RUTGERS
New Jersey Agricultural Experiment Station

VECTOR SURVEILLANCE IN NEW JERSEY
EEE, WNV and SLE
CDC WEEK 36: September 6 to September 12, 2009

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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	3.50	.24	664	32	2	4.01
Corbin City (Atlantic County)	Coastal	2.90	1.20	174	18	1	5.75
Dennisville (Cape May County)	Coastal	6.30	1.80	1622	51	18	11.10
Winslow † (Camden County)	Inland	No history	7.92	1136	26	11	9.68
Centerton (Salem County)	Inland	3.70	2.00	377	30	1	2.65
Turkey Swamp (Monmouth County)	Inland	2.10	3.46	1229	108	10	8.14
Glassboro (Gloucester County)	Inland	No history	2.62	469	27	2	4.26

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

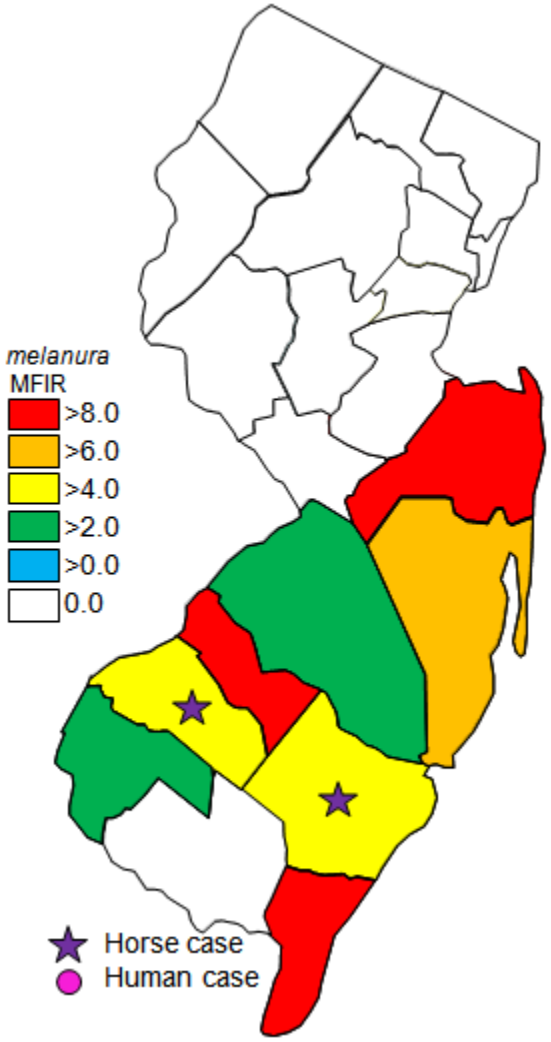
Remarks: Eastern equine encephalitis virus has disseminated throughout southern New Jersey. The total number of positive EEE pools of mosquitoes is at 78. Most positive pools remain in the enzootic vector, *Culiseta melanura* (69 out of the 78 positive pools). Positive pools of *Cs. melanura* from the traditional resting box sites have increased to 45 from 42 since last week. Twenty-four positive pools come from traps set by county agencies. To date, 300 pools from 5695 *Cs. melanura* mosquitoes have been sent for EEE testing from the seven resting box collections, and a total of 564 pools from 10292 *Cs. melanura* from all trap sites.

Positive species other than *Cs. melanura*	County(s)	Total Pools	Total Mosquitoes	Total Positive Pools	MFIR
Mixed *Culex* species	Atlantic	162	6905	2	0.29
Culex erraticus	Cape May	81	3458	5	1.45
Culex pipiens	Cape May	33	298	1	3.36
Culex salinarius	Burlington	99	3064	1	0.33

Additional Pools: EEE continued to be detected in pools of *Culex erraticus* from Cape May County. The location for the positive pools is also habitat for numerous wading birds, and it is likely that this opportunistic feeder is taking avian bloodmeals. *Culex pipiens* also tested positive in Cape May County (not surprising as it is primarily ornithophilic). 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, An. walker, Coquillettidia perturbans, Cx. restuans, Cx. territans, Culiseta inornata, Psorophora ciliate, Ps columbiae, Ps. ferox, Ps. howardii and Uranotaenia sappharina.*

