VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE and LAC

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CDC WEEK 40: September 30 to October 6, 2012

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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, 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	0.90	63‡	9		
Green Bank (Burlington Co.)/25	**Coastal**	0.94	2.16	(513) 459	(16) 15	1	2.18
Corbin City (Atlantic Co.)/25	**Coastal**	0.47	0.32	202‡	16		
Dennisville (Cape May Co.)/50	**Coastal**	1.39	0.18	187	16	3	16.04
Winslow (Camden Co.)/50	**Inland**	0.30	0.08	1976	49	8	4.05
Centerton (Salem Co.)/50	**Inland**	1.65	0.22	537	21	3	5.59
Turkey Swamp (Monmouth Co.)/48	**Inland**	0.28	0.15	(671) 664	(23) 22	2	3.01
Glassboro (Gloucester Co.)/50	**Inland**	0.54	0.14	227	18	1	4.41

*Including trial run last week in May. ‡ Incomplete, to be updated.

Remarks: There was one new detection of an EEE positive pool in *Cs. melanura* at Dennisville in the traditional resting box sites for a seasonal total of 18 positive pools. There was an additional positive pool of *Cs. melanura* in the county sites (also Cape May) for a seasonal total of 12 positive pools. A total of 32 positive pools including 2 additional positive pools from another species (see next pages) have been detected in New Jersey this season.

To date 4315 *Cs. melanura* from 166 pools have been tested from the traditional resting box sites, with two additional pools in the system to be tested. Eighteen positive pools have been detected at these sites, for an MFIR of 4.17. Eleven positive pools of *Cs. melanura* in traps set by individual counties have been detected for a county site MFIR of 1.82 (see below). Overall *Cs. melanura* MFIR value for the state is 2.75.

Additional *Cs. melanura*: Three hundred ninety-three additional pools containing 6611 *Cs. melanura* have been tested from other sites using other traps in addition to resting boxes. One additional positive pool was found in a RB trap from Cape May County, collected 25 Sep. A season total of 12 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
Atlantic	**CO_2**	18 (1)	1	55.56
Burlington	**CO_2**, Other	4241 (102)	2	0.48
Cape May	Gravid, **RB**	625 (134)	1	1.60
Cumberland	CO_2, Gravid, **RB**	342 (25)	1	2.96
Gloucester	CO_2, **RB**	1239 (95)	6	4.84
Monmouth	Gravid	9 (2)		
Ocean	**CO_2**, Gravid, RB	134 (31)	1	7.46
Salem	CO_2	3 (3)		
TOTAL		**6611 (393)**	**12**	1.82

Additional Species: The table below indicates non-*Cs. melanura* mosquitoes tested for EEE. An additional 22 species of mosquitoes have been tested. Two positive pools have previously been detected in *Culex erraticus*, both collected on 19 Sep, with one in the traditional resting box site at Turkey Swamp and the other in Cumberland County, where an additional positive *Culiseta melanura* pool was also detected. *Culex erraticus* is a known enzootic vector in the southern US. It is also cosmopolitan in its diet, making it a potential bridge vector.

Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	9	41		
Aedes atlanticus	2	20		
Aedes canadensis canadensis	17	482		
Aedes cantator	36	472		
Aedes japonicus	18	72		
Aedes mitchellae	4	60		
Aedes sollicitans	21	172		
Aedes sticticus	1	8		
Aedes taeniorhynchus	1	1		
Aedes triseriatus	7	8		
Aedes trivittatus	1	2		
Aedes vexans	7	83		
Anopheles bradleyi	73	449		
Anopheles crucians	5	39		

Anopheles punctipennis	30	140		
Anopheles quadrimaculatus	28	144		
Coquillettidia perturbans	70	1637		
Culex erraticus	292	8955	2	0.223
Culex pipiens	707	6345		
Culex restuans	15	76		
Culex salinarius	189	904		
Culex sp.	161	4596		
Psorophora columbiae	3	17		
Psorophora ferox	1	50		
State Total	**1698**	**24773**	**2**	**0.081**

