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 26 to September 1, 2012

Data Downloaded 12:38 pm 4 September 2012

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, Department of Agriculture and of the 21 county mosquito control agencies of New Jersey.

Culiseta melanura and Eastern Equine Encephalitis

SITE/Boxes	Inland / Coastal	Historic Population Mean	Current Weekly Mean	Total (Collected) Tested*	Total Pools (Submitted) Tested	EEE Isolation Pools	MFIR
Bass River (Burlington Co.)/10	**Coastal**	na	0.50	(19) 14	(5) 4		
Green Bank (Burlington Co.)/25	**Coastal**	4.49	1.32	(116) 83	(8) 7	1	12.05
Corbin City (Atlantic Co.)/25	**Coastal**	2.19	0.44	(178) 167	(13) 12		
Dennisville (Cape May Co.)/50	**Coastal**	6.27	0.68	138	13	2	14.49
Winslow (Camden Co.)/50	**Inland**	0.77	2.44	1872	43	8	4.27
Centerton (Salem Co.)/50	**Inland**	3.90	0.72	435	16	3	6.90
Turkey Swamp (Monmouth Co.)/47	**Inland**	1.71	na	562‡	18	2	3.56
Glassboro (Gloucester Co.)/50	**Inland**	0.67	0.18	173	13	1	5.78

*Including trial run last week in May. ‡ Adjusted.

Remarks: One new EEE positive pool of *Cs. melanura* was detected in the traditional resting box sites at Turkey Swamp in the previous week. Current means are not available for that site due to inaccessibility from recent rains.

To date 3444 *Cs. melanura* from 126 pools have been tested from the traditional resting box sites, with three additional pools in the system to be tested. Seventeen positive pools have been detected at these sites, for an MFIR of 4.94 (a decrease from the previous week). A total of 24 positive pools have been detected in New Jersey, with seven detected positive pools in traps set by individual counties for an MFIR of 1.31 (see below). Overall *Cs. melanura* MFIR value for the state is 2.73. All positive pools remain in *Culiseta melanura*.

Two hundred ninety-two additional pools containing 5363 *Cs. melanura* have been tested from other sites using other traps in addition to resting boxes. One new positive pool was detected in Gloucester County (resting box). A season total of 7 positive *Cs. melanura* pools from these sites have been detected.

Additional *Cs. melanura* trapped by counties *traps with positives indicated in **BOLD.**				
County	**Trap types***	**Number collected (pools)**	**Number of positives pools**	**MFIR**
Burlington	**CO_2**, Other	3466 (79)	1	0.29
Cape May	Gravid, RB	490 (97)		
Cumberland	CO_2, Gravid, RB	270 (21)		
Gloucester	CO_2, **RB**	1037 (78)	5	4.82
Monmouth	Gravid	9 (2)		
Ocean	**CO_2**, Gravid, RB	88 (19)	1	11.36
Salem	CO_2	3 (3)		
TOTAL		**5363 (292)**	**7**	1.31

Horses and Humans: To date, four EEE positive horses have been identified: 1) A presumptive positive horse with an unusually early onset date of 25 May has been reported for Burlington County. The horse was reportedly vaccinated in early May. 2) A second horse has been reported, also from Burlington County. Date of onset was 22 July, with the 3.9 yo mare euthanized on the same date and no reported vaccination history. 3) A 3 yo mare from Atlantic County with date of onset of 10 Aug was euthanized on the same day (no vaccination history) and 4) a 4 yo mare from Camden County with date of onset 18 Aug was euthanized on same date, no vaccination history.

