

**VECTOR SURVEILLANCE IN NEW JERSEY**  
**EEE, WNV and SLE**  
CDC WEEK 34: August 23 to August 29, 2009

Prepared by Lisa M. Reed, Scott Crans, Dina Fonseca and Randy Gaugler at the Center for Vector Biology, Rutgers University.  
Supported by funding from the NJ State Mosquito Control Commission.

*Culiseta melanura* and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Tested to Date*	Total Pools Submitted	EEE Isolations	MFIR
<b>Green Bank</b> (Burlington County)	Coastal	6.1	1.72	310	27	2	6.45
<b>Corbin City</b> (Atlantic County)	Coastal	1.6	1.28	114	16	1	8.77
<b>Dennisville</b> (Cape May County)	Coastal	7.2	1.22	1423	46	13	9.14
<b>Winslow</b> † (Camden County)	Inland	No history	4.10	689	16	10	14.51
<b>Centerton</b> (Salem County)	Inland	4.4	Collected but will be submitted next week.	258	27	0	
<b>Turkey Swamp</b> (Monmouth County)	Inland	1.6	2.96	815	92	4	4.91
<b>Glassboro</b> (Gloucester County)	Inland	No history	0 (treated)	469	27	2	4.26

\*Including trial run last week in May. † Date of site change-over occurred during Week 30.

**Remarks:** Activity of eastern equine encephalitis virus has increased in southern New Jersey. The total number of positive EEE pools of mosquitoes is at 44. Most positive pools remain in the enzootic vector, *Culiseta melanura*. Positive pools of *Cs. melanura* from the traditional resting box sites have increased to 32 from 21 since last week, with several positive pools developing in both Dennisville and Winslow. To date, 251 pools from 4078 *Cs. melanura* mosquitoes have been sent for EEE testing from the seven resting box collections.

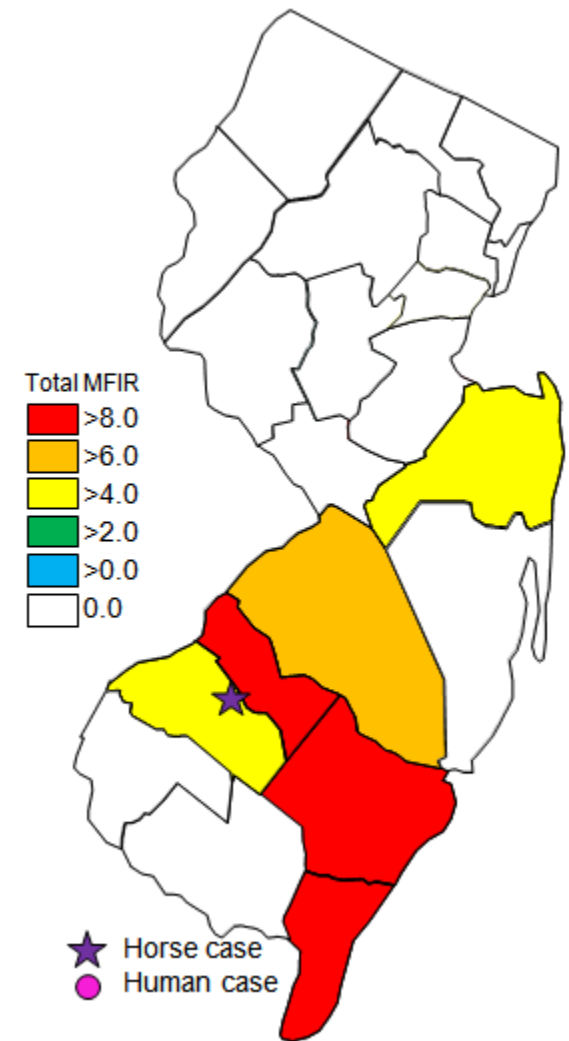
Positive species other than <i>Cs. melanura</i>	County(s)	Total Pools	Total Mosquitoes	Total Positive Pools	MFIR
Mixed <i>Culex</i> species	Atlantic	141	6197	2	0.32
<i>Culex salinarius</i>	Burlington	71	2810	1	0.36

**Additional Pools:** When positive EEE pools are found, southern NJ counties increase their surveillance activities aimed toward EEE detection. Resting boxes outside of the traditional resting box sites account for three additional *Cs. melanura* positive pools, Gravid traps for two *Cs. melanura* pools and CO<sub>2</sub> traps for four additional *Cs. melanura* positive pools. *Culex* pools account for three positive (table above, from previous week). Other species tested for EEE include *Aedes abserratus*, *Ae. albopictus*, *Ae. atlanticus*, *Ae. atropalpus*, *Ae. canadensis*, *Ae. cantator*, *Ae. cinereus*, *Ae. japonicas*, *Ae. sollicitans*, *Ae. sticticus*, *Ae. taeniorhynchus*, *Ae. thibaulti*, *Ae. triseriatus*, *Ae. trivittatus*, *Ae. vexans*, *Anopheles barberi*, *An. Bradleyi*,

*An. crucians*, *An. punctipennis*, *An. quadrimaculatus*, *Coquillettidia perturbans*, *Culex erraticus*, *Cx. pipiens*, *Cx. restuans*, *Cx. salinarius*, Mixed *Culex* pools, *Cx. territans*, *Culiseta inornata*, *Psorophora ciliata*, *Ps. columbiae*, *Ps. ferox* and *Uranotaenia sappharina*.