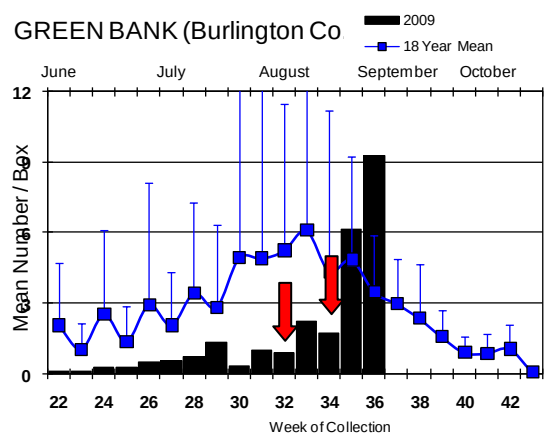
MFIR values: The MFIR values calculated for *Cs. melanura* changed slightly from last week, with an increase seen in Cape May due to positives at both the traditional resting box site plus trapping by the county in other areas. Ocean County decreased from last week. Surveillance should continue in light of the positive non-*melanura* pools detected. Graph to the right is the MFIR values of *Cs. melanura* for counties with positive pools, including non-resting box pools.

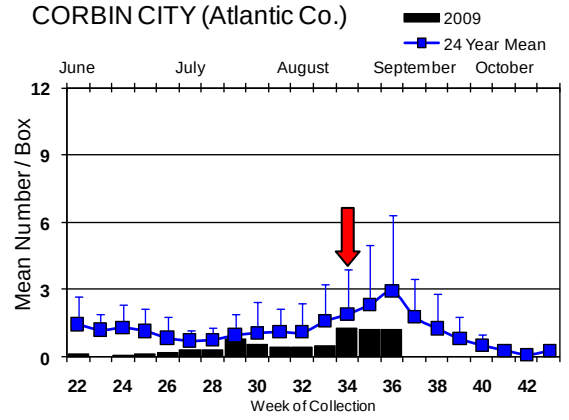
Horse and Humans: One horse was with no travel history was reported with both eastern equine encephalitis and West Nile virus infections with onset on 18 Aug in Gloucester County. A second horse in Atlantic County has been reported, with date on onset unknown. The fate of these two horse reinforces the 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