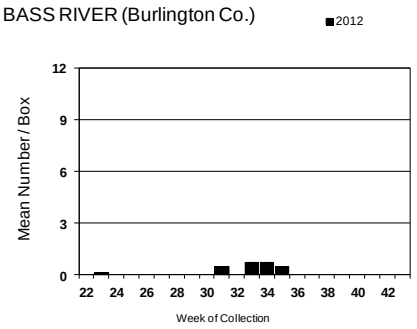
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

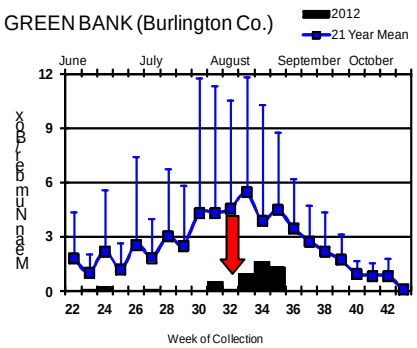
Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	8	40		
Aedes canadensis canadensis	9	242		
Aedes cantator	36	472		
Aedes japonicus	18	72		
Aedes mitchellae	4	60		
Aedes sollicitans	13	26		
Aedes sticticus	1	8		
Aedes triseriatus	4	4		
Aedes trivittatus	1	2		
Aedes vexans	5	81		
Anopheles bradleyi	37	132		
Anopheles crucians	5	39		
Anopheles punctipennis	19	74		
Anopheles quadrimaculatus	19	76		
Coquillettidia perturbans	67	1613		
Culex erraticus	176	6454		
Culex pipiens	556	5493		
Culex restuans	4	56		
Culex salinarius	147	528		
Culex sp.	143	4459		
Psorophora columbiae	1	5		
State Total	**1273**	**19936**		

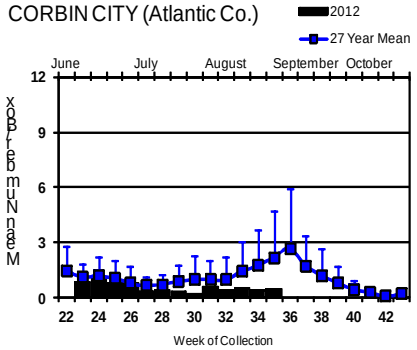
The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. An additional 20 species of mosquitoes have been tested with no detection of EEE.

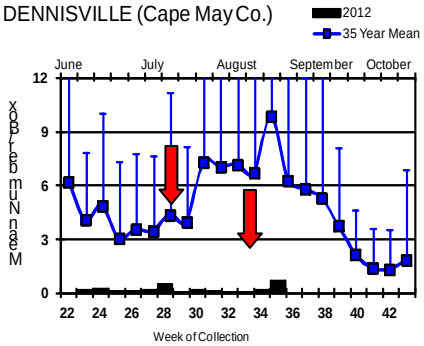
Culiseta melanura Population Graphs

Coastal

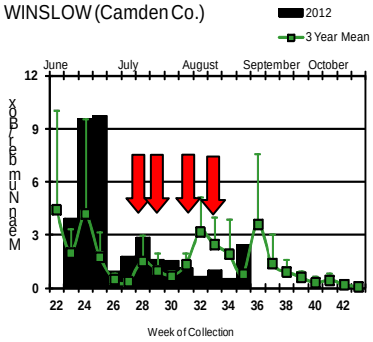


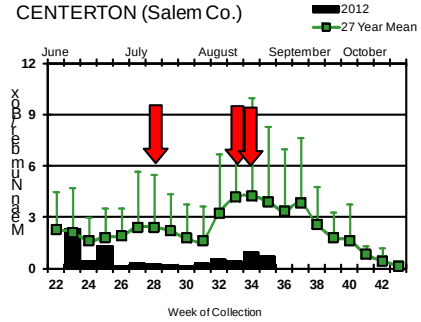


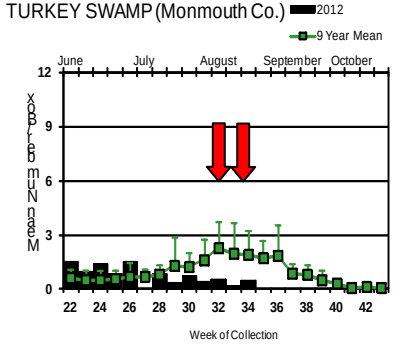


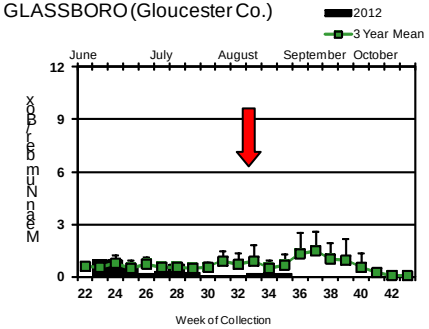


Inland









Populations of *Culiseta melanura* are above historical levels in Winslow while levels at the other sites have generally remained the same or decreased. Numbers at Dennisville increased but remain well below historical values.

