

VECTOR SURVEILLANCE IN NEW JERSEY
EEE, WNV, SLE and LAC
CDC WEEK 40: October 4 to October 10, 2009

Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Tested to Date*	Total Pools Submitted	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	0.9	2.40	997	39	3	3.01
Corbin City (Atlantic County)	Coastal	0.5	0.36	288	23	1	3.47
Dennisville (Cape May County)	Coastal	1.5	0.02	1714	54	20	11.67
Winslow † (Camden County)	Inland	no history	0.74	1435	33	15	10.45
Centerton (Salem County)	Inland	1.7	2.68	551	34	2	3.63
Turkey Swamp (Monmouth County)	Inland	0.3	0.47	1408	120	11	7.81
Glassboro (Gloucester County)	Inland	no history	1.47	956	39	3	3.14

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

Remarks: Eastern equine encephalitis virus continues developing in southern New Jersey, but at a slower rate compared to the previous month. The total number of positive EEE pools of mosquitoes rose slightly from 112 to 115, with the gain in one positive *Cs. melanura*, one *Cx. erraticus* and one *Cx. pipiens*. With the addition of a positive pool at the Centerton site, positive *Cs. melanura* pools from the traditional resting box sites are at 55. Thirty-five positive *Cs. melanura* pools come from traps set by county agencies and 25 other positive species come from those traps (see below). To date, 349 pools from 7371 *Cs. melanura* mosquitoes have been sent for EEE testing from the seven resting box collections, and a total of 736 pools from 13772 *Cs. melanura* from all trap sites.

Positive species other than <i>Cs. melanura</i>	County(s)	Total Pools	Total Mosquitoes	Total Positive Pools	MFIR
<i>Aedes canadensis</i>	Burlington, Monmouth	45	735	3	4.082
<i>Aedes japonicus</i>	Ocean	51	200	1	5.000
<i>Aedes vexans</i>	Gloucester	43	827	1	1.209
<i>Anopheles punctipennis</i>	Monmouth	60	339	1	2.950

Positive species other than <i>Cs. melanura</i>	County(s)	Total Pools	Total Mosquitoes	Total Positive Pools	MFIR
Mixed <i>Culex</i> species	Atlantic, Monmouth	236	7869	3	0.381
<i>Culex erraticus</i>	Cape May	161	6522	13	1.993
<i>Culex pipiens</i>	Cape May	64	468	2	4.274
<i>Culex salinarius</i>	Burlington	115	3186	1	0.314

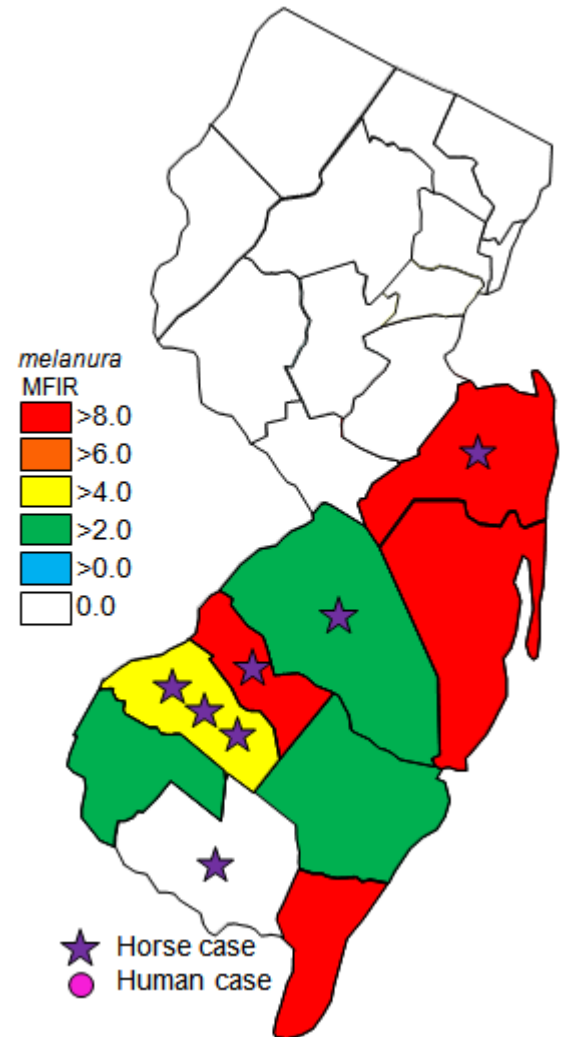
Additional Species Pools: Positive ornithophilic species continue to increase, albeit at a much slower pace than the previous month. Other species tested for EEE include *Aedes abserratus*, *Ae. albopictus*, *Ae. atlanticus*, *Ae. atropalpus*, *Ae. cantator*, *Ae. cinereus*, *Ae. sollicitans*, *Ae. sticticus*, *Ae. taeniorhynchus*, *Ae. thibaulti*, *Ae. triseriatus*, *Ae. trivittatus*, *Anopheles barberi*, *An. bradleyi*, *An. crucians*, *An. quadrimaculatus*, *An. walker*, *Coquillettidia perturbans*, *Cx. restuans*, *Cx. territans*, *Culiseta inornata*, *Cs. morsitans*, *Psorophora ciliate*, *Ps. columbiae*, *Ps. ferox*, *Ps. howardii* and *Uranotaenia sapphirina*.