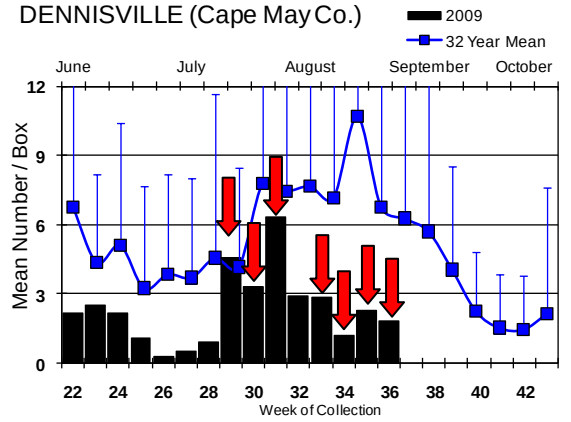


Culiseta melanura Population Graphs

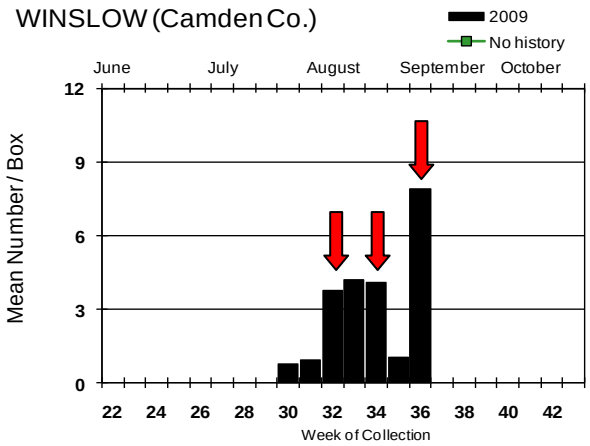
Coastal

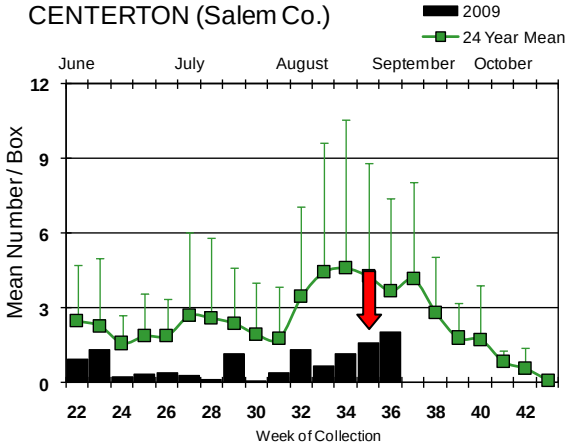


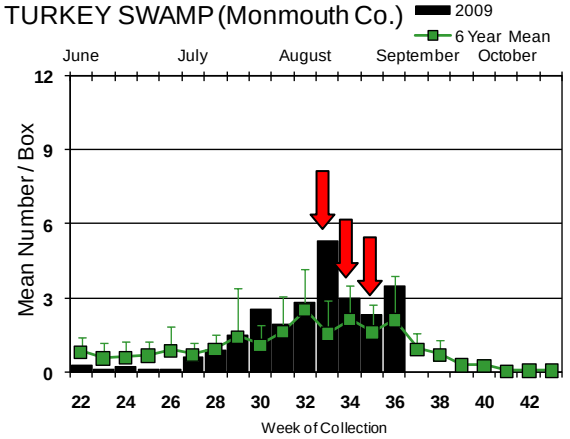




Inland

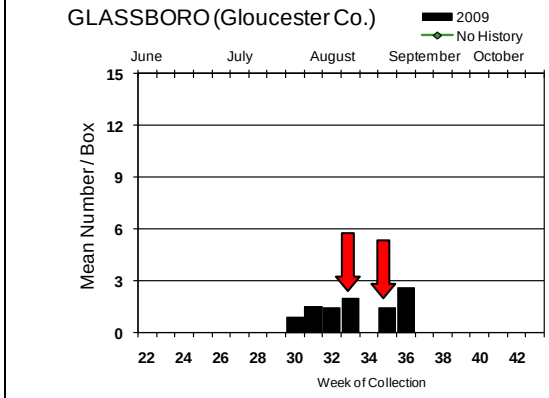






While Turkey Swamp population of *Culiseta melanura* continued to show abundance above historical data the populations at Green Bank and Winslow have also increased considerably. Over the past several years, population levels at Green Bank have been very low. Despite this, detection of positive EEE pools in *Cs. melanura* has occurred, often being the first detection of the year for the entire state. With positive pools being present, this large increase in the enzootic vector at several different sites should reinforce the necessity of wider surveillance for both enzootic and epizootic vectors.

= positive pool(s) detected.



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

- equine: 18(AL) 67(FL) 44(GA) 19(LA) 15(MA) 5(ME) 1(MO) 36(MS) 15(NC) 3[1alpaca](NH) 2(NJ) 2(NY) 2(SC) 4(TX) 10(VA)
- mosquito: 31(CT) 1(FL) 2(LA) 20(MA) 35(NH) 78(NJ) 45(NY) 2(RH) 136(VA)
- sentinel: 2(AL) 155/80wild(FL) 24(NC) 52[plus 1 emu 1 fairy bluebird (*Irena* sp)](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	70/72	4/5	0	13/15
Arkansas					1
California	405/420	845/908	171/223	6/8	29/6
Colorado		65/70		7/15	33/51
Connecticut	0	19/21	0	0	0
Delaware					
DC					
Florida	2 (flavi)		9/15	1	0
Georgia	0	4/17		2	2
Hawaii					
Idaho	1	9 co.		4/8	13/20
Illinois	17/20	271/304	0	2/3	1/4
Indiana	2	79/96		0	1/2
Iowa		5/8	5/6	1/2	1/2
Kansas		3/4			4
Kentucky				3	1
Louisiana		37/944	5	2	8/14
Maine					
Maryland	0	5/7		0	0
Mass.		17/23		0	0
Michigan		3	0	0	0
Minnesota	1	4			1
Mississippi		7		3	31/39
Missouri		293/329 flavi		1/2	1
Montana		5		8	5
Nebraska	10	22		2	8/16

