

# VECTOR SURVEILLANCE IN NEW JERSEY

## EEE, WNV, SLE and LAC

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CDC WEEK 39: September 22 – September 28, 2013

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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	1.40	0.60	60 (63)	13 (14)		
Green Bank (Burlington Co.)/25	Coastal	1.72	0.96	485 (509)	18 (19)	3	6.19
Corbin City (Atlantic Co.)/25	Coastal	0.80	1.24	402	19	2	4.98
Dennisville (Cape May Co.)/50	Coastal	2.09	0.08	252	17	1	3.97
Winslow (Camden Co.)/50	Inland	0.53	0.58	1671	41	1	0.60
Centerton (Salem Co.)/50	Inland	1.77	0.62	948	28		
Turkey Swamp (Monmouth Co.)/44	Inland	0.46	1.11	1472 (1521)	40 (41)	10	6.79
Glassboro (Gloucester Co.)/50	Inland	0.76	0.18	373	15	1	2.68

\*Current week (in parentheses) results pending.

**Remarks:** More EEE activity was detected with additional positive pools found at the traditional resting box sites as well as other county sites. To date, 39 positive EEE pools (*Cs. melanura*, *Anopheles bradleyi*, *Coquillettidia perturbans*, *Culex erraticus* and *Cx. salinarius*) have been collected in New Jersey. Three presumptive horse cases have been reported.

**Traditional Resting Box Sites:** To date 5663 *Cs. melanura* from 191 pools have been tested from the traditional resting box sites with an additional 3 pools of 76 mosquitoes to be tested. Eighteen pools have been detected positive for an overall MFIR of 3.18 for the traditional resting box sites. A new positive was detected at Glassboro.

Additional <i>Cs. melanura</i> trapped by counties *traps with positives indicated in <b>BOLD</b> .				
County	Trap types*	Number collected (pools)	Number of positives pools	MFIR
Atlantic	CO <sub>2</sub>	4 (2)		
Burlington	<b>CO<sub>2</sub></b>	4650 (84)	4	0.86
Cape May	CO <sub>2</sub> , <b>Gravid, RB</b>	1284 (111)	7	5.45
Gloucester	RB	776 (68)	1	
Monmouth	CO <sub>2</sub> , <b>Other</b>	186 (16)	1	5.38
Ocean	<b>CO<sub>2</sub>, RB</b>	337 (52)	2	5.93
Salem	CO <sub>2</sub>	33 (4)		
<b>TOTAL</b>		<b>6982 (312)</b>	<b>15</b>	2.15*

**Additional *Cs. melanura*:**  
 Three hundred twelve additional pools containing 6982 *Cs. melanura* have been tested from other sites using other traps in addition to resting boxes. A total of 15 positive *Cs. melanura* pools from non-traditional sites have been detected to date, with four new positive pools (2 in Burlington, one in Cape May and one in Gloucester). Note that MFIR value is a “rough estimate” as other data already completed may be pending for entry to the West Nile database and not reflected in

Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	12	28		
<i>Aedes atlanticus</i>	3	75		
<i>Aedes canadensis canadensis</i>	14	138		
<i>Aedes cantator</i>	19	24		
<i>Aedes infirmatus</i>	1	1		
<i>Aedes japonicus</i>	7	15		
<i>Aedes sollicitans</i>	4	19		
<i>Aedes sticticus</i>	2	3		
<i>Aedes taeniorhynchus</i>	1	2		
<i>Aedes triseriatus</i>	7	25		
<i>Aedes vexans</i>	2	33		
<i>Anopheles bradleyi</i>	19	131	1	7.634
<i>Anopheles crucians</i>	3	15		
<i>Anopheles punctipennis</i>	9	64		
<i>Anopheles quadrimaculatus</i>	7	28		
<i>Coquillettidia perturbans</i>	24	338	1	2.959
<i>Culex erraticus</i>	106	2851	2	0.702
<i>Culex pipiens</i>	378	5126	1	0.195
<i>Culex restuans</i>	4	4		
<i>Culex salinarius</i>	80	752	1	1.330
<i>Culex spp.</i>	78	532		
<i>Psorophora columbiae</i>	3	7		
State Total	<b>783</b>	<b>10211</b>	<b>6</b>	<b>0.588</b>

the tables below.