= Positive pool(s) detected.

EEE in US (2012 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: 7(AL) 18(FL) 6(GA) 27(LA) 2(MA) 26(MS) 10(NC) 4(NJ) 1(NY) 8(SC) 2(WI)
- mosquito pools: 3(CT) 1(LA) 143(MA) 1(NH) 24(NJ) 1(RI) 137(VA) 4(VT)
- sentinel: 1(DE) 40(FL) 2 wild(ME) 3(NC)
- human: 1(FL) 1(MA) 2(VT)

West Nile Virus

West Nile in US (2012 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	14/15		8/11	3	8/13
Alaska					
Arizona	1	90/96	2	1	15/25
Arkansas					25/31
California	855/954	1596/1890	168/217	8/9	41/56
Colorado		86		8	5/22
Connecticut		192/205		0	4/6
Delaware	8/10		2		
DC					1
Florida	0		97/106	1	13/19
Georgia	0	74/79	0	3	18/29
Hawaii					
Idaho		23		3	4
Illinois	69/82	2753/3104		2	45/60
Indiana	2	422/518		9/17	11/26
Iowa		3	6	4	5
Kansas					8/15
Kentucky				7/8	1
Louisiana		2165/2323	69/90	27	121/145
Maine		2/4			1
Maryland		5			11/15
Mass.		153/189		1	3/8
Michigan	7/19	15/16		2	66/95
Minnesota	20	51		5/8	27/43
Mississippi		55		4/8	95/114
Missouri		96		5	7

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana		2/8		1	1
Nebraska	6/8	145/158			20/29
Nevada		2		1	
New Hampshire		36/38		0	1
New Jersey	61/72	677/761		2	4/8
New Mexico		16		6	7
New York		714/830			11/25
North Carolina					1/3
North Dakota	2	0		12	19/36
Ohio		695/960		1	16/43
Oklahoma		28/29		2	68/118
Oregon	1	53/58	0	1	2
Pennsylvania	79/95	2377/2716		10/16*	12/16
Rhode Island		2/3		0	0
South Carolina	13	1		3/11	9
South Dakota	1	61/62		8	82/98
Tennessee	1/2	628/702		1	7/10
Texas	97/118	1073/1108		16/22	723/981
Utah		8	0	0	2
Vermont		1		0	0
Virginia		199/208			2/5
Washington	0	4/5		1	0
West Virginia		134/156			1/2
Wisconsin	21	0		0	1
Wyoming	3	13		1	2/4

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

Protocol: New Jersey Department of Health (NJDH Public Health Environmental and Agricultural Laboratories, PHEAL) and the Cape May County Department of Mosquito Control tests mosquito pools using RT-PCR Taqman techniques.

Mosquito Species Submitted and Tested for West Nile Virus Testing through 4 September 2012

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	906	7120	5	0.702
Aedes atlanticus	9	13		
Aedes atropalpus	1	2		
Aedes canadensis canadensis	64	1565		
Aedes cantator	70	881		
Aedes grossbecki	2	2		
Aedes japonicus	415	2319	6	2.587
Aedes mitchellae	4	60		
Aedes sollicitans	17	38		
Aedes sticticus	7	124		
Aedes taeniorhynchus	22	208		
Aedes triseriatus	215	472		
Aedes trivittatus	6	10		
Aedes vexans	77	595	1	1.681
Anopheles bradleyi	59	443		
Anopheles crucians	7	44		
Anopheles punctipennis	82	300	1	3.333
Anopheles quadrimaculatus	105	359	1	2.786
Coquillettidia perturbans	87	1852		
Culex erraticus	189	6603		
Culex pipiens	1168	28365	108	3.808
Culex restuans	311	1678	1	0.596
Culex salinarius	184	786	1	1.272
Culex sp.	2818	105890	628	5.931
Culex territans	35	54		
Culiseta melanura	448	8865	9	1.015
Culiseta minnesotae	1	2		
Orthopodomyia signifera	13	13		
Psorophora ciliata	1	1		
Psorophora columbiae	11	162		
Psorophora ferox	9	56		
Psorophora howardii	1	1		
State Total	**7344**	**168,883**	**761**	**4.506**

