

VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE and LAC

Prepared by Lisa M. Reed, Scott Crans and Mark Robson

Center for Vector Biology, Rutgers University

CDC WEEK 42: October 16 to October 22, 2011

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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 /Tested [†]	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	0.88	0.24	118 ^{††}	17	0	
Corbin City (Atlantic County)	Coastal	0.08	0.24	180 [†]	17	0	
Dennisville (Cape May County)	Coastal	1.93	0	229	20	0	
Winslow (Camden County)	Inland	0.26	0.06	500 ^{††}	22	0	
Centerton (Salem County)	Inland	0.46	1.32	972 [†]	28	0	
Turkey Swamp (Monmouth County)	Inland	0.08	0.16	368 [†]	36	0	
Glassboro (Gloucester County)	Inland	0.10	0.12	480 [†]	21	0	

*Including trial run last week in May. † Adjusted for testing this week.

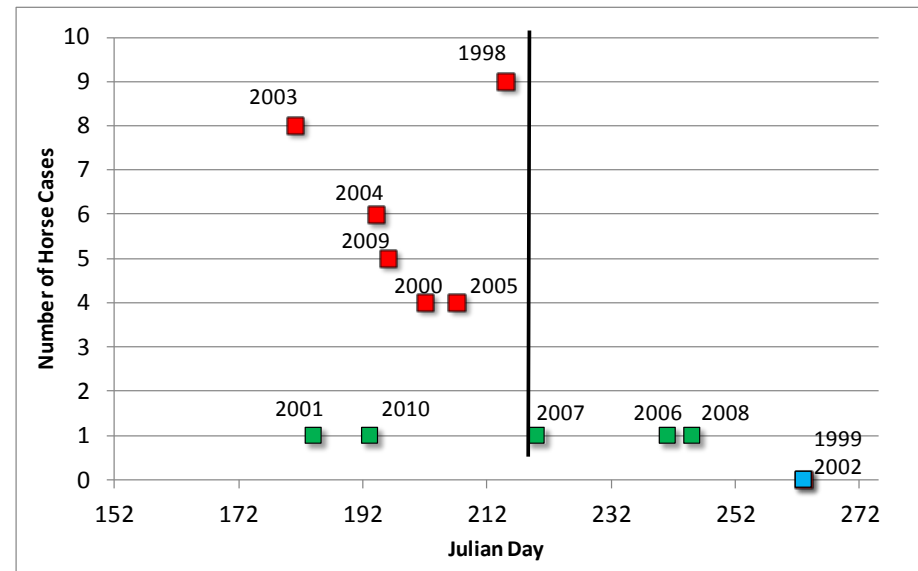
Remarks: The traditional resting box sites for the collection of *Culiseta melanura*, the primary enzootic vector, continue to show no detectable EEE activity. Total number of *Culiseta melanura* tested to date is 2729 mosquitoes from 159 pools. These totals are the same from the previous week as the Cape May Labs are currently down and PHEL has (successfully) transferred their operations from the old lab to the new and will be up and running soon. Samples from the past two week will be analyzed.

Despite the lack of positive mosquito pools, there was one horse case (described below). This is unusual in that most years, EEE is detected in mosquito pools. One or more horse cases also occur in most years, generally preceded by detection in mosquito pools in the state. Last year one unvaccinated horse died from EEE but subsequent trapping around the site did not produce positive pools. There were, however, 21 positive mosquito pools detected throughout the state.

Three hundred ninety six additional pools containing 3,937 *Cs. melanura* have tested negative from other county trapping sites using other traps in addition to resting boxes. No detection of EEE has occurred.

Additional <i>Cs. melanura</i> trapped by counties				
*traps with positives indicated in BOLD .				
County	Trap types*	Number collected (pools)	Number of positives pools	MFIR
Burlington	CO2, Gravid	2233 (87)	0	
Cape May	CO2, Gravid, RB	435 (96)	0	
Cumberland	CO2, Gravid, RB	320 (38)	0	
Gloucester	RB	802 (127)	0	
Ocean	CO2, Gravid, RB	94 (37)	0	
Salem	BA, Gravid	28 (8)	0	
Sussex	CO2	14 (1)	0	
TOTAL		3937 (396)	0	

Horses and Humans: One positive 3 yo stallion in Gloucester County with no vaccination or travel history was euthanized after onset of symptoms (19 October) from EEE. At this time, with the samples analyzed to date, there has been no detection of EEE in mosquito samples from either the enzootic vector or potential bridge vectors. The figure to the right illustrates the relationship between first detection date and number of horse cases between 1998 and 2010. In 2002, there were no detection of positive mosquito pools and there were no horse cases while in 1999, there was a late season mosquito pool detection without horse cases. This year there is a horse case with no detectable mosquito pools as tested so far.



There are no reported human cases.

