

VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE, LAC, DENV and CHIK

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CDC WEEK 37: 7 September to 13 September, 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	1.65	1.20	6 (12)	4 (5)		
Green Bank (Burlington Co.)/25	Coastal	2.62	2.52	116 (179)	14 (16)	1	8.62
Corbin City (Atlantic Co.)/25	Coastal	1.75	1.72	199 (242)	14 (15)		
Dennisville (Cape May Co.)/50	Coastal	4.99	1.04	430	18	5	11.63
Winslow (Camden Co.)/50	Inland	0.80	2.56	1189	31	3	2.52
Centerton (Salem Co.)/50	Inland	3.62	0.98	487	18	1	2.05
Turkey Swamp (Monmouth Co.)/50	Inland	1.09	0.22	158 (169)	15 (16)		
Glassboro (Gloucester Co.)/50	Inland	0.62	0.46	481	17		

*Current week (in parentheses) results pending.

Remarks: Five additional positive EEE pools have been detected this past week: 1 each from the Centerton, Dennisville and Green Bank traditional resting box sites and two from Burlington Counties non-traditional sites. Total number of positive EEE pools is 24, all in *Cs. melanura*. Statewide, for all mosquitoes tested, MFIR is 1.92, up from 1.72 of the previous week.

Traditional Resting Box Sites: Three new EEE positive *Cs. melanura* pools has been detected, one each at the Centerton, Dennisville and Green Bank sites. To date, 3066 *Cs. melanura* from 131 pools have been tested for EEE at the traditional resting box sites. Overall MFIR for these traditional sites is 3.26, up from 2.49 of the previous week. Five additional pools containing 123 *Cs. melanura* remains to be tested.

Additional <i>Cs. melanura</i> trapped by counties				
*traps with positives indicated in BOLD .				
County	Trap types*	Number collected (pools)	Number of positive pools	MFIR
Atlantic	CO ₂	4 (3)		
Burlington	CO₂	4564 (100)	10	2.191
Cape May	Gravid, RB	203 (15)	1	4.926
Cumberland	CO ₂ , RB	102 (15)		
Gloucester	RB	759 (65)	1	1.318
Monmouth	Other	2 (1)		
Ocean	CO₂, RB	41 (14)	2	48.780
Salem	CO ₂	9 (5)		
TOTAL		5684 (218)	14	2.464

Additional *Cs. melanura*: Counties submit additional pools of *Cs. melanura* caught in other trap types as well as resting boxes. Two additional positive pools were detected in CO₂ traps from Burlington County. Virus was first detected in these additional pools from a Gloucester County resting box sampled on 23 July.

Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes atlanticus</i>	1	5		
<i>Aedes canadensis canadensis</i>	7	169		
<i>Aedes cantator</i>	4	7		
<i>Aedes cinereus</i>	1	1		
<i>Aedes mitchellae</i>	1	1		
<i>Aedes sollicitans</i>	4	45		
<i>Aedes taeniorhynchus</i>	4	30		
<i>Aedes triseriatus</i>	5	26		
<i>Aedes vexans</i>	4	35		
<i>Anopheles bradleyi</i>	12	322		
<i>Anopheles punctipennis</i>	36	720		
<i>Anopheles quadrimaculatus</i>	23	686		

Additional Species: Counties submit additional pools of species other than *Cs. melanura* for EEE virus testing. Currently, no detection of EEE in other species has occurred.