Remarks: To date, there have been 168,883 mosquitoes tested in 7,344 pools from 31 species. Currently, 761 positive pools have been detected in *Aedes albopictus, Ae. japonicus, Aedes vexans, Anopheles punctipennis, Culex pipiens,* Mixed *Cx.* species, *Culex restuans, Culiseta melanura* and most recently, *Anopheles quadrimaculatus* and *Culex salinarius*. Mixed *Culex* pools continued to increase in positive pools from 560 to 628, with MFIR values increasing from 5.621 to 5.931.

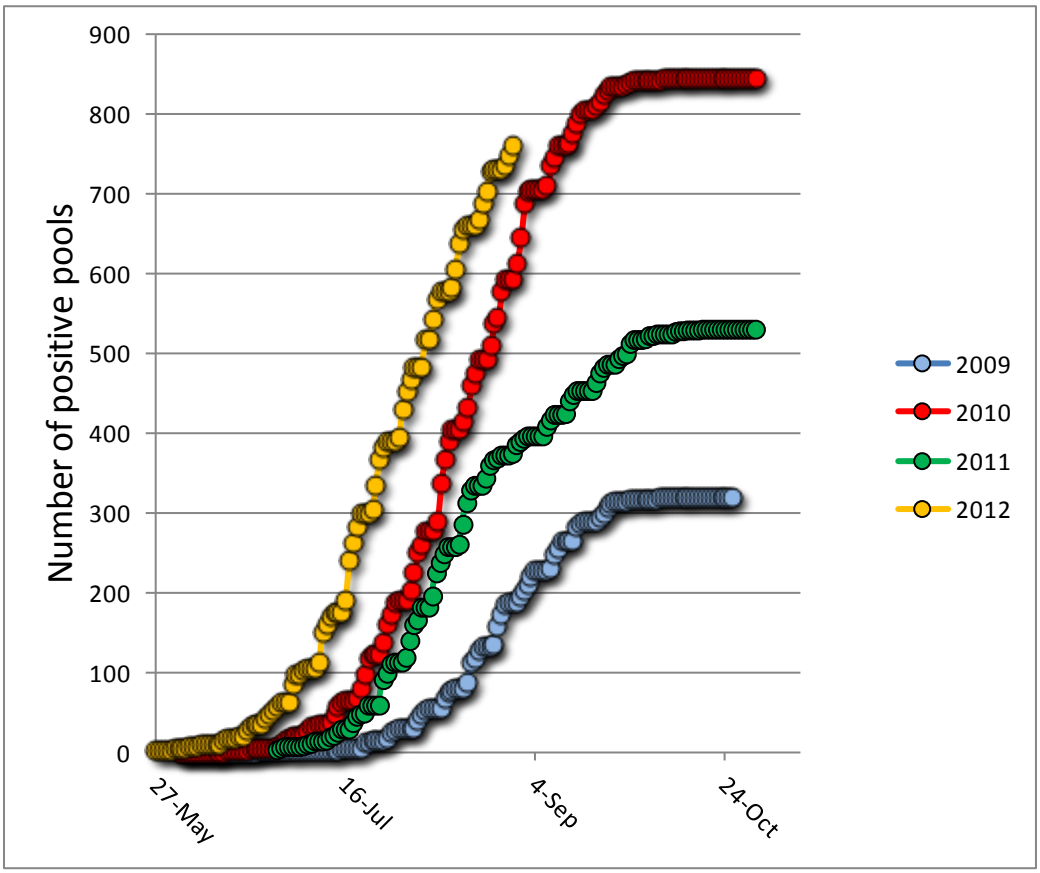
Humans, Horses and Wild Birds: Eight human cases have been reported in the following counties: Bergen (1), Essex (2), Hudson (1), Mercer (1), Middlesex (1), Monmouth (1), and Ocean (1). See http://www.state.nj.us/health/cd/westnile/techinfo.shtml for further information.