MFIR values: One additional pool of EEE positive *Cs. melanura* occurred at the Centerton site. Figure to the right is the MFIR values of *Cs. melanura* for counties with positive pools, including non-resting box pools. Stars only indicate which counties have positive horses/alpacas, not location.

Horses and Humans: A three year old alpaca (*Vicugna pacos*) was found positive for EEE with date of symptom onset on 5 Sep. There was no travel or vaccination history. Camelids (llama and alpaca) have a recent history of acquiring EEE in North America with the first cases occurring in 2004. Prior cases may not have been detected if samples were not tested for EEE from potentially suspect cases. Although EEE vaccines are not a regular part of alpaca vaccination protocols, one study suggests that equine vaccines may provide protection for alpacas

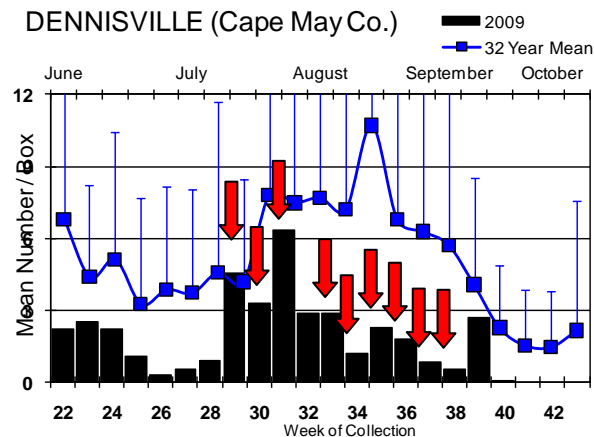
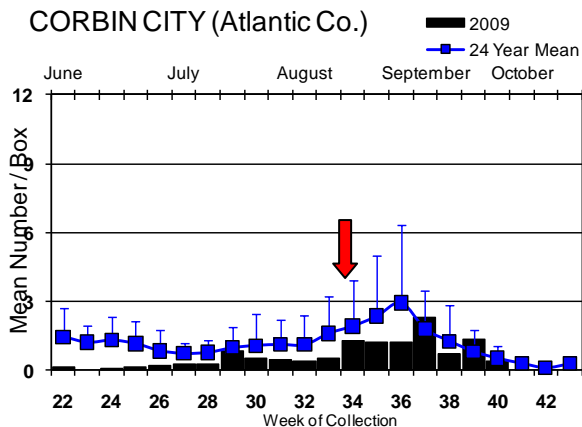
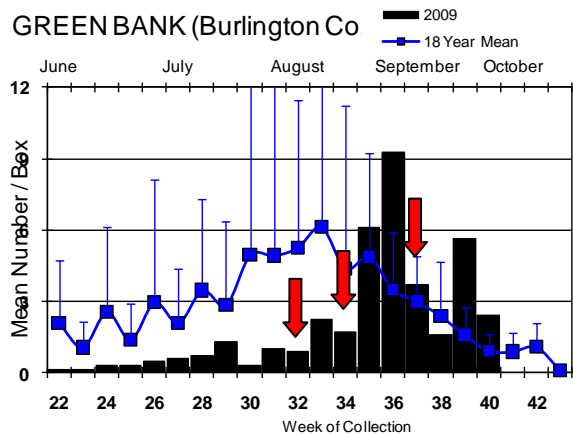
(<http://avmajournals.avma.org/doi/abs/10.2460/javma.234.4.530?cookieSet=1&journalCode=javma>). The number of EEE positive horses/alpaca increases to seven (Burlington-1, Camden-1, Cumberland-1, Gloucester-3 and Monmouth-1). The fate of these six horses reinforces the necessity of maintaining a vaccination schedule for arboviruses: For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

No human cases have been detected to date.