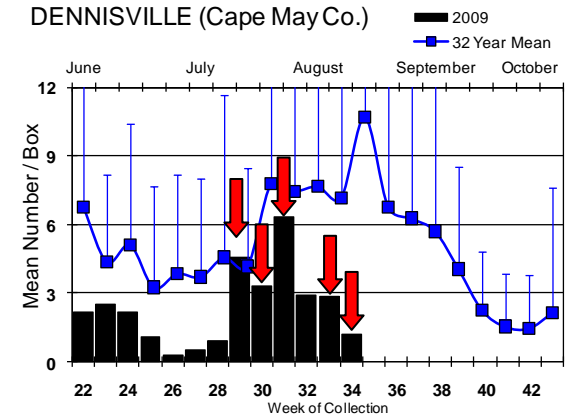
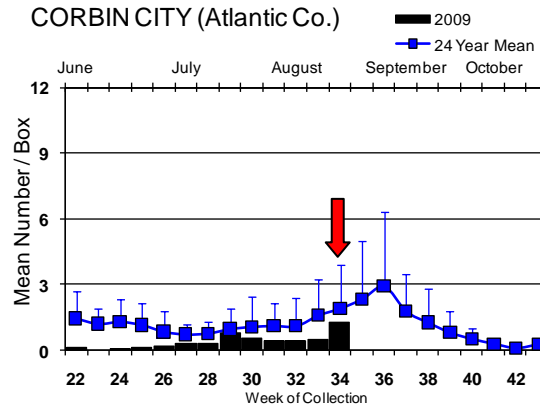
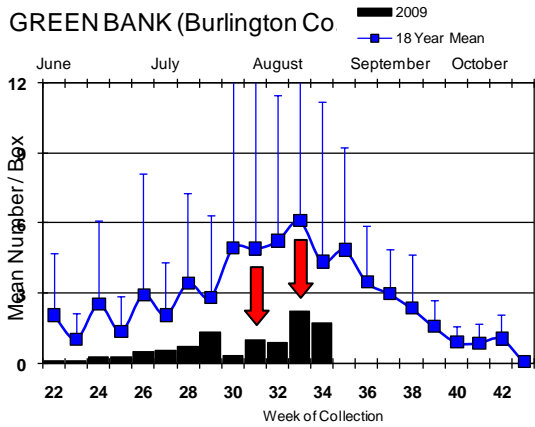
The distribution of positive EEE pools indicates a thorough dissemination of the virus in southern New Jersey. Bridge vector considerations warrant due diligence and control.

**Horse and Humans:** One horse (no travel history) was reported with both eastern equine and West Nile virus infections with onset on 18 Aug in Gloucester County. The fate of this horse 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)

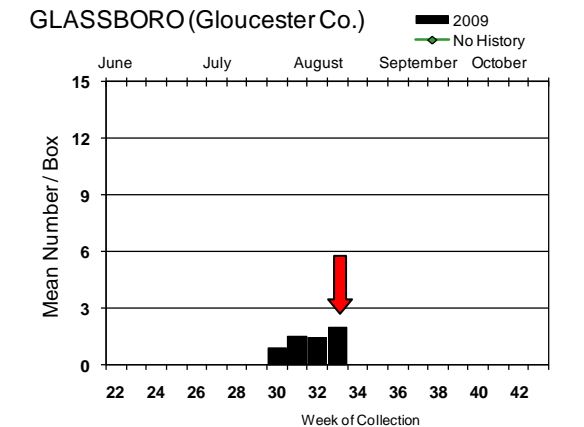
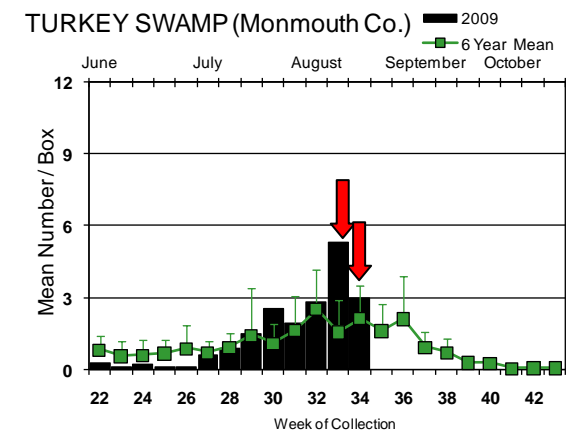
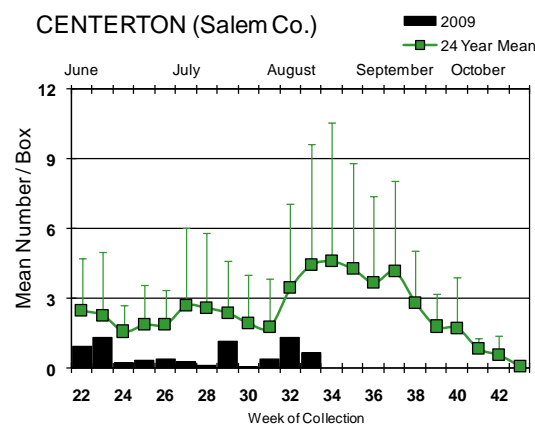
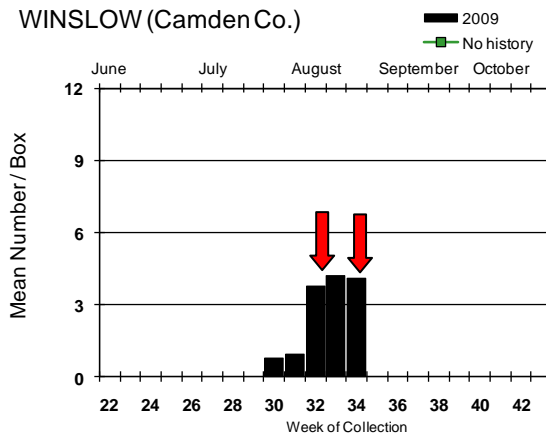