Two positive WNV horses have been reported: 1) A 11 yo quarter horse from Salem County, with onset of symptoms on 4th August. The horse was put down the same day. Generally horses have either an unknown or no vaccination history, but this horse was reported as vaccinated. See http://www.escrutgers.com/downloads/NJDA_08102012.pdf In the very active year of 2010, the first WNV horse case had an onset date of 17 August. 2) A 25 yo gelding from Monmouth County, onset of symptoms 14 July, was vaccinated and is recovering.

Bird testing began in mid-April. To date, WNV has been detected in seventy-two birds out of 199 tested. WNV was first detected in an American Crow (*Corvus brachyrhynchos*) from Morris County, collected 9 April. To date, testing includes: American Crow (*Corvus brachyrhynchos* 34/39), Fish Crow (*Corvus ossifragus* 12/38), unidentified Crow (*Corvus* spp. 9/18), Blue Jay (*Cyanocitta cristata* 13/22), Hawk/Raptor (1/8) and other avian species (3/74). Counties submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Somerset, Sussex and Warren.

2012 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
761 / 7344 (0.104)	393 / 4817 (0.082)
2012 Positive Birds to date / Total Birds Submitted	**This time last year**
72 / 199 (0.362)	23 / 81 (0.284)

Activity continues to increase, as seen by plotting cumulative positive pools (graph below).



WNV Results by County through 4 September 2012

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**83**	**2048**	**3**	**1.465**
	Aedes albopictus	13	196		
	Aedes canadensis canadensis	1	2		
	Aedes cantator	1	10		
	Aedes japonicus	6	24		
	Aedes sollicitans	1	9		
	Aedes taeniorhynchus	2	89		
	Aedes triseriatus	2	12		

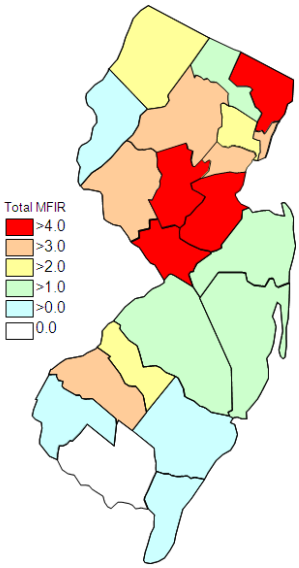
	Aedes trivittatus	1	2		
	Aedes vexans	3	78		
	Anopheles bradleyi	1	3		
	Anopheles punctipennis	1	15		
	Coquillettidia perturbans	2	3		
	Culex erraticus	3	34		
	Culex spp.	31	1388	3	2.161
	Culiseta melanura	13	174		
	Psorophora ferox	1	8		
	Psorophora howardii	1	1		
Bergen		**175**	**10794**	**123**	**11.395**
	Aedes albopictus	2	43	1	23.256
	Aedes japonicus	3	13	2	153.846
	Anopheles quadrimaculatus	1	1	1	1000.000
	Culex salinarius	1	3	1	333.333
	Culex spp.	168	10734	118	10.993
Burlington		**366**	**11654**	**21**	**1.802**
	Aedes albopictus	13	216		
	Aedes atropalpus	1	2		
	Aedes canadensis canadensis	6	214		
	Aedes cantator	2	30		
	Aedes japonicus	21	115	1	8.696
	Aedes mitchellae	4	60		
	Aedes sticticus	1	8		
	Aedes triseriatus	4	14		
	Aedes trivittatus	1	2		
	Aedes vexans	6	88		
	Anopheles bradleyi	3	80		
	Anopheles crucians	3	37		
	Anopheles punctipennis	3	14		
	Anopheles quadrimaculatus	3	11		
	Coquillettidia perturbans	24	967		
	Culex erraticus	7	87		
	Culex pipiens	6	222		
	Culex restuans	3	55		
	Culex salinarius	10	182		
	Culex spp.	154	5682	16	2.816
	Culiseta melanura	90	3563	4	1.123
	Psorophora columbiae	1	5		
Camden		**216**	**7440**	**42**	**5.645**
	Aedes albopictus	22	125	1	8.000
	Aedes japonicus	15	30	1	33.333
	Aedes triseriatus	2	6		
	Aedes trivittatus	1	2		
	Anopheles punctipennis	1	2		
	Culex spp.	132	5403	39	7.218
	Culiseta melanura	43	1872	1	0.534
Cape May		**2437**	**20393**	**11**	**0.539**
	Aedes albopictus	448	1179		
	Aedes atlanticus	6	9		
	Aedes canadensis canadensis	8	73		
	Aedes cantator	44	459		