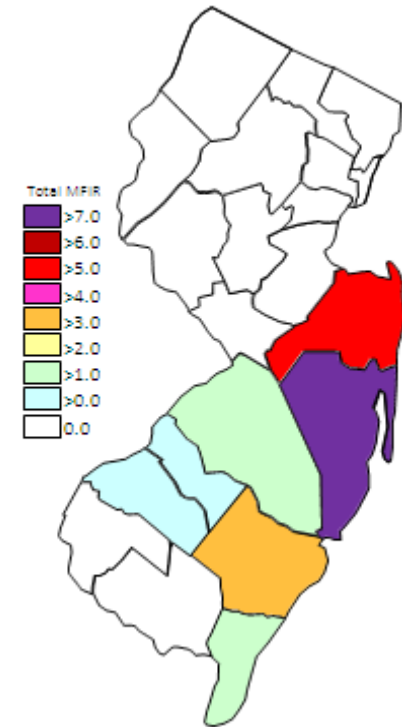
While *Cs. melanura* is primarily a bird feeder, it is not exclusively ornithophilic and may on occasion take a bloodmeal from a mammal. The appropriate precautions should be taken in its habitat.

**Additional Species:** The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. One pool of *Anopheles bradleyi* from Burlington County, collected 17 Sep was positive. An additional pool of *Cx. erraticus* collected 20 Sep in Ocean County was also positive. First positive in a non-*Cs. melanura* species was a pool of *Cx. salinarius* collected 3 August in Cape May County. *Coquillettidia perturbans*, a suspected inland vector of EEE, was found positive in Ocean County. *Culex erraticus*, an indiscriminant feeder that will bite both birds and mammals was found positive in Monmouth County.

**Horses and Humans:** Currently there are no reported human cases or new horse cases. Three presumptive horse cases have been reported. The first was in Cape May County. This 7 yo gelding had a date of onset 2 August and was euthanized the following day. Vaccination history is unknown. The second horse, a 7 month old unvaccinated colt, was in Monmouth County with an onset date of 27 August. This horse died two days later. The third horse case is a 9 yo mare from Ocean County with an unknown vaccination history and date of onset of 10 September and euthanized 11 September.

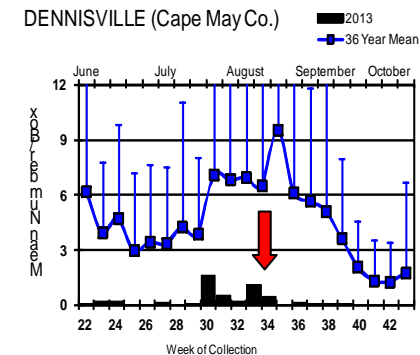
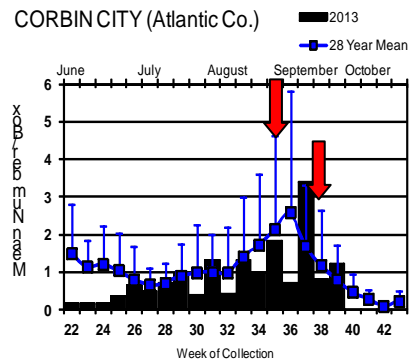
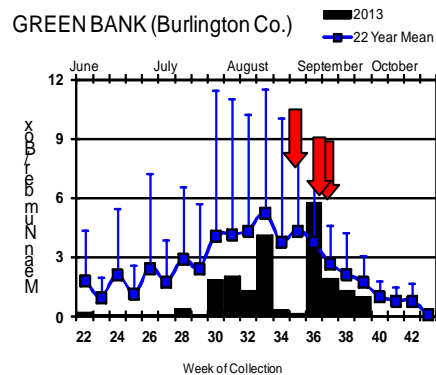
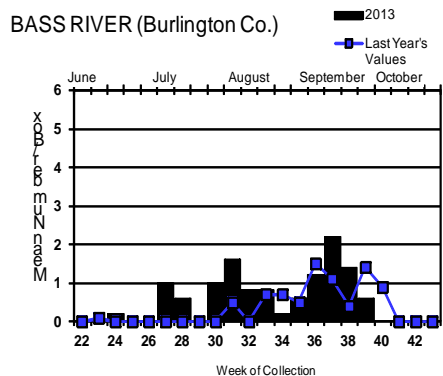
**Horses and Vaccinations:** The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: [http://www.aaep.org/vaccination\\_guidelines.htm](http://www.aaep.org/vaccination_guidelines.htm)