Horses and Humans: Currently there is no reported horse or human cases

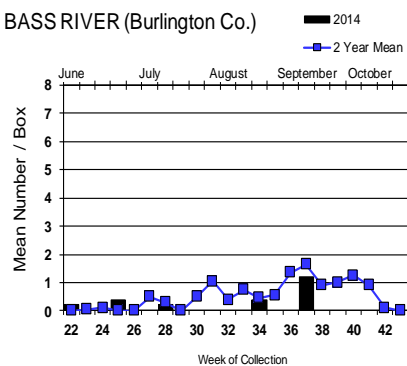
<i>Coquillettidia perturbans</i>	44	770
<i>Culex erraticus</i>	14	136
<i>Culex pipiens</i>	23	178
<i>Culex restuans</i>	4	16
<i>Culex salinarius</i>	34	483
<i>Culex</i> spp.	9	69
<i>Culex territans</i>	1	1
<i>Culiseta morsitans</i>	1	1
<i>Psorophora ciliata</i>	1	1
<i>Psorophora columbiae</i>	2	14
State Total	235	3716

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

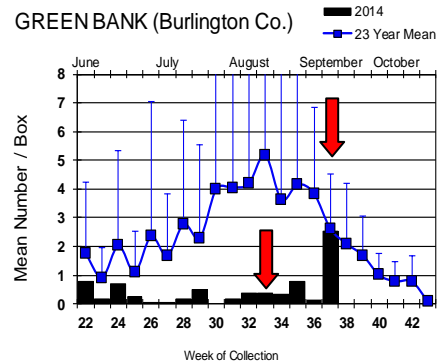
Culiseta melanura Population Graphs

Coastal

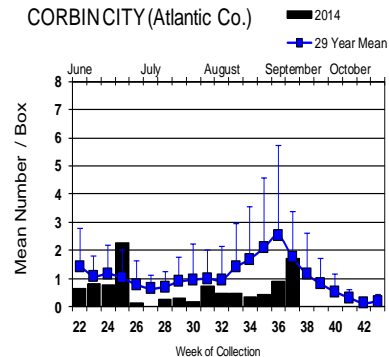
BASS RIVER (Burlington Co.)



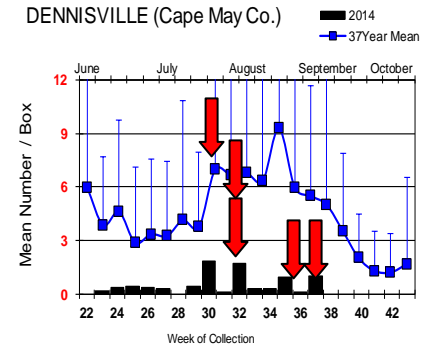
GREEN BANK (Burlington Co.)



CORBINCITY (Atlantic Co.)

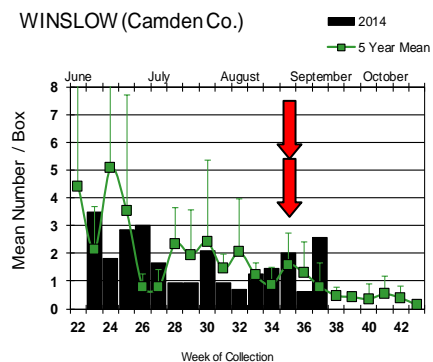


DENNISVILLE (Cape May Co.)

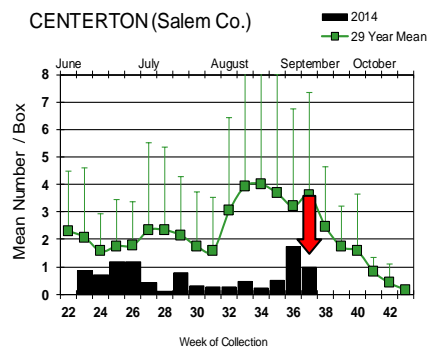


Inland

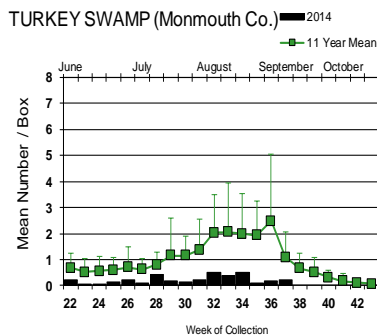
WINSLOW (Camden Co.)