# Culiseta melanura Population Graphs

## Coastal



## Inland



The Turkey Swamp population of *Culiseta melanura* remained with higher numbers than historical data and the additional detection of EEE. Detections also occurred at Corbin City, Dennisville and Winslow. One site, Glassboro, did not report any *Cs. melanura*.

↓ = positive pool(s) detected.

**EEE in US (2009 cumulative cases):** (Red = new reported cases occurring)

- equine: 15(AL) 64(FL) 39(GA) 18(LA) 15(MA) 5(ME) 1(MO) 34(MS) 12(NC) 1a(paca)(NH) 1(NJ) 2(SC) 3(TX) 7(VA)
- mosquito: 8(CT) 1(FL) 1(LA) 7(MA) 13(NH) 44(NJ) 5(NY) 131(VA)
- sentinel: 2(AL) 150/75(wild)(FL) 24(NC) 52(VA)
- human: 1(LA)

## West Nile Virus

**West Nile in US (2009 cumulative cases):** Single black values indicate no change from previous week. Black values / red values equals previous week/**New totals**.

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found [here](#).

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama			1/2	1	
Alaska					
Arizona	1	68/70	4	0	12/13
Arkansas					1
California	329/385	649/744	98/139	4	10/26
Colorado		51/65		7	14/20
Connecticut	0	7/13	0	0	0
Delaware					
DC					
Florida	2 (flavi)		4	1	0
Georgia	0	4		2	0
Hawaii					
Idaho		9 co.		4	8/13
Illinois	8/13	107/247	0	0	1
Indiana	2	36/51		0	1
Iowa		5	3	1	1
Kansas		3+			
Kentucky				2/3	
Louisiana		13/37		2	8
Maine					
Maryland	0	5		0	0
Mass.		5/10		0	0
Michigan		1	0	0	0
Minnesota	1	3/4			1
Mississippi		6/7		3	21/30
Missouri		238/293 flavi		1	1
Montana		4		6/8	3
Nebraska	2/10	15/22		2	8

		Mosquito Pools	Sentinels	Horses	Humans
Nevada		4+			5/12
New Hampshire		0		0	0
New Jersey	3/5	84/140	0	2	0
New Mexico		+		1	2/3
New York	7	34/43	0	0	1
North Carolina					
North Dakota	0	0		0	0
Ohio	0	44/49		0	1
Oklahoma	0	0	0	0	1
Oregon	6/12	154/193	0	2/3	6
Pennsylvania	2/3	57/131	0	0	1
Rhode Island					
South Carolina	2	0			1
South Dakota	0	17/18	0	1/3	9/11
Tennessee	1	207/274	0	0	1
Texas	6/7	187/250	0	2	12/14
Utah		183/225	1	1/5	0
Vermont	0	1	0	0	0
Virginia		26	1/4		0
Washington	8/12	214/326	0	20/32	1
West Virginia	1	7/72	0	1	0
Wisconsin	2	0	0	0	0
Wyoming		17/21			2/3

**Protocol:** New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) and the Cape May County Division of Mosquito Control tests mosquito pools using RT-PCR Taqman techniques.

