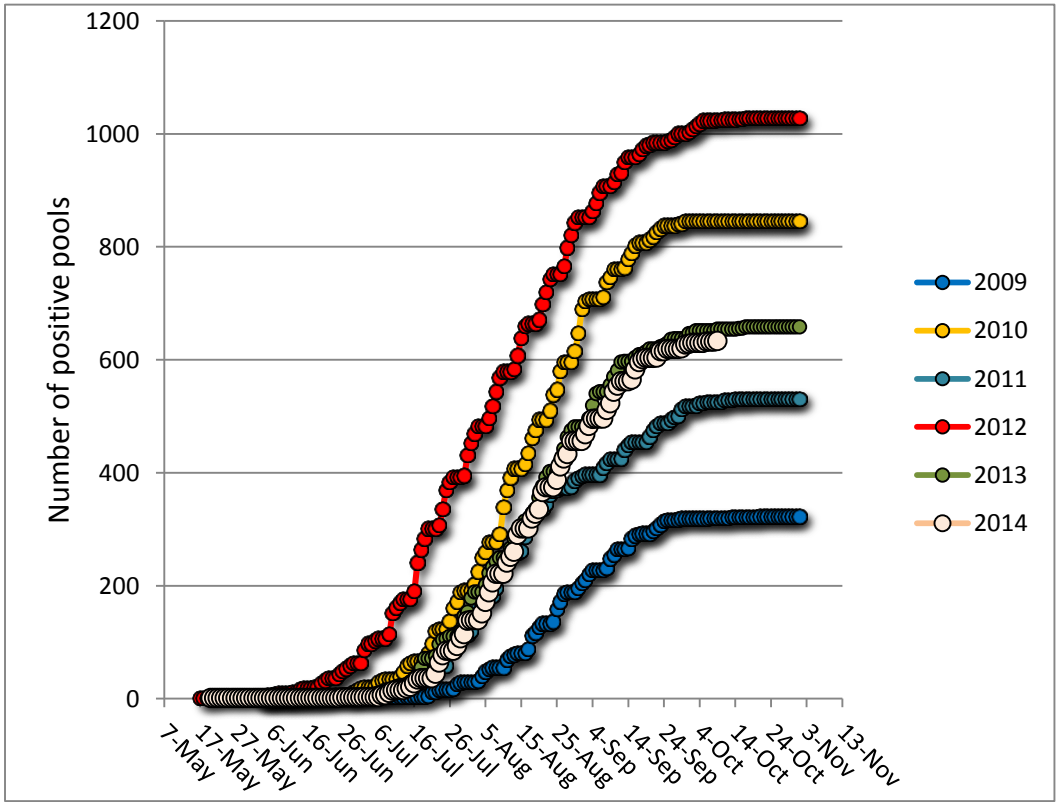
Remarks: To date, 7770 pools of 190,216 mosquitoes from 30 species have been tested, with 633 positive pools detected. First positive was detected in a Mixed *Culex* pool collected on 20 May in Camden County. Nineteen counties have detected positive pools, including Atlantic, Bergen, Burlington, Camden, Cape May, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren Counties. Overall MFIR for the state is 3.328.

Humans, Horses and Wild Birds: Seven human cases of WNV have occurred, one each in Camden, Gloucester, Mercer, 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, 112 birds have been tested, with 18 positives. 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 (1/52). Counties (positives) submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem, Sussex, Union and Warren.



Graph above shows cumulative positive WNV pools over the season from 2009-2014. 2014 activity appears similar to the previous year, 2013.

WNV Results by County through 27 October 2014

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**193**	**3871**	**19**	4.908
	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	31	409		
	Psorophora ferox	7	130		
Bergen		**244**	**17577**	**138**	**7.851**
	Aedes albopictus	9	52	1	19.231
	Aedes japonicus	3	199		

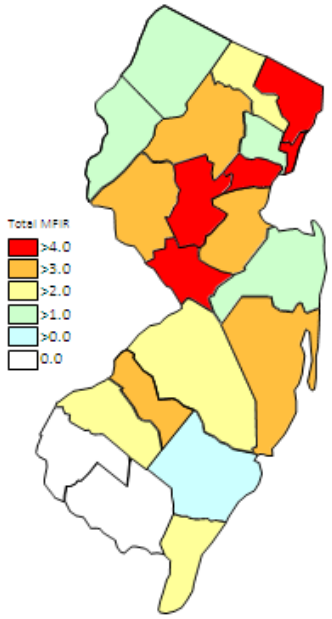
	Anopheles punctipennis	1	1		
	Culex spp.	231	17325	137	7.908
Burlington		**545**	**12674**	**16**	**1.262**
	Aedes albopictus	49	343		
	Aedes atlanticus	1	5		
	Aedes canadensis canadensis	18	321		
	Aedes cantator	3	21		
	Aedes cinereus	1	1		
	Aedes japonicus	40	320		
	Aedes mitchellae	1	1		
	Aedes sollicitans	1	6		
	Aedes taeniorhynchus	4	30		
	Aedes triseriatus	16	80		
	Aedes trivittatus	1	41		
	Aedes vexans	14	109		
	Anopheles bradleyi	17	489		
	Anopheles punctipennis	3	13		
	Anopheles quadrimaculatus	3	25		
	Coquillettidia perturbans	8	143		
	Culex erraticus	9	59		
	Culex pipiens	3	3		
	Culex restuans	1	1		
	Culex salinarius	36	620		
	Culex spp.	136	3701	11	2.972
	Culiseta melanura	175	6325	5	0.791
	Psorophora ciliata	1	1		
	Psorophora columbiae	4	16		
Camden		**437**	**10563**	**37**	**3.503**
	Aedes albopictus	26	53		
	Aedes japonicus	120	469	1	2.132
	Culex spp.	254	8759	36	4.110
	Culiseta melanura	37	1282		
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		**256**	**3513**		
	Aedes albopictus	7	13		
	Aedes atlanticus	3	7		
	Aedes canadensis canadensis	2	3		
	Aedes japonicus	6	7		
	Aedes sollicitans	9	66		
	Aedes taeniorhynchus	3	32		
	Aedes triseriatus	1	12		
	Aedes vexans	21	177		
	Anopheles bradleyi	17	526		
	Anopheles punctipennis	28	215		
	Anopheles quadrimaculatus	12	123		
	Coquillettidia perturbans	11	334		
	Culex erraticus	4	48		
	Culex pipiens	2	11		
	Culex salinarius	7	86		
	Culex spp.	83	1496		
	Culiseta melanura	28	207		
	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		**632**	**19260**	**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	105	1489	1	0.672
	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		**317**	**13556**	**11**	**0.811**
	Culex spp.	317	13556	11	0.811
Mercer		**564**	**10966**	**67**	**6.110**
	Aedes albopictus	130	965		