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada		4+			12
New Hampshire		0		0	0
New Jersey	21/24	182/240	0	2	1
New Mexico		+		1/4	3
New York	7/29	62/75	0	0	1
North Carolina					
North Dakota	0	0		0	1
Ohio	0	187/203		0	1
Oklahoma	0	0	0	5	2/4
Oregon	15	258	0	3	6
Pennsylvania	8	175/220	0	0	1/2
Rhode Island					
South Carolina	2/3	0			1/2
South Dakota	0	18	0	3	11/12
Tennessee	1	382/393	0	0	2
Texas	7	293/303	0	4	24/44
Utah		230/262	1	5	0
Vermont	2	6/26	0	0	0
Virginia		26	4		0
Washington	16	326/336	0	43/51	10
West Virginia	1	7/72	0	1	0
Wisconsin	3	0	0	0	0
Wyoming		22		2	4/7

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 17 September 2009

Species	Pools	Mosquitoes	Positives	MFIR
Aedes abserratus	1	1		
Aedes albopictus	517	3564	3	0.842
Aedes atlanticus	15	40		
Aedes atropalpus	1	15		
Aedes canadensis canadensis	110	2458		
Aedes cantator	53	459		
Aedes cinereus	2	7		
Aedes grossbecki	3	35		
Aedes japonicus	652	4355	1	0.230
Aedes sollicitans	32	337		
Aedes sticticus	12	115		
Aedes taeniorhynchus	16	140		
Aedes thibaulti	6	9		
Aedes triseriatus	211	782	1	1.279
Aedes trivittatus	36	590		
Aedes vexans	141	2081	1	0.481
Anopheles barberi	4	15		
Anopheles bradleyi	38	715	1	1.399
Anopheles crucians	3	26		
Anopheles punctipennis	142	509		
Anopheles quadrimaculatus	117	1422		
Anopheles walkeri	1	19		
Coquillettidia perturbans	58	593		
Culex erraticus	93	3609		
Culex pipiens	878	19958	7	0.351
Culex restuans	536	6369	1	0.157
Culex salinarius	152	3537		
Culex spp.	3272	135354	223	1.648
Culex territans	31	111		
Culiseta inornata	1	2		
Culiseta melanura	507	7564	2	0.264
Culiseta morsitans	1	3		
Orthopodomyia signifera	3	3		
Psorophora ciliata	2	4		
Psorophora columbiae	6	12		
Psorophora ferox	35	329		
Psorophora howardii	1	6		
Uranotaenia sapphirina	1	14		
State Total	**7690**	**195162**	**240**	**1.230**

Remarks: The number of pools positive for West Nile virus has increased from 182 to 240. Infected pools continue to be primarily from ornithophilic species (223 pools). Increased activity is occurring in potential bridge vectors, with positive pools detected in *Aedes albopictus, Ae. japonicus, Ae. triseriatus* and *Ae. vexans* (the first two are competent vectors of WNV). Despite an increase in activity, this season continues to be less active as compared to last year.

Humans, Horses and Wild Birds: One human has been reported positive for WNV by PHEL in Hunterdon County with symptom onset on 18 August. 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. Sixteen positive Blue Jays (*Cyanocitta cristata*) mostly in Ocean County, three American Crows (*Corvus brachyrhynchos*), three unknown crow species (*Corvus*) and two unknown hawks 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
232* / 6180 (3.8%)	573 / 6879 (8.3%)
2009 Positive Birds to date / Total Birds Submitted	This time last year* * 2008 started later (at least one month) last year than in 2009
24 / 101 (23.8%)	38 / 144 (26.4%)