	Aedes japonicus	99	151		
	Aedes sollicitans	14	27		
	Aedes taeniorhynchus	19	118		
	Aedes triseriatus	123	193		
	Aedes vexans	17	48		
	Anopheles bradleyi	39	132		
	Anopheles punctipennis	17	21		
	Anopheles quadrimaculatus	71	249		
	Coquillettidia perturbans	6	25		
	Culex erraticus	159	6219		
	Culex pipiens	711	9290	11	1.184
	Culex restuans	269	813		
	Culex salinarius	150	407		
	Culex spp.	74	278		
	Culex territans	32	51		
	Culiseta melanura	116	635		
	Orthopodomyia signifera	13	13		
	Psorophora columbiae	2	3		
Cumberland		**142**	**1530**		
	Aedes albopictus	14	54		
	Aedes atlanticus	2	2		
	Aedes canadensis canadensis	4	25		
	Aedes cantator	3	11		
	Aedes japonicus	12	31		
	Aedes triseriatus	7	14		
	Aedes vexans	2	6		
	Anopheles crucians	4	158		
	Anopheles bradleyi	3	6		
	Anopheles punctipennis	8	16		
	Anopheles quadrimaculatus	2	2		
	Coquillettidia perturbans	6	89		
	Culex erraticus	6	125		
	Culex pipiens	17	344		
	Culex restuans	10	88		
	Culex salinarius	10	148		
	Culex spp.	4	15		
	Culex territans	3	3		
	Culiseta melanura	21	270		
	Psorophora columbiae	2	104		
	Psorophora ferox	2	19		
Essex		**347**	**5864**	**28**	**4.775**
	Aedes albopictus	49	354		
	Aedes canadensis canadensis	2	2		
	Aedes grossbecki	2	2		
	Aedes japonicus	39	386	1	2.591
	Aedes sticticus	5	113		
	Aedes triseriatus	9	22		
	Aedes vexans	16	220		
	Culex spp.	224	4761	27	5.671
	Psorophora ferox	1	4		
Gloucester		**454**	**15504**	**52**	**3.354**
	Aedes albopictus	23	786		
	Aedes japonicus	6	127		