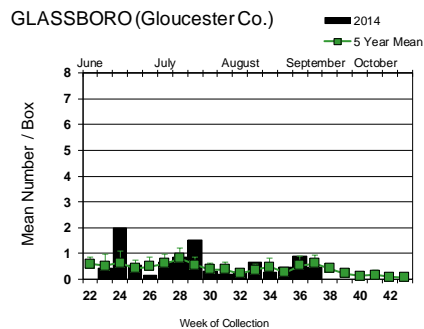
CENTERTON (Salem Co.)



TURKEY SWAMP (Monmouth Co.)



GLASSBORO (Gloucester Co.)



Some increases in *Culiseta melanura* populations were seen at Bass River, Green Bank, Corbin City, Dennisville, Winslow and Turkey Swamp. Winslow was the only site to be above the historical trend, though not significantly so. Despite lower populations in general, detection of EEE continues to occur.

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

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

- equine: AL(2) FL (46 +2 deer) GA(6) LA(5) MA(1) NC(6) NH(1) NY(1) SC(7) TX(1)
- mosquito pools: GA(1) LA(1) MA(24) ME(4) NH(6) NJ(19) NY(60) VA(108) VT(5)
- sentinel: AL(3) FL(151) GA(1) ME(1 emu) NC(1) VA(27/3 cassowaries)
- human: AL(1) NH(1) NY(1)

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	192/196		1/2	27/34
Arkansas					2
California	1733/1827	2485/2660	242/274	4/7	129/181
Colorado	2/3	148/195		2/3	12/19
Connecticut		34/43			0
Delaware	1/2				
DC					1
Florida			44/60	2/3	
Georgia	0	25			1/3
Hawaii					
Idaho		49/62		2	11/13
Illinois	22/25	606/760			2/4
Indiana		85/105			2
Iowa		5		1	8
Kansas		0			1/3
Kentucky				1	
Louisiana		817/857	26	1	61/80
Maine		0		0	0
Maryland		14/16		1	1
Mass.		33/39		0	1
Michigan	10/11	6/9		1	
Minnesota	2	10/17		1	3/4
Mississippi		54		0	17/24
Missouri	1	34		1	1/2

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana		9/12		2	1/3
Nebraska	3/4	153/166		0	14/28
Nevada		43/55			
New Hampshire		0		0	0
New Jersey	13/15	429/491		0	2/3
New Mexico		1		2	1
New York		327/492			2/3
North Carolina					
North Dakota	0	6		2*	7/9
Ohio		216/267			3
Oklahoma		4/5			4/6
Oregon	0	31	0	2	4
Pennsylvania	7/8	1097/1129			2
Rhode Island		1			
South Carolina	1				
South Dakota	1	57		1	26/31
Tennessee	0	293/304		0	3
Texas	63/69	1480/1673		1	49/70
Utah	2	133/145		1/3	1
Vermont		7/8		0	0
Virginia		130	15		1
Washington	0	60/80		1/3	4/7
West Virginia	1	6/7		0	0
Wisconsin	23/25	2		1	5
Wyoming	1	12		3	3/5

* 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 15 September 2014

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	703	6679	10	1.497
<i>Aedes atlanticus</i>	3	9		
<i>Aedes atropalpus</i>	1	5		
<i>Aedes canadensis canadensis</i>	30	569		
<i>Aedes cantator</i>	16	208		
<i>Aedes cinereus</i>	1	1		
<i>Aedes japonicus</i>	419	2574	4	1.554
<i>Aedes mitchellae</i>	1	1		
<i>Aedes sollicitans</i>	10	95		
<i>Aedes sticticus</i>	3	7		
<i>Aedes taeniorhynchus</i>	15	349		
<i>Aedes triseriatus</i>	125	501	1	1.996
<i>Aedes trivittatus</i>	14	66		
<i>Aedes vexans</i>	50	343		
<i>Anopheles bradleyi</i>	25	644		
<i>Anopheles punctipennis</i>	83	1004		
<i>Anopheles quadrimaculatus</i>	69	1427		
<i>Coquillettidia perturbans</i>	86	1186		
<i>Culex erraticus</i>	50	429		
<i>Culex pipiens</i>	472	15221	35	2.299
<i>Culex restuans</i>	213	4913	17	3.460
<i>Culex salinarius</i>	40	505		
<i>Culex spp.</i>	2847	113752	418	3.675
<i>Culex territans</i>	4	4		
<i>Culiseta melanura</i>	374	8747	6	0.686
<i>Culiseta morsitans</i>	1	1		
<i>Psorophora ciliata</i>	3	3		
<i>Psorophora columbiae</i>	12	88		
<i>Psorophora ferox</i>	11	197		
State Total	5681	159528	491	3.078