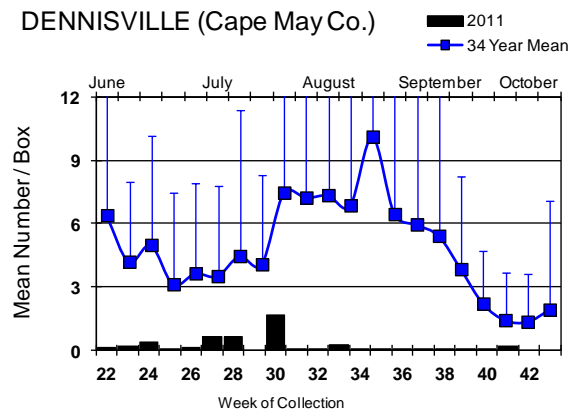
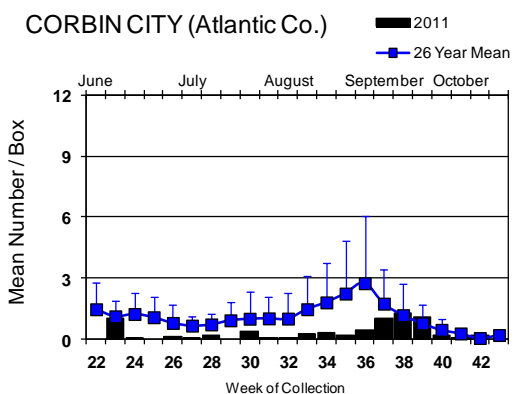
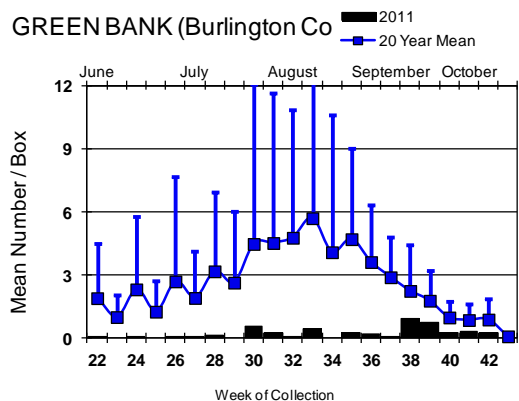
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	57	488		
<i>Aedes atlanticus</i>	6	60		
<i>Aedes atropalpus</i>	3	4		
<i>Aedes canadensis canadensis</i>	48	1998		
<i>Aedes cantator</i>	51	249		
<i>Aedes grossbecki</i>	1	3		
<i>Aedes japonicus</i>	27	98		
<i>Aedes mitchellae</i>	2	29		
<i>Aedes sollicitans</i>	38	238		
<i>Aedes sticticus</i>	2	30		
<i>Aedes taeniorhynchus</i>	22	411		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes triseriatus</i>	18	96		
<i>Aedes trivittatus</i>	1	7		
<i>Aedes vexans</i>	24	841		
<i>Anopheles barberi</i>	2	2		
<i>Anopheles bradleyi</i>	94	1056		
<i>Anopheles crucians</i>	7	75		
<i>Anopheles punctipennis</i>	43	360		
<i>Anopheles quadrimaculatus</i>	38	310		
<i>Coquillettidia perturbans</i>	87	1357		
<i>Culex erraticus</i>	217	9251		
<i>Culex pipiens</i>	515	4033		
<i>Culex restuans</i>	41	107		
<i>Culex salinarius</i>	190	1220		
<i>Culex</i> spp.	372	12298		
<i>Culex territans</i>	4	24		
<i>Psorophora ciliata</i>	1	35		
<i>Psorophora columbiae</i>	7	148		
<i>Psorophora ferox</i>	9	119		
<i>Psorophora howardii</i>	4	35		
<i>Uranotaenia sapphirina</i>	3	81		
State Total	1935	35,064		

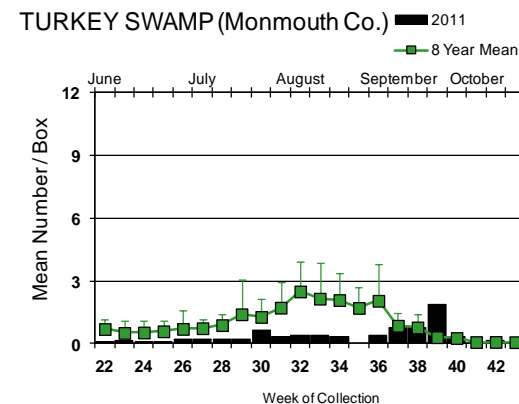
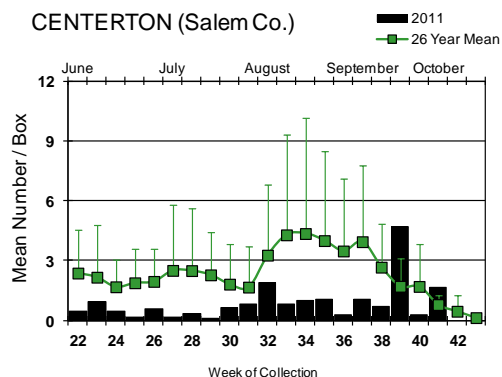
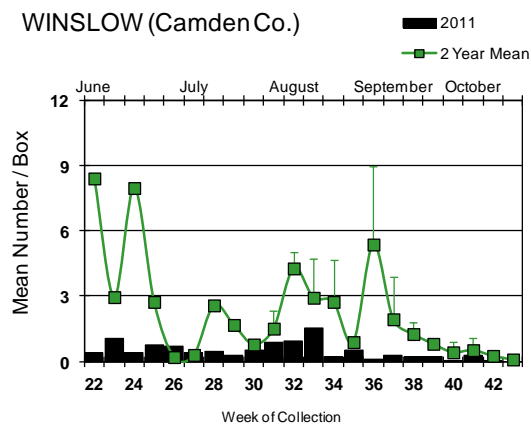
The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. An additional 31 species of mosquitoes have been tested with no detection of EEE.

