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 35: August 28 to September 3, 2011

Data Downloaded 14:46 pm 6 September 2011

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	4.70	0.24	47†	10	0	
Corbin City (Atlantic County)	Coastal	2.26	0.24	70	11	0	
Dennisville (Cape May County)	Coastal	6.45	0.02	207‡	14	0	
Winslow (Camden County)	Inland	0.89	0.52	438‡	16	0	
Centerton (Salem County)	Inland	4.00	1.08	474‡	16	0	
Turkey Swamp (Monmouth County)	Inland	1.71	No collection due to Irene	154	30	0	
Glassboro (Gloucester County)	Inland	0.84	0.34	306‡	14	0	

*Including trial run last week in May. † Adjusted. ‡ Testing delayed due to disruptions from Hurricane Irene.

Remarks: The 7 traditional resting box sites for the collection of *Culiseta melanura*, the primary enzootic vector, continue to show no detectable EEE activity, and low *Cs. melanura* populations. Total number of *Culiseta melanura* tested to date is 1598 from 106 pools. Testing has been delayed due to disruptions from Hurricane Irene at the Cape May Labs as well as the ability for some counties to access the sites.

While New Jersey remains without detectable positive pools and with apparent low enzootic vector populations, a second human case resulting in death occurred in Massachusetts and reminds us all of the need to remain vigilant regarding this disease. New Jersey has detected virus even in vector populations of small numbers nearly every year, making it evident that this virus circulates each year in this state.

Two hundred fifty additional pools containing 2,385 *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	1170 (44)	0	
Cape May	CO2, Gravid, RB	276 (59)	0	
Cumberland	CO2, Gravid, RB	243 (27)	0	
Gloucester	RB	614 (91)	0	
Ocean	CO2, Gravid, RB	65 (27)	0	
Salem	BA	3 (1)	0	
Sussex	CO2	14 (1)	0	
TOTAL		**2385 (250)**	**0**	

Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	31	270		
Aedes atlanticus	4	47		
Aedes atropalpus	3	4		
Aedes canadensis canadensis	16	617		
Aedes cantator	29	201		
Aedes grossbecki	1	3		
Aedes japonicus	18	67		
Aedes sollicitans	29	201		
Aedes sticticus	1	3		
Aedes taeniorhynchus	20	389		
Aedes thibaulti	1	1		
Aedes triseriatus	11	67		
Aedes vexans	15	501		
Anopheles barberi	2	2		
Anopheles bradleyi	54	788		
Anopheles crucians	1	2		
Anopheles punctipennis	27	268		
Anopheles quadrimaculatus	23	240		
Coquillettidia perturbans	81	1348		
Culex erraticus	123	5381		
Culex pipiens	353	2810		
Culex restuans	22	45		
Culex salinarius	142	1050		
Culex spp.	260	8697		
Culex territans	1	14		
Psorophora ciliata	1	35		
Psorophora columbiae	3	26		
Psorophora ferox	2	8		
Psorophora howardii	4	35		
Uranotaenia sapphirina	1	75		
State Total	**1279**	**23,195**		

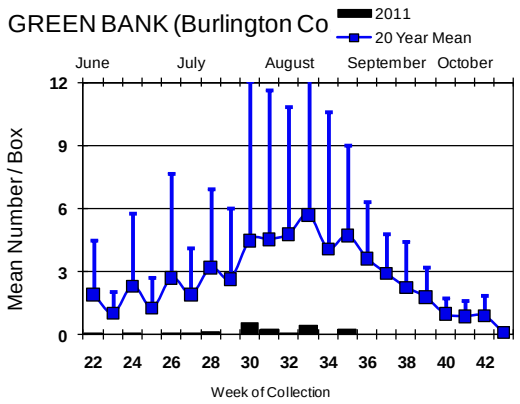
The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. An addition 29 species of mosquitoes have been tested with no detection of EEE.