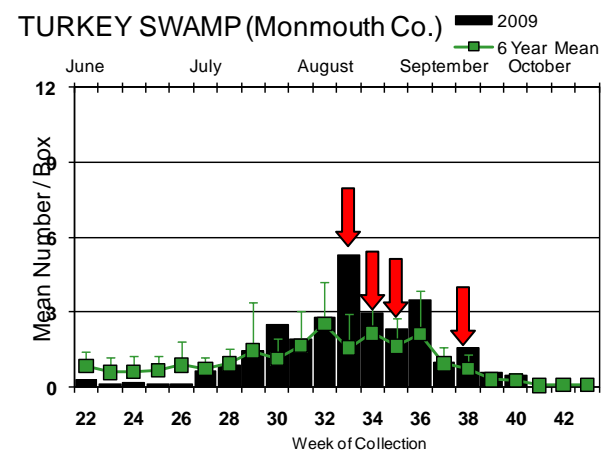
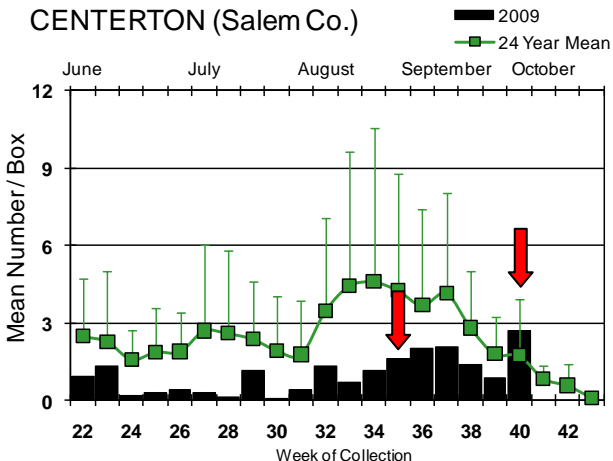
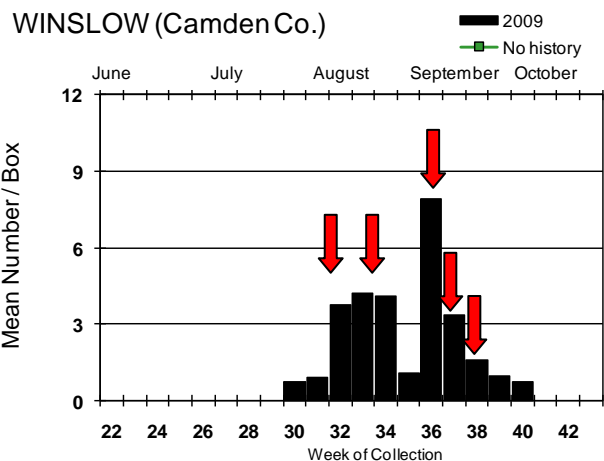


Culiseta melanura Population Graphs

Coastal

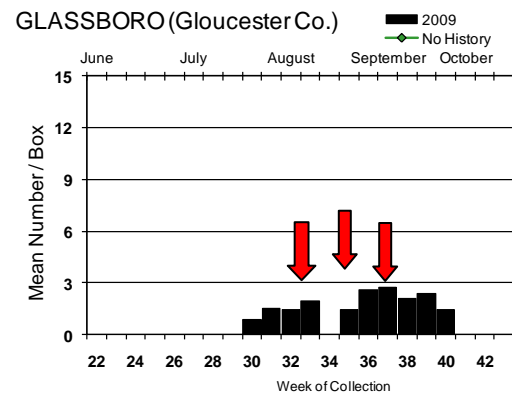


Inland



One EEE positive *Culiseta melanura* pool was detected at the Centerton resting box site. At this site, the average *Cs. melanura* per box increased from the previous week, although it was still within the range of error in the historical dataset. The Green Bank site also showed increase activity that was above the range of historical error. The other sites with comparable historical data had averages that were at or below historical trends.

↓ = positive pool(s) detected.



EEE in US (2009 cumulative cases): (Red = new reported cases occurring) [1 horse case Nova Scotia]

- equine: 19(AL) 1(AR) 69(FL) 44(GA) 21(LA) 1(MA) 15(ME) 1(MO) 43(MS) 17(NC) 6[1alpaca,1llama](NH) 7(1alpaca)(NJ) 4(NY) 2(RI) 12(SC) 4(TX) 10(VA)
- mosquito: 100(CT) 3(FL) 2(LA) 54(MA) 2(ME) 68(NH) 115(NJ) 59(NY) 3(RI) 137(VA)
- sentinel: 2(AL) 168/91wild(FL) 2(LA) 24(NC) 6(NH) 58[1emu,1fairybluebird(*Irena* sp)](VA)
- human: 1(LA) 1(NC) 1(NH) 1(NY)

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	84/85	5	0	16
Arkansas					3
California	471/496	1034/1044	330/390	15	72/81
Colorado		78		18/20	73/87
Connecticut	0	32	0	0	0
Delaware					
DC					
Florida	2 (flavi)		38/42	1/3	1/2
Georgia	0	17		2	2
Hawaii					
Idaho	1/3	9 co.		10	29/33
Illinois	25	389/392	0	6	4/5
Indiana	2	124/127		0	3
Iowa		9	6	2	3
Kansas		5			7/9
Kentucky	1	1		5/7	2/3
Louisiana		1034	5/10	3	14
Maine					
Maryland	0	9		0	1
Mass.		26		1	0
Michigan		3	0	0	0
Minnesota	1	4			3
Mississippi		7		4/5	47/50
Missouri		347 flavi		2	2
Montana		5		12/14	5
Nebraska	20	72/105		6	33