Counties with all  
mosquito EEE activity

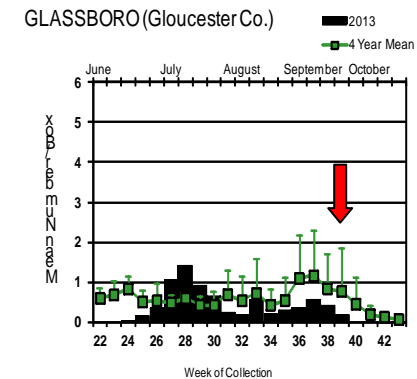
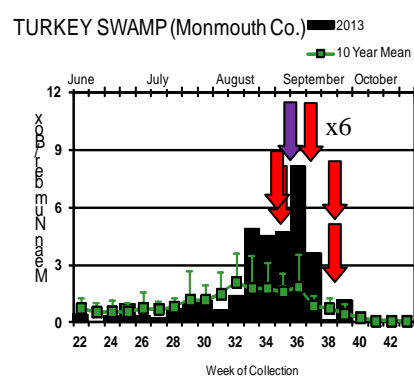
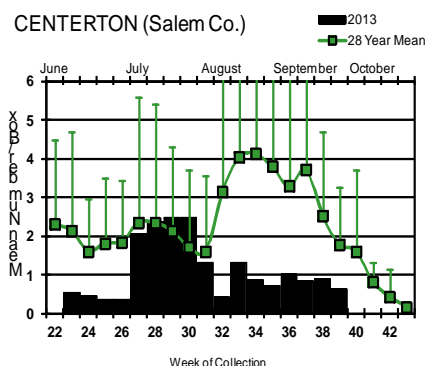
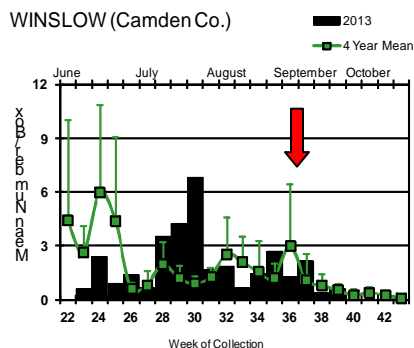


# Culiseta melanura Population Graphs

## Coastal





## Inland



*Cs. melanura* populations decreased at several sites, but remained above historical levels at Corbin City, Winslow and Turkey Swamp. A positive pool was detected at Glassboro.

Note axis change (from 12 to 6) on Bass River, Corbin City, Centerton and Glassboro sites. Note axis change on Turkey Swamp *back* to original numbers to accommodate increased population activity.

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

EEE in US (2013 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: 4(AL) 3(AR) 31(FL) 20(GA) 1(KY) 6(LA) 4(MA) 3(ME) 1(MD) 1(MI) 9(MS) 12(NC) 2(NH) 3(NJ) 1(NY) 36(SC) 1(TX) 1(VA) 2(VT)
- mosquito pools: 44(CT) 1(GA) 60(MA) 9(MD) 24(ME) 1(NC) 20(NH) 39(NJ) 43(NY) 4(RI) 98(VA) 22(VT)
- sentinel: 3(AL) 1(DE) 140/4 wild(FL) 1(GA) 1pheasant1emu(ME) 2(NC) 30(VA)
- human: 2(FL) 1(GA) 1(MA)