***Data was obtained from the PHEL database prior to update and contains fewer pools than overall dataset.**

WNV Results by County through 17 September 2009

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**224**	**5671**	**2**	**0.353**
	Aedes albopictus	16	248		
	Aedes atlanticus	1	4		
	Aedes canadensis canadensis	5	61		
	Aedes cantator	8	148		
	Aedes grossbecki	1	8		
	Aedes japonicus	10	75		
	Aedes sollicitans	5	17		
	Aedes sticticus	2	18		
	Aedes taeniorhynchus	7	43		
	Aedes thibaulti	3	3		
	Aedes triseriatus	5	12		
	Aedes trivittatus	2	19		
	Aedes vexans	18	501		
	Anopheles bradleyi	7	58	1	17.241
	Anopheles punctipennis	5	10		
	Anopheles quadrimaculatus	5	9		
	Culex erraticus	2	12		
	Culex restuans	2	5		
	Culex salinarius	2	37		
	Culex spp.	93	4127	1	0.242
	Culex territans	1	1		
	Culiseta melanura	21	242		
	Psorophora columbiae	2	3		
	Psorophora ferox	1	10		
Bergen		**188**	**12975**	**64**	**4.933**
	Aedes albopictus	3	16		
	Aedes japonicus	8	34		
	Aedes triseriatus	1	1		
	Anopheles punctipennis	1	4		
	Culex spp.	175	12920	64	4.954
Burlington		**454**	**12679**	**3**	**1.814**
	Aedes abserratus	1	1		
	Aedes albopictus	41	293		

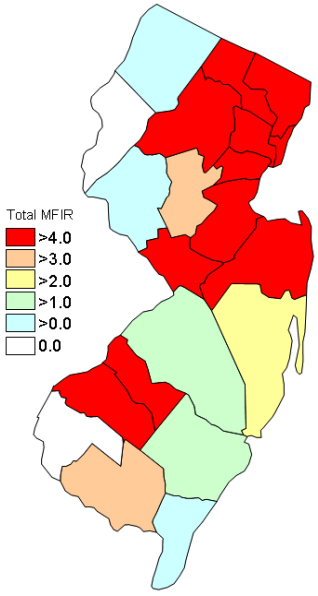
	Aedes atlanticus	3	18		
	Aedes atropalpus	1	15		
	Aedes canadensis canadensis	22	1072		
	Aedes cantator	6	67		
	Aedes cinereus	1	6		
	Aedes grossbecki	1	26		
	Aedes japonicus	30	155		
	Aedes sollicitans	5	71		
	Aedes sticticus	2	85		
	Aedes taeniorhynchus	4	57		
	Aedes triseriatus	14	78		
	Aedes trivittatus	2	9		
	Aedes vexans	25	869		
	Anopheles barberi	1	1		
	Anopheles bradleyi	9	433		
	Anopheles crucians	1	5		
	Anopheles punctipennis	10	33		
	Anopheles quadrimaculatus	4	12		
	Coquillettidia perturbans	19	279		
	Culex erraticus	7	23		
	Culex pipiens	1	75		
	Culex restuans	2	4		
	Culex salinarius	16	512		
	Culex spp.	131	5801	23	3.965
	Culex territans	3	13		
	Culiseta inornata	1	2		
	Culiseta melanura	83	2565		
	Psorophora ciliate	1	1		
	Psorophora columbiae	1	4		
	Psorophora ferox	4	74		
	Psorophora howardii	1	6		
	Uranotaenia sapphirina	1	14		
Camden		**236**	**6619**	**19**	**2.871**
	Aedes albopictus	25	140	2	14.286
	Aedes japonicus	31	74	1	13.514
	Aedes thibaulti	1	1		
	Aedes triseriatus	4	4		
	Aedes trivittatus	2	2		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	8		
	Anopheles quadrimaculatus	3	4		
	Culex pipiens	3	107		
	Culex restuans	2	2		
	Culex spp.	153	6261	16	2.556
	Culex territans	1	1		
	Culiseta melanura	4	11		
	Orthopodomyia signifera	3	3		
Cape May		**1868**	**31276**	**10**	**0.320**
	Aedes albopictus	103	406		
	Aedes canadensis canadensis	5	51		
	Aedes cantator	6	20		