Remarks: To date, 5681 pools of 159,528 mosquitoes from 28 species have been tested, with 491 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 has increased from 3.078 to 2.448.

Humans, Horses and Wild Birds: Three human cases of WNV have occurred, one each in Gloucester, Hudson and Monmouth 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. First positive bird (Fish Crow in Mercer County collected 8 July) has been reported. To date, 106 birds have been tested, with 15 positives. Species includes: American Crow (*Corvus brachyrhynchos* 3/3) Fish Crow (*Corvus ossifragus* 9/33), Blue Jay (*Cyanocitta cristata* 0/10), Hawk/Raptor (1/7), unidentified corvid (0/4) and other avian species (1/48). 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 15 September 2014

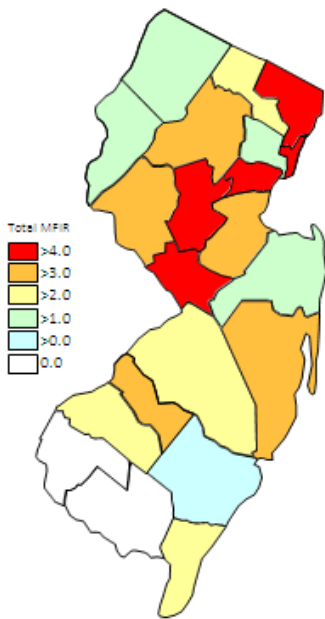
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		140	3295	19	5.766
	<i>Aedes albopictus</i>	24	241	1	4.149
	<i>Aedes canadensis canadensis</i>	3	26		
	<i>Aedes cantator</i>	3	10		
	<i>Aedes japonicus</i>	5	36		
	<i>Aedes sollicitans</i>	2	6		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes taeniorhynchus</i>	6	247		
	<i>Aedes vexans</i>	5	33		
	<i>Anopheles bradleyi</i>	3	11		
	<i>Anopheles punctipennis</i>	2	4		
	<i>Anopheles quadrimaculatus</i>	3	10		
	<i>Coquillettidia perturbans</i>	5	24		
	<i>Culex erraticus</i>	2	25		
	<i>Culex</i> spp.	53	2276	18	7.909
	<i>Culiseta melanura</i>	18	229		
	<i>Psorophora ferox</i>	5	116		
Bergen		200	14652	106	7.235
	<i>Aedes albopictus</i>	5	27		
	<i>Culex</i> spp.	195	14625	106	7.248
Burlington		397	9893	15	1.516
	<i>Aedes albopictus</i>	45	324		
	<i>Aedes atlanticus</i>	1	5		
	<i>Aedes canadensis canadensis</i>	5	163		
	<i>Aedes cinereus</i>	1	1		
	<i>Aedes japonicus</i>	32	279		
	<i>Aedes mitchellae</i>	1	1		
	<i>Aedes taeniorhynchus</i>	4	30		
	<i>Aedes triseriatus</i>	13	74		
	<i>Aedes trivittatus</i>	1	41		
	<i>Aedes vexans</i>	7	85		
	<i>Anopheles bradleyi</i>	5	180		
	<i>Anopheles punctipennis</i>	3	13		
	<i>Anopheles quadrimaculatus</i>	1	21		
	<i>Coquillettidia perturbans</i>	7	141		
	<i>Culex erraticus</i>	7	54		
	<i>Culex pipiens</i>	2	2		
	<i>Culex restuans</i>	1	1		
	<i>Culex salinarius</i>	20	344		
	<i>Culex</i> spp.	119	3432	10	2.914
	<i>Culiseta melanura</i>	118	4686	5	1.067
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	3	15		
Camden		345	9627	28	2.908
	<i>Aedes albopictus</i>	19	43		
	<i>Aedes japonicus</i>	91	391	1	2.558
	<i>Culex</i> spp.	204	8004	27	3.373
	<i>Culiseta melanura</i>	31	1189		