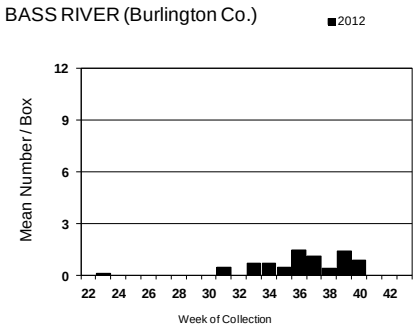
Horses and Humans: To date, six EEE positive horses have been identified, including with the above: 1) A presumptive positive horse with an unusually early onset date of 25 May has been reported for Burlington County. The horse was reportedly vaccinated in early May. 2) A second horse has been reported, 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), 4) a 4 yo mare from Camden County with date of onset 18 Aug was euthanized on same date, no vaccination history and 5/6) two 2 yo colts from Camden County with onset date of 9 Sep, both euthanized on 10 Sep, both with no vaccination or travel history.

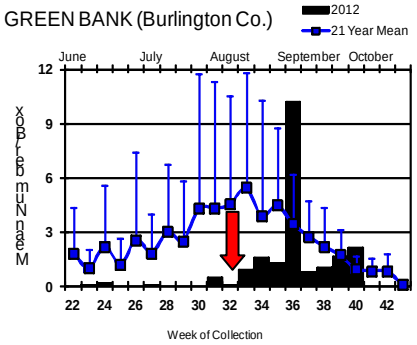
In Burlington County, 300 out of 3000 birds died September 1st/2nd in a flock of ring-necked pheasants (*Phasianus colchicus)*. Three birds of the 300 were tested out of state and returned positive for EEE. This non-native species can be susceptible to EEE effects, including hemorrhagic enteritis and sick birds can become aggressive targets of healthier birds.

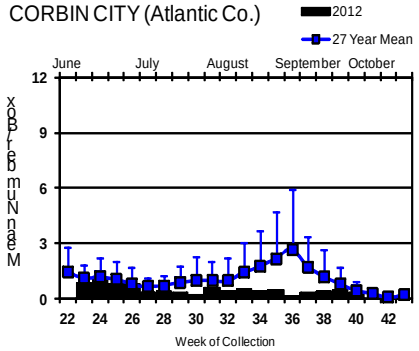
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

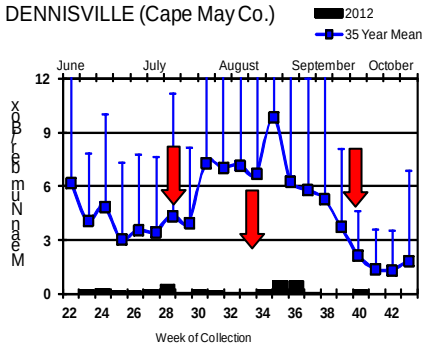
Culiseta melanura Population Graphs

Coastal

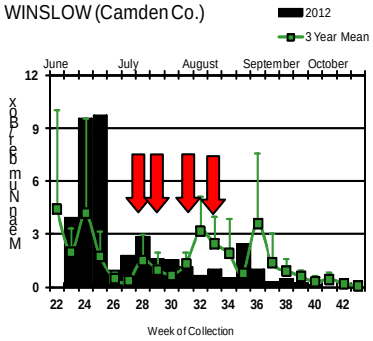


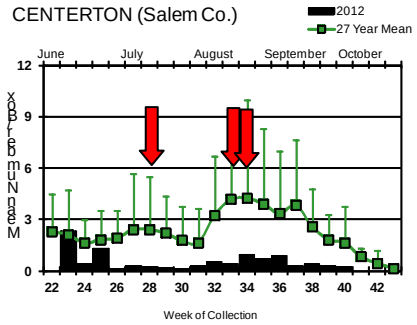


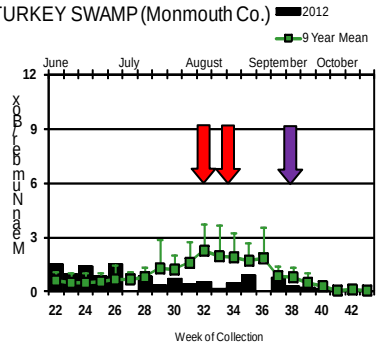


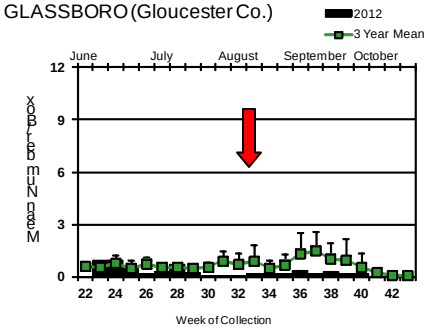


Inland









Increases in populations of *Culiseta melanura* above historical levels continue to occur at Green Bank. Activity elsewhere appears to be either at historical values or on the decline. Dennisville, which had previously recorded no *Cs. melanura* present the previous two weeks, showed small populations there, nut also came up positive for EEE activity. EEE was also detected in another site in Cape May County.