## West Nile Virus in US

West Nile in US (2013 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					5
Alaska					
Arizona	0	174/182	6	1	30/34
Arkansas				1/2	6
California	1061/1102	2314/2379	374/404	10/16	150/206
Colorado	11	441		8	175/230
Connecticut		84/87			2
Delaware	7/8		13/16	2	2
DC		23			
Florida			78/89	2	1
Georgia	0	64		2	2/4
Hawaii					
Idaho		66/178		9	24
Illinois	66/77	2232/2468		4	14/27
Indiana	0	412/455		1	11
Iowa		30	9	5	21/26
Kansas		10/11		6	9/20
Kentucky	1			4	2
Louisiana		171	66	2	31/35
Maine		2/3		0	0
Maryland		9		1	8
Mass.		323/329		1	3/6
Michigan	36/46	19		2/3	14/21
Minnesota	1	48		2	49/61
Mississippi		46		1/2	35/39
Missouri		4		7/9	6/7

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana	1	19		27	19/23
Nebraska	4	182/237		4/6	53/85
Nevada	1	47			8
New Hampshire		10/13			1
New Jersey	30/31	599/622		0	9/11
New Mexico		1		3	7/18
New York		525/563	1	6/8	9/15
North Carolina				2	1
North Dakota	6/8	20/23		1	76/88
Ohio		130/169		2/3	6/10
Oklahoma		36/41		5	21/29
Oregon	1	84/85	0	2	11/14
Pennsylvania	25/27	1462/1499		1	7/11
Rhode Island		8			
South Carolina	1			1	1
South Dakota	8	368/392		2/3	99/122
Tennessee	1	641/695		1	12
Texas	3	354/386		9/12	36/66
Utah	1	64/66	2	6/7	4/7
Vermont		21/23		1	1
Virginia		98/126	6/10	1	2/3
Washington	0	18		1	1
West Virginia		25/26			
Wisconsin	57/62	20		0	8/11
Wyoming	5	52		17/18	26/31

\* 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 30 September 2013

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	731	6035	2	0.331
<i>Aedes atlanticus</i>	6	80		
<i>Aedes atropalpus</i>	4	7		
<i>Aedes canadensis canadensis</i>	56	879		
<i>Aedes cantator</i>	31	114		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes infirmatus</i>	1	1		
<i>Aedes japonicus</i>	399	2277	2	0.878
<i>Aedes sollicitans</i>	10	47		
<i>Aedes sticticus</i>	3	5		
<i>Aedes taeniorhynchus</i>	14	123		
<i>Aedes triseriatus</i>	114	305	1	3.279
<i>Aedes trivittatus</i>	9	64		
<i>Aedes vexans</i>	73	713		
<i>Anopheles bradleyi</i>	28	169		
<i>Anopheles crucians</i>	6	107		
<i>Anopheles punctipennis</i>	44	256	1	3.906
<i>Anopheles quadrimaculatus</i>	104	1911		
<i>Coquillettidia perturbans</i>	37	453		
<i>Culex erraticus</i>	112	2862	1	0.349
<i>Culex pipiens</i>	836	21386	76	3.554
<i>Culex restuans</i>	551	6309	23	3.646
<i>Culex salinarius</i>	85	771	1	1.297
<i>Culex spp.</i>	3184	130216	494	3.794
<i>Culex territans</i>	14	17		
<i>Culiseta melanura</i>	524	12395	21	1.694
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	3	4		
<i>Psorophora columbiae</i>	22	167		
<i>Psorophora ferox</i>	30	364		
<i>Psorophora howardii</i>	1	10		
<i>Uranotaenia sapphirina</i>	1	1		
<b>State Total</b>	<b>7038</b>	<b>188053</b>	<b>622</b>	<b>3.308</b>

**Remarks:** To date, 7038 pools of 188053 mosquitoes from 31 species have been tested, with 622 positive pools detected. First positive was detected in a pool collected on 26 June in Middlesex County. Positive pools continue to be detected primarily in the enzootic vectors. Potential bridge vectors are also being detected, with positive pools in *Aedes albopictus*, *Aedes japonicus*, *Aedes triseriatus*, *Anopheles punctipennis*, and, most recently, *Culex salinarius* in Cape May County.

**Humans, Horses and Wild Birds:** To date, eleven human cases have been reported by the NJ Department of Health. The first case was from Burlington County with onset date of 5 August. Cases are from Bergen (1), Burlington (2), Camden (5), Gloucester (1), Morris (1) and Ocean (1) counties. See <http://www.state.nj.us/health/cd/westnile/techinfo.shtml> for further information.