Culiseta melanura Population Graphs

Coastal



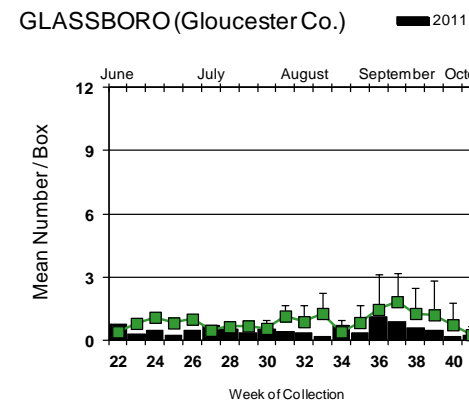
Inland



Cs. melanura populations at Corbin City, Centerton and Turkey Swamp were above historical values at this late point in the season. The four other traditional resting box sites continue to be below historical values. Despite being able to detect positive mosquitoes at low population levels in previous years, the low population abundance shown this year may have had an effect on detection thresholds.

↓ = Positive pool(s) detected.

Note: Both Winslow and Glassboro have single point historical data (the previous year) for weeks 22 to 29.



EEE in US (2011 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: 4(FL) 3(LA) 3(MI) 1(MS) 1(NJ) 12(NY) 2(NC) 1(VT-emu) 34(WI-2 alpaca)
- mosquito pools: 3(CT) 2(LA) 80(MA) 1(MI) 40(NY) 1(NC)
- sentinel: 26 chickens/19 wild bird (FL) 3(NC) 9(VA)
- human: 2(MA, 1 visitor from MO) 1(NY)

West Nile Virus

West Nile in US (2011 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/**New totals**.

Note: Data reported by all states should be considered provisional and subject to change. Sources for this table can be found [here](#).

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama			1		1/3
Alaska					
Arizona	0	140	17	4/6	30/39
Arkansas					1
California	617/656	2002/2030	311/332	12/14	113/122
Colorado	0	59		0	6/7
Connecticut		163		1	9
Delaware	16		8	1	1
DC	5	31			1
Florida	1 flavi		110/125	3	23/25
Georgia	1	374/392		2	8/9
Hawaii					
Idaho		2/3			1
Illinois	21	1049/1055	0	0	25/28
Indiana	1	182/191		3	6/9
Iowa		3	14	½	9
Kansas					4
Kentucky		2/4		1	3
Louisiana		239/251	3		8/10
Maine		0		0	0
Maryland	6/7	14		½	16/19
Mass.		275		1	5
Michigan	13/14	21/33	0	1	23/33
Minnesota	4	3/5		1	1/2
Mississippi		31		1	47/48
Missouri		116/119		0	7/8

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					1
Nebraska	2	53		1	24/26
Nevada	2	8/20		1	13/16
New Hampshire		9		0	0
New Jersey	34/41	528/530		1	5
New Mexico				2	3/4
New York		450/452		3*	36/40
North Carolina					2
North Dakota	0	0		5/7*	4
Ohio		577/586		4	16/20
Oklahoma		1			
Oregon	0	3	0	2	0
Pennsylvania	46/48	1484/1490		10*	5
Rhode Island		2		0	1
South Carolina	0	5/6		0	0
South Dakota		2/4		1	1/2
Tennessee	0	586/939		3	16/17
Texas	12	661/663		3/4	20
Utah		23/24	0	1	3
Vermont	12/14	3		0	2
Virginia		47	3/4	1	7/8
Washington	0	5		0	0
West Virginia	0	18/27		0	1
Wisconsin	13/16	0		3	1/2
Wyoming		10		0	3

* Can include other species (e.g., dogs, cows) reported positive.