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada		18		3	12
New Hampshire		0		0	0
New Jersey	29	296	0	1	2
New Mexico		1		4/6	5/7
New York	56/66	96/98	0	0	2/4
North Carolina					
North Dakota	0	0		2 dogs	1
Ohio	0	234/239		0	2
Oklahoma	0	6	0	0	6/8
Oregon	15	266	0	5	7
Pennsylvania	10	279	0	2	2
Rhode Island		2			
South Carolina	2	13			3
South Dakota	0	18	0	4	17
Tennessee	1	481/487	0	0	3/6
Texas	8/10	366/377	0	9	84/89
Utah		284	1	6	1
Vermont	4	11	0	0	0
Virginia		41	14	3	0
Washington	22	341	0	67	28/32
West Virginia	2/3	132/141	0	1	0
Wisconsin	5		0	1	0
Wyoming		22		2	10

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 15 October 2009

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	1		
<i>Aedes albopictus</i>	621	4261	3	0.704
<i>Aedes atlanticus</i>	17	52		
<i>Aedes atropalpus</i>	2	16		
<i>Aedes canadensis canadensis</i>	129	2764		
<i>Aedes cantator</i>	56	467		
<i>Aedes cinereus</i>	2	7		
<i>Aedes grossbecki</i>	3	35		
<i>Aedes japonicus</i>	770	4787	1	0.209
<i>Aedes sollicitans</i>	33	370		
<i>Aedes sticticus</i>	12	115		
<i>Aedes taeniorhynchus</i>	17	141		
<i>Aedes thibaulti</i>	6	9		
<i>Aedes triseriatus</i>	271	1058	1	0.945
<i>Aedes trivittatus</i>	39	604		
<i>Aedes vexans</i>	183	2480	1	0.403
<i>Anopheles barberi</i>	7	24		
<i>Anopheles bradleyi</i>	42	822	1	1.217
<i>Anopheles crucians</i>	5	33		
<i>Anopheles punctipennis</i>	168	622		
<i>Anopheles quadrimaculatus</i>	136	1521		
<i>Anopheles walkeri</i>	1	19		
<i>Coquillettidia perturbans</i>	65	622		
<i>Culex erraticus</i>	177	6691		
<i>Culex pipiens</i>	988	21036	11	0.523
<i>Culex restuans</i>	615	6767	2	0.296
<i>Culex salinarius</i>	175	3703		
<i>Culex spp.</i>	3697	146334	274	1.872
<i>Culex territans</i>	33	119		
<i>Culiseta inornata</i>	1	2		
<i>Culiseta melanura</i>	671	10427	2	0.192
<i>Culiseta morsitans</i>	2	4		
<i>Orthopodomyia signifera</i>	3	3		
<i>Psorophora ciliata</i>	6	48		
<i>Psorophora columbiae</i>	9	165		
<i>Psorophora ferox</i>	47	494		
<i>Psorophora howardii</i>	1	6		
<i>Uranotaenia sapphirina</i>	7	22		
State Total	8911	212822	296	1.372

Remarks: The number of pools positive for West Nile virus remained at 296. Mosquito activity has dropped considerably the past week or two and county participation begins to vary depending on this fact. Northern counties may have already stopped certain trapping, such as those from NJ light traps.

Humans, Horses and Wild Birds: Two human cases have been reported to PHEL. The first human was in Hunterdon County with symptom onset on 18 August. The second resided in Camden County, with onset of symptoms occurring on 28 August. For more details plus information about WNV, see the PHEL's West Nile Virus Alert and FAQ Sheets:

One horse with an uncertain vaccination history in Salem County was found positive earlier in the season. Positive dead birds remain at 29. Seventeen positive Blue Jays (*Cyanocitta cristata*) mostly in Ocean County, four American Crows (*Corvus brachyrhynchos*), six unknown crow species (*Corvus*) and two unknown hawks have been detected with WNV infection to date. No Fish Crows (*Corvus ossifragus*) have been reported infected with WNV, although nearly as many Fish Crows as American Crows have been sent in to PHEL for testing.

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
296 / 8911 (3.3%)	661 / 8430 (7.8%)
2009 Positive Birds to date / Total Birds Submitted	This time last year* * 2008 started later (at least one month) last year than in 2009
29 / 123 (23.6%)	52 / 163 (31.9%)