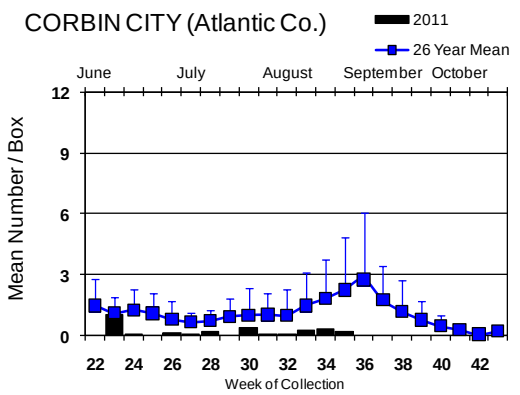
Horses and Humans: No positive horses or humans to date.

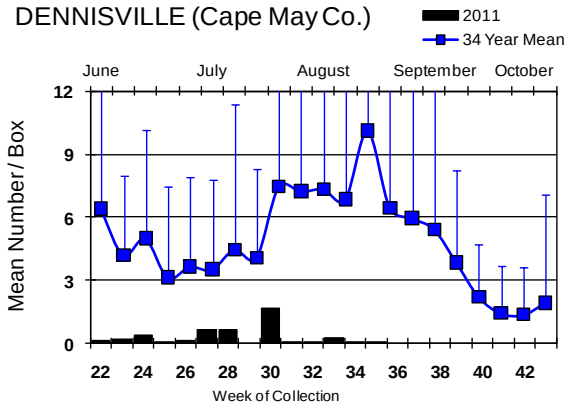
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

Culiseta melanura Population Graphs

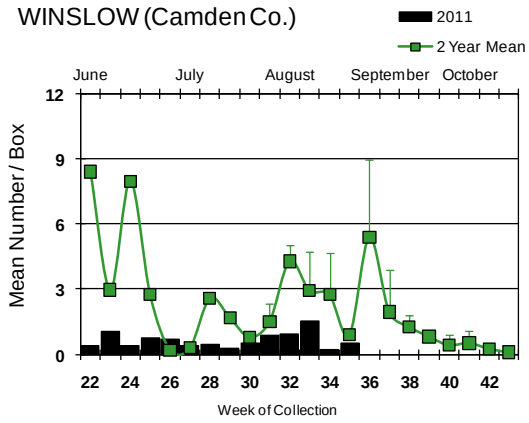
Coastal

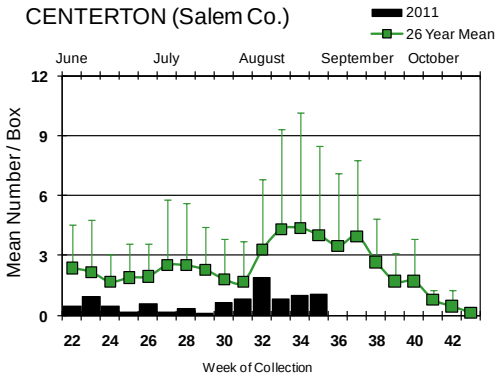


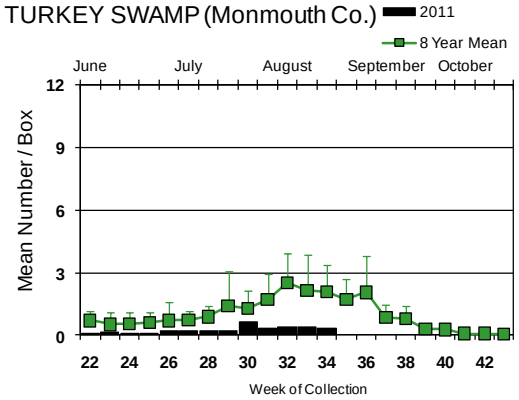




Inland



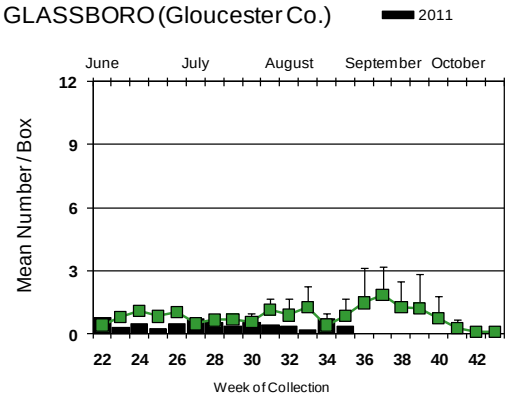




Most of the traditional resting box sites continue to show abundance values of less than one *Cs. melanura* per resting box and remain below the historical trends. Only the site at Centerton showed values slightly higher than one melanura per box, also below historical trends.