Cape May	357	4227	3	0.710
<i>Aedes albopictus</i>	31	195		
<i>Aedes atropalpus</i>	1	5		
<i>Aedes canadensis canadensis</i>	1	1		
<i>Aedes cantator</i>	4	7		
<i>Aedes japonicus</i>	14	35		
<i>Aedes taeniorhynchus</i>	1	50		
<i>Aedes triseriatus</i>	14	74		
<i>Aedes vexans</i>	1	1		
<i>Anopheles bradleyi</i>	7	142		
<i>Anopheles quadrimaculatus</i>	19	566		
<i>Coquillettidia perturbans</i>	3	52		
<i>Culex erraticus</i>	6	59		
<i>Culex pipiens</i>	140	1818	1	0.550
<i>Culex restuans</i>	69	558	1	1.792
<i>Culex salinarius</i>	9	66		
<i>Culex spp.</i>	2	3		
<i>Culex territans</i>	3	3		
<i>Culiseta melanura</i>	32	592	1	1.689
Cumberland	159	2525		
<i>Aedes albopictus</i>	4	9		
<i>Aedes atlanticus</i>	2	4		
<i>Aedes canadensis canadensis</i>	1	2		
<i>Aedes japonicus</i>	2	2		
<i>Aedes sollicitans</i>	4	45		
<i>Aedes taeniorhynchus</i>	2	18		
<i>Aedes vexans</i>	10	105		
<i>Anopheles bradleyi</i>	9	310		
<i>Anopheles punctipennis</i>	15	161		
<i>Anopheles quadrimaculatus</i>	8	49		
<i>Coquillettidia perturbans</i>	11	334		
<i>Culex erraticus</i>	1	4		
<i>Culex pipiens</i>	1	5		
<i>Culex salinarius</i>	6	83		
<i>Culex spp.</i>	57	1203		
<i>Culiseta melanura</i>	17	118		
<i>Psorophora ciliata</i>	2	2		
<i>Psorophora columbiae</i>	6	70		
<i>Psorophora ferox</i>	1	1		
Essex	250	2721	4	1.470
<i>Aedes albopictus</i>	18	70		
<i>Aedes japonicus</i>	36	109		
<i>Aedes triseriatus</i>	4	8		
<i>Aedes trivittatus</i>	7	17		
<i>Aedes vexans</i>	1	4		
<i>Anopheles quadrimaculatus</i>	5	6		
<i>Culex spp.</i>	177	2505	4	1.597
<i>Psorophora ferox</i>	2	2		
Gloucester	511	16259	27	1.661
<i>Aedes albopictus</i>	87	1067	2	1.874
<i>Aedes japonicus</i>	13	183	1	5.464
<i>Aedes triseriatus</i>	5	50		
<i>Aedes vexans</i>	1	4		