WNV Results by County through 15 October 2009

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		262	6310	3	0.475
	<i>Aedes albopictus</i>	19	256		
	<i>Aedes atlanticus</i>	2	9		
	<i>Aedes canadensis canadensis</i>	7	84		
	<i>Aedes cantator</i>	8	148		
	<i>Aedes grossbecki</i>	1	8		
	<i>Aedes japonicus</i>	13	79		
	<i>Aedes sollicitans</i>	5	17		
	<i>Aedes sticticus</i>	2	18		
	<i>Aedes taeniorhynchus</i>	7	43		
	<i>Aedes thibaulti</i>	3	3		
	<i>Aedes triseriatus</i>	5	12		
	<i>Aedes trivittatus</i>	4	32		
	<i>Aedes vexans</i>	22	626		
	<i>Anopheles bradleyi</i>	7	58	1	17.241
	<i>Anopheles punctipennis</i>	6	11		
	<i>Anopheles quadrimaculatus</i>	5	9		
	<i>Culex erraticus</i>	3	15		
	<i>Culex restuans</i>	2	5		
	<i>Culex salinarius</i>	2	37		
	<i>Culex spp.</i>	102	4352	2	0.460
	<i>Culex territans</i>	1	1		
	<i>Culiseta melanura</i>	30	432		
	<i>Psorophora columbiae</i>	2	3		
	<i>Psorophora ferox</i>	4	52		
Bergen		229	15096	80	5.299
	<i>Aedes albopictus</i>	5	21		
	<i>Aedes japonicus</i>	12	42		
	<i>Aedes triseriatus</i>	1	1		
	<i>Anopheles punctipennis</i>	4	11		
	<i>Culex spp.</i>	207	15021	80	5.326

Burlington	546	14587	25	1.714
<i>Aedes abserratus</i>	1	1		
<i>Aedes albopictus</i>	45	316		
<i>Aedes atlanticus</i>	3	18		
<i>Aedes atropalpus</i>	2	16		
<i>Aedes canadensis canadensis</i>	31	1299		
<i>Aedes cantator</i>	7	71		
<i>Aedes cinereus</i>	1	6		
<i>Aedes grossbecki</i>	1	26		
<i>Aedes japonicus</i>	35	174		
<i>Aedes sollicitans</i>	5	71		
<i>Aedes sticticus</i>	2	85		
<i>Aedes taeniorhynchus</i>	4	57		
<i>Aedes triseriatus</i>	16	85		
<i>Aedes trivittatus</i>	2	9		
<i>Aedes vexans</i>	31	1031		
<i>Anopheles barberi</i>	1	1		
<i>Anopheles bradleyi</i>	10	469		
<i>Anopheles crucians</i>	2	11		
<i>Anopheles punctipennis</i>	11	46		
<i>Anopheles quadrimaculatus</i>	4	12		
<i>Coquillettidia perturbans</i>	21	288		
<i>Culex erraticus</i>	11	36		
<i>Culex pipiens</i>	1	75		
<i>Culex restuans</i>	4	6		
<i>Culex salinarius</i>	23	592		
<i>Culex spp.</i>	147	6281	25	3.980
<i>Culex territans</i>	3	13		
<i>Culiseta inornata</i>	1	2		
<i>Culiseta melanura</i>	108	3247		
<i>Psorophora ciliate</i>	2	34		
<i>Psorophora columbiae</i>	2	7		
<i>Psorophora ferox</i>	7	182		
<i>Psorophora howardii</i>	1	6		
<i>Uranotaenia sapphirina</i>	1	14		
Camden	274	7155	20	2.795
<i>Aedes albopictus</i>	31	154	2	12.987
<i>Aedes japonicus</i>	41	105	1	9.524
<i>Aedes thibaulti</i>	1	1		
<i>Aedes triseriatus</i>	5	5		
<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>	3	3		
<i>Culex spp.</i>	171	6669	17	2.549
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	6	92		
<i>Orthopodomyia signifera</i>	3	3		