	Aedes japonicus	170	659		
	Aedes sollicitans	10	111		
	Aedes taeniorhynchus	3	20		
	Aedes triseriatus	45	150		
	Aedes vexans	1	1		
	Anopheles bradleyi	10	127		
	Anopheles punctipennis	5	19		
	Anopheles quadrimaculatus	32	1068		
	Coquillettidia perturbans	3	30		
	Culex erraticus	51	2889		
	Culex pipiens	437	7949	5	0.629
	Culex restuans	333	4055	1	0.247
	Culex salinarius	87	2665		
	Culex spp.	405	8650	2	0.231
	Culex territans	7	29		
	Culiseta melanura	155	2377	2	0.841
Cumberland		**98**	**2097**		
	Aedes albopictus	9	127		
	Aedes atlanticus	1	5		
	Aedes cantator	1	15		
	Aedes japonicas	13	82		
	Aedes triseriatus	2	11		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	2	5		
	Culex erraticus	5	88		
	Culex pipiens	15	414		
	Culex restuans	2	6		
	Culex spp.	38	1246		
	Culex territans	1	1		
	Culiseta melanura	8	96		
Essex		**253**	**3696**	**2**	**0.541**
	Aedes albopictus	21	128		
	Aedes japonicus	25	150		
	Aedes sticticus	1	1		
	Aedes triseriatus	16	29		
	Aedes trivittatus	4	28		
	Aedes vexans	15	60		
	Anopheles punctipennis	9	16		
	Anopheles quadrimaculatus	6	13		
	Coquillettidia perturbans	4	6		
	Culex spp.	146	3218	2	0.622
	Psorophora ciliata	1	3		
	Psorophora ferox	5	44		
Gloucester		**568**	**12560**	**2**	**0.159**
	Aedes albopictus	49	522		
	Aedes atlanticus	1	1		
	Aedes canadensis canadensis	2	2		
	Aedes japonicus	53	467		
	Aedes thibaulti	1	4		
	Aedes triseriatus	7	32		

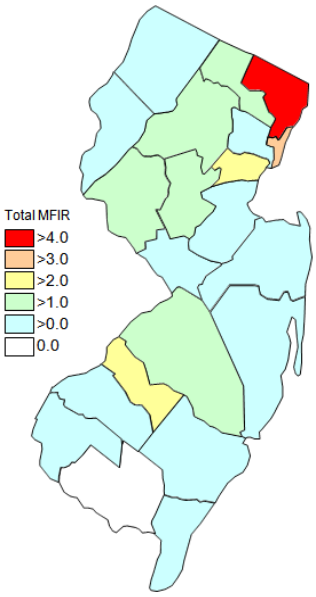
	Aedes trivittatus	1	75		
	Aedes vexans	12	79		
	Anopheles barberi	2	13		
	Anopheles crucians	2	21		
	Anopheles punctipennis	30	182		
	Anopheles quadrimaculatus	31	110		
	Anopheles walkeri	1	19		
	Coquillettidia perturbans	4	13		
	Culex pipiens	293	10390	2	0.192
	Culex restuans	20	142		
	Culex salinarius	1	1		
	Culex territans	4	9		
	Culiseta melanura	54	478		
Hudson		**203**	**10655**	**35**	**3.285**
	Culex spp.	203	10655	35	3.285
Hunterdon		**262**	**12933**	**20**	**1.546**
	Aedes albopictus	1	45		
	Culex erraticus	4	109		
	Culex spp.	257	12779	20	1.565
Mercer		**471**	**8063**	**3**	**0.372**
	Aedes albopictus	52	153		
	Aedes japonicus	69	176		
	Aedes triseriatus	8	12		
	Culex erraticus	1	1		
	Culex pipiens	97	783		
	Culex restuans	128	1820		
	Culex salinarius	6	26		
	Culex spp.	110	5092	3	0.589
Middlesex		**301**	**13575**	**12**	**0.884**
	Aedes albopictus	11	87		
	Aedes japonicus	25	333		
	Aedes triseriatus	1	6		
	Culex spp.	264	13149	12	0.913
Monmouth		**591**	**5769**	**2**	**0.347**
	Aedes albopictus	61	280		
	Aedes atlanticus	4	4		
	Aedes canadensis canadensis	34	295		
	Aedes cantator	11	52		
	Aedes japonicus	42	249		
	Aedes sollicitans	2	3		
	Aedes thibaulti	1	1		
	Aedes triseriatus	25	131		
	Aedes trivittatus	8	20		
	Aedes vexans	16	104		
	Anopheles barberi	1	1		
	Anopheles punctipennis	28	89		
	Anopheles quadrimaculatus	12	21		
	Coquillettidia perturbans	6	15		