**Mosquito Species Submitted for West Nile Virus Testing through 2 September 2009**

<b>Species</b>	<b>Pools</b>	<b>Mosquitoes</b>	<b>Positives</b>	<b>MFIR</b>
<i>Aedes abserratus</i>	1	1		
<i>Aedes albopictus</i>	383	2714		
<i>Aedes atlanticus</i>	5	8		
<i>Aedes atropalpus</i>	1	15		
<i>Aedes canadensis canadensis</i>	90	2183		
<i>Aedes cantator</i>	51	455		
<i>Aedes cinereus</i>	2	7		
<i>Aedes grossbecki</i>	3	35		
<i>Aedes japonicus</i>	566	3928		
<i>Aedes sollicitans</i>	26	215		
<i>Aedes sticticus</i>	12	115		
<i>Aedes taeniorhynchus</i>	14	132		
<i>Aedes thibaulti</i>	6	9		
<i>Aedes triseriatus</i>	175	640		
<i>Aedes trivittatus</i>	29	420		
<i>Aedes vexans</i>	124	1845		
<i>Anopheles barberi</i>	4	15		
<i>Anopheles bradleyi</i>	32	703	1	1.422
<i>Anopheles crucians</i>	3	26		
<i>Anopheles punctipennis</i>	116	409		
<i>Anopheles quadrimaculatus</i>	98	1374		
<i>Anopheles walkeri</i>	1	19		
<i>Coquillettidia perturbans</i>	52	559		
<i>Culex erraticus</i>	47	2039		
<i>Culex pipiens</i>	755	17762	3	0.169
<i>Culex restuans</i>	506	6239	1	0.160
<i>Culex salinarius</i>	120	3269		
<i>Culex spp.</i>	2764	118064	134	1.135
<i>Culex territans</i>	29	86		
<i>Culiseta inornata</i>	1	2		
<i>Culiseta melanura</i>	392	4785	1	0.209
<i>Culiseta morsitans</i>	1	3		
<i>Orthopodomyia signifera</i>	2	2		
<i>Psorophora ciliata</i>	2	4		
<i>Psorophora columbiae</i>	4	10		
<i>Psorophora ferox</i>	23	254		
<i>Uranotaenia sapphirina</i>	1	14		
<b>State Total</b>	<b>6441</b>	<b>168360</b>	<b>140</b>	<b>0.832</b>

**Remarks:** The number of pools positive for West Nile virus has increased from 84 to 140. Infected pools continue to be primarily from ornithophilic species: *Culex* and *Culiseta*. However, two horse cases have occurred (see below) an indication that some crossover to bridge vector or changes in ornithophilic bloodmeal diet has occurred. Although this year's number of positive pools has been significantly fewer than last year, both seasons have picked up from the previous week.

**Humans, Horses and Wild Birds:** No humans have been reported positive for WNV by PHEL. For more details plus information about WNV, see the PHEL's West Nile Virus Alert and FAQ Sheets:  
<http://www.state.nj.us/health/cd/westnile/enceph.htm>

Two confirmed horse cases for WNV infection have occurred (one in Gloucester and one in Salem counties). The Gloucester horse was also positive for EEE. Both horses appear to have had an uncertain vaccination history. Three positive Blue Jays (*Cyanocitta cristata*) in Ocean County, one American Crow (*Corvus brachyrhynchos*) in Monmouth County and one unknown crow species in Burlington County have been detected with WNV infection to date.

2009 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year* * 2008 started later (at least one month) last year than in 2009
140 / 6441 (2.2%)	448 / 5537 (8.1%)
2009 Positive Birds to date / Total Birds Submitted	This time last year* * 2008 started later (at least one month) last year than in 2009
5 / 77 (6.5%)	30 / 131 (22.9%)

#### WNV Results by County through 2 September 2009

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Atlantic</b>		<b>180</b>	<b>4649</b>	<b>1</b>	<b>0.215</b>
	<i>Aedes albopictus</i>	12	229		
	<i>Aedes canadensis canadensis</i>	4	38		
	<i>Aedes cantator</i>	7	146		
	<i>Aedes grossbecki</i>	1	8		
	<i>Aedes japonicus</i>	7	67		
	<i>Aedes sollicitans</i>	4	16		
	<i>Aedes sticticus</i>	2	18		
	<i>Aedes taeniorhynchus</i>	5	35		
	<i>Aedes thibaulti</i>	3	3		
	<i>Aedes triseriatus</i>	4	11		
	<i>Aedes trivittatus</i>	1	4		
	<i>Aedes vexans</i>	14	357		
	<i>Anopheles bradleyi</i>	5	50	1	20.000
	<i>Anopheles punctipennis</i>	4	7		
	<i>Anopheles quadrimaculatus</i>	4	8		
	<i>Culex erraticus</i>	1	3		
	<i>Culex restuans</i>	2	5		
	<i>Culex salinarius</i>	2	37		
	<i>Culex spp.</i>	77	3422		
	<i>Culex territans</i>	1	1		
	<i>Culiseta melanura</i>	19	182		
	<i>Psorophora columbiae</i>	1	2		
<b>Bergen</b>		<b>143</b>	<b>10262</b>	<b>37</b>	<b>3.606</b>
	<i>Aedes albopictus</i>	1	6		
	<i>Aedes japonicus</i>	4	16		
	<i>Culex spp.</i>	138	10240	37	3.613
<b>Burlington</b>		<b>386</b>	<b>10637</b>	<b>19</b>	<b>1.786</b>
	<i>Aedes abserratus</i>	1	1		
	<i>Aedes albopictus</i>	37	275		
	<i>Aedes atlanticus</i>	1	1		
	<i>Aedes atropalpus</i>	1	15		
	<i>Aedes canadensis canadensis</i>	20	958		
	<i>Aedes cantator</i>	6	67		
	<i>Aedes cinereus</i>	1	6		