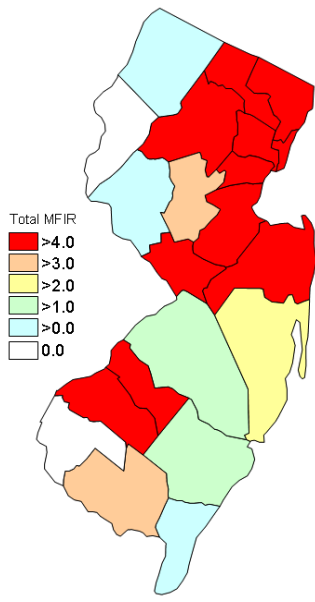
Cape May	2244	37064	13	0.351
<i>Aedes albopictus</i>	134	506		
<i>Aedes canadensis canadensis</i>	8	96		
<i>Aedes cantator</i>	8	24		
<i>Aedes japonicus</i>	196	720		
<i>Aedes sollicitans</i>	10	111		
<i>Aedes taeniorhynchus</i>	4	21		
<i>Aedes triseriatus</i>	45	150		
<i>Aedes vexans</i>	4	6		
<i>Anopheles bradleyi</i>	13	198		
<i>Anopheles punctipennis</i>	7	21		
<i>Anopheles quadrimaculatus</i>	32	1068		
<i>Coquillettidia perturbans</i>	3	30		
<i>Culex erraticus</i>	105	5855		
<i>Culex pipiens</i>	495	8406	6	0.714
<i>Culex restuans</i>	392	4395	2	0.455
<i>Culex salinarius</i>	97	2725		
<i>Culex spp.</i>	473	9211	3	0.326
<i>Culex territans</i>	7	29		
<i>Culiseta melanura</i>	210	3487	2	0.574
<i>Psorophora ferox</i>	1	5		
Cumberland	139	2499	1	0.400
<i>Aedes albopictus</i>	12	131		
<i>Aedes atlanticus</i>	2	12		
<i>Aedes cantator</i>	1	15		
<i>Aedes japonicas</i>	20	115		
<i>Aedes triseriatus</i>	2	11		
<i>Aedes vexans</i>	2	5		
<i>Anopheles punctipennis</i>	1	1		
<i>Anopheles quadrimaculatus</i>	2	5		
<i>Culex erraticus</i>	11	102		
<i>Culex pipiens</i>	22	588	1	1.701
<i>Culex restuans</i>	6	22		
<i>Culex salinarius</i>	1	5		
<i>Culex spp.</i>	41	1345		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	14	135		
<i>Psorophora ferox</i>	1	6		
Essex	271	3791	2	0.528
<i>Aedes albopictus</i>	21	128		
<i>Aedes japonicus</i>	27	153		
<i>Aedes sticticus</i>	1	1		
<i>Aedes triseriatus</i>	18	32		
<i>Aedes trivittatus</i>	4	28		
<i>Aedes vexans</i>	17	69		
<i>Anopheles punctipennis</i>	9	16		
<i>Anopheles quadrimaculatus</i>	7	14		
<i>Coquillettidia perturbans</i>	4	6		
<i>Culex spp.</i>	157	3297	2	0.607
<i>Psorophora ciliata</i>	1	3		
<i>Psorophora ferox</i>	5	44		

Gloucester	675	13550	3	0.221
<i>Aedes albopictus</i>	59	644		
<i>Aedes atlanticus</i>	1	1		
<i>Aedes canadensis canadensis</i>	2	2		
<i>Aedes japonicus</i>	66	520		
<i>Aedes thibaulti</i>	1	4		
<i>Aedes triseriatus</i>	12	53		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	17	98		
<i>Anopheles barberi</i>	3	20		
<i>Anopheles crucians</i>	2	21		
<i>Anopheles punctipennis</i>	37	204		
<i>Anopheles quadrimaculatus</i>	40	179		
<i>Anopheles walkeri</i>	1	19		
<i>Coquillettidia perturbans</i>	7	31		
<i>Culex pipiens</i>	326	10755	3	0.279
<i>Culex restuans</i>	20	142		
<i>Culex salinarius</i>	1	1		
<i>Culex territans</i>	4	9		
<i>Culiseta melanura</i>	72	762		
<i>Psorophora ciliata</i>	2	9		
Hudson	228	11596	43	3.708
<i>Culex spp.</i>	228	11596	43	3.708
Hunterdon	322	15123	33	2.208
<i>Aedes albopictus</i>	1	45		
<i>Culex erraticus</i>	4	109		
<i>Culex spp.</i>	315	14949	33	2.208
Mercer	471	8063	3	0.372
<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 spp.</i>	110	5092	3	0.589
Middlesex	305	13611	12	0.882
<i>Aedes albopictus</i>	11	87		
<i>Aedes japonicus</i>	25	333		
<i>Aedes triseriatus</i>	1	6		
<i>Culex spp.</i>	268	13185	12	0.910
Monmouth	703	6325	2	0.316
<i>Aedes albopictus</i>	80	393		
<i>Aedes atlanticus</i>	4	4		
<i>Aedes canadensis canadensis</i>	37	304		
<i>Aedes cantator</i>	11	52		