Last year the first horse was detected in mid July. No horse or other livestock have been reported positive in 2013 to date.

Bird testing began in mid-April. Thirty-three positive birds have been reported, mostly corvids. First American Crow positive has been detected. To date, 119 birds have been tested. Testing includes: American Crow (*Corvus brachyrhynchos* 1/6),

Fish Crow (*C. ossifragus* 7/18), unidentified Crow (*Corvus* spp. 4/7), Blue Jay (*Cyanocitta cristata* 15/21), Hawk/Raptor (0/9) and other avian species (6/58). Counties (positives) submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Salem, Sussex, Union and Warren.

2013 Positive Mosquito pools to date / Total Mosquito Pools Submitted (PHEL)	This time last year (PHEL)
599 / 6656 (0.090)	966 / 6713 (0.144)
2013 Positive Birds to date / Total Birds Submitted	This time last year
30 / 113 (0.265)	120 / 275 (0.436)

### WNV Results by County through 30 September 2013

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Atlantic</b>		<b>184</b>	<b>3230</b>	<b>1</b>	<b>0.310</b>
	<i>Aedes albopictus</i>	18	169		
	<i>Aedes canadensis canadensis</i>	4	81		
	<i>Aedes cantator</i>	3	36		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	8	28		
	<i>Aedes sollicitans</i>	2	23		
	<i>Aedes sticticus</i>	2	3		
	<i>Aedes taeniorhynchus</i>	6	30		
	<i>Aedes triseriatus</i>	6	14		
	<i>Aedes vexans</i>	15	292		
	<i>Anopheles bradleyi</i>	7	30		
	<i>Anopheles crucians</i>	1	47		
	<i>Anopheles punctipennis</i>	4	14		
	<i>Anopheles quadrimaculatus</i>	3	11		
	<i>Coquillettidia perturbans</i>	6	37		
	<i>Culex erraticus</i>	9	111		
	<i>Culex</i> spp.	51	1694	1	0.590
	<i>Culiseta melanura</i>	28	449		
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	5	146		
	<i>Psorophora howardii</i>	1	10		
	<i>Uranotaenia sapphirina</i>	1	1		
<b>Bergen</b>		<b>184</b>	<b>10778</b>	<b>85</b>	<b>7.886</b>
	<i>Aedes albopictus</i>	1	6		
	<i>Aedes japonicus</i>	5	42		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex</i> spp.	177	10729	85	7.922
<b>Burlington</b>		<b>262</b>	<b>9179</b>	<b>23</b>	<b>2.506</b>
	<i>Aedes albopictus</i>	14	201		
	<i>Aedes atlanticus</i>	2	53		
	<i>Aedes canadensis canadensis</i>	7	101		
	<i>Aedes infirmatus</i>	1	1		
	<i>Aedes japonicus</i>	12	76		
	<i>Aedes taeniorhynchus</i>	1	2		
	<i>Aedes triseriatus</i>	1	17		
	<i>Aedes vexans</i>	2	10		