<i>Aedes grossbecki</i>	1	26		
<i>Aedes japonicus</i>	29	153		
<i>Aedes sollicitans</i>	4	61		
<i>Aedes sticticus</i>	2	85		
<i>Aedes taeniorhynchus</i>	4	57		
<i>Aedes triseriatus</i>	13	75		
<i>Aedes trivittatus</i>	2	9		
<i>Aedes vexans</i>	25	869		
<i>Anopheles barberi</i>	1	1		
<i>Anopheles bradleyi</i>	8	432		
<i>Anopheles crucians</i>	1	5		
<i>Anopheles punctipennis</i>	9	29		
<i>Anopheles quadrimaculatus</i>	4	12		
<i>Coquillettidia perturbans</i>	17	255		
<i>Culex erraticus</i>	2	10		
<i>Culex pipiens</i>	1	75		
<i>Culex restuans</i>	2	4		
<i>Culex salinarius</i>	10	378		
<i>Culex</i> spp.	113	5099	19	3.726
<i>Culex territans</i>	3	13		
<i>Culiseta inornata</i>	1	2		
<i>Culiseta melanura</i>	62	1603		
<i>Psorophora ciliate</i>	1	1		
<i>Psorophora columbiae</i>	1	4		
<i>Psorophora ferox</i>	2	42		
<i>Uranotaenia sapphirina</i>	1	14		
<b>Camden</b>	<b>219</b>	<b>6398</b>	<b>13</b>	<b>2.032</b>
<i>Aedes albopictus</i>	19	84		
<i>Aedes japonicus</i>	28	68		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes triseriatus</i>	4	4		
<i>Aedes trivittatus</i>	2	2		
<i>Aedes vexans</i>	1	1		
<i>Anopheles punctipennis</i>	3	8		
<i>Anopheles quadrimaculatus</i>	3	4		
<i>Culex pipiens</i>	3	107		
<i>Culex restuans</i>	2	2		
<i>Culex</i> spp.	146	6103	13	2.130
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	4	11		
<i>Orthopodomyia signifera</i>	2	2		
<b>Cape May</b>	<b>1573</b>	<b>27047</b>	<b>5</b>	<b>0.185</b>
<i>Aedes albopictus</i>	64	239		
<i>Aedes canadensis canadensis</i>	5	51		
<i>Aedes cantator</i>	6	20		
<i>Aedes japonicus</i>	156	618		
<i>Aedes sollicitans</i>	9	109		
<i>Aedes taeniorhynchus</i>	3	20		
<i>Aedes triseriatus</i>	44	147		
<i>Aedes vexans</i>	1	1		
<i>Anopheles bradleyi</i>	10	127		

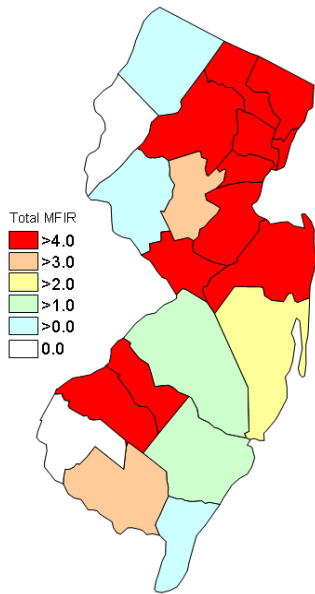
<i>Anopheles punctipennis</i>	5	19		
<i>Anopheles quadrimaculatus</i>	30	1059		
<i>Coquillettidia perturbans</i>	2	27		
<i>Culex erraticus</i>	29	1627		
<i>Culex pipiens</i>	359	6819	2	0.293
<i>Culex restuans</i>	311	3944	1	0.254
<i>Culex salinarius</i>	69	2556		
<i>Culex spp.</i>	353	8251	1	0.121
<i>Culex territans</i>	7	29		
<i>Culiseta melanura</i>	110	1384	1	0.723
<b>Cumberland</b>	<b>66</b>	<b>1548</b>		
<i>Aedes albopictus</i>	3	16		
<i>Aedes cantator</i>	1	15		
<i>Aedes japonicas</i>	8	56		
<i>Anopheles punctipennis</i>	1	1		
<i>Anopheles quadrimaculatus</i>	2	5		
<i>Culex erraticus</i>	1	9		
<i>Culex pipiens</i>	6	150		
<i>Culex restuans</i>	2	6		
<i>Culex spp.</i>	36	1227		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	5	62		
<b>Essex</b>	<b>232</b>	<b>3582</b>	<b>1</b>	<b>0.279</b>
<i>Aedes albopictus</i>	17	108		
<i>Aedes japonicus</i>	23	146		
<i>Aedes sticticus</i>	1	1		
<i>Aedes triseriatus</i>	14	27		
<i>Aedes trivittatus</i>	4	28		
<i>Aedes vexans</i>	15	60		
<i>Anopheles punctipennis</i>	9	16		
<i>Anopheles quadrimaculatus</i>	6	13		
<i>Coquillettidia perturbans</i>	4	6		
<i>Culex spp.</i>	133	3130	1	0.319
<i>Psorophora ciliata</i>	1	3		
<i>Psorophora ferox</i>	5	44		
<b>Gloucester</b>	<b>507</b>	<b>11723</b>	<b>1</b>	<b>0.085</b>
<i>Aedes albopictus</i>	41	492		
<i>Aedes atlanticus</i>	1	1		
<i>Aedes canadensis canadensis</i>	2	2		
<i>Aedes japonicus</i>	47	447		
<i>Aedes thibaulti</i>	1	4		
<i>Aedes triseriatus</i>	4	18		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	10	77		
<i>Anopheles barberi</i>	2	13		
<i>Anopheles crucians</i>	2	21		
<i>Anopheles punctipennis</i>	25	143		
<i>Anopheles quadrimaculatus</i>	28	99		
<i>Anopheles walkeri</i>	1	19		
<i>Coquillettidia perturbans</i>	3	12		