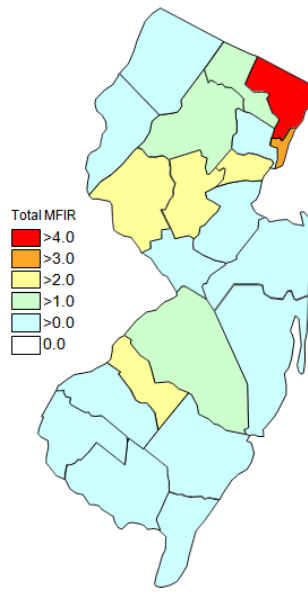
<i>Aedes japonicus</i>	57	290		
<i>Aedes sollicitans</i>	2	3		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes triseriatus</i>	30	139		
<i>Aedes trivittatus</i>	9	21		
<i>Aedes vexans</i>	20	113		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles crucians</i>	1	1		
<i>Anopheles punctipennis</i>	34	147		
<i>Anopheles quadrimaculatus</i>	16	36		
<i>Coquillettidia perturbans</i>	6	15		
<i>Culex erraticus</i>	14	138		
<i>Culex pipiens</i>	22	61		
<i>Culex restuans</i>	30	65		
<i>Culex salinarius</i>	1	5		
<i>Culex spp.</i>	163	2977	2	0.672
<i>Culex territans</i>	14	63		
<i>Culiseta melanura</i>	133	1448		
<i>Culiseta morsitans</i>	1	1		
<i>Psorophora columbiae</i>	1	3		
<i>Psorophora ferox</i>	7	34		
<i>Uranotaenia sapphirina</i>	6	8		
Morris	215	8678	9	1.037
<i>Aedes japonicus</i>	30	421		
<i>Aedes triseriatus</i>	5	39		
<i>Anopheles punctipennis</i>	1	2		
<i>Culex spp.</i>	179	8216	9	1.095
Ocean	684	10714	6	0.560
<i>Aedes albopictus</i>	88	1200	1	0.833
<i>Aedes atlanticus</i>	5	8		
<i>Aedes canadensis canadensis</i>	41	951		
<i>Aedes cantator</i>	21	157		
<i>Aedes cinereus</i>	1	1		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes japonicus</i>	78	430		
<i>Aedes sollicitans</i>	8	133		
<i>Aedes sticticus</i>	6	10		
<i>Aedes taeniorhynchus</i>	2	20		
<i>Aedes triseriatus</i>	34	98		
<i>Aedes trivittatus</i>	5	15		
<i>Aedes vexans</i>	53	224	1	4.464
<i>Anopheles bradleyi</i>	12	97		
<i>Anopheles punctipennis</i>	28	54		
<i>Anopheles quadrimaculatus</i>	10	22		
<i>Coquillettidia perturbans</i>	13	25		
<i>Culex erraticus</i>	2	2		
<i>Culex pipiens</i>	4	5		
<i>Culex restuans</i>	18	25		
<i>Culex salinarius</i>	24	89		
<i>Culex spp.</i>	164	6839	4	0.585
<i>Culiseta melanura</i>	49	228		

	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	15	78		
Passaic		120	2193	4	1.824
	<i>Aedes albopictus</i>	10	76		
	<i>Aedes canadensis canadensis</i>	1	20		
	<i>Aedes japonicus</i>	28	450		
	<i>Aedes triseriatus</i>	14	67	1	14.925
	<i>Anopheles punctipennis</i>	2	5		
	<i>Culex</i> spp.	65	1575	3	1.905
Salem		213	5655	3	0.531
	<i>Aedes albopictus</i>	14	53		
	<i>Aedes japonicus</i>	8	37		
	<i>Aedes triseriatus</i>	3	3		
	<i>Aedes vexans</i>	5	173		
	<i>Anopheles punctipennis</i>	11	57		
	<i>Anopheles quadrimaculatus</i>	12	163		
	<i>Coquillettidia perturbans</i>	4	128		
	<i>Culex erraticus</i>	24	413		
	<i>Culex pipiens</i>	3	45	1	22.222
	<i>Culex restuans</i>	6	94		
	<i>Culex salinarius</i>	6	172		
	<i>Culex</i> spp.	72	3592	2	0.557
	<i>Culex territans</i>	2	2		
	<i>Culiseta melanura</i>	40	571		
	<i>Psorophora ciliate</i>	1	2		
	<i>Psorophora columbiae</i>	2	150		
Somerset		330	6986	15	2.147
	<i>Aedes albopictus</i>	16	48		
	<i>Aedes canadensis canadensis</i>	2	8		
	<i>Aedes japonicus</i>	41	555		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes triseriatus</i>	39	152		
	<i>Aedes trivittatus</i>	12	422		
	<i>Aedes vexans</i>	3	25		
	<i>Anopheles punctipennis</i>	12	33		
	<i>Anopheles quadrimaculatus</i>	5	9		
	<i>Coquillettidia perturbans</i>	3	4		
	<i>Culex</i> spp.	193	5711	15	2.627
	<i>Psorophora ferox</i>	3	18		
Sussex		344	9668	6	0.621
	<i>Aedes japonicus</i>	3	3		
	<i>Aedes triseriatus</i>	30	187		
	<i>Coquillettidia perturbans</i>	3	94		
	<i>Culex pipiens</i>	15	211		
	<i>Culex restuans</i>	6	190		
	<i>Culex salinarius</i>	14	51		
	<i>Culex</i> spp.	263	8904	6	0.674
	<i>Culiseta melanura</i>	9	25		
	<i>Culiseta morsitans</i>	1	3		