= 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: 3(FL) 1(LA) 1(MS) 11(NY) 1(NC) 5(WI-2 alpaca)
- mosquito pools: 2(LA) 55(MA) 26(NY) 1(NC)
- sentinel: 19 chickens/19 wild bird (FL) 2(NC) 2(VA)
- human: 1(MA) 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		
Alaska					
Arizona	0	99/108	9/11	2	16/22
Arkansas					
California	229/302	1028/1265	79/99	2	20/27
Colorado	0	32/47		0	2
Connecticut		122/128			1
Delaware	10/12		1/2		
DC	5	22/31			
Florida	1 flavi		60	1	11
Georgia		197/296		1	2
Hawaii					
Idaho		1/2			1
Illinois	9	542/564	0	0	4
Indiana	1	79/110		1	3
Iowa		2	10/12	1	0
Kansas					
Kentucky		2		1	
Louisiana		171/216	1		2/4
Maine		0		0	0
Maryland	3	11/12			4
Mass.		191/203		0	0
Michigan	2	1/9	0	0	1/2
Minnesota	1/3	1		1	
Mississippi		28/31		1	18/20
Missouri		65/80		0	1

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana				0	0
Nebraska	2	13/18		0	6/7
Nevada	2	7/8		1	3/5
New Hampshire		4		0	0
New Jersey	19/22	336/360		0	1
New Mexico					1
New York		329/346		1/2*	4/7
North Carolina				1	
North Dakota	0	0		4*	2/3
Ohio		450/515		0	3/6
Oklahoma		1			
Oregon	0	2	0	0	0
Pennsylvania	23/28	1012/1035		2/5*	1
Rhode Island		1		0	0
South Carolina	0	1		0	0
South Dakota		2		0	1
Tennessee	0	481/586		0	2
Texas	2	479/492		2	9
Utah		22	0	0	0
Vermont	2/7	2		0	2
Virginia		47	1	1	1/2
Washington	0	1		0	0
West Virginia	0	1		0	0
Wisconsin	2	0		1	0
Wyoming		6/10		0	1