	Culex erraticus	9	115		
	Culex pipiens	18	47		
	Culex restuans	27	55		
	Culex salinarius	1	5		
	Culex spp.	150	2937	2	0.681
	Culex territans	12	55		
	Culiseta melanura	115	1253		
	Psorophora columbiae	1	3		
	Psorophora ferox	7	34		
Morris		**194**	**8308**	**9**	**1.083**
	Aedes japonicus	26	393		
	Aedes triseriatus	4	37		
	Culex spp.	164	7878	9	1.142
Ocean		**564**	**10055**	**6**	**0.597**
	Aedes albopictus	71	922	1	1.085
	Aedes atlanticus	5	8		
	Aedes canadensis canadensis	39	949		
	Aedes cantator	21	157		
	Aedes cinereus	1	1		
	Aedes grossbecki	1	1		
	Aedes japonicus	60	384		
	Aedes sollicitans	8	133		
	Aedes sticticus	6	10		
	Aedes taeniorhynchus	2	20		
	Aedes triseriatus	31	95		
	Aedes trivittatus	5	15		
	Aedes vexans	41	201	1	4.975
	Anopheles bradleyi	12	97		
	Anopheles punctipennis	25	51		
	Anopheles quadrimaculatus	8	20		
	Coquillettidia perturbans	11	23		
	Culex restuans	10	11		
	Culex salinarius	22	87		
	Culex spp.	143	6660	4	0.601
	Culiseta melanura	28	133		
	Psorophora columbiae	2	2		
	Psorophora ferox	12	75		
Passaic		**113**	**2140**	**4**	**1.869**
	Aedes albopictus	8	72		
	Aedes canadensis canadensis	1	20		
	Aedes japonicus	25	409		
	Aedes triseriatus	12	59	1	16.949
	Anopheles punctipennis	2	5		
	Culex spp.	65	1575	3	1.905
Salem		**167**	**4620**	**2**	**0.433**
	Aedes albopictus	10	36		
	Aedes japonicus	8	37		
	Aedes triseriatus	3	3		
	Aedes vexans	2	150		

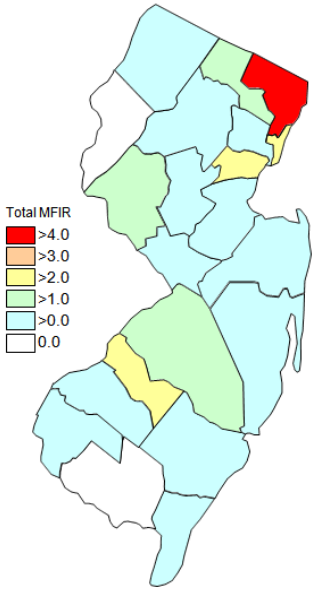
	Anopheles punctipennis	11	57		
	Anopheles quadrimaculatus	10	152		
	Coquillettidia perturbans	4	128		
	Culex erraticus	14	372		
	Culex restuans	4	79		
	Culex salinarius	3	153		
	Culex spp.	61	3056	2	0.654
	Culex territans	2	2		
	Culiseta melanura	35	395		
Somerset		**270**	**5871**	**9**	**1.533**
	Aedes albopictus	16	48		
	Aedes canadensis canadensis	2	8		
	Aedes japonicus	33	491		
	Aedes sticticus	1	1		
	Aedes triseriatus	30	116		
	Aedes trivittatus	12	422		
	Aedes vexans	3	25		
	Anopheles punctipennis	10	28		
	Anopheles quadrimaculatus	4	8		
	Coquillettidia perturbans	3	4		
	Culex spp.	153	4702	9	1.914
	Psorophora ferox	3	18		
Sussex		**226**	**7960**	**3**	**0.377**
	Aedes japonicus	3	3		
	Coquillettidia perturbans	3	94		
	Culex pipiens	14	193		
	Culex restuans	6	190		
	Culex salinarius	14	51		
	Culex spp.	217	7412	3	0.405
	Culiseta melanura	4	14		
	Culiseta morsitans	1	3		
Union		**160**	**4410**	**12**	**2.721**
	Aedes albopictus	21	86		
	Aedes japonicus	20	139		
	Aedes sollicitans	2	2		
	Aedes triseriatus	3	6		
	Aedes vexans	7	90		
	Anopheles punctipennis	2	3		
	Coquillettidia perturbans	1	1		
	Culex spp.	101	4006	12	2.996
	Psorophora ferox	3	74		
Warren		**243**	**13230**	**1**	**0.076**
	Culex spp.	243	13230	**1**	**0.076**
Grand Total		**7690**	**195,162**	**240**	**1.230**



Cumulative activity in 2008



Activity this year to 9 Sept 2009



Activity last week, 2009.