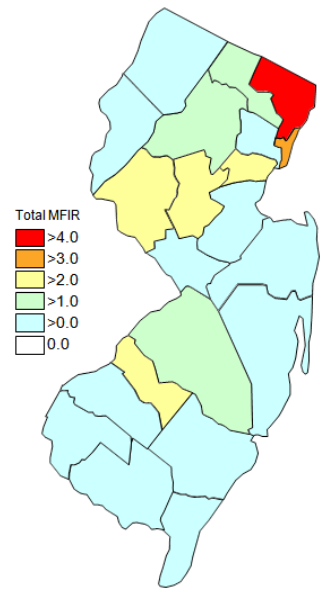
Union	169	4552	12	2.636
<i>Aedes albopictus</i>	24	95		
<i>Aedes japonicus</i>	20	139		
<i>Aedes sollicitans</i>	3	35		
<i>Aedes triseriatus</i>	3	6		
<i>Aedes vexans</i>	8	109		
<i>Anopheles punctipennis</i>	2	6		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex spp.</i>	105	4087	12	2.936
<i>Psorophora ferox</i>	3	74		
Warren	274	13435	1	0.074
<i>Culex spp.</i>	274	13435	1	0.074
Grand Total	9018	216651	296	1.366



Cumulative activity in 2008



Activity this year to 15 Oct 2009



Activity last week, 2009.

Saint Louis Encephalitis (SLE) through 15 October 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
Burlington		473	12503		
	<i>Aedes abserratus</i>	1	1		
	<i>Aedes albopictus</i>	45	316		
	<i>Aedes atlanticus</i>	3	18		
	<i>Aedes atropalpus</i>	2	16		
	<i>Aedes canadensis canadensis</i>	17	555		
	<i>Aedes cantator</i>	6	70		
	<i>Aedes cinereus</i>	1	6		
	<i>Aedes japonicus</i>	34	173		
	<i>Aedes sollicitans</i>	5	71		
	<i>Aedes sticticus</i>	1	41		
	<i>Aedes taeniorhynchus</i>	4	57		
	<i>Aedes triseriatus</i>	15	84		
	<i>Aedes trivittatus</i>	2	9		
	<i>Aedes vexans</i>	26	787		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles bradleyi</i>	9	468		
	<i>Anopheles crucians</i>	2	11		
	<i>Anopheles punctipennis</i>	9	40		
	<i>Anopheles quadrimaculatus</i>	3	11		
	<i>Coquillettidia perturbans</i>	21	288		
	<i>Culex erraticus</i>	11	36		
	<i>Culex pipiens</i>	1	75		
	<i>Culex restuans</i>	2	4		
	<i>Culex salinarius</i>	22	591		
	<i>Culex spp.</i>	145	6272		
	<i>Culex territans</i>	2	7		
	<i>Culiseta inornata</i>	1	2		
	<i>Culiseta melanura</i>	69	2250		
	<i>Psorophora ciliate</i>	2	34		
	<i>Psorophora columbiae</i>	2	7		
	<i>Psorophora ferox</i>	7	182		
	<i>Psorophora howardii</i>	1	6		
	<i>Uranotaenia sapphirina</i>	1	14		
Camden		191	4887		
	<i>Aedes albopictus</i>	29	146		
	<i>Aedes japonicus</i>	29	82		
	<i>Aedes triseriatus</i>	5	5		
	<i>Aedes vexans</i>	1	1		
	<i>Culex pipiens</i>	2	95		
	<i>Culex restuans</i>	1	1		
	<i>Culex spp.</i>	121	4554		
	<i>Orthopodomyia signifera</i>	3	3		

Cape May		971	17311		
	<i>Aedes albopictus</i>	18	88		
	<i>Aedes cantator</i>	1	2		
	<i>Aedes japonicus</i>	6	34		
	<i>Aedes triseriatus</i>	3	14		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Coquillettidia perturbans</i>	2	22		
	<i>Culex erraticus</i>	2	78		
	<i>Culex pipiens</i>	350	6575		
	<i>Culex restuans</i>	176	1762		
	<i>Culex salinarius</i>	21	182		
	<i>Culex spp.</i>	378	8402		
	<i>Culiseta melanura</i>	13	151		
Essex		216	3563		
	<i>Aedes albopictus</i>	21	128		
	<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>	155	3283		
	<i>Psorophora ferox</i>	2	3		
Hunterdon		66	3300		
	<i>Culex spp.</i>	66	3300		
Mercer		453	7961		
	<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		
Ocean		2	3		
	<i>Aedes albopictus</i>	1	1		
	<i>Culex spp.</i>	1	2		
Somerset		22	557		
	<i>Aedes albopictus</i>	1	4		
	<i>Culex spp.</i>	21	553		
Somerset		30	187		
	<i>Aedes triseriatus</i>	30	187		
Grand Total		2424	50272		

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

La Crosse Encephalitis (LAC) through 15 October 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
Cape May		309	1364		
	<i>Aedes albopictus</i>	112	426		
	<i>Aedes japonicus</i>	142	567		
	<i>Aedes sollicitans</i>	1	2		
	<i>Aedes triseriatus</i>	42	138		
	<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>	6	70		
	<i>Culiseta melanura</i>	1	1		
Passaic		2	17		
	<i>Aedes triseriatus</i>	2	17		
Sussex		30	187		
	<i>Aedes triseriatus</i>	30	187		
Grand Total		341	1568		

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