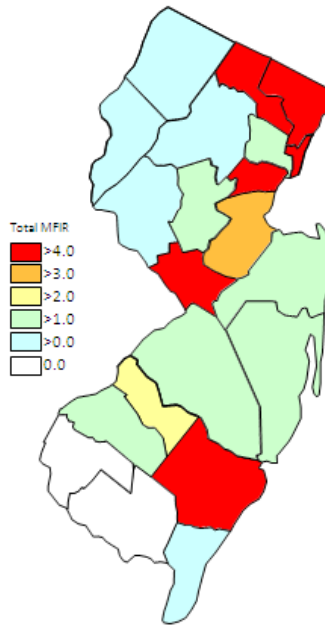
<i>Anopheles punctipennis</i>	29	700		
<i>Anopheles quadrimaculatus</i>	22	685		
<i>Coquillettidia perturbans</i>	5	39		
<i>Culex pipiens</i>	268	12315	24	1.949
<i>Culiseta melanura</i>	81	1216		
Hudson	139	6596	61	9.248
<i>Aedes albopictus</i>	14	220	2	9.091
<i>Culex</i> spp.	125	6376	59	9.253
Hunterdon	239	11707	7	0.598
<i>Culex</i> spp.	239	11707	7	0.598
Mercer	382	8419	43	5.107
<i>Aedes albopictus</i>	74	574		
<i>Aedes canadensis canadensis</i>	2	5		
<i>Aedes japonicus</i>	41	147		
<i>Aedes triseriatus</i>	10	28	1	35.714
<i>Aedes vexans</i>	5	48		
<i>Culex erraticus</i>	2	6		
<i>Culex pipiens</i>	57	1075	10	9.302
<i>Culex restuans</i>	139	4349	16	3.679
<i>Culex salinarius</i>	2	8		
<i>Culex</i> spp.	50	2179	16	7.343
Middlesex	312	12486	46	3.684
<i>Aedes albopictus</i>	61	461	3	6.508
<i>Aedes triseriatus</i>	2	14		
<i>Culex</i> spp.	249	12011	43	3.580
Monmouth	410	6269	9	1.436
<i>Aedes albopictus</i>	130	1635		
<i>Aedes canadensis canadensis</i>	14	273		
<i>Aedes cantator</i>	6	56		
<i>Aedes japonicus</i>	41	156		
<i>Aedes sollicitans</i>	4	44		
<i>Aedes taeniorhynchus</i>	2	4		
<i>Aedes triseriatus</i>	15	41		
<i>Aedes trivitatus</i>	6	8		
<i>Aedes vexans</i>	10	31		
<i>Anopheles punctipennis</i>	17	25		
<i>Anopheles quadrimaculatus</i>	3	3		
<i>Coquillettidia perturbans</i>	6	6		
<i>Culex erraticus</i>	4	11		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	1	1		
<i>Culex</i> spp.	126	3797	9	2.370
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	17	170		
<i>Culiseta morsitans</i>	1	1		
<i>Psorophora columbiae</i>	3	3		
<i>Psorophora ferox</i>	1	1		
Morris	242	10682	5	0.468
<i>Aedes albopictus</i>	5	75		

	<i>Coquillettidia perturbans</i>	4	200		
	<i>Culex</i> spp.	233	10407	5	0.480
Ocean		308	4217	6	1.423
	<i>Aedes albopictus</i>	75	1010		
	<i>Aedes canadensis canadensis</i>	3	96		
	<i>Aedes cantator</i>	3	135		
	<i>Aedes japonicus</i>	46	231	2	8.658
	<i>Aedes sticticus</i>	2	6		
	<i>Aedes triseriatus</i>	13	42		
	<i>Aedes vexans</i>	9	29		
	<i>Coquillettidia perturbans</i>	17	94		
	<i>Culex erraticus</i>	4	5		
	<i>Culex salinarius</i>	2	3		
	<i>Culex</i> spp.	94	2413	4	1.658
	<i>Culiseta melanura</i>	38	76		
	<i>Psorophora ferox</i>	2	77		
Passaic		150	4265	19	4.455
	<i>Aedes albopictus</i>	16	48		
	<i>Aedes japonicus</i>	32	338		
	<i>Aedes triseriatus</i>	9	17		
	<i>Aedes vexans</i>	1	3		
	<i>Coquillettidia perturbans</i>	2	12		
	<i>Culex</i> spp.	90	3847	19	4.939
Salem		294	2786		
	<i>Aedes albopictus</i>	64	360		
	<i>Aedes japonicus</i>	27	64		
	<i>Aedes triseriatus</i>	25	52		
	<i>Anopheles bradleyi</i>	1	1		
	<i>Anopheles punctipennis</i>	13	78		
	<i>Anopheles quadrimaculatus</i>	6	80		
	<i>Coquillettidia perturbans</i>	25	267		
	<i>Culex erraticus</i>	24	265		
	<i>Culex pipiens</i>	4	6		
	<i>Culex restuans</i>	2	3		
	<i>Culex</i> spp.	81	1139		
	<i>Culiseta melanura</i>	22	471		
Somerset		226	4665	9	1.929
	<i>Aedes albopictus</i>	9	36		
	<i>Aedes canadensis canadensis</i>	1	3		
	<i>Aedes japonicus</i>	18	218		
	<i>Aedes triseriatus</i>	5	21		
	<i>Anopheles punctipennis</i>	1	2		
	<i>Culex</i> spp.	192	4385	9	2.052
Sussex		196	5703	2	0.351
	<i>Aedes japonicus</i>	10	231		
	<i>Aedes triseriatus</i>	6	64		
	<i>Anopheles punctipennis</i>	2	8		
	<i>Anopheles quadrimaculatus</i>	1	5		
	<i>Coquillettidia perturbans</i>	1	17		
	<i>Culex</i> spp.	176	5378	2	0.372