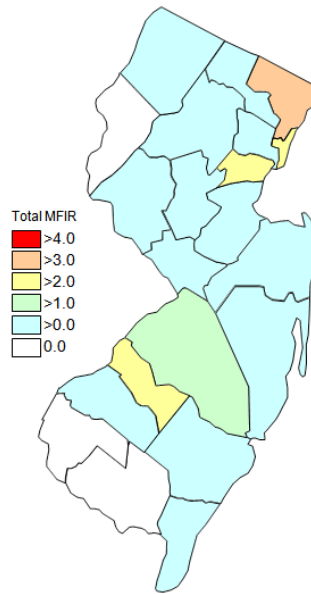
	<i>Culex pipiens</i>	265	9757	1	0.102
	<i>Culex restuans</i>	20	142		
	<i>Culex salinarius</i>	1	1		
	<i>Culex territans</i>	4	9		
	<i>Culiseta melanura</i>	49	391		
<b>Hudson</b>		<b>162</b>	<b>8850</b>	<b>20</b>	<b>2.260</b>
	<i>Culex</i> spp.	162	8850	20	2.260
<b>Hunterdon</b>		<b>202</b>	<b>10026</b>	<b>4</b>	<b>0.399</b>
	<i>Aedes albopictus</i>	1	45		
	<i>Culex</i> spp.	201	9981	4	0.401
<b>Mercer</b>		<b>471</b>	<b>8063</b>	<b>3</b>	<b>0.372</b>
	<i>Aedes albopictus</i>	52	153		
	<i>Aedes japonicus</i>	69	176		
	<i>Aedes triseriatus</i>	8	12		
	<i>Culex erraticus</i>	1	1		
	<i>Culex pipiens</i>	97	783		
	<i>Culex restuans</i>	128	1820		
	<i>Culex salinarius</i>	6	26		
	<i>Culex</i> spp.	110	5092	3	0.589
<b>Middlesex</b>		<b>276</b>	<b>13215</b>	<b>10</b>	<b>0.757</b>
	<i>Aedes albopictus</i>	9	81		
	<i>Aedes japonicus</i>	22	319		
	<i>Aedes triseriatus</i>	1	6		
	<i>Culex</i> spp.	244	12809	10	0.781
<b>Monmouth</b>		<b>458</b>	<b>4724</b>	<b>1</b>	<b>0.212</b>
	<i>Aedes albopictus</i>	39	219		
	<i>Aedes canadensis canadensis</i>	19	168		
	<i>Aedes cantator</i>	11	52		
	<i>Aedes japonicus</i>	32	224		
	<i>Aedes sollicitans</i>	2	3		
	<i>Aedes thibaulti</i>	1	1		
	<i>Aedes triseriatus</i>	21	102		
	<i>Aedes trivittatus</i>	6	6		
	<i>Aedes vexans</i>	14	76		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles punctipennis</i>	19	68		
	<i>Anopheles quadrimaculatus</i>	7	14		
	<i>Coquillettidia perturbans</i>	6	15		
	<i>Culex erraticus</i>	3	38		
	<i>Culex pipiens</i>	15	24		
	<i>Culex restuans</i>	24	42		
	<i>Culex</i> spp.	132	2804	1	0.357
	<i>Culex territans</i>	10	30		
	<i>Culiseta melanura</i>	92	815		
	<i>Psorophora columbiae</i>	1	3		
	<i>Psorophora ferox</i>	3	19		
<b>Morris</b>		<b>154</b>	<b>6624</b>	<b>3</b>	<b>0.453</b>