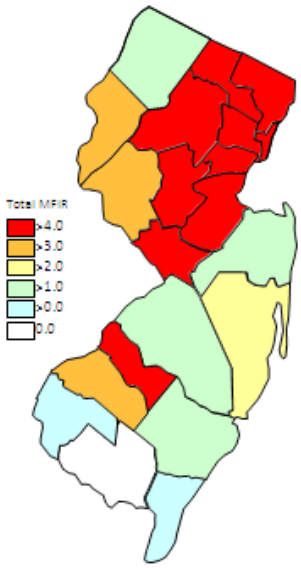
	Aedes triseriatus	1	7		
	Aedes vexans	2	4		
	Anopheles punctipennis	15	78		
	Anopheles quadrimaculatus	16	66		
	Coquillettidia perturbans	1	2		
	Culex pipiens	299	13224	49	3.705
	Culiseta melanura	91	1210	3	2.479
Hudson		**190**	**11670**	**64**	**5.484**
	Culex spp.	190	11670	64	5.484
Hunterdon		**228**	**10941**	**42**	**3.839**
	Culex spp.	228	10941	42	3.839
Mercer		**248**	**6933**	**52**	**7.500**
	Aedes albopictus	57	651		
	Aedes japonicus	32	177		
	Aedes triseriatus	5	11		
	Aedes vexans	1	3		
	Culex erraticus	1	7		
	Culex pipiens	126	5199	48	9.233
	Culex restuans	20	520	1	1.923
	Culex spp.	6	365	3	8.219
Middlesex		**226**	**8.87**	**68**	**8.409**
	Aedes albopictus	16	185		
	Aedes japonicus	15	120		
	Aedes triseriatus	3	14		
	Culex spp.	192	7768	68	8.754
Monmouth		**279**	**4020**	**8**	**1.990**
	Aedes albopictus	49	268	1	3.731
	Aedes canadensis canadensis	11	128		
	Aedes cantator	8	43		
	Aedes japonicus	43	160	1	6.250
	Aedes triseriatus	13	18		
	Aedes vexans	5	8		
	Anopheles crucians	1	1		
	Anopheles punctipennis	12	17		
	Coquillettidia perturbans	3	4		
	Culex erraticus	3	34		
	Culex pipiens	1	1		
	Culex salinarius	3	14		
	Culex spp.	102	2739	6	2.191
	Culiseta melanura	23	581		
	Psorophora columbiae	1	2		
	Psorophora ferox	1	2		
Morris		**305**	**11512**	**61**	**5.299**
	Aedes japonicus	19	298		
	Aedes triseriatus	3	14		
	Anopheles punctipennis	2	65		
	Coquillettidia perturbans	3	149		
	Culex spp.	278	10986	61	5.553

Ocean	**330**	**5977**	**15**	**2.510**
Aedes albopictus	86	2157	1	0.464
Aedes atlanticus	1	2		
Aedes canadensis canadensis	29	1112		
Aedes cantator	11	327		
Aedes japonicus	29	130		
Aedes sollicitans	2	2		
Aedes taeniorhynchus	1	1		
Aedes triseriatus	15	36		
Aedes trivittatus	1	2		
Aedes vexans	9	35	1	28.571
Anopheles bradleyi	7	39		
Anopheles punctipennis	2	2		
Anopheles quadrimaculatus	1	1		
Coquillettidia perturbans	19	423		
Culex restuans	1	1		
Culex salinarius	9	31		
Culex spp.	86	1586	13	8.197
Culiseta melanura	19	88		
Psorophora ferox	2	2		
Passaic	**149**	**2553**	**11**	**4.309**
Aedes albopictus	26	114	1	8.772
Aedes japonicus	33	332		
Aedes triseriatus	13	29		
Anopheles punctipennis	3	5		
Coquillettidia perturbans	1	2		
Culex spp.	73	2071	10	4.829
Salem	**235**	**2466**	**2**	**0.811**
Aedes albopictus	36	105		
Aedes canadensis canadensis	2	6		
Aedes cantator	1	1		
Aedes japonicus	8	22		
Aedes sticticus	1	3		
Aedes triseriatus	4	4		
Aedes vexans	10	82		
Anopheles bradleyi	5	31		
Anopheles punctipennis	5	7		
Anopheles quadrimaculatus	7	25		
Coquillettidia perturbans	20	144		
Culex erraticus	10	97		
Culex pipiens	4	26		
Culex restuans	2	15		
Culex spp.	86	1366	1	0.732
Culiseta melanura	25	460	1	2.174
Culiseta minnesotae	1	2		
Psorophora ciliata	1	1		
Psorophora columbiae	5	48		
Psorophora ferox	2	21		
Somerset	**194**	**3835**	**26**	**6.780**
Aedes albopictus	13	82		
Aedes canadensis canadensis	1	3		
Aedes japonicus	16	105		