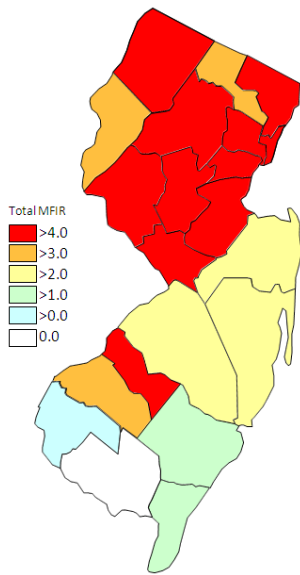
	<i>Anopheles bradleyi</i>	2	32		
	<i>Anopheles crucians</i>	2	47		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	5	216		
	<i>Culex erraticus</i>	3	5		
	<i>Culex pipiens</i>	2	15		
	<i>Culex restuans</i>	2	2		
	<i>Culex salinarius</i>	4	100		
	<i>Culex spp.</i>	84	3100	14	4.516
	<i>Culiseta melanura</i>	115	5195	9	1.732
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	1	4		
<b>Camden</b>		<b>290</b>	<b>7849</b>	<b>35</b>	<b>4.459</b>
	<i>Aedes albopictus</i>	41	185		
	<i>Aedes japonicus</i>	40	113	1	8.850
	<i>Aedes triseriatus</i>	1	2		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex spp.</i>	173	6140	31	5.049
	<i>Culiseta melanura</i>	37	1516	3	1.979
<b>Cape May</b>		<b>1800</b>	<b>18127</b>	<b>34</b>	<b>1.876</b>
	<i>Aedes albopictus</i>	174	378		
	<i>Aedes atlanticus</i>	1	2		
	<i>Aedes atropalpus</i>	4	7		
	<i>Aedes canadensis canadensis</i>	6	7		
	<i>Aedes cantator</i>	20	25		
	<i>Aedes japonicus</i>	87	168		
	<i>Aedes sollicitans</i>	4	19		
	<i>Aedes taeniorhynchus</i>	6	90		
	<i>Aedes triseriatus</i>	43	69		
	<i>Aedes vexans</i>	19	32		
	<i>Anopheles bradleyi</i>	17	99		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Anopheles quadrimaculatus</i>	74	1763		
	<i>Coquillettidia perturbans</i>	4	8		
	<i>Culex erraticus</i>	74	2523		
	<i>Culex pipiens</i>	494	6647	25	3.761
	<i>Culex restuans</i>	476	3709	3	0.809
	<i>Culex salinarius</i>	74	603	1	
	<i>Culex spp.</i>	62	204	1	4.902
	<i>Culex territans</i>	14	17		
	<i>Culiseta melanura</i>	129	1733	4	2.308
	<i>Orthopodomyia signifera</i>	4	4		
	<i>Psorophora columbiae</i>	5	8		
	<i>Psorophora ferox</i>	8	11		
<b>Essex</b>		<b>213</b>	<b>3001</b>	<b>4</b>	<b>1.333</b>
	<i>Aedes albopictus</i>	86	588		
	<i>Aedes japonicus</i>	53	448		
	<i>Culex spp.</i>	74	1965	4	2.036
<b>Gloucester</b>		<b>454</b>	<b>16773</b>	<b>51</b>	<b>3.041</b>
	<i>Aedes albopictus</i>	22	618		
	<i>Aedes japonicus</i>	17	231		
	<i>Aedes triseriatus</i>	2	33		