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 Oct. 2011

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	1181	7703	6	0.779
<i>Aedes atlanticus</i>	18	140		
<i>Aedes atropalpus</i>	3	4		
<i>Aedes aurifer</i>	1	2		
<i>Aedes canadensis canadensis</i>	192	5395		
<i>Aedes cantator</i>	81	426		
<i>Aedes cinereus</i>	3	5		
<i>Aedes grossbecki</i>	3	8		
<i>Aedes japonicus</i>	639	3742	3	0.802
<i>Aedes mitchellae</i>	2	29		
<i>Aedes sollicitans</i>	60	372		
<i>Aedes sticticus</i>	8	88		
<i>Aedes stimulans</i>	5	47		
<i>Aedes taeniorhynchus</i>	70	1187		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes triseriatus</i>	342	758		
<i>Aedes trivittatus</i>	50	479		
<i>Aedes vexans</i>	224	2368		
<i>Anopheles barberi</i>	7	7		
<i>Anopheles bradleyi</i>	121	1575	1	0.635
<i>Anopheles crucians</i>	8	77		
<i>Anopheles punctipennis</i>	117	531		
<i>Anopheles quadrimaculatus</i>	161	888		
<i>Anopheles walkeri</i>	2	14		
<i>Coquillettidia perturbans</i>	128	1700		
<i>Culex erraticus</i>	246	9941		
<i>Culex pipiens</i>	1131	18397	80	4.349
<i>Culex restuans</i>	728	3872	11	2.841
<i>Culex salinarius</i>	221	2423	1	0.413
<i>Culex spp.</i>	3186	117545	415	3.531
<i>Culex territans</i>	6	26		
<i>Culiseta inornata</i>	2	3		
<i>Culiseta melanura</i>	570	6726	12	1.784
<i>Orthopodomyia signifera</i>	6	6		
<i>Psorophora ciliata</i>	6	63		
<i>Psorophora columbiae</i>	23	253		
<i>Psorophora ferox</i>	82	1230	1	0.813
<i>Psorophora howardii</i>	6	42		
<i>Uranotaenia sapphirina</i>	10	117		
State Total	9,650	188,190	530	2.816

Remarks: To date, there have been 188,190 mosquitoes tested in 9,650 pools from 38 species. Currently, 530 positive pools have been detected as of last week in *Culex pipiens*, *Cx. restuans*, *Cx. salinarius*, Mixed *Culex*, *Culiseta melanura*, *Aedes albopictus*, *Aedes japonicus*, *Anopheles bradleyi* and *Psorophora ferox*. Dates for all positive samples were collected were between 28 June and 14 October.

Humans, Horses and Wild Birds: There have been five human cases reported by the Department of Health and Senior Services. These include one case each in Mercer (probable), Middlesex (confirmed), Morris (probable), Ocean and Union (probable) counties. See <http://www.state.nj.us/health/cd/westnile/techinfo.shtml>

One positive horse has been reported, with date of onset 10 October, from Monmouth County. The 11 year old mare was not vaccinated.

Bird testing began in mid-April. WNV has been detected in 41 birds from the 117 birds that have been tested. Species include American Crow *Corvus brachyrhynchos* (14/16), Blue Jays *Cyanocitta cristata* (8/15), Fish Crows *Corvus ossifragus* (8/25) unknown *Corvus* (7/11), Hawk/raptor (0/4) and Other (non-corvid) species (4/46). Positive birds were from Atlantic, Burlington, Gloucester, Mercer, Monmouth, Morris, Ocean, Somerset, Sussex, Union and Warren counties. Counties submitting birds are Atlantic, Burlington, Cape May, Cumberland, Gloucester, Mercer, Monmouth, Morris, Ocean, Salem, Somerset, Sussex, Union and Warren. County participation in submitting dead birds varies across the state.

2011 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
530 / 9,650 (0.055)	836 / 5,713 (0.146)
2011 Positive Birds to date / Total Birds Submitted	This time last year
41 / 117 (0.353)	129 / 246 (0.524)

WNV Results by County through 17 October 2011

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		229	6182	4	0.647
	<i>Aedes albopictus</i>	21	539		
	<i>Aedes canadensis canadensis</i>	8	194		
	<i>Aedes cantator</i>	5	40		
	<i>Aedes japonicus</i>	7	24		
	<i>Aedes sticticus</i>	5	48		
	<i>Aedes sollicitans</i>	1	6		
	<i>Aedes taeniorhynchus</i>	8	123		
	<i>Aedes thibaulti</i>	1	1		
	<i>Aedes triseriatus</i>	8	17		
	<i>Aedes trivittatus</i>	2	10		
	<i>Aedes vexans</i>	19	317		
	<i>Anopheles bradleyi</i>	6	48		
	<i>Anopheles punctipennis</i>	3	3		
	<i>Anopheles quadrimaculatus</i>	1	2		
	<i>Coquillettidia perturbans</i>	5	63		
	<i>Culex erraticus</i>	7	191		
	<i>Culex restuans</i>	1	1		
	<i>Culex</i> spp.	86	3827	3	0.784
	<i>Culiseta melanura</i>	19	205		
	<i>Orthopodomyia signifera</i>	1	1		
	<i>Psorophora columbiae</i>	1	2		
	<i>Psorophora ferox</i>	12	513	1	1.949
	<i>Psorophora howardii</i>	2	7		
Bergen		200	13401	108	8.059
	<i>Aedes albopictus</i>	5	15		
	<i>Aedes japonicus</i>	11	65	1	15.385
	<i>Aedes triseriatus</i>	1	1		
	<i>Aedes vexans</i>	5	140		
	<i>Anopheles punctipennis</i>	2	5		
	<i>Culex</i> spp.	176	13175	107	8.121