	<i>Aedes japonicus</i>	21	340		
	<i>Aedes triseriatus</i>	3	26		
	<i>Culex spp.</i>	130	6258	3	0.479
<b>Ocean</b>		<b>453</b>	<b>9154</b>	<b>3</b>	<b>0.328</b>
	<i>Aedes albopictus</i>	53	661		
	<i>Aedes atlanticus</i>	3	6		
	<i>Aedes canadensis canadensis</i>	37	938		
	<i>Aedes cantator</i>	20	155		
	<i>Aedes cinereus</i>	1	1		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	49	347		
	<i>Aedes sollicitans</i>	6	25		
	<i>Aedes sticticus</i>	6	10		
	<i>Aedes taeniorhynchus</i>	2	20		
	<i>Aedes triseriatus</i>	27	91		
	<i>Aedes trivittatus</i>	5	15		
	<i>Aedes vexans</i>	35	181		
	<i>Anopheles bradleyi</i>	9	94		
	<i>Anopheles punctipennis</i>	17	25		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Coquillettidia perturbans</i>	9	17		
	<i>Culex restuans</i>	5	5		
	<i>Culex salinarius</i>	17	74		
	<i>Culex spp.</i>	123	6363	3	0.471
	<i>Culiseta melanura</i>	17	51		
	<i>Psorophora columbiae</i>	1	1		
	<i>Psorophora ferox</i>	9	72		
<b>Passaic</b>		<b>86</b>	<b>1764</b>	<b>1</b>	<b>0.567</b>
	<i>Aedes albopictus</i>	5	36		
	<i>Aedes canadensis canadensis</i>	1	20		
	<i>Aedes japonicus</i>	18	295		
	<i>Aedes triseriatus</i>	6	29		
	<i>Anopheles punctipennis</i>	1	2		
	<i>Culex spp.</i>	55	1382	1	0.724
<b>Salem</b>		<b>134</b>	<b>3417</b>		
	<i>Aedes albopictus</i>	7	30		
	<i>Aedes japonicus</i>	6	34		
	<i>Aedes triseriatus</i>	1	1		
	<i>Aedes vexans</i>	2	150		
	<i>Anopheles punctipennis</i>	11	57		
	<i>Anopheles quadrimaculatus</i>	10	152		
	<i>Coquillettidia perturbans</i>	4	128		
	<i>Culex erraticus</i>	10	351		
	<i>Culex restuans</i>	4	79		
	<i>Culex salinarius</i>	3	153		
	<i>Culex spp.</i>	42	2004		
	<i>Culex territans</i>	2	2		
	<i>Culiseta melanura</i>	32	276		
<b>Somerset</b>		<b>210</b>	<b>4914</b>	<b>3</b>	<b>0.611</b>

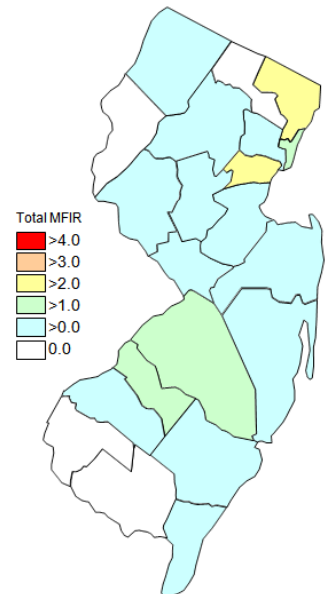
<i>Aedes albopictus</i>	12	37		
<i>Aedes canadensis canadensis</i>	2	8		
<i>Aedes japonicus</i>	28	455		
<i>Aedes sticticus</i>	1	1		
<i>Aedes triseriatus</i>	23	89		
<i>Aedes trivittatus</i>	8	281		
<i>Aedes vexans</i>	1	5		
<i>Anopheles punctipennis</i>	10	28		
<i>Anopheles quadrimaculatus</i>	3	7		
<i>Coquillettidia perturbans</i>	3	4		
<i>Culex spp.</i>	118	3996	3	0.751
<i>Psorophora ferox</i>	1	3		
<b>Sussex</b>	<b>206</b>	<b>6144</b>	<b>3</b>	<b>0.488</b>
<i>Aedes japonicus</i>	3	3		
<i>Coquillettidia perturbans</i>	3	94		
<i>Culex pipiens</i>	9	47		
<i>Culex restuans</i>	6	190		
<i>Culex salinarius</i>	12	44		
<i>Culex spp.</i>	170	5753	3	0.521
<i>Culiseta melanura</i>	2	10		
<i>Culiseta morsitans</i>	1	3		
<b>Union</b>	<b>131</b>	<b>4145</b>	<b>12</b>	<b>2.895</b>
<i>Aedes albopictus</i>	12	48		
<i>Aedes japonicus</i>	15	119		
<i>Aedes sollicitans</i>	1	1		
<i>Aedes triseriatus</i>	2	2		
<i>Aedes vexans</i>	6	68		
<i>Anopheles punctipennis</i>	2	6		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex spp.</i>	89	3826	12	3.136
<i>Psorophora ferox</i>	3	74		
<b>Warren</b>	<b>192</b>	<b>11474</b>		
<i>Culex spp.</i>	192	11474		
<b>Grand Total</b>	<b>6441</b>	<b>168,360</b>	<b>140</b>	<b>0.832</b>



Cumulative activity in 2008



Activity this year to 2 Sept 2009



Activity last week, 2009.

## Saint Louis Encephalitis (SLE) through 2 September 2009.

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.