= Positive pool(s) detected (red = melanura, purple = other).

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

- equine: 12(AL) 1(AK) 22(FL) 8(GA) 45(LA) 6(MA) 1(MI) 31(MS) 14(NC) 3(NH) 6(NJ) 2(NY) 12(SC) 2(VT) 4(WI)
- mosquito pools: 9(CT) 2(GA) 3(LA) 288(MA) 5(NH) 30(NJ) 1(NY) 5(RI) 137(VA) 10(VT)
- sentinel: 1(AL) 1(DE) 53(FL) 1[2 wild](ME) 3(NC) (2 emu NH) 33(VA)
- human: 1(FL) 7(MA) 1(NC) 1(VA) 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	15		20	5/10	21/31
Alaska					0
Arizona	1	151	2	1	67
Arkansas					48/54
California	1376/1456	2541/2632	420/442	20	182/231
Colorado		209		10/13	92/118
Connecticut		233		0	17/18
Delaware	24		17/21	0	6
DC					2
Florida	1	4	194/258	6	43/45
Georgia	0	109	0	4	55
Hawaii					
Idaho	2	35		8	13
Illinois	98/100	3852/3919		5/6	138/179
Indiana	2	713		21/24	61/62
Iowa		14	12/17	21/24	19
Kansas		2		1	31
Kentucky		2		13	6
Louisiana		2447/2462	120/126	42/50	281
Maine		7			1
Maryland		10		1	33/35
Mass.		244/246		2	20
Michigan	30/33	23		5	178/185
Minnesota	26	102/105		8/10	61/65
Mississippi		56		10/17	200/213
Missouri		150/162		6	16

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana	1	11		6	5
Nebraska	13	221		11	85/100
Nevada		2		1/3	2/6
New Hampshire		40		0	1
New Jersey	123/129	975/994		3	35/40
New Mexico	1	20		9	31/36
New York		975/997		2/3	67/79
North Carolina				2	6
North Dakota	2	0		14	79/80
Ohio		1206/1214		8/9	89/97
Oklahoma	1	30		8/9	154/162
Oregon	1	71	0	2	4
Pennsylvania	129/133	3353/3397		39/45	23/24
Rhode Island		5		0	4
South Carolina	16	1/3		4/5	33/40
South Dakota	5	82/84		10	175/195
Tennessee	3	742/753		4	25/28
Texas	177/191	1334/1362		58/72	1442/1574
Utah		16	1	1	3
Vermont		1		0	1
Virginia		208	19		9/19
Washington	0	5		1	4
West Virginia	1	266			3/5
Wisconsin	30	0		1/2	38/40
Wyoming	3	13		5	7

* 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 6 October 2012

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	1456	10603	5	0.472
Aedes atlanticus	12	34		
Aedes atropalpus	14	41		
Aedes canadensis canadensis	78	1825		
Aedes cantator	73	884		
Aedes grossbecki	2	2		
Aedes japonicus	551	2859	6	2.099
Aedes mitchellae	4	60		
Aedes sollicitans	26	185		
Aedes sticticus	9	126		
Aedes taeniorhynchus	46	469		
Aedes triseriatus	308	707		
Aedes trivittatus	8	16		
Aedes vexans	144	1017	1	0.983
Anopheles bradleyi	106	795		
Anopheles crucians	14	60		
Anopheles punctipennis	131	444	1	2.252
Anopheles quadrimaculatus	168	582	1	1.718
Coquillettidia perturbans	92	1881		
Culex erraticus	328	9224		
Culex pipiens	1523	32603	141	4.325
Culex restuans	435	1998	4	2.002
Culex salinarius	234	1182	1	0.846
Culex sp.	3692	125252	823	6.571
Culex territans	51	103		
Culiseta melanura	604	11074	11	0.993
Culiseta minnesotae	1	2		
Orthopodomyia signifera	17	17		
Psorophora ciliata	1	1		
Psorophora columbiae	23	187		
Psorophora ferox	16	120		
Psorophora howardii	2	2		
Uranotaenia sapphirina	5	9		
State Total	**10174**	**204364**	**994**	**4.864**