Burlington	687	21111	35	1.658
<i>Aedes albopictus</i>	39	449		
<i>Aedes atlanticus</i>	6	60		
<i>Aedes atropalpus</i>	3	4		
<i>Aedes canadensis canadensis</i>	44	1986		
<i>Aedes cantator</i>	3	72		
<i>Aedes grossbecki</i>	1	3		
<i>Aedes japonicus</i>	16	76		
<i>Aedes mitchellae</i>	2	29		
<i>Aedes sollicitans</i>	8	130		
<i>Aedes sticticus</i>	2	30		
<i>Aedes taeniorhynchus</i>	9	69		
<i>Aedes triseriatus</i>	14	91		
<i>Aedes trivittatus</i>	1	7		
<i>Aedes vexans</i>	22	839		
<i>Anopheles bradleyi</i>	13	448	1	2.232
<i>Anopheles crucians</i>	7	75		
<i>Anopheles punctipennis</i>	9	37		
<i>Anopheles quadrimaculatus</i>	1	5		
<i>Coquillettidia perturbans</i>	29	805		
<i>Culex erraticus</i>	12	533		
<i>Culex pipiens</i>	19	312	2	6.410
<i>Culex restuans</i>	11	56		
<i>Culex salinarius</i>	24	309		
<i>Culex</i> spp.	264	11910	27	2.267
<i>Culex territans</i>	3	23		
<i>Culiseta melanura</i>	103	2337	5	2.139
<i>Psorophora ciliata</i>	1	35		
<i>Psorophora columbiae</i>	7	148		
<i>Psorophora ferox</i>	7	117		
<i>Psorophora howardii</i>	4	35		
<i>Uranotaenia sapphirina</i>	3	81		
Camden	272	6491	19	2.927
<i>Aedes albopictus</i>	53	313		
<i>Aedes japonicus</i>	32	72		
<i>Aedes triseriatus</i>	4	8		
<i>Aedes vexans</i>	1	1		
<i>Anopheles punctipennis</i>	3	3		
<i>Anopheles quadrimaculatus</i>	1	2		
<i>Culex erraticus</i>	2	7		
<i>Culex pipiens</i>	3	135		
<i>Culex</i> spp.	152	5468	18	3.292
<i>Culiseta melanura</i>	21	482	1	2.075
Cape May	2957	24006	3	0.125
<i>Aedes albopictus</i>	442	1062		
<i>Aedes canadensis canadensis</i>	31	513		
<i>Aedes cantator</i>	47	152		
<i>Aedes japonicus</i>	118	197		
<i>Aedes sollicitans</i>	27	103		
<i>Aedes taeniorhynchus</i>	35	513		
<i>Aedes triseriatus</i>	144	213		
<i>Aedes trivittatus</i>	1	1		
<i>Aedes vexans</i>	34	73		