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

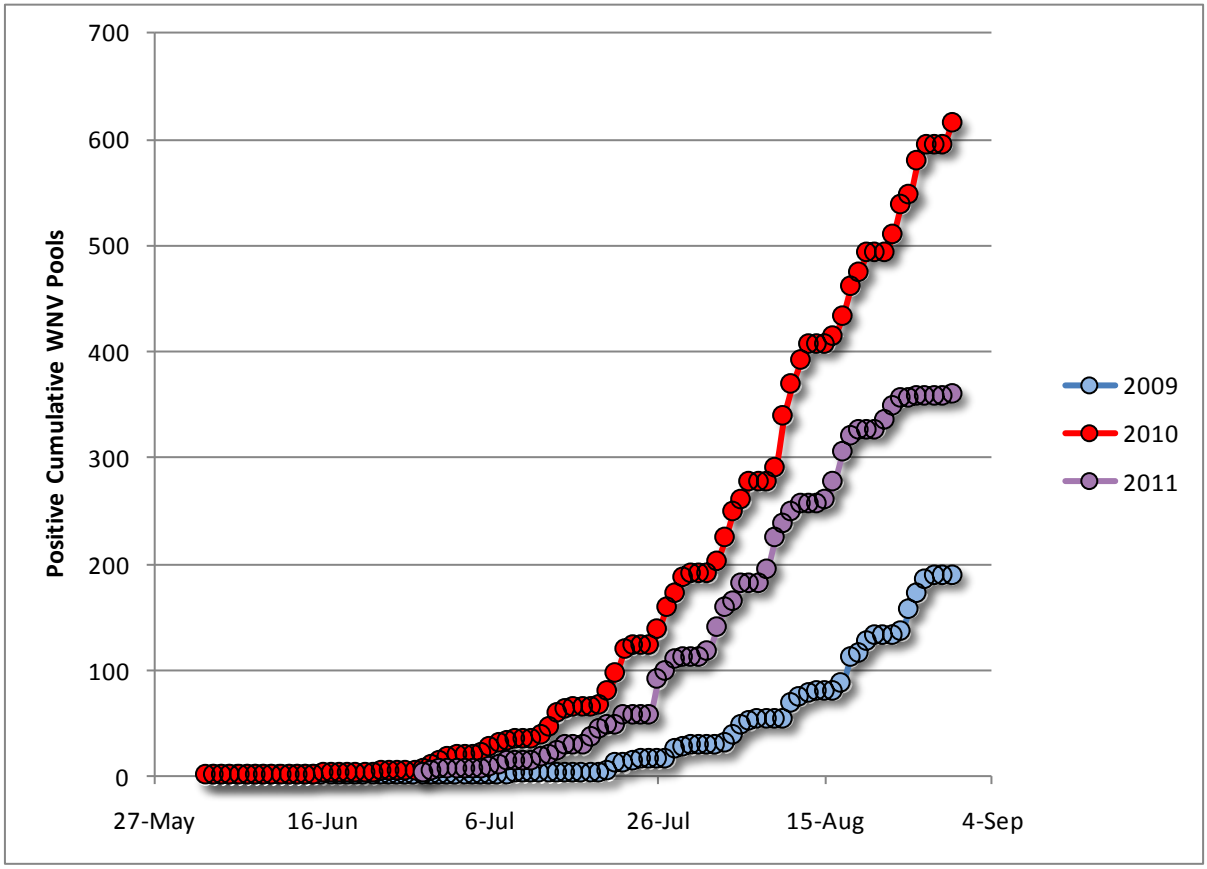
Mosquito Species Submitted for West Nile Virus Testing through 1 Sept. 2011

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	672	4897	6	1.225
Aedes atlanticus	6	63		
Aedes atropalpus	3	4		
Aedes aurifer	1	2		
Aedes canadensis canadensis	71	1163		
Aedes cantator	47	237		
Aedes cinereus	3	5		
Aedes grossbecki	3	8		
Aedes japonicus	377	2202	1	0.454
Aedes sollicitans	46	285		
Aedes sticticus	2	24		
Aedes stimulans	5	47		
Aedes taeniorhynchus	52	924		
Aedes thibaulti	1	1		
Aedes triseriatus	218	536		
Aedes trivittatus	15	166		
Aedes vexans	126	1036		
Anopheles barberi	6	6		
Anopheles bradleyi	67	970	1	1.031
Anopheles crucians	1	2		
Anopheles punctipennis	80	376		
Anopheles quadrimaculatus	102	614		
Anopheles walkeri	1	7		
Coquillettidia perturbans	115	1626		
Culex erraticus	147	6003		
Culex pipiens	733	13698	68	4.964
Culex restuans	466	2791	5	1.791
Culex salinarius	164	2136	1	0.468
Culex spp.	2237	88852	271	3.050
Culex territans	3	16		
Culiseta inornata	2	3		
Culiseta melanura	365	4025	7	1.739
Orthopodomyia signifera	4	4		
Psorophora ciliata	3	44		
Psorophora columbiae	11	120		
Psorophora ferox	22	122		
Psorophora howardii	4	35		
Uranotaenia sapphirina	4	107		
State Total	**6,185**	**133,157**	**360**	**2.704**

Remarks: To date, there have been 133,157 mosquitoes tested in 6,185 pools from 37 species. Currently, 360 positive pools have been detected last week in *Culex pipiens, Cx. restuans, Cx. salinarius*, Mixed *Culex, Culiseta melanura*, *Aedes albopictus*, *Aedes japonicus* and *Anopheles bradleyi*. Dates positive samples were collected were between 28 June and 25 August.