Remarks: To date, there have been 204,364 mosquitoes tested in 10,174 pools from 32 species. Currently, 994 positive pools have been detected in *Aedes albopictus, Ae. japonicus, Ae. vexans, Anopheles punctipennis, An. quadrimaculatus, Culex pipiens,* Mixed *Cx.* species, *Cx. restuans, Cx. salinarius and Culiseta melanura*.

Humans, Horses and Wild Birds: Forty human cases have been reported in the following counties: Atlantic (1), Bergen (4), Burlington (2), Camden (5), Cape May (1), Essex (3), Gloucester (2), Hudson (1), Mercer (1), Middlesex (4), Monmouth (3), Ocean (7), Passaic (2) Salem (1) Somerset (2) and Union (1). DOH noted that a change in protocol has occurred to include WNV results from commercial laboratories. See http://www.state.nj.us/health/cd/westnile/techinfo.shtml for further information.

Four positive WNV horses have been reported to date: 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

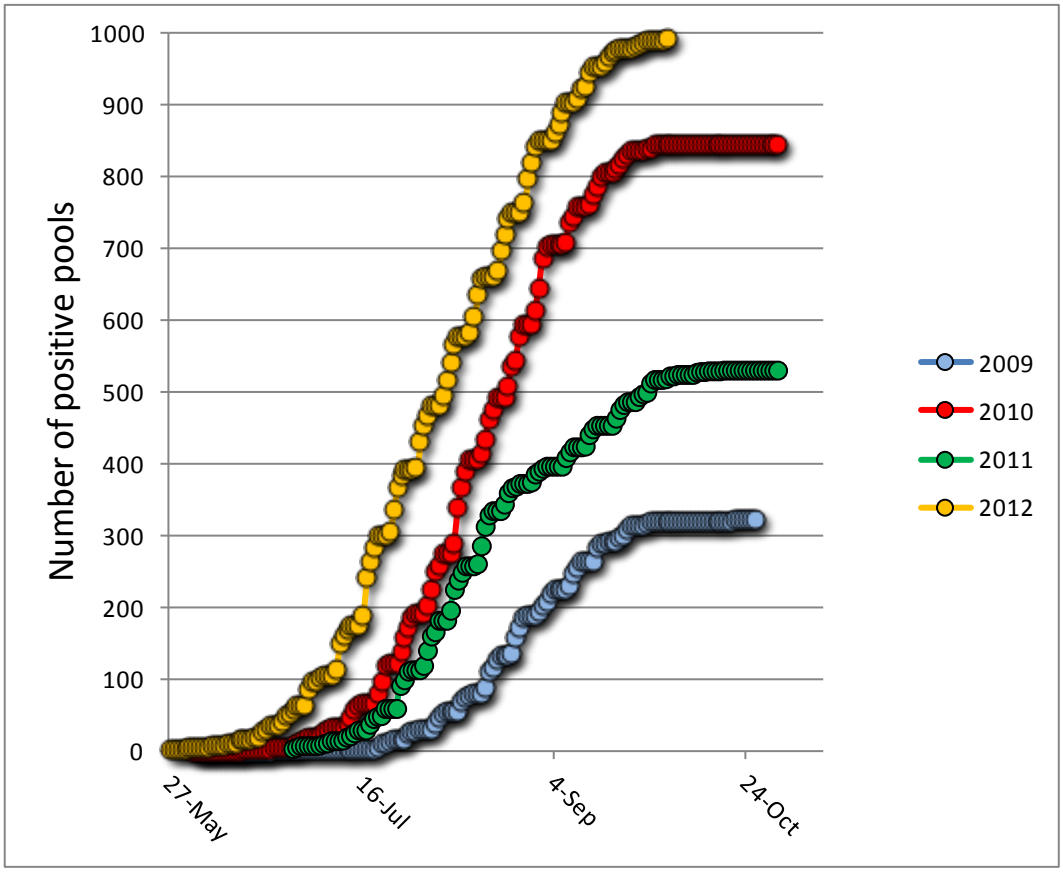
http://www.escrutgers.com/downloads/NJDA_08102012.pdf In the very active year of 2010, the first WNV horse case had an onset date of 17 August. 2) A 25 yo gelding from Monmouth County, onset of symptoms 14 July, was vaccinated and is recovering. 3) An additional Monmouth County horse (2 yo mare) with date of onset on 15 Sep was euthanized 17 Sep. No vaccination history was reported. The latest horse was reported from Atlantic County.