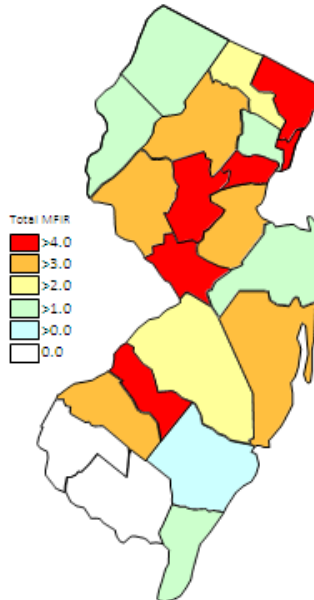
<i>Aedes vexans</i>	4	139		
<i>Anopheles punctipennis</i>	7	152	1	6.579
<i>Anopheles quadrimaculatus</i>	5	53		
<i>Coquillettidia perturbans</i>	4	74		
<i>Culex pipiens</i>	302	14251	49	3.438
<i>Culiseta melanura</i>	86	1105	1	0.905
<i>Psorophora ferox</i>	3	88		
<b>Hudson</b>	<b>200</b>	<b>10155</b>	<b>59</b>	<b>5.810</b>
<i>Culex</i> spp.	200	10155	59	5.810
<b>Hunterdon</b>	<b>318</b>	<b>14864</b>	<b>50</b>	<b>3.364</b>
<i>Culex</i> spp.	318	14864	50	3.364
<b>Mercer</b>	<b>260</b>	<b>6978</b>	<b>46</b>	<b>6.592</b>
<i>Aedes albopictus</i>	65	602		
<i>Aedes japonicus</i>	16	57	1	17.544
<i>Aedes triseriatus</i>	4	11		
<i>Aedes vexans</i>	5	124		
<i>Culex erraticus</i>	3	7		
<i>Culex pipiens</i>	40	729	6	8.230
<i>Culex restuans</i>	68	2593	20	7.713
<i>Culex salinarius</i>	1	5		
<i>Culex</i> spp.	58	2850	19	6.667
<b>Middlesex</b>	<b>247</b>	<b>7251</b>	<b>27</b>	<b>3.724</b>
<i>Aedes albopictus</i>	14	189		
<i>Aedes japonicus</i>	4	20		
<i>Culex</i> spp.	229	7042	27	3.834
<b>Monmouth</b>	<b>318</b>	<b>4539</b>	<b>9</b>	<b>1.983</b>
<i>Aedes albopictus</i>	56	666		
<i>Aedes atlanticus</i>	3	25		
<i>Aedes canadensis canadensis</i>	17	260		
<i>Aedes cantator</i>	6	20		
<i>Aedes japonicus</i>	27	97		
<i>Aedes sollicitans</i>	1	1		
<i>Aedes taeniorhynchus</i>	1	1		
<i>Aedes triseriatus</i>	17	43		
<i>Aedes trivittatus</i>	6	9		
<i>Aedes vexans</i>	8	22		
<i>Anopheles punctipennis</i>	16	39		
<i>Anopheles quadrimaculatus</i>	3	4		
<i>Coquillettidia perturbans</i>	3	7		
<i>Culex erraticus</i>	5	59		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	1	50		
<i>Culex</i> spp.	78	1542	3	1.946
<i>Culiseta melanura</i>	58	1578	6	3.802
<i>Psorophora columbiae</i>	4	70		
<i>Psorophora ferox</i>	6	44		
<b>Morris</b>	<b>375</b>	<b>14350</b>	<b>44</b>	<b>3.066</b>
<i>Culex</i> spp.	375	14350	44	3.066

<b>Ocean</b>	<b>378</b>	<b>4674</b>	<b>15</b>	<b>3.209</b>
<i>Aedes albopictus</i>	100	1244	1	0.804
<i>Aedes canadensis canadensis</i>	21	417		
<i>Aedes cantator</i>	2	33		
<i>Aedes japonicus</i>	34	113		
<i>Aedes sollicitans</i>	1	2		
<i>Aedes triseriatus</i>	6	12		
<i>Aedes vexans</i>	15	22		
<i>Anopheles crucians</i>	3	13		
<i>Anopheles punctipennis</i>	2	3		
<i>Anopheles quadrimaculatus</i>	2	7		
<i>Coquillettidia perturbans</i>	9	73		
<i>Culex erraticus</i>	11	55	1	18.182
<i>Culex restuans</i>	1	1		
<i>Culex salinarius</i>	4	14		
<i>Culex spp.</i>	115	2328	11	4.725
<i>Culiseta melanura</i>	52	337	2	5.935
<b>Passaic</b>	<b>208</b>	<b>6812</b>	<b>17</b>	<b>2.496</b>
<i>Aedes albopictus</i>	24	95		
<i>Aedes japonicus</i>	23	187		
<i>Aedes triseriatus</i>	8	13		
<i>Aedes trivittatus</i>	2	51		
<i>Aedes vexans</i>	2	51		
<i>Anopheles punctipennis</i>	2	4		
<i>Anopheles quadrimaculatus</i>	2	20		
<i>Coquillettidia perturbans</i>	1	2		
<i>Culex spp.</i>	142	6387	17	2.662
<i>Psorophora ferox</i>	2	2		
<b>Salem</b>	<b>257</b>	<b>4794</b>		
<i>Aedes albopictus</i>	38	172		
<i>Aedes japonicus</i>	24	91		
<i>Aedes sollicitans</i>	2	2		
<i>Aedes sticticus</i>	1	2		
<i>Aedes triseriatus</i>	14	38		
<i>Anopheles bradleyi</i>	2	8		
<i>Anopheles punctipennis</i>	6	23		
<i>Anopheles quadrimaculatus</i>	14	48		
<i>Coquillettidia perturbans</i>	5	36		
<i>Culex erraticus</i>	7	102		
<i>Culex pipiens</i>	3	3		
<i>Culex restuans</i>	2	2		
<i>Culex spp.</i>	92	3294		
<i>Culiseta melanura</i>	30	815		
<i>Psorophora ciliata</i>	1	2		
<i>Psorophora columbiae</i>	10	83		
<i>Psorophora ferox</i>	6	73		
<b>Somerset</b>	<b>270</b>	<b>6073</b>	<b>27</b>	<b>4.446</b>
<i>Aedes albopictus</i>	26	144		
<i>Aedes japonicus</i>	16	161		
<i>Aedes triseriatus</i>	5	14		
<i>Aedes vexans</i>	2	16		
<i>Culex spp.</i>	221	5738	27	4.705