Hurricane Irene was just the latest factor in bringing considerable water to New Jersey. This is likely to change mosquito species patterns as floodwater mosquitoes respond. Reports of “large and hairy” mosquitoes have been coming in from

citizens, corroborated by county workers reporting increased *Psorophora* activity. In addition, there is the likely re-appearance of other Spring floodwater species such as *Aedes sticticus* as higher areas have become flooded.



This year continues to be in between the very active 2010 season and the more modestly active 2009 season. The recent passage of Hurricane Irene has disrupted some service as some counties have needed to deal with the more immediate needs of local situations.

Humans, Horses and Wild Birds: There has been one positive human case reported by the Department of Health and Senior Services: http://www.state.nj.us/cgi-bin/dhss/njnewsline/view_article.pl?id=3759.

No positive horse cases have been reported.

Bird testing began in mid-April. WNV has been detected in twenty-two birds from the 80 birds that have been tested. Species include American Crow *Corvus brachyrhynchos* (8/10), Blue Jays *Cyanocitta cristata* (2/8), Fish Crows *Corvus ossifragus* (4/18) unknown Corvus (5/7), Hawk (0/3) and Other (non-corvid) species (3/34). Positive birds were from Gloucester, Morris, Ocean, and Warren counties. Counties submitting birds are Atlantic, Burlington, Cape May, Cumberland, Gloucester, Monmouth, Morris, Ocean 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
360 / 6,185 (0.058)	699 / 4,297 (0.163)
2011 Positive Birds to date / Total Birds Submitted	**This time last year**
22 / 80 (0.275)	107 / 202 (0.530)

WNV Results by County through 1 September 2011

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**149**	**4294**	**1**	**0.233**
	Aedes albopictus	13	358		
	Aedes canadensis canadensis	2	9		
	Aedes cantator	3	20		
	Aedes japonicus	4	18		
	Aedes sollicitans	4	37		
	Aedes taeniorhynchus	6	104		
	Aedes thibaulti	1	1		
	Aedes triseriatus	6	14		
	Aedes vexans	11	81		
	Anopheles bradleyi	3	16		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	1	2		
	Coquillettidia perturbans	5	63		
	Culex erraticus	4	185		
	Culex restuans	1	1		
	Culex spp.	69	3278	1	0.305
	Culiseta melanura	12	92		
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	1	2		
	Psorophora ferox	1	11		
Bergen		**105**	**7375**	**66**	**8.949**
	Aedes albopictus	2	7		
	Aedes japonicus	3	10		
	Aedes vexans	1	6		
	Anopheles punctipennis	1	2		
	Culex spp.	98	7350	66	8.980
Burlington		**410**	**13549**	**24**	**1.771**
	Aedes albopictus	24	249		
	Aedes atlanticus	4	47		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	14	611		