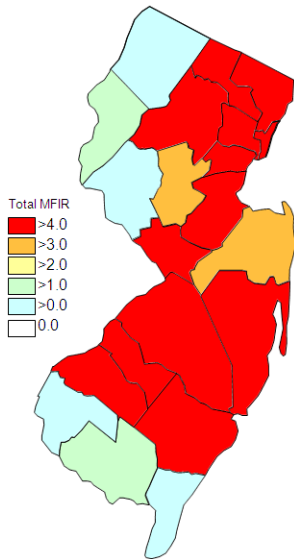
	<i>Anopheles bradleyi</i>	85	646		
	<i>Anopheles punctipennis</i>	13	15		
	<i>Anopheles quadrimaculatus</i>	85	402		
	<i>Coquillettidia perturbans</i>	26	324		
	<i>Culex erraticus</i>	183	8520		
	<i>Culex pipiens</i>	647	6176	1	0.162
	<i>Culex restuans</i>	626	3035	1	0.329
	<i>Culex salinarius</i>	169	914	1	1.094
	<i>Culex spp.</i>	119	468		
	<i>Culiseta melanura</i>	118	667		
	<i>Orthopodomyia signifera</i>	5	5		
	<i>Psorophora ferox</i>	1	6		
	<i>Uranotaenia sapphirina</i>	1	1		
Cumberland		254	3996		
	<i>Aedes albopictus</i>	27	95		
	<i>Aedes atlanticus</i>	3	17		
	<i>Aedes canadensis canadensis</i>	13	147		
	<i>Aedes cantator</i>	3	81		
	<i>Aedes japonicus</i>	11	41		
	<i>Aedes sollicitans</i>	4	24		
	<i>Aedes taeniorhynchus</i>	6	337		
	<i>Aedes triseriatus</i>	14	26		
	<i>Aedes vexans</i>	14	99		
	<i>Anopheles bradleyi</i>	7	416		
	<i>Anopheles punctipennis</i>	6	13		
	<i>Anopheles quadrimaculatus</i>	5	13		
	<i>Coquillettidia perturbans</i>	13	144		
	<i>Culex erraticus</i>	13	72		
	<i>Culex pipiens</i>	8	25		
	<i>Culex restuans</i>	4	17		
	<i>Culex salinarius</i>	17	1160		
	<i>Culex spp.</i>	40	890		
	<i>Culex territans</i>	2	2		
	<i>Culiseta melanura</i>	38	320		
	<i>Psorophora ciliata</i>	1	8		
	<i>Psorophora columbiae</i>	1	23		
	<i>Psorophora ferox</i>	4	26		
Essex		550	7837	16	2.042
	<i>Aedes albopictus</i>	112	516	1	1.938
	<i>Aedes canadensis canadensis</i>	2	8		
	<i>Aedes grossbecki</i>	2	5		
	<i>Aedes japonicus</i>	86	711	1	1.406
	<i>Aedes sticticus</i>	1	21		
	<i>Aedes stimulans</i>	4	46		
	<i>Aedes triseriatus</i>	43	110		
	<i>Aedes vexans</i>	31	127		
	<i>Anopheles punctipennis</i>	4	5		
	<i>Culex spp.</i>	261	6269	14	2.233
	<i>Psorophora ferox</i>	4	19		
Gloucester		679	12485	48	3.845
	<i>Aedes albopictus</i>	82	1098	3	2.732
	<i>Aedes canadensis canadensis</i>	2	23		
	<i>Aedes japonicus</i>	24	174		

<i>Aedes triseriatus</i>	7	19		
<i>Aedes vexans</i>	19	334		
<i>Anopheles punctipennis</i>	22	306		
<i>Anopheles quadrimaculatus</i>	34	313		
<i>Coquillettidia perturbans</i>	14	79		
<i>Culex pipiens</i>	312	8701	43	4.942
<i>Culiseta melanura</i>	150	1282	2	1.560
<i>Psorophora ciliata</i>	1	8		
<i>Psorophora ferox</i>	12	148		
Hudson	214	11230	37	3.295
<i>Culex</i> spp.	214	11230	37	3.295
Hunterdon	250	11462	39	3.403
<i>Culex</i> spp.	250	11462	39	3.43
Mercer	357	4469	44	9.846
<i>Aedes albopictus</i>	105	668	1	1.497
<i>Aedes japonicus</i>	54	163		
<i>Aedes triseriatus</i>	12	30		
<i>Aedes vexans</i>	4	11		
<i>Culex erraticus</i>	3	7		
<i>Culex pipiens</i>	128	2921	33	11.298
<i>Culex restuans</i>	45	655	10	15.267
<i>Culex salinarius</i>	3	7		
<i>Culex</i> spp.	1	2		
<i>Psorophora ciliata</i>	1	4		
<i>Psorophora ferox</i>	1	1		
Middlesex	246	8693	55	6.327
<i>Aedes albopictus</i>	19	160		
<i>Aedes japonicus</i>	24	248		
<i>Aedes triseriatus</i>	1	5		
<i>Culex</i> spp.	202	8280	55	6.643
Monmouth	468	4196	7	1.68
<i>Aedes albopictus</i>	62	332		
<i>Aedes atlanticus</i>	1	2		
<i>Aedes canadensis canadensis</i>	28	428		
<i>Aedes cantator</i>	10	33		
<i>Aedes japonicus</i>	50	160		
<i>Aedes sollicitans</i>	9	33		
<i>Aedes taeniorhynchus</i>	10	141		
<i>Aedes triseriatus</i>	31	79		
<i>Aedes trivittatus</i>	18	113		
<i>Aedes vexans</i>	15	44		
<i>Anopheles barberi</i>	5	5		
<i>Anopheles crucians</i>	1	2		
<i>Anopheles punctipennis</i>	15	43		
<i>Anopheles quadrimaculatus</i>	4	6		
<i>Coquillettidia perturbans</i>	6	29		
<i>Culex erraticus</i>	3	5		
<i>Culex pipiens</i>	3	17		
<i>Culex restuans</i>	6	22		
<i>Culex salinarius</i>	1	16		