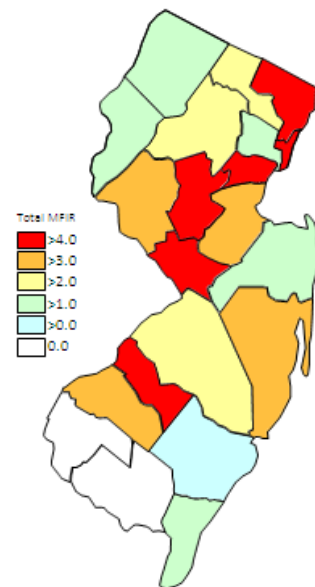
<b>Sussex</b>	<b>272</b>	<b>11916</b>	<b>16</b>	<b>1.343</b>
<i>Aedes japonicus</i>	14	273		
<i>Culex</i> spp.	257	11613	16	1.378
<i>Culiseta melanura</i>	1	30		
<b>Union</b>	<b>257</b>	<b>13652</b>	<b>68</b>	<b>4.981</b>
<i>Aedes albopictus</i>	39	582		
<i>Aedes japonicus</i>	9	137		
<i>Culex</i> spp.	209	12933	68	5.258
<b>Warren</b>	<b>307</b>	<b>13602</b>	<b>19</b>	<b>1.397</b>
<i>Aedes albopictus</i>	13	196	1	5.102
<i>Aedes canadensis canadensis</i>	1	13		
<i>Aedes japonicus</i>	10	35		
<i>Aedes triseriatus</i>	7	39	1	25.641
<i>Aedes trivittatus</i>	1	4		
<i>Aedes vexans</i>	1	5		
<i>Anopheles punctipennis</i>	3	17		
<i>Anopheles quadrimaculatus</i>	1	5		
<i>Culex</i> spp.	270	13288	17	1.279
<b>Grand Total</b>	<b>7038</b>	<b>188053</b>	<b>622</b>	<b>3.308</b>



Cumulative WNV activity in 2012.



WNV activity to 30 September 2013.



WNV activity last week, 2013.

### Saint Louis Encephalitis (SLE) to 30 September 2013.

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 2013.

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Burlington</b>		<b>48</b>	<b>1460</b>		
	<i>Aedes albopictus</i>	5	81		
	<i>Aedes japonicus</i>	2	13		
	<i>Culex erraticus</i>	1	2		
	<i>Culex pipiens</i>	40	1364		
<b>Cape May</b>		<b>368</b>	<b>4782</b>		
	<i>Culex pipiens</i>	356	4748		
	<i>Culex</i> spp.	12	34		
<b>Salem</b>		<b>2</b>	<b>122</b>		
	<i>Culex</i> spp.	2	122		
<b>Grand Total</b>		<b>418</b>	<b>6364</b>		

### La Crosse Encephalitis (LAC) through 30 September 2013.

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 2013.

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Burlington</b>		<b>1</b>	<b>17</b>		
	<i>Aedes triseriatus</i>	1	17		
<b>Cape May</b>		<b>39</b>	<b>65</b>		
	<i>Aedes triseriatus</i>	39	65		
<b>Salem</b>		<b>14</b>	<b>52</b>		
	<i>Aedes triseriatus</i>	14	52		
<b>Grand Total</b>		<b>54</b>	<b>134</b>		