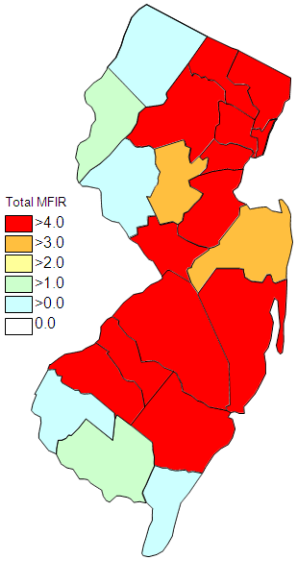
	Aedes cantator	2	63		
	Aedes grossbecki	1	3		
	Aedes japonicus	10	52		
	Aedes sollicitans	7	129		
	Aedes sticticus	1	3		
	Aedes taeniorhynchus	8	62		
	Aedes triseriatus	10	65		
	Aedes vexans	14	500		
	Anopheles bradleyi	4	260	1	3.846
	Anopheles crucians	1	2		
	Anopheles punctipennis	3	17		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	11	529		
	Culex pipiens	9	127	1	7.874
	Culex restuans	3	20		
	Culex salinarius	18	231		
	Culex spp.	168	8356	18	2.154
	Culex territans	1	14		
	Culiseta melanura	54	1217	4	3.287
	Psorophora ciliata	1	35		
	Psorophora columbiae	3	26		
	Psorophora ferox	1	7		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	1	75		
Camden		**184**	**3843**	**13**	**3.383**
	Aedes albopictus	42	241		
	Aedes japonicus	24	57		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex spp.	92	3112	13	4.177
	Culiseta melanura	15	412		
Cape May		**1847**	**15855**	**2**	**0.126**
	Aedes albopictus	206	469		
	Aedes canadensis canadensis	24	393		
	Aedes cantator	26	114		
	Aedes japonicus	82	156		
	Aedes sollicitans	21	70		
	Aedes taeniorhynchus	29	495		
	Aedes triseriatus	71	106		
	Aedes vexans	18	32		
	Anopheles bradleyi	50	531		
	Anopheles punctipennis	9	11		
	Anopheles quadrimaculatus	55	242		
	Coquillettidia perturbans	26	324		
	Culex erraticus	101	4619		
	Culex pipiens	419	4252		
	Culex restuans	411	2326	1	0.430
	Culex salinarius	124	818	1	1.222
	Culex spp.	100	412		
	Culiseta melanura	72	482		

	Orthopodomyia signifera	3	3		
Cumberland		**161**	**2728**		
	Aedes albopictus	16	65		
	Aedes atlanticus	2	16		
	Aedes canadensis canadensis	3	7		
	Aedes japonicus	5	15		
	Aedes sollicitans	2	4		
	Aedes taeniorhynchus	2	150		
	Aedes triseriatus	12	23		
	Aedes vexans	7	40		
	Anopheles bradleyi	2	150		
	Anopheles punctipennis	3	5		
	Anopheles quadrimaculatus	3	8		
	Coquillettidia perturbans	12	143		
	Culex erraticus	7	54		
	Culex pipiens	7	24		
	Culex restuans	2	5		
	Culex salinarius	15	1055		
	Culex spp.	28	664		
	Culex territans	2	2		
	Culiseta melanura	27	243		
	Psorophora ciliata	1	8		
	Psorophora columbiae	1	23		
	Psorophora ferox	2	24		
Essex		**408**	**7243**	**16**	**2.209**
	Aedes albopictus	72	324	1	3.086
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	53	609	1	1.642
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	34	90		
	Aedes vexans	26	112		
	Anopheles punctipennis	2	3		
	Culex spp.	209	6007	14	2.331
	Psorophora ferox	3	18		
Gloucester		**419**	**9194**	**42**	**4.568**
	Aedes albopictus	32	507	3	5.917
	Aedes japonicus	14	117		
	Aedes triseriatus	3	8		
	Aedes vexans	2	4		
	Anopheles punctipennis	15	247		
	Anopheles quadrimaculatus	14	215		
	Coquillettidia perturbans	6	12		
	Culex pipiens	228	7180	39	5.432
	Culiseta melanura	104	903		
	Psorophora ferox	1	1		
Hudson		**135**	**8436**	**27**	**3.201**
	Culex spp.	135	8436	27	3.201
Hunterdon		**165**	**8114**	**20**	**2.465**