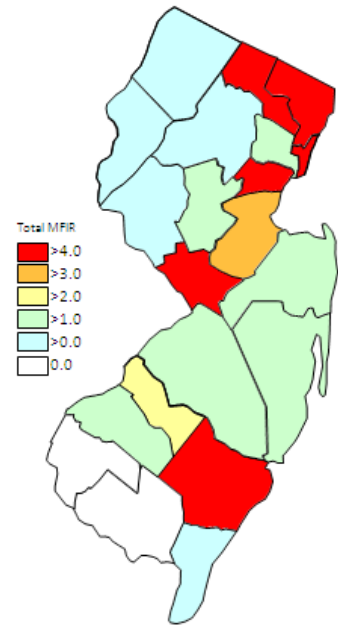
Union		172	8555	77	9.001
	<i>Aedes albopictus</i>	16	191	2	10.471
	<i>Aedes japonicus</i>	6	84		
	<i>Culex</i> spp.	150	8280	75	9.058
Warren		252	9979	5	0.501
	<i>Aedes albopictus</i>	6	93		
	<i>Aedes japonicus</i>	5	70		
	<i>Aedes triseriatus</i>	4	16		
	<i>Anopheles punctipennis</i>	1	13		
	<i>Anopheles quadrimaculatus</i>	1	2		
	<i>Culex</i> spp.	235	9785	5	0.511
Grand Total		5681	159528	491	3.078



Cumulative WNV activity in 2013.



WNV activity to 15 September 2014.



WNV activity last week, 2014.

Saint Louis Encephalitis (SLE) to 15 September 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		151	3686		
	<i>Aedes albopictus</i>	6	48		
	<i>Aedes japonicus</i>	26	245		
	<i>Aedes triseriatus</i>	1	1		
	<i>Culex erraticus</i>	1	3		

	<i>Culex pipiens</i>	2	2		
	<i>Culex restuans</i>	1	1		
	<i>Culex</i> spp.	114	3386		
Cape May		24	174		
	<i>Culex pipiens</i>	22	171		
	<i>Culex</i> spp.	2	3		
Grand Total		175	3860		

La Crosse Encephalitis (LAC) through 15 September 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		46	386		
	<i>Aedes albopictus</i>	23	180		
	<i>Aedes canadensis canadensis</i>	4	88		
	<i>Aedes japonicus</i>	6	44		
	<i>Aedes triseriatus</i>	13	74		
Cape May		15	81		
	<i>Aedes triseriatus</i>	14	74		
	<i>Culex pipiens</i>	1	7		
Salem		13	28		
	<i>Aedes triseriatus</i>	13	28		
Grand Total		74	495		