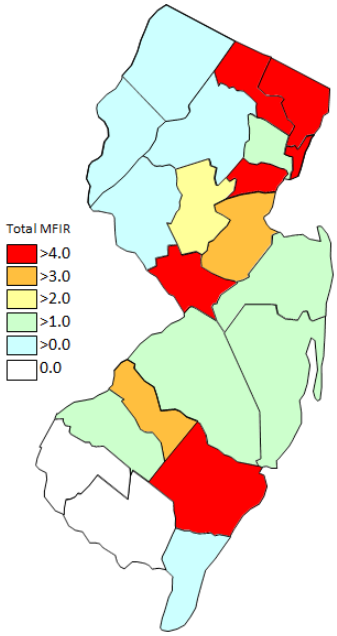
	Aedes canadensis canadensis	2	5		
	Aedes japonicus	58	185	1	5.405
	Aedes triseriatus	10	28	1	35.714
	Aedes vexans	5	48		0.000
	Culex erraticus	8	28	1	35.714
	Culex pipiens	114	2083	20	9.602
	Culex restuans	158	4752	23	4.840
	Culex salinarius	2	8		
	Culex spp.	77	2864	21	7.332
Middlesex		**393**	**13598**	**53**	**3.898**
	Aedes albopictus	69	502	3	5.976
	Aedes triseriatus	2	14		
	Culex spp.	322	13082	50	3.822
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		**454**	**4887**	**7**	**1.432**
	Aedes albopictus	109	1265		
	Aedes canadensis canadensis	4	97		
	Aedes cantator	3	135		
	Aedes japonicus	75	307	2	6.515
	Aedes sticticus	2	6		
	Aedes triseriatus	19	56		
	Aedes vexans	9	29		
	Anopheles bradleyi	1	1		
	Anopheles crucians	4	19		
	Anopheles punctipennis	3	7		
	Anopheles quadrimaculatus	4	8		
	Coquillettidia perturbans	21	106		

	Culex erraticus	14	22		
	Culex salinarius	3	4		
	Culex spp.	125	2559	5	1.954
	Culiseta melanura	56	189		
	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		**385**	**3584**		
	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	30	706		
	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		

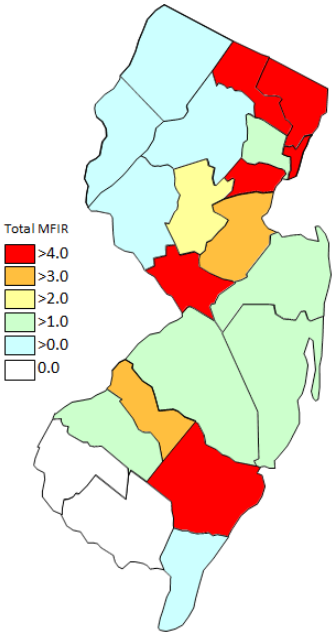
	Aedes triseriatus	5	17		
	Anopheles punctipennis	2	25		
	Anopheles quadrimaculatus	2	7		
	Culex spp.	257	10062	7	0.696
Grand Total		**7770**	**190216**	**633**	**3.328**



Cumulative WNV activity in 2013.



WNV activity to 27 October 2014.



WNV activity last week, 2014.

Saint Louis Encephalitis (SLE) to 27 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		**177**	**3997**		
	Aedes albopictus	6	48		
	Aedes japonicus	34	286		
	Aedes triseriatus	1	1		
	Culex erraticus	1	3		
	Culex pipiens	3	3		
	Culex restuans	1	1		
	Culex spp.	131	3655		
Cape May		**127**	**764**		
	Culex pipiens	117	744		
	Culex spp.	10	20		
Grand Total		**304**	**4761**		

La Crosse Encephalitis (LAC) through 27 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		**64**	**559**		
	Aedes albopictus	27	199		
	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		**115**	**711**		

Dengue (DENV) to 27 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 40 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		**2**	**37**	**2**	**37**	**2**	**37**	**2**	**37**		
	Aedes albopictus	2	37	2	37	2	37	2	37		
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		**623**	**6240**	**623**	**6240**	**623**	**6240**	**622**	**6234**		

Chikungunya (CHIK) to 27 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 130 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		**2**	**37**		
	Aedes albopictus	2	37		
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		**623**	**6240**		