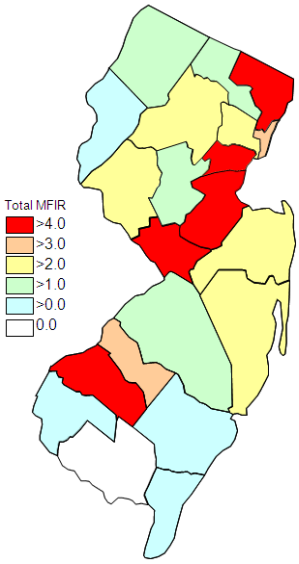
	Culex spp.	165	8114	20	2.465
Mercer		**174**	**2882**	**33**	**11.450**
	Aedes albopictus	49	314	1	3.185
	Aedes japonicus	29	91		
	Aedes triseriatus	7	14		
	Aedes vexans	1	2		
	Culex erraticus	2	6		
	Culex pipiens	63	2061	28	13.586
	Culex restuans	21	392	4	10.204
	Culex salinarius	1	1		
	Psorophora ferox	1	1		
Middlesex		**190**	**6984**	**43**	**6.157**
	Aedes albopictus	13	106		
	Aedes japonicus	20	225		
	Aedes triseriatus	1	5		
	Culex spp.	156	6648	43	6.468
Monmouth		**328**	**3121**	**7**	**2.243**
	Aedes albopictus	45	245		
	Aedes canadensis canadensis	14	100		
	Aedes cantator	7	28		
	Aedes japonicus	41	137		
	Aedes sollicitans	7	13		
	Aedes taeniorhynchus	5	109		
	Aedes triseriatus	24	71		
	Aedes trivittatus	4	5		
	Aedes vexans	8	20		
	Anopheles barberi	5	5		
	Anopheles punctipennis	12	22		
	Anopheles quadrimaculatus	3	5		
	Coquillettidia perturbans	6	29		
	Culex erraticus	1	1		
	Culex pipiens	2	3		
	Culex restuans	4	4		
	Culex salinarius	1	16		
	Culex spp.	100	2090	7	3.349
	Culiseta melanura	32	156		
	Psorophora ciliata	1	1		
	Psorophora columbiae	2	16		
	Psorophora ferox	4	45		
Morris		**150**	**5990**	**13**	**2.170**
	Aedes albopictus	2	14		
	Aedes japonicus	6	125		
	Coquillettidia perturbans	2	65		
	Culex spp.	140	5786	13	2.247
Ocean		**306**	**3072**	**9**	**2.930**
	Aedes albopictus	69	1259		
	Aedes canadensis canadensis	6	6		
	Aedes cantator	8	10		
	Aedes japonicus	26	65		
	Aedes sollicitans	3	28		

	Aedes taeniorhunchus	2	4		
	Aedes triseriatus	15	27		
	Aedes trivittatus	2	2		
	Aedes vexans	15	73		
	Anopheles bradleyi	5	10		
	Anopheles punctipennis	11	12		
	Anopheles quadrimaculatus	3	4		
	Coquillettidia perturbans	16	99		
	Culex erraticus	1	1		
	Culex restuans	11	13		
	Culex salinarius	5	15		
	Culex spp.	74	1369	7	5.113
	Culiseta melanura	27	65	2	30.769
	Psorophora ferox	7	10		
Passaic		**109**	**2169**	**3**	**1.383**
	Aedes albopictus	13	128		
	Aedes canadensis canadensis	3	10		
	Aedes japonicus	16	163		
	Aedes triseriatus	7	28		
	Aedes trivittatus	4	32		
	Aedes vexans	1	4		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	1	3		
	Culex spp.	63	1800	3	1.667
Salem		**213**	**2866**	**1**	**0.349**
	Aedes albopictus	18	36		
	Aedes aurifer	1	2		
	Aedes canadensis canadensis	3	19		
	Aedes cantator	1	2		
	Aedes japonicus	17	42		
	Aedes sollicitans	2	4		
	Aedes triseriatus	16	36		
	Aedes vexans	15	111		
	Anopheles bradleyi	3	3		
	Anopheles punctipennis	8	11		
	Anopheles quadrimaculatus	14	97		
	Coquillettidia perturbans	8	22		
	Culex erraticus	18	601		
	Culex pipiens	4	8		
	Culex restuans	8	18		
	Culex spp.	57	1376		
	Culiseta inornata	1	2		
	Culiseta melanura	15	423	1	2.364
	Psorophora columbiae	4	53		
Somerset		**144**	**1695**	**3**	**1.770**
	Aedes albopictus	19	84		
	Aedes japonicus	10	112		
	Aedes triseriatus	5	29		
	Anopheles punctipennis	3	10		
	Coquillettidia perturbans	1	1		
	Culex spp.	106	1459	3	2.056