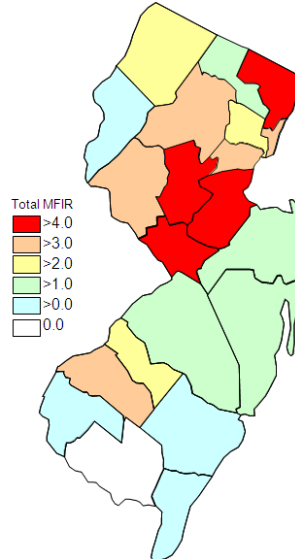
	<i>Culex</i> spp.	131	2214	7	3.162
	<i>Culex territans</i>	1	1		
	<i>Culiseta melanura</i>	41	374		
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	3	17		
	<i>Psorophora ferox</i>	12	78		
	<i>Uranotaenia sapphirina</i>	1	1		
Morris		230	7695	25	3.249
	<i>Aedes albopictus</i>	2	14		
	<i>Aedes japonicus</i>	12	187		
	<i>Coquillettidia perturbans</i>	2	65		
	<i>Culex</i> spp.	214	7429	25	3.365
Ocean		524	6282	10	1.592
	<i>Aedes albopictus</i>	99	1563		
	<i>Aedes atlanticus</i>	8	61		
	<i>Aedes canadensis canadensis</i>	57	2066		
	<i>Aedes cantator</i>	10	42		
	<i>Aedes japonicus</i>	45	94		
	<i>Aedes sollicitans</i>	4	29		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes taeniorhynchus</i>	2	4		
	<i>Aedes triseriatus</i>	20	32		
	<i>Aedes trivittatus</i>	12	58		
	<i>Aedes vexans</i>	26	107		
	<i>Anopheles bradleyi</i>	7	14		
	<i>Anopheles punctipennis</i>	17	36		
	<i>Anopheles quadrimaculatus</i>	5	6		
	<i>Coquillettidia perturbans</i>	20	105		
	<i>Culex erraticus</i>	2	2		
	<i>Culex restuans</i>	13	17		
	<i>Culex salinarius</i>	7	17		
	<i>Culex</i> spp.	105	1697	8	4.714
	<i>Culiseta melanura</i>	37	94	2	21.277
	<i>Psorophora ciliata</i>	1	7		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	22	226		
	<i>Uranotaenia sapphirina</i>	2	2		
Passaic		124	2244	4	1.783
	<i>Aedes albopictus</i>	15	132		
	<i>Aedes canadensis canadensis</i>	3	10		
	<i>Aedes japonicus</i>	22	186		
	<i>Aedes triseriatus</i>	8	29		
	<i>Aedes trivittatus</i>	4	32		
	<i>Aedes vexans</i>	1	4		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	1	3		
	<i>Culex</i> spp.	69	1847	4	2.166
Salem		304	3553	2	0.563
	<i>Aedes albopictus</i>	30	59		
	<i>Aedes aurifer</i>	1	2		
	<i>Aedes canadensis canadensis</i>	4	20		
	<i>Aedes cantator</i>	3	6		

<i>Aedes japonicus</i>	28	61		
<i>Aedes sollicitans</i>	3	5		
<i>Aedes sticticus</i>	1	1		
<i>Aedes triseriatus</i>	23	47		
<i>Aedes vexans</i>	19	137		
<i>Anopheles barberi</i>	1	1		
<i>Anopheles bradleyi</i>	3	3		
<i>Anopheles punctipennis</i>	10	15		
<i>Anopheles quadrimaculatus</i>	18	105		
<i>Coquillettidia perturbans</i>	8	22		
<i>Culex erraticus</i>	21	604		
<i>Culex pipiens</i>	6	12		
<i>Culex restuans</i>	14	31		
<i>Culex</i> spp.	65	1425		
<i>Culiseta inornata</i>	1	2		
<i>Culiseta melanura</i>	36	934	2	2.141
<i>Psorophora columbiae</i>	9	61		
Somerset	227	3095	17	5.493
<i>Aedes albopictus</i>	21	89		
<i>Aedes japonicus</i>	16	141		
<i>Aedes triseriatus</i>	7	36		
<i>Aedes trivittatus</i>	4	112		
<i>Aedes vexans</i>	3	45		
<i>Anopheles punctipennis</i>	3	10		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex</i> spp.	169	2605	17	6.526
<i>Psorophora ferox</i>	3	56		
Sussex	339	9550	25	2.618
<i>Aedes japonicus</i>	69	1075	1	0.930
<i>Aedes vexans</i>	1	7		
<i>Coquillettidia perturbans</i>	1	57		
<i>Culex pipiens</i>	5	98	1	10.204
<i>Culex restuans</i>	8	38		
<i>Culex</i> spp.	249	8244	23	2.790
<i>Culiseta melanura</i>	6	31		
Union	176	4832	17	3.518
<i>Aedes albopictus</i>	47	599	1	1.669
<i>Aedes japonicus</i>	3	14		
<i>Culex</i> spp.	126	4219	16	3.792
Warren	363	15381	15	0.975
<i>Aedes cinereus</i>	3	5		
<i>Aedes japonicus</i>	11	53		
<i>Aedes sticticus</i>	2	29		
<i>Aedes stimulans</i>	1	1		
<i>Aedes triseriatus</i>	5	15		
<i>Aedes trivittatus</i>	8	146		
<i>Aedes vexans</i>	10	83		
<i>Anopheles barberi</i>	1	1		
<i>Anopheles punctipennis</i>	9	39		
<i>Anopheles quadrimaculatus</i>	7	34		
<i>Anopheles walkeri</i>	2	14		
<i>Coquillettidia perturbans</i>	2	3		