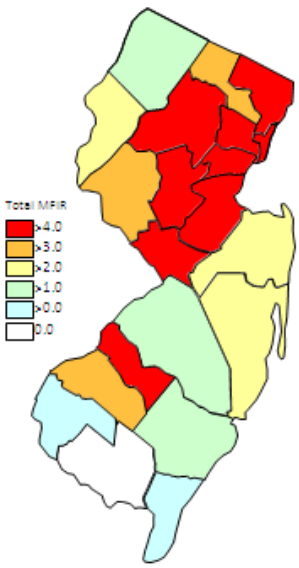
	Aedes triseriatus	3	39		
	Aedes vexans	1	8		
	Anopheles punctipennis	2	13	1	76.923
	Culex spp.	158	3585	25	6.974
Sussex		**228**	**7254**	**14**	**1.930**
	Coquillettidia perturbans	1	43		
	Culex pipiens	4	59		
	Culex restuans	6	186		
	Culex salinarius	1	1		
	Culex spp.	209	6953	14	2.014
	Culiseta melanura	7	12		
Union		**254**	**12418**	**100**	**8.053**
	Aedes albopictus	38	602		
	Aedes japonicus	3	42		
	Aedes triseriatus	1	15		
	Culex spp.	212	11759	100	8.504
Warren		**258**	**5990**	**18**	**3.005**
	Aedes albopictus	1	3		
	Aedes japonicus	16	56		
	Aedes triseriatus	7	24		
	Aedes trivittatus	2	2		
	Aedes vexans	5	15		
	Anopheles punctipennis	11	45		
	Anopheles quadrimaculatus	4	4		
	Coquillettidia perturbans	1	1		
	Culex spp.	211	5840	18	3.082
Grand Total		**7344**	**168883**	**761**	**4.506**



Cumulative WNV activity in 2011.



WNV activity to 4 September 2012.



WNV activity last week, 2012.

Saint Louis Encephalitis (SLE) through 4 September 2012.

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 2012.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		**267**	**9122**		
	Aedes albopictus	5	32		
	Aedes canadensis canadensis	6	214		
	Aedes cantator	2	30		
	Aedes japonicus	18	72		
	Aedes mitchellae	4	60		
	Aedes sticticus	1	8		
	Aedes triseriatus	3	3		
	Aedes trivittatus	1	2		
	Aedes vexans	4	65		
	Anopheles bradleyi	1	4		
	Anopheles crucians	3	37		
	Anopheles punctipennis	2	13		
	Anopheles quadrimaculatus	3	11		
	Coquillettidia perturbans	20	892		
	Culex erraticus	3	71		
	Culex pipiens	6	222		
	Culex restuans	3	55		
	Culex salinarius	10	182		
	Culex spp.	116	4597		
	Culiseta melanura	55	2547		
	Psorophora columbiae	1	5		
Camden		**75**	**2601**		
	Aedes albopictus	7	31		
	Aedes japonicus	4	6		
	Aedes triseriatus	1	5		
	Anopheles punctipennis	1	2		
	Culex spp.	62	2557		
Essex		**200**	**3900**		
	Aedes albopictus	23	48		
	Aedes canadensis canadensis	2	2		
	Aedes grossbecki	2	2		
	Aedes japonicus	30	251		
	Aedes sticticus	5	113		
	Aedes triseriatus	9	22		
	Aedes vexans	16	220		
	Culex spp.	112	3238		
	Psorophora ferox	1	4		
Hudson		**74**	**4966**		

	Culex spp.	74	4966		
Grand Total		**616**	**20589**		

La Crosse Encephalitis (LAC) through 4 September 2012.

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 2012.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		**100**	**161**		
	Aedes triseriatus	97	156		
	Culex spp.	1	2		
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	1	2		
Cumberland		**7**	**14**		
	Aedes triseriatus	7	14		
Salem		**1**	**1**		
	Aedes triseriatus	1	1		
Union		**1**	**15**		
	Aedes triseriatus	1	15		
Grand Total		**109**	**191**		