An unvaccinated alpaca from Gloucester County developed WNV with an onset date of 9 Sep.

Bird testing began in mid-April. To date, WNV has been detected in 129 birds out of 294 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* 61/67), Fish Crow (*Corvus ossifragus* 14/42), unidentified Crow (*Corvus* spp. 15/25), Blue Jay (*Cyanocitta cristata* 31/41), Hawk/Raptor (2/11) and other avian species (6/108). 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
994 / 10174 (0.098)	518 / 6779 (0.076)
2012 Positive Birds to date / Total Birds Submitted	This time last year
129 / 294 (0.439)	36 / 110 (0.327)

Activity, as seen by plotting cumulative positive pools (graph below) has now gone above 2010 levels. It should be noted that testing began earlier this year.



WNV Results by County through 1 October 2012

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**140**	**2562**	**5**	**1.952**
	Aedes albopictus	20	281		
	Aedes canadensis canadensis	1	2		

	Aedes cantator	2	11		
	Aedes japonicus	8	32		
	Aedes sollicitans	1	9		
	Aedes taeniorhynchus	3	92		
	Aedes triseriatus	5	18		
	Aedes trivittatus	1	2		
	Aedes vexans	8	102		
	Anopheles bradleyi	4	14		
	Anopheles punctipennis	3	17		
	Anopheles quadrimaculatus	2	5		
	Coquillettidia perturbans	2	3		
	Culex erraticus	11	80		
	Culex spp.	42	1626	5	3.075
	Culiseta melanura	22	250		
	Psorophora columbiae	2	2		
	Psorophora ferox	2	15		
	Psorophora howardii	1	1		
Bergen		**260**	**13115**	**162**	**12.352**
	Aedes albopictus	2	43	1	23.256
	Aedes japonicus	3	13	2	153.846
	Aedes triseriatus	1	1		
	Aedes vexans	1	4		
	Anopheles punctipennis	1	1		
	Anopheles quadrimaculatus	1	1	1	1000.000
	Culex salinarius	1	3	1	333.333
	Culex spp.	250	13049	157	12.032
Burlington		**498**	**14757**	**31**	**2.101**
	Aedes albopictus	28	459		
	Aedes atlanticus	2	20		
	Aedes atropalpus	1	2		
	Aedes canadensis canadensis	13	453		
	Aedes cantator	2	30		
	Aedes japonicus	26	128	1	7.813
	Aedes mitchellae	4	60		
	Aedes sollicitans	1	9		
	Aedes sticticus	1	8		
	Aedes triseriatus	6	55		
	Aedes trivittatus	1	2		
	Aedes vexans	12	243		
	Anopheles bradleyi	8	171		
	Anopheles crucians	4	38		
	Anopheles punctipennis	7	28		
	Anopheles quadrimaculatus	5	13		
	Coquillettidia perturbans	25	983		
	Culex erraticus	12	115		
	Culex pipiens	6	222		
	Culex restuans	6	72		
	Culex salinarius	11	257		
	Culex spp.	185	6553	26	3.968
	Culiseta melanura	126	4763	4	0.840
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	3	19		
	Psorophora ferox	1	50		
	Uranotaenia sapphirina	1	3		