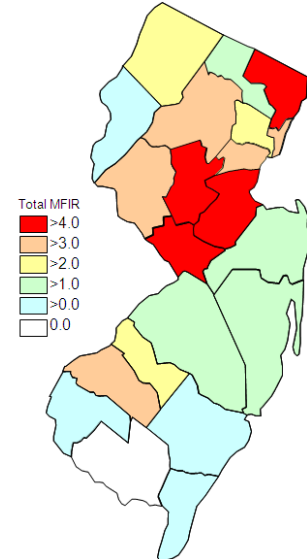
<i>Culex</i> spp.	293	14884	15	1.008
<i>Culiseta inornata</i>	1	1		
<i>Culiseta melanura</i>	1	1		
<i>Psorophora ferox</i>	4	40		
<i>Uranotaenia sapphirina</i>	3	32		
Grand Total	9,650	188,190	530	2.816



Cumulative WNV activity in 2010.



WNV activity to 17 October 2011.



WNV activity last week, 2011.

Saint Louis Encephalitis (SLE) through 17 October 2011.

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 tested positive for SLE to date in 2011.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		659	20993		
	<i>Aedes albopictus</i>	37	447		
	<i>Aedes atlanticus</i>	6	60		
	<i>Aedes atropalpus</i>	3	4		
	<i>Aedes canadensis canadensis</i>	42	1984		
	<i>Aedes cantator</i>	3	72		
	<i>Aedes grossbecki</i>	1	3		
	<i>Aedes japonicus</i>	16	76		
	<i>Aedes mithcellae</i>	2	29		
	<i>Aedes sollicitans</i>	7	129		
	<i>Aedes sticticus</i>	2	30		
	<i>Aedes taeniorhynchus</i>	9	69		
	<i>Aedes triseriatus</i>	14	91		
	<i>Aedes trivittatus</i>	1	7		
	<i>Aedes vexans</i>	22	839		
	<i>Anopheles bradleyi</i>	11	445		
	<i>Anopheles crucians</i>	7	75		
	<i>Anopheles punctipennis</i>	8	36		
	<i>Anopheles quadrimaculatus</i>	1	5		
	<i>Coquillettidia perturbans</i>	29	805		
	<i>Culex erraticus</i>	12	533		
	<i>Culex pipiens</i>	19	312		
	<i>Culex restuans</i>	9	53		
	<i>Culex salinarius</i>	23	308		
	<i>Culex spp.</i>	263	11909		

	<i>Culex erraticus</i>	3	23		
	<i>Culiseta melanura</i>	87	2233		
	<i>Psorophora ciliata</i>	1	35		
	<i>Psorophora columbiae</i>	7	148		
	<i>Psorophora ferox</i>	7	117		
	<i>Psorophora howardii</i>	4	35		
	<i>Uranotaenia sapphirina</i>	3	81		
Camden		251	6009		
	<i>Aedes albopictus</i>	53	313		
	<i>Aedes japonicus</i>	32	72		
	<i>Aedes triseriatus</i>	4	8		
	<i>Aedes vexans</i>	1	1		
	<i>Anopheles punctipennis</i>	3	3		
	<i>Anopheles quadrimaculatus</i>	1	2		
	<i>Culex erraticus</i>	2	7		
	<i>Culex pipiens</i>	3	135		
	<i>Culex</i> spp.	152	5468		
Cumberland		1	1		
	<i>Aedes triseriatus</i>	1	1		
Essex		550	7837		
	<i>Aedes albopictus</i>	112	516		
	<i>Aedes canadensis canadensis</i>	2	8		
	<i>Aedes grossbecki</i>	2	5		
	<i>Aedes japonicus</i>	86	711		
	<i>Aedes sticticus</i>	1	21		
	<i>Aedes stimulans</i>	4	46		
	<i>Aedes triseriatus</i>	43	110		
	<i>Aedes vexans</i>	31	127		
	<i>Anopheles punctipennis</i>	4	5		
	<i>Culex</i> spp.	261	6269		
	<i>Psorophora ferox</i>	4	19		
Hudson		199	10456		
	<i>Culex</i> spp.	199	10456		
Grand Total		1,660	45,296		

La Crosse Encephalitis (LAC) through 17 October 2011.

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 tested positive to date for 2011.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		135	01		
	<i>Aedes japonicus</i>	1	1		
	<i>Aedes triseriatus</i>	134	200		
Cumberland		16	30		
	<i>Aedes triseriatus</i>	16	30		
Salem		9	18		
	<i>Aedes triseriatus</i>	9	18		
Warren		1	9		
	<i>Aedes triseriatus</i>	1	9		
Grand Total		161	258		