VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE and LAC

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CDC WEEK 44: October 30 to November 5, 2011

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This New Jersey Agricultural Experiment Station report is supported by Rutgers University, Hatch funds, funding from the NJ State Mosquito Control Commission and with the participation of the Department of Health and Senior Services, Department of Agriculture and of the 21 county mosquito control agencies of New Jersey.

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**	nd†	nc††	118	18	0	
Corbin City (Atlantic County)	**Coastal**	nd†	nc††	180	18	0	
Dennisville (Cape May County)	**Coastal**	nd†	nc††	229	20	0	
Winslow (Camden County)	**Inland**	nd†	nc††	482(503)	21(23)	0	
Centerton (Salem County)	**Inland**	nd†	nc††	906(987)	28(30)	0	
Turkey Swamp (Monmouth County)	**Inland**	nd†	nc††	368	37	0	
Glassboro (Gloucester County)	**Inland**	nd†	nc††	482	21	0	

*Including trial run last week in May. † No data. †† No collection

Remarks: The traditional resting box sites for the collection of *Culiseta melanura*, the primary enzootic vector, have shown no detectable EEE activity this year. Total number of *Culiseta melanura* tested to date is 2757 mosquitoes from 163 pools. There are still some samples from Winslow and Centerton to be analyzed and will be reported in the end of year report. This is the last report of the season.

In general for any given year, New Jersey finds activity in at least one mosquito pool, and usually this is in *Culiseta melanura*. Horse activity occurs also fairly frequently. This year, there was one reported horse case but no positive mosquito pools detected. This is an unusual situation. This year, *Culiseta melanura* populations were very low, particularly those sampled from resting boxes. While positive virus activity has been detected in populations with low numbers in the past, we may have gone below the threshold for ready detection with these very low abundances.

Four hundred twenty-two additional pools containing 4,053 *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 *Cs. melanura* trapped by counties ***traps with positives indicated in BOLD.**				
County	**Trap types***	**Number collected (pools)**	**Number of positives pools**	**MFIR**
Burlington	CO2, Gravid	2263 (91)	0	
Cape May	CO2, Gravid, RB	435 (96)	0	
Cumberland	CO2, Gravid, RB	325 (39)	0	
Gloucester	RB	852 (141)	0	
Monmouth	CO2, Gravid	11 (2)		
Ocean	CO2, Gravid, RB	125 (44)	0	
Salem	BA, Gravid	28 (8)	0	
Sussex	CO2	14 (1)	0	
TOTAL		**4053 (422)**	**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.

There are no reported human cases.

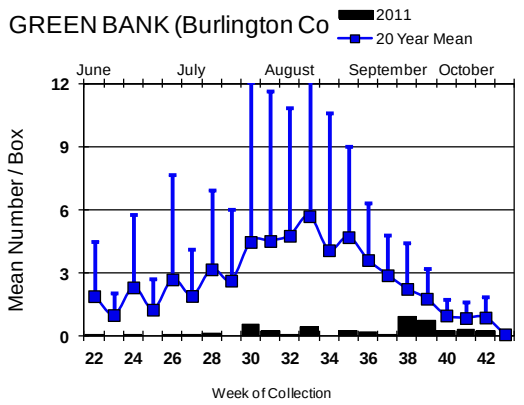
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

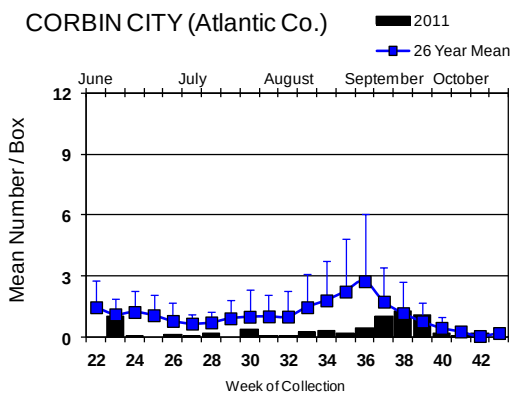
Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	60	502		
Aedes atlanticus	6	60		
Aedes atropalpus	3	4		
Aedes canadensis canadensis	50	2022		
Aedes cantator	51	249		
Aedes grossbecki	1	3		
Aedes japonicus	29	103		
Aedes mitchellae	2	29		
Aedes sollicitans	40	241		
Aedes sticticus	2	30		
Aedes taeniorhynchus	22	411		
Aedes thibaulti	1	1		
Aedes triseriatus	18	96		
Aedes trivittatus	1	7		
Aedes vexans	26	854		
Anopheles barberi	2	2		
Anopheles bradleyi	100	1080		
Anopheles crucians	7	75		
Anopheles punctipennis	54	402		
Anopheles quadrimaculatus	45	329		
Coquillettidia perturbans	90	1362		
Culex erraticus	220	9257		
Culex pipiens	525	4081		
Culex restuans	46	125		
Culex salinarius	193	1225		
Culex spp.	378	12471		
Culex territans	4	24		
Psorophora ciliata	1	35		
Psorophora columbiae	7	148		
Psorophora ferox	9	119		
Psorophora howardii	4	35		
Uranotaenia sapphirina	3	81		
State Total	2000	35,463		

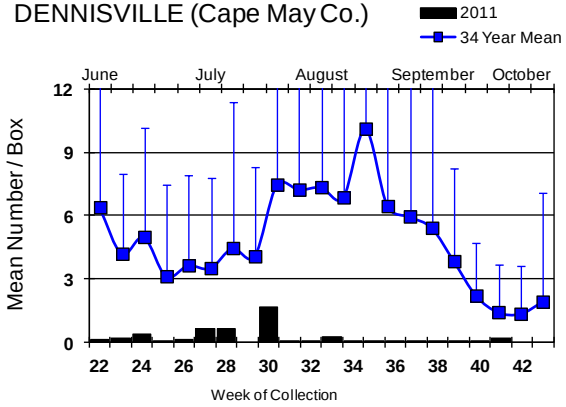
The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. An additional 31 species of mosquitoes have been tested with no detection of EEE.

Culiseta melanura Population Graphs

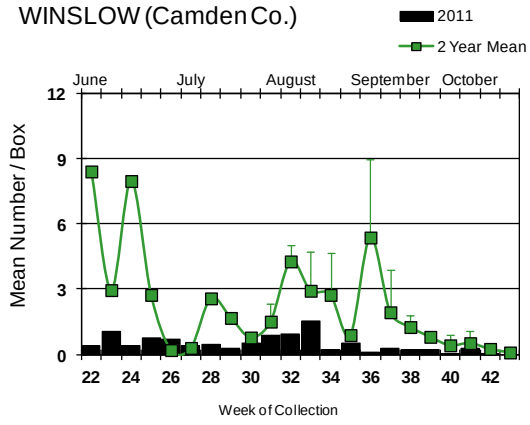
Coastal

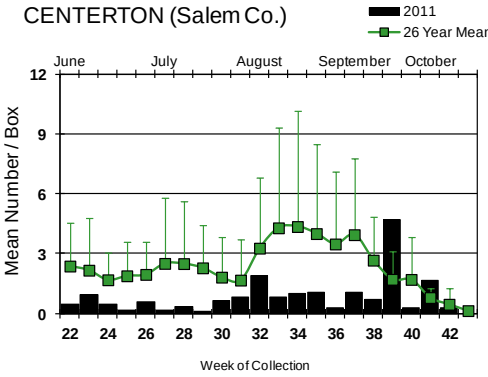


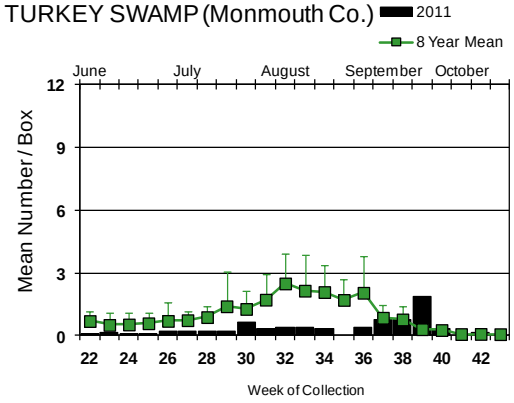




Inland



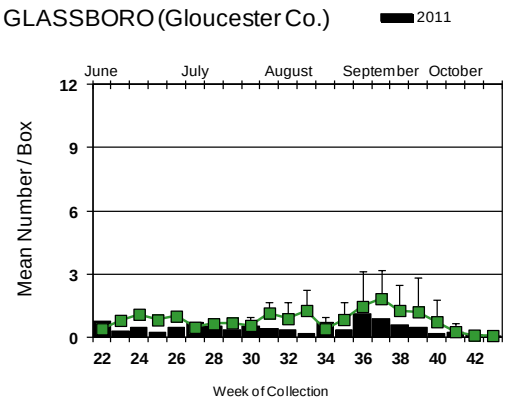




No collections were made at the traditional resting box sites.

= 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		3
Alaska					
Arizona	0	140	17	8	39
Arkansas					1
California	664/678	2060/2077	351/369	14	129/140
Colorado	0	59		0	7
Connecticut		163		1	9
Delaware	16		8	1	1
DC	5	31			1
Florida	1 flavi		125/142	3	25
Georgia	1	392		2	9/12
Hawaii					
Idaho		2/3			1
Illinois	21	1065	0	0	29/30
Indiana	1	191		3	9
Iowa		3/4	14	2*	9
Kansas					4
Kentucky		2/4		1	3
Louisiana		251	3		10
Maine		0		0	0
Maryland	7	15		2	19
Mass.		275		1	5
Michigan	14	22	0	1	33
Minnesota	4	3/5		1	2
Mississippi		31		1	48
Missouri		119		0	7

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					1
Nebraska	2	53		1	26
Nevada	2	20		1	16
New Hampshire		9		0	0
New Jersey	34/41	528/530		1	5
New Mexico				2	4
New York		452		4*	42/43
North Carolina					2
North Dakota	0	0		7*	4
Ohio		586		4	20
Oklahoma		1			
Oregon	0	3	0	2	0
Pennsylvania	48/49	1490		10*	5
Rhode Island		2		0	1
South Carolina	0	6/10		0	0
South Dakota		2/4		1	1/2
Tennessee	0	939		3	16/17
Texas	12	663/668		4	20/26
Utah		23/24	0	1	3
Vermont	16	3		0	2
Virginia		47/189	1/4	1	8
Washington	0	5		0	0
West Virginia	0	18/27		0	1
Wisconsin	16/17	0		3	2
Wyoming		10		0	3

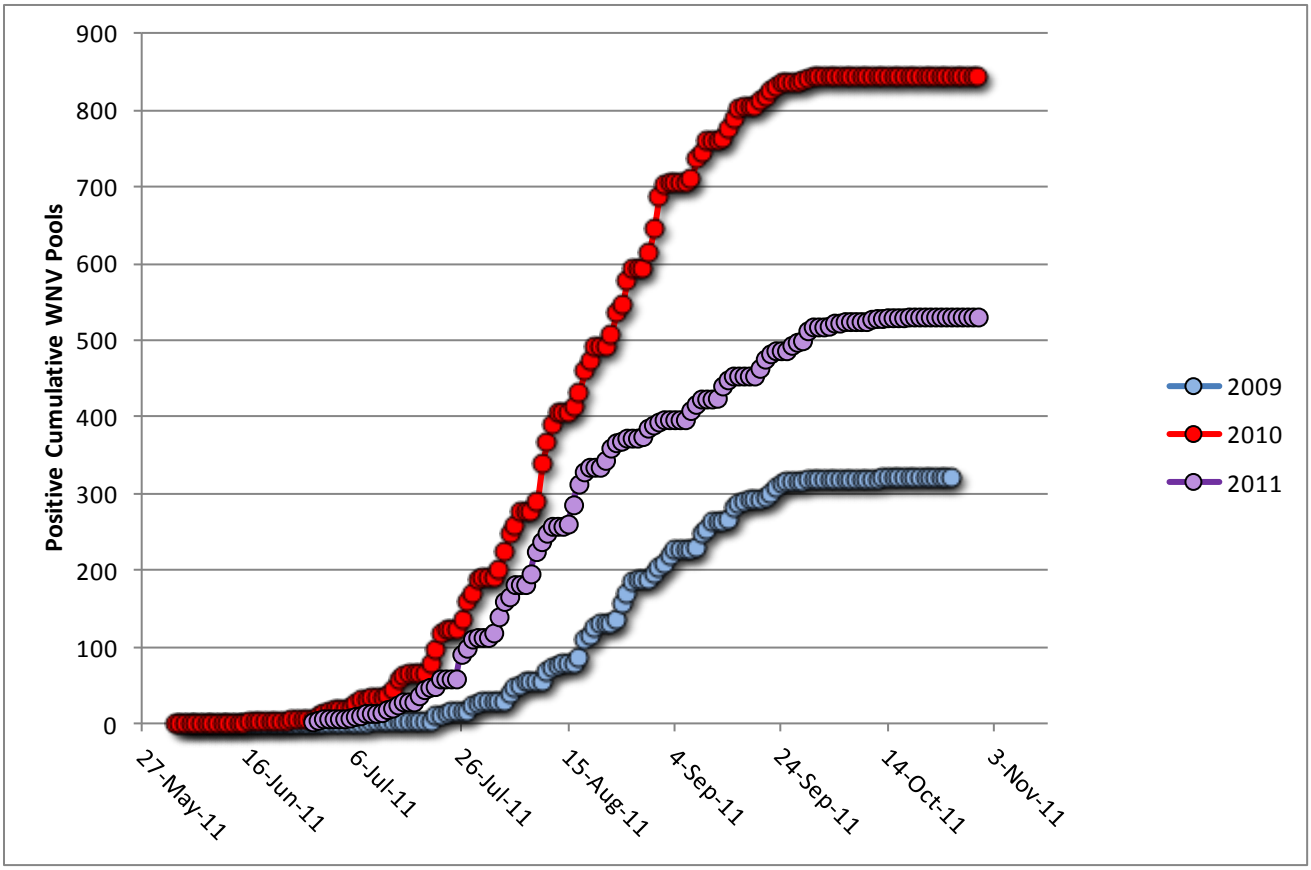
* Can include other species (e.g., dogs, cows) reported positive.

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 31 Oct. 2011

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	1226	8020	6	0.748
Aedes atlanticus	18	140		
Aedes atropalpus	3	4		
Aedes aurifer	1	2		
Aedes canadensis canadensis	207	5462		
Aedes cantator	81	426		
Aedes cinereus	3	5		
Aedes grossbecki	3	8		
Aedes japonicus	682	3903	3	0.769
Aedes mitchellae	3	30		
Aedes sollicitans	63	376		
Aedes sticticus	9	89		
Aedes stimulans	5	47		
Aedes taeniorhynchus	71	1262		
Aedes thibaulti	1	1		
Aedes triseriatus	344	761		
Aedes trivittatus	50	479		
Aedes vexans	249	2566		
Anopheles barberi	7	7		
Anopheles bradleyi	132	1724	1	0.580
Anopheles crucians	8	77		
Anopheles punctipennis	138	593		
Anopheles quadrimaculatus	178	947		
Anopheles walkeri	2	14		
Coquillettidia perturbans	138	1729		
Culex erraticus	251	9951		
Culex pipiens	1191	18895	81	4.287
Culex restuans	745	3971	11	2.770
Culex salinarius	226	2441	1	0.410
Culex spp.	3252	118224	415	3.510
Culex territans	7	27		
Culiseta inornata	2	3		
Culiseta melanura	610	6919	12	1.734
Orthopodomyia signifera	6	6		
Psorophora ciliata	6	63		
Psorophora columbiae	23	253		
Psorophora ferox	86	1247	1	0.802
Psorophora howardii	6	42		
Uranotaenia sapphirina	16	129		
State Total	**10,049**	**190,843**	**531**	**2.782**

Remarks: To date, there have been 190,843 mosquitoes tested in 10,049 pools from 38 species. Currently, 531 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 between 28 June and 18 October. Last sample analyzed was collected on 31 October.



Detection of positive pools has slowed considerably as counties end seasonal surveillance**.**

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 42 birds from the 123 birds that have been tested. Species include American Crow *Corvus brachyrhynchos* (15/18), 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 (4/49). 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
531 / 10,049 (0.053)	836 / 5,716 (0.146)
2011 Positive Birds to date / Total Birds Submitted	This time last year
42/ 123 (0.341)	129 / 240 (0.540)

WNV Results by County through 31 October 2011

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**236**	**6211**	**4**	**0.644**
	Aedes albopictus	22	540		
	Aedes canadensis canadensis	8	194		
	Aedes cantator	5	40		

	Aedes japonicus	7	24		
	Aedes sticticus	5	48		
	Aedes sollicitans	1	6		
	Aedes taeniorhynchus	8	123		
	Aedes thibaulti	1	1		
	Aedes triseriatus	8	17		
	Aedes trivittatus	2	10		
	Aedes vexans	20	324		
	Anopheles bradleyi	7	50		
	Anopheles punctipennis	4	4		
	Anopheles quadrimaculatus	1	2		
	Coquillettidia perturbans	5	63		
	Culex erraticus	8	192		
	Culex restuans	1	1		
	Culex spp.	87	3838	3	0.782
	Culiseta melanura	20	211		
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	1	2		
	Psorophora ferox	12	513	1	1.949
	Psorophora howardii	2	7		
Bergen		**200**	**13401**	**108**	**8.059**
	Aedes albopictus	5	15		
	Aedes japonicus	11	65	1	15.385
	Aedes triseriatus	1	1		
	Aedes vexans	5	140		
	Anopheles punctipennis	2	5		
	Culex spp.	176	13175	107	8.121
Burlington		**755**	**21730**	**35**	**1.611**
	Aedes albopictus	41	460		
	Aedes atlanticus	6	60		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	49	2028		
	Aedes cantator	3	72		
	Aedes grossbecki	1	3		
	Aedes japonicus	18	82		
	Aedes mitchellae	3	30		
	Aedes sollicitans	8	130		
	Aedes sticticus	2	30		
	Aedes taeniorhynchus	9	69		
	Aedes triseriatus	14	91		
	Aedes trivittatus	1	7		
	Aedes vexans	25	859		
	Anopheles bradleyi	18	478	1	2.092
	Anopheles crucians	7	75		
	Anopheles punctipennis	11	42		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	13	534		
	Culex pipiens	26	362	2	5.525
	Culex restuans	18	83		
	Culex salinarius	29	327		
	Culex spp.	278	12225	27	2.209
	Culex territans	3	23		
	Culiseta melanura	116	2427	5	2.060

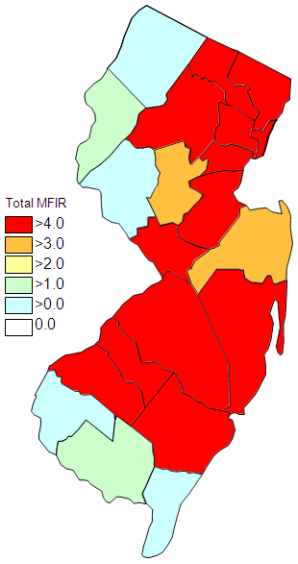
	Psorophora ciliata	1	35		
	Psorophora columbiae	7	148		
	Psorophora ferox	7	117		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	4	84		
Camden		**280**	**6614**	**19**	**2.873**
	Aedes albopictus	55	332		
	Aedes japonicus	33	73		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex pipiens	3	135		
	Culex spp.	157	5571	18	3.231
	Culiseta melanura	21	482	1	2.075
Cape May		**2957**	**24006**	**3**	**0.125**
	Aedes albopictus	442	1062		
	Aedes canadensis canadensis	31	513		
	Aedes cantator	47	152		
	Aedes japonicus	118	197		
	Aedes sollicitans	27	103		
	Aedes taeniorhynchus	35	513		
	Aedes triseriatus	144	213		
	Aedes trivittatus	1	1		
	Aedes vexans	34	73		
	Anopheles bradleyi	85	646		
	Anopheles punctipennis	13	15		
	Anopheles quadrimaculatus	85	402		
	Coquillettidia perturbans	26	324		
	Culex erraticus	183	8520		
	Culex pipiens	647	6176	1	0.162
	Culex restuans	626	3035	1	0.329
	Culex salinarius	169	914	1	1.094
	Culex spp.	119	468		
	Culiseta melanura	118	667		
	Orthopodomyia signifera	5	5		
	Psorophora ferox	1	6		
	Uranotaenia sapphirina	1	1		
Cumberland		**269**	**4216**		
	Aedes albopictus	27	95		
	Aedes atlanticus	3	17		
	Aedes canadensis canadensis	14	150		
	Aedes cantator	3	81		
	Aedes japonicus	12	44		
	Aedes sollicitans	6	27		
	Aedes taeniorhynchus	7	412		
	Aedes triseriatus	14	26		
	Aedes vexans	15	102		
	Anopheles bradleyi	9	524		
	Anopheles punctipennis	8	20		
	Anopheles quadrimaculatus	5	13		
	Coquillettidia perturbans	13	144		

	Culex erraticus	14	76		
	Culex pipiens	8	25		
	Culex restuans	4	17		
	Culex salinarius	17	1160		
	Culex spp.	41	893		
	Culex territans	3	3		
	Culiseta melanura	39	325		
	Psorophora ciliata	1	8		
	Psorophora columbiae	1	23		
	Psorophora ferox	4	26		
Essex		**550**	**7837**	**16**	**2.042**
	Aedes albopictus	112	516	1	1.938
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	86	711	1	1.406
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	43	110		
	Aedes vexans	31	127		
	Anopheles punctipennis	4	5		
	Culex spp.	261	6269	14	2.233
	Psorophora ferox	4	19		
Gloucester		**805**	**13294**	**49**	**3.686**
	Aedes albopictus	100	1186	3	2.530
	Aedes canadensis canadensis	2	23		
	Aedes japonicus	30	191		
	Aedes triseriatus	8	21		
	Aedes vexans	31	487		
	Anopheles bradleyi	3	9		
	Anopheles punctipennis	32	337		
	Anopheles quadrimaculatus	46	364		
	Coquillettidia perturbans	24	108		
	Culex pipiens	347	9035	44	4.870
	Culex restuans	1	29		
	Culiseta melanura	164	1331	2	1.503
	Psorophora ciliata	1	8		
	Psorophora ferox	16	165		
Hudson		**214**	**11230**	**37**	**3.295**
	Culex spp.	214	11230	37	3.295
Hunterdon		**250**	**11462**	**39**	**3.403**
	Culex spp.	250	11462	39	3.43
Mercer		**369**	**4702**	**44**	**9.385**
	Aedes albopictus	109	818	1	1.222
	Aedes japonicus	56	168		
	Aedes triseriatus	12	30		
	Aedes vexans	5	13		
	Culex erraticus	3	7		
	Culex pipiens	133	2997	33	11.011
	Culex restuans	45	655	10	15.267
	Culex salinarius	3	7		

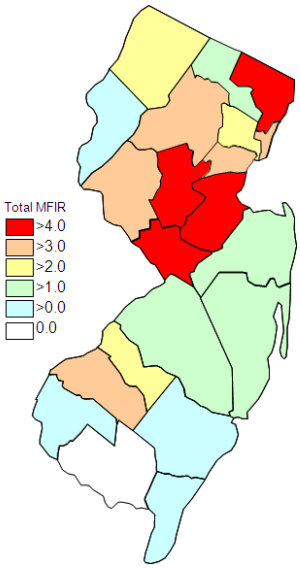
	Culex spp.	1	2		
	Psorophora ciliata	1	4		
	Psorophora ferox	1	1		
Middlesex		**246**	**8693**	**55**	**6.327**
	Aedes albopictus	19	160		
	Aedes japonicus	24	248		
	Aedes triseriatus	1	5		
	Culex spp.	202	8280	55	6.643
Monmouth		**499**	**4271**	**7**	**1.639**
	Aedes albopictus	67	339		
	Aedes atlanticus	1	2		
	Aedes canadensis canadensis	30	430		
	Aedes cantator	10	33		
	Aedes japonicus	52	163		
	Aedes sollicitans	10	34		
	Aedes taeniorhynchus	10	141		
	Aedes triseriatus	32	80		
	Aedes trivittatus	18	113		
	Aedes vexans	18	48		
	Anopheles barberi	5	5		
	Anopheles crucians	1	2		
	Anopheles punctipennis	16	54		
	Anopheles quadrimaculatus	5	7		
	Coquillettidia perturbans	6	29		
	Culex erraticus	3	5		
	Culex pipiens	3	17		
	Culex restuans	6	22		
	Culex salinarius	1	16		
	Culex spp.	142	2248	7	3.114
	Culex territans	1	1		
	Culiseta melanura	45	385		
	Psorophora ciliata	1	1		
	Psorophora columbiae	3	17		
	Psorophora ferox	12	78		
	Uranotaenia sapphirina	1	1		
Morris		**230**	**7695**	**25**	**3.249**
	Aedes albopictus	2	14		
	Aedes japonicus	12	187		
	Coquillettidia perturbans	2	65		
	Culex spp.	214	7429	25	3.365
Ocean		**577**	**6429**	**10**	**1.555**
	Aedes albopictus	108	1588		
	Aedes atlanticus	8	61		
	Aedes canadensis canadensis	64	2086		
	Aedes cantator	10	42		
	Aedes japonicus	47	97		
	Aedes sollicitans	4	29		
	Aedes sticticus	2	2		
	Aedes taeniorhynchus	2	4		
	Aedes triseriatus	20	32		
	Aedes trivittatus	12	58		
	Aedes vexans	30	116		

	Anopheles bradleyi	7	14		
	Anopheles punctipennis	21	42		
	Anopheles quadrimaculatus	5	6		
	Coquillettidia perturbans	20	105		
	Culex erraticus	2	2		
	Culex restuans	15	27		
	Culex salinarius	7	17		
	Culex spp.	119	1736	8	4.608
	Culiseta melanura	44	125	2	16.000
	Psorophora ciliata	1	7		
	Psorophora columbiae	2	2		
	Psorophora ferox	22	226		
	Uranotaenia sapphirina	5	5		
Passaic		**124**	**2244**	**4**	**1.783**
	Aedes albopictus	15	132		
	Aedes canadensis canadensis	3	10		
	Aedes japonicus	22	186		
	Aedes triseriatus	8	29		
	Aedes trivittatus	4	32		
	Aedes vexans	1	4		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	1	3		
	Culex spp.	69	1847	4	2.166
Salem		**321**	**3603**	**2**	**0.555**
	Aedes albopictus	34	75		
	Aedes aurifer	1	2		
	Aedes canadensis canadensis	4	20		
	Aedes cantator	3	6		
	Aedes japonicus	30	63		
	Aedes sollicitans	3	5		
	Aedes sticticus	1	1		
	Aedes triseriatus	23	47		
	Aedes vexans	19	137		
	Anopheles barberi	1	1		
	Anopheles bradleyi	3	3		
	Anopheles punctipennis	11	16		
	Anopheles quadrimaculatus	22	112		
	Coquillettidia perturbans	8	22		
	Culex erraticus	23	608		
	Culex pipiens	6	12		
	Culex restuans	14	31		
	Culex spp.	68	1444		
	Culiseta inornata	1	2		
	Culiseta melanura	36	934	2	2.141
	Psorophora columbiae	9	61		
Somerset		**227**	**3095**	**17**	**5.493**
	Aedes albopictus	21	89		
	Aedes japonicus	16	141		
	Aedes triseriatus	7	36		
	Aedes trivittatus	4	112		
	Aedes vexans	3	45		
	Anopheles punctipennis	3	10		
	Coquillettidia perturbans	1	1		

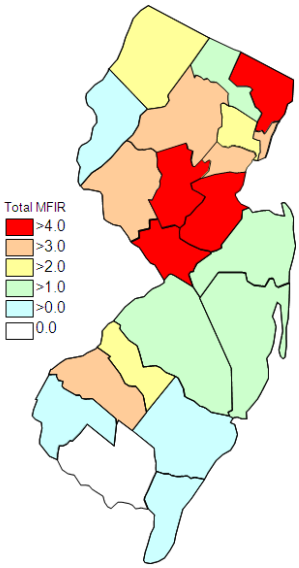
	Culex spp.	169	2605	17	6.526
	Psorophora ferox	3	56		
Sussex		**401**	**9897**	**25**	**2.526**
	Aedes japonicus	94	1196	1	0.836
	Aedes vexans	1	7		
	Coquillettidia perturbans	1	57		
	Culex pipiens	18	136	1	7.353
	Culex restuans	15	71		
	Culex spp.	266	8399	23	2.738
	Culiseta melanura	6	31		
Union		**176**	**4832**	**17**	**3.518**
	Aedes albopictus	47	599	1	1.669
	Aedes japonicus	3	14		
	Culex spp.	126	4219	16	3.792
Warren		**363**	**15381**	**15**	**0.975**
	Aedes cinereus	3	5		
	Aedes japonicus	11	53		
	Aedes sticticus	2	29		
	Aedes stimulans	1	1		
	Aedes triseriatus	5	15		
	Aedes trivittatus	8	146		
	Aedes vexans	10	83		
	Anopheles barberi	1	1		
	Anopheles punctipennis	9	39		
	Anopheles quadrimaculatus	7	34		
	Anopheles walkeri	2	14		
	Coquillettidia perturbans	2	3		
	Culex spp.	293	14884	15	1.008
	Culiseta inornata	1	1		
	Culiseta melanura	1	1		
	Psorophora ferox	4	40		
	Uranotaenia sapphirina	3	32		
Grand Total		**10,049**	**190,843**	**531**	**2.782**



Cumulative WNV activity in 2010.



WNV activity to 31 October 2011.



WNV activity last week, 2011.

Saint Louis Encephalitis (SLE) through 31 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		**691**	**21316**		
	Aedes albopictus	39	458		
	Aedes atlanticus	6	60		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	44	2008		
	Aedes cantator	3	72		
	Aedes grossbecki	1	3		
	Aedes japonicus	17	79		
	Aedes mithcellae	2	29		
	Aedes sollicitans	7	129		
	Aedes sticticus	2	30		
	Aedes taeniorhynchus	9	69		
	Aedes triseriatus	14	91		
	Aedes trivittatus	1	7		
	Aedes vexans	23	850		
	Anopheles bradleyi	14	460		
	Anopheles crucians	7	75		
	Anopheles punctipennis	9	38		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	13	534		
	Culex pipiens	24	348		
	Culex restuans	13	70		
	Culex salinarius	26	313		
	Culex spp.	268	12077		

	Culex erraticus	3	23		
	Culiseta melanura	91	2263		
	Psorophora ciliata	1	35		
	Psorophora columbiae	7	148		
	Psorophora ferox	7	117		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	3	81		
Camden		**259**	**6132**		
	Aedes albopictus	55	332		
	Aedes japonicus	33	73		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex pipiens	3	135		
	Culex spp.	157	5571		
Cumberland		**1**	**1**		
	Aedes triseriatus	1	1		
Essex		**550**	**7837**		
	Aedes albopictus	112	516		
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	86	711		
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	43	110		
	Aedes vexans	31	127		
	Anopheles punctipennis	4	5		
	Culex spp.	261	6269		
	Psorophora ferox	4	19		
Hudson		**199**	**10456**		
	Culex spp.	199	10456		
Grand Total		**1,700**	**45,742**		

La Crosse Encephalitis (LAC) through 31 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**	**201**		
	Aedes japonicus	1	1		
	Aedes triseriatus	134	200		
Cumberland		**16**	**30**		
	Aedes triseriatus	16	30		
Salem		**9**	**18**		
	Aedes triseriatus	9	18		
Warren		**1**	**9**		
	Aedes triseriatus	1	9		
Grand Total		**161**	**258**		