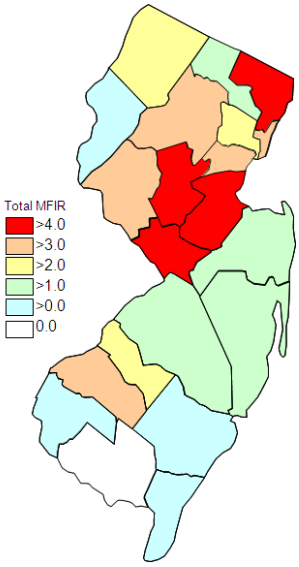
Camden		**306**	**8434**	**47**	**5.573**
	Aedes albopictus	46	193	1	5.181
	Aedes japonicus	26	44	1	22.727
	Aedes triseriatus	2	6		
	Aedes trivittatus	1	2		
	Aedes vexans	4	8		
	Anopheles crucians	1	1		
	Anopheles punctipennis	2	3		
	Culex erraticus	1	1		
	Culex spp.	173	6197	44	7.100
	Culiseta melanura	49	1976	1	0.506
	Uranotaenia sapphirina	1	3		
Cape May		**3473**	**27247**	**23**	**0.844**
	Aedes albopictus	711	2015		
	Aedes atlanticus	6	9		
	Aedes atropalpus	13	39		
	Aedes canadensis canadensis	10	79		
	Aedes cantator	46	461		
	Aedes japonicus	122	176		
	Aedes sollicitans	21	164		
	Aedes taeniorhynchus	42	376		
	Aedes triseriatus	169	304		
	Aedes vexans	30	73		
	Anopheles bradleyi	70	359		
	Anopheles punctipennis	27	32		
	Anopheles quadrimaculatus	111	381		
	Coquillettidia perturbans	6	25		
	Culex erraticus	249	8569		
	Culex pipiens	940	11102	19	1.711
	Culex restuans	382	1092	3	2.747
	Culex salinarius	192	719		
	Culex spp.	88	308		
	Culex territans	47	99		
	Culiseta melanura	165	838	1	1.193
	Orthopodomyia signifera	16	16		
	Psorophora columbiae	5	6		
	Psorophora ferox	2	2		
	Uranotaenia sapphirina	3	3		
Cumberland		**197**	**1784**		
	Aedes albopictus	23	92		
	Aedes atlanticus	3	3		
	Aedes canadensis canadensis	4	25		
	Aedes cantator	3	11		
	Aedes japonicus	17	37		
	Aedes triseriatus	9	17		
	Aedes vexans	5	17		
	Anopheles crucians	4	158		
	Anopheles bradleyi	6	10		
	Anopheles punctipennis	9	18		
	Anopheles quadrimaculatus	5	5		
	Coquillettidia perturbans	6	89		
	Culex erraticus	15	170		
	Culex pipiens	22	357		

	Culex restuans	11	90		
	Culex salinarius	12	150		
	Culex spp.	9	30		
	Culex territans	3	3		
	Culiseta melanura	26	376		
	Psorophora columbiae	2	104		
	Psorophora ferox	3	22		
Essex		**482**	**6485**	**28**	**4.318**
	Aedes albopictus	93	613		
	Aedes canadensis canadensis	2	2		
	Aedes grossbecki	2	2		
	Aedes japonicus	59	467	1	2.141
	Aedes sticticus	5	113		
	Aedes triseriatus	13	32		
	Aedes vexans	20	227		
	Culex spp.	287	5025	27	5.373
	Psorophora ferox	1	4		
Gloucester		**593**	**17587**	**61**	**3.468**
	Aedes albopictus	53	1297		
	Aedes japonicus	7	141		
	Aedes triseriatus	1	7		
	Aedes vexans	3	12		
	Anopheles punctipennis	23	139		
	Anopheles quadrimaculatus	21	133		
	Coquillettidia perturbans	1	2		
	Culex pipiens	370	14387	57	3.962
	Culiseta melanura	114	1469	4	2.723
Hudson		**256**	**14069**	**79**	**5.615**
	Culex spp.	256	14069	79	5.615
Hunterdon		**335**	**14199**	**68**	**4.789**
	Culex spp.	335	14199	68	4.789
Mercer		**351**	**8578**	**70**	**8.160**
	Aedes albopictus	93	942		
	Aedes japonicus	39	214		
	Aedes triseriatus	5	11		
	Aedes vexans	1	3		
	Culex erraticus	3	10		
	Culex pipiens	175	6447	65	10.082
	Culex restuans	24	538	1	1.859
	Culex spp.	11	413	4	9.685
Middlesex		**280**	**10140**	**86**	**8.481**
	Aedes albopictus	19	222		
	Aedes japonicus	15	120		
	Aedes triseriatus	3	14		
	Culex spp.	243	9784	86	8.790
Monmouth		**390**	**4636**	**12**	**2.588**
	Aedes albopictus	76	389	1	2.571
	Aedes canadensis canadensis	12	129		