Dengue (DENV) to 15 September 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 25 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		21	232	21	232	21	232	20	226		
	<i>Aedes albopictus</i>	21	232	21	232	21	232	20	226		
Bergen		5	27	5	27	5	27	5	27		
	<i>Aedes albopictus</i>	5	27	5	27	5	27	5	27		
Burlington		20	128	20	128	20	128	20	128		
	<i>Aedes albopictus</i>	20	128	20	128	20	128	20	128		
Camden		11	33	11	33	11	33	11	33		
	<i>Aedes albopictus</i>	11	33	11	33	11	33	11	33		
Cape May		18	171	18	171	18	171	18	171		
	<i>Aedes albopictus</i>	18	171	18	171	18	171	18	171		
Cumberland		3	8	3	8	3	8	3	8		
	<i>Aedes albopictus</i>	3	8	3	8	3	8	3	8		
Gloucester		75	822	75	822	75	822	75	822		
	<i>Aedes albopictus</i>	75	822	75	822	75	822	75	822		
Hudson		14	220	14	220	14	220	14	220		
	<i>Aedes albopictus</i>	14	220	14	220	14	220	14	220		
Mercer		57	501	57	501	57	501	57	501		
	<i>Aedes albopictus</i>	57	501	57	501	57	501	57	501		
Middlesex		60	461	60	461	60	461	60	461		
	<i>Aedes albopictus</i>	59	453	59	453	59	453	59	453		
	<i>Culex spp.</i>	1	8	1	8	1	8	1	8		
Monmouth		85	1381	85	1381	85	1381	85	1381		
	<i>Aedes albopictus</i>	85	1381	85	1381	85	1381	85	1381		
Morris		2	24	2	24	2	24	2	24		
	<i>Aedes albopictus</i>	2	24	2	24	2	24	2	24		
Ocean		1	25	1	25	1	25	1	25		
	<i>Aedes albopictus</i>	1	25	1	25	1	25	1	25		
Passaic		1	2	1	2	1	2	1	2		
	<i>Aedes albopictus</i>	1	2	1	2	1	2	1	2		
Salem		60	348	60	348	60	348	60	348		
	<i>Aedes albopictus</i>	60	348	60	348	60	348	60	348		
Somerset		3	7	3	7	3	7	3	7		
	<i>Aedes albopictus</i>	3	7	3	7	3	7	3	7		
Warren		5	76	5	76	5	76	5	76		

<i>Aedes albopictus</i>	5	76	5	76	5	76	5	76		
Grand Total	441	4466	441	4466	441	4466	440	4460		

Chikungunya (CHIK) to 15 September 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 87 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		21	232		
	<i>Aedes albopictus</i>	21	232		
Bergen		5	27		
	<i>Aedes albopictus</i>	5	27		
Burlington		20	128		
	<i>Aedes albopictus</i>	20	128		
Camden		11	33		
	<i>Aedes albopictus</i>	11	33		
Cape May		18	171		
	<i>Aedes albopictus</i>	18	171		
Cumberland		3	8		
	<i>Aedes albopictus</i>	3	8		
Gloucester		75	822		
	<i>Aedes albopictus</i>	75	822		
Hudson		14	220		
	<i>Aedes albopictus</i>	14	220		
Mercer		57	501		
	<i>Aedes albopictus</i>	57	501		
Middlesex		60	461		
	<i>Aedes albopictus</i>	59	453		
	<i>Culex</i> spp.	1	8		
Monmouth		85	1381		
	<i>Aedes albopictus</i>	85	1381		
Morris		2	24		
	<i>Aedes albopictus</i>	2	24		

Ocean		1	25		
	<i>Aedes albopictus</i>	1	25		
Passaic		1	2		
	<i>Aedes albopictus</i>	1	2		
Salem		60	348		
	<i>Aedes albopictus</i>	60	348		
Somerset		3	7		
	<i>Aedes albopictus</i>	3	7		
Warren		5	76		
	<i>Aedes albopictus</i>	5	76		
Grand Total		441	4466		