Saint Louis Encephalitis (SLE) through 17 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
Burlington		**391**	**10933**		
	Aedes abserratus	1	1		
	Aedes albopictus	41	293		
	Aedes atlanticus	3	18		
	Aedes atropalpus	1	15		
	Aedes canadensis canadensis	10	331		
	Aedes cantator	5	66		
	Aedes cinereus	1	6		
	Aedes japonicus	29	154		
	Aedes sollicitans	5	71		
	Aedes sticticus	1	41		
	Aedes taeniorhynchus	4	57		
	Aedes triseriatus	13	77		
	Aedes trivittatus	2	9		
	Aedes vexans	20	625		
	Anopheles barberi	1	1		
	Anopheles bradleyi	8	432		
	Anopheles crucians	1	5		
	Anopheles punctipennis	8	27		
	Anopheles quadrimaculatus	3	11		
	Coquillettidia perturbans	19	279		
	Culex erraticus	7	23		
	Culex pipiens	1	75		
	Culex restuans	1	3		
	Culex salinarius	16	512		
	Culex spp.	129	5792		
	Culex territans	2	7		

	Culiseta inornata	1	2		
	Culiseta melanura	50	1901		
	Psorophora ciliate	1	1		
	Psorophora columbiae	1	4		
	Psorophora ferox	4	74		
	Psorophora howardii	1	6		
	Uranotaenia sapphirina	1	14		
Camden		**155**	**4432**		
	Aedes albopictus	23	132		
	Aedes japonicus	19	51		
	Aedes triseriatus	4	4		
	Aedes vexans	1	1		
	Culex pipiens	2	95		
	Culex spp.	103	4146		
	Orthopodomyia signifera	3	3		
Cape May		**862**	**16386**		
	Aedes albopictus	18	88		
	Aedes cantator	1	2		
	Aedes japonicus	6	34		
	Aedes triseriatus	3	14		
	Anopheles quadrimaculatus	1	1		
	Coquillettidia perturbans	2	22		
	Culex erraticus	2	78		
	Culex pipiens	304	6120		
	Culex restuans	154	1651		
	Culex salinarius	20	164		
	Culex spp.	338	8061		
	Culiseta melanura	13	151		
Essex		**207**	**3498**		
	Aedes albopictus	21	128		
	Aedes japonicus	17	107		
	Aedes sticticus	1	1		
	Aedes triseriatus	9	14		
	Aedes vexans	9	25		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	1	1		
	Culex spp.	146	3218		
	Psorophora ferox	2	3		
Hunterdon		**66**	**3300**		
	Culex spp.	66	3300		
Mercer		**453**	**7961**		
	Aedes albopictus	52	153		
	Aedes japonicus	65	172		
	Aedes triseriatus	8	12		
	Culex pipiens	94	772		
	Culex restuans	124	1777		
	Culex salinarius	4	24		

	Culex spp.	106	5051		
Ocean		**2**	**3**		
	Aedes albopictus	1	1		
	Culex spp.	1	2		
Somerset		**22**	**557**		
	Aedes albopictus	1	4		
	Culex spp.	21	553		
Grand Total		**2158**	**47070**		

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

La Crosse Encephalitis (LAC) through 17 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
Cape May		**257**	**1215**		
	Aedes albopictus	82	334		
	Aedes japonicus	122	518		
	Aedes sollicitans	1	2		
	Aedes triseriatus	42	138		
	Anopheles bradleyi	1	34		
	Culex pipiens	1	41		
	Culex restuans	1	8		
	Culex salinarius	2	77		
	Culex spp.	5	63		
Passaic		**2**	**17**		
	Aedes triseriatus	2	17		
Grand Total		**259**	**1232**		