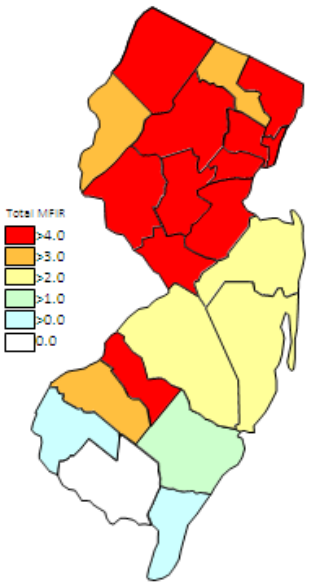
	Aedes cantator	8	43		
	Aedes japonicus	54	185	1	5.405
	Aedes triseriatus	18	24		
	Aedes vexans	10	20		
	Anopheles crucians	1	1		
	Anopheles punctipennis	22	32		
	Anopheles quadrimaculatus	1	1		
	Coquillettidia perturbans	4	5		
	Culex erraticus	12	131		
	Culex pipiens	1	1		
	Culex salinarius	4	15		
	Culex spp.	133	2965	10	3.373
	Culex territans	1	1		
	Culiseta melanura	30	689		
	Psorophora columbiae	2	3		
	Psorophora ferox	1	2		
Morris		**372**	**12409**	**73**	**5.883**
	Aedes albopictus	2	25		
	Aedes japonicus	25	332		
	Aedes triseriatus	4	15		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	66		
	Coquillettidia perturbans	3	149		
	Culex spp.	334	11821	73	6.175
Ocean		**458**	**6822**	**16**	**2.345**
	Aedes albopictus	117	2700	1	0.370
	Aedes atlanticus	1	2		
	Aedes canadensis canadensis	33	1126		
	Aedes cantator	11	327		
	Aedes japonicus	35	142		
	Aedes sollicitans	2	2		
	Aedes sticticus	2	2		
	Aedes taeniorhynchus	1	1		
	Aedes triseriatus	21	43		
	Aedes trivittatus	1	2		
	Aedes vexans	22	66	1	15.152
	Anopheles bradleyi	12	47		
	Anopheles crucians	2	10		
	Anopheles punctipennis	4	4		
	Anopheles quadrimaculatus	5	6		
	Coquillettidia perturbans	21	431		
	Culex erraticus	8	10		
	Culex restuans	1	1		
	Culex salinarius	13	37		
	Culex spp.	109	1723	14	8.125
	Culiseta melanura	31	134		
	Psorophora columbiae	1	1		
	Psorophora ferox	4	4		
	Psorophora howardii	1	1		
Passaic		**160**	**2778**	**11**	**3.960**
	Aedes albopictus	29	128	1	7.813
	Aedes japonicus	34	335		
	Aedes triseriatus	13	29		

	Anopheles punctipennis	4	15		
	Coquillettidia perturbans	1	2		
	Culex spp.	79	2269	10	4.407
Salem		**311**	**2269**	**2**	**0.682**
	Aedes albopictus	54	148		
	Aedes canadensis canadensis	2	6		
	Aedes cantator	1	1		
	Aedes japonicus	10	24		
	Aedes sollicitans	1	1		
	Aedes sticticus	1	3		
	Aedes triseriatus	5	6		
	Aedes vexans	18	205		
	Anopheles bradleyi	8	46		
	Anopheles punctipennis	10	16		
	Anopheles quadrimaculatus	12	32		
	Coquillettidia perturbans	20	144		
	Culex erraticus	17	138		
	Culex pipiens	4	26		
	Culex restuans	4	18		
	Culex spp.	102	1480	1	0.676
	Culiseta melanura	30	562	1	1.779
	Culiseta minnesotae	1	2		
	Psorophora ciliata	1	1		
	Psorophora columbiae	8	52		
	Psorophora ferox	2	21		
Somerset		**277**	**4846**	**43**	**8.873**
	Aedes albopictus	21	128		
	Aedes canadensis canadensis	1	3		
	Aedes japonicus	20	148		
	Aedes triseriatus	4	42		
	Aedes vexans	1	8