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Burlington</b>		<b>330</b>	<b>9246</b>		
	<i>Aedes abserratus</i>	1	1		
	<i>Aedes albopictus</i>	37	275		
	<i>Aedes atlanticus</i>	1	1		
	<i>Aedes atropalpus</i>	1	15		
	<i>Aedes canadensis canadensis</i>	8	217		
	<i>Aedes cantator</i>	5	66		
	<i>Aedes cinereus</i>	1	6		
	<i>Aedes japonicus</i>	28	152		
	<i>Aedes sollicitans</i>	4	61		
	<i>Aedes sticticus</i>	1	41		
	<i>Aedes taeniorhynchus</i>	4	57		
	<i>Aedes triseriatus</i>	12	74		
	<i>Aedes trivittatus</i>	2	9		
	<i>Aedes vexans</i>	20	625		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles bradleyi</i>	8	432		
	<i>Anopheles crucians</i>	1	5		
	<i>Anopheles punctipennis</i>	7	23		
	<i>Anopheles quadrimaculatus</i>	3	11		
	<i>Coquillettidia perturbans</i>	17	255		
	<i>Culex erraticus</i>	2	10		
	<i>Culex pipiens</i>	1	75		
	<i>Culex restuans</i>	1	3		
	<i>Culex salinarius</i>	10	378		
	<i>Culex spp.</i>	111	5090		
	<i>Culex territans</i>	2	7		
	<i>Culiseta inornata</i>	1	2		
	<i>Culiseta melanura</i>	35	1293		
	<i>Psorophora ciliate</i>	1	1		
	<i>Psorophora columbiae</i>	1	4		
	<i>Psorophora ferox</i>	2	42		
	<i>Uranotaenia sapphirina</i>	1	14		
<b>Camden</b>		<b>138</b>	<b>4211</b>		
	<i>Aedes albopictus</i>	17	76		
	<i>Aedes japonicus</i>	16	45		
	<i>Aedes triseriatus</i>	4	4		
	<i>Aedes vexans</i>	1	1		
	<i>Culex pipiens</i>	2	95		
	<i>Culex spp.</i>	96	3988		
	<i>Orthopodomyia signifera</i>	2	2		
<b>Cape May</b>		<b>736</b>	<b>15069</b>		
	<i>Aedes cantator</i>	1	2		

<i>Aedes japonicus</i>	2	22		
<i>Aedes triseriatus</i>	2	11		
<i>Anopheles quadrimaculatus</i>	1	1		
<i>Coquillettidia perturbans</i>	1	19		
<i>Culex erraticus</i>	2	78		
<i>Culex pipiens</i>	256	5359		
<i>Culex restuans</i>	145	1618		
<i>Culex salinarius</i>	8	73		
<i>Culex spp.</i>	314	7874		
<i>Culiseta melanura</i>	4	12		
<b>Essex</b>	<b>190</b>	<b>3390</b>		
<i>Aedes albopictus</i>	17	108		
<i>Aedes japonicus</i>	17	107		
<i>Aedes sticticus</i>	1	1		
<i>Aedes triseriatus</i>	9	14		
<i>Aedes vexans</i>	9	25		
<i>Anopheles punctipennis</i>	1	1		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex spp.</i>	133	3130		
<i>Psorophora ferox</i>	2	3		
<b>Hunterdon</b>	<b>50</b>	<b>2500</b>		
<i>Culex spp.</i>	50	2500		
<b>Mercer</b>	<b>453</b>	<b>7961</b>		
<i>Aedes albopictus</i>	52	153		
<i>Aedes japonicus</i>	65	172		
<i>Aedes triseriatus</i>	8	12		
<i>Culex pipiens</i>	94	772		
<i>Culex restuans</i>	124	1777		
<i>Culex salinarius</i>	4	24		
<i>Culex spp.</i>	106	5051		
<b>Ocean</b>	<b>2</b>	<b>3</b>		
<i>Aedes albopictus</i>	1	1		
<i>Culex spp.</i>	1	2		
<b>Somerset</b>	<b>22</b>	<b>557</b>		
<i>Aedes albopictus</i>	1	4		
<i>Culex spp.</i>	21	553		
<b>Grand Total</b>	<b>1921</b>	<b>42937</b>		

Specimens submitted by the counties continue to be negative for SLE.

## La Crosse Encephalitis (LAC) through 2 September 2009.

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).

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Cape May</b>		<b>219</b>	<b>1060</b>		
	<i>Aedes albopictus</i>	53	204		
	<i>Aedes japonicus</i>	115	498		
	<i>Aedes triseriatus</i>	41	135		
	<i>Anopheles bradleyi</i>	1	34		
	<i>Culex pipiens</i>	1	41		
	<i>Culex restuans</i>	1	8		
	<i>Culex salinarius</i>	2	77		
	<i>Culex spp.</i>	5	63		
<b>Passaic</b>		<b>2</b>	<b>17</b>		
	<i>Aedes triseriatus</i>	2	17		
<b>Grand Total</b>		<b>221</b>	<b>1077</b>		