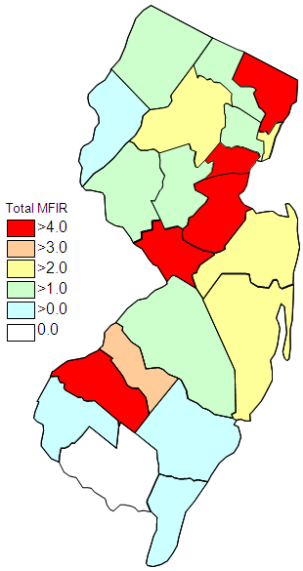
Sussex		**177**	**6159**	**8**	**1.299**
	Aedes japonicus	10	175		
	Coquillettidia perturbans	1	57		
	Culex pipiens	1	43		
	Culex restuans	5	12		
	Culex spp.	154	5841	8	1.370
	Culiseta melanura	6	31		
Union		**110**	**2966**	**15**	**5.057**
	Aedes albopictus	37	491	1	2.037
	Aedes japonicus	3	14		
	Culex spp.	70	2461	14	5.689
Warren		**301**	**14622**	**14**	**0.957**
	Aedes cinereus	3	5		
	Aedes japonicus	4	19		
	Aedes stimulans	1	1		
	Aedes triseriatus	3	12		
	Aedes trivittatus	5	127		
	Aedes vexans	6	50		
	Anopheles barberi	1	1		
	Anopheles punctipennis	8	31		
	Anopheles quadrimaculatus	7	34		
	Anopheles walkeri	1	7		
	Coquillettidia perturbans	2	3		
	Culex spp.	253	14293	14	0.980
	Culiseta inornata	1	1		
	Culiseta melanura	1	1		
	Psorophora ferox	2	5		
	Uranotaenia sapphirina	3	32		
Grand Total		**6,185**	**133,157**	**360**	**2.701**



Cumulative WNV activity in 2010.



WNV activity to 1 September 2011.



WNV activity last week, 2011.

Saint Louis Encephalitis (SLE) through 1 September 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		**397**	**13499**		
	Aedes albopictus	23	248		
	Aedes atlanticus	4	47		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	14	611		
	Aedes cantator	2	63		
	Aedes grossbecki	1	3		
	Aedes japonicus	10	52		
	Aedes sollicitans	7	129		
	Aedes sticticus	1	3		
	Aedes taeniorhynchus	8	62		
	Aedes triseriatus	10	65		
	Aedes vexans	14	500		
	Anopheles bradleyi	4	260		
	Anopheles crucians	1	2		
	Anopheles punctipennis	3	17		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	11	529		
	Culex pipiens	9	127		
	Culex restuans	3	20		
	Culex salinarius	17	230		
	Culex spp.	167	8355		
	Culex erraticus	1	14		
	Culiseta melanura	44	1170		
	Psorophora ciliata	1	35		
	Psorophora columbiae	3	26		
	Psorophora ferox	1	7		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	1	75		
Camden		**169**	**3431**		
	Aedes albopictus	42	241		
	Aedes japonicus	24	57		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex spp.	92	3112		
Cumberland		**1**	**1**		

	Aedes triseriatus	1	1		
Essex		**408**	**7243**		
	Aedes albopictus	72	324		
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	53	609		
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	34	90		
	Aedes vexans	26	112		
	Anopheles punctipennis	2	3		
	Culex spp.	209	6007		
	Psorophora ferox	3	18		
Hudson		**120**	**7662**		
	Culex spp.	120	7662		
Grand Total		**1095**	**31,836**		

La Crosse Encephalitis (LAC) through 1 September 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		**71**	**106**		
	Aedes japonicus	1	1		
	Aedes triseriatus	70	105		
Cumberland		**14**	**27**		
	Aedes triseriatus	14	27		
Salem		**7**	**16**		
	Aedes triseriatus	7	16		
Grand Total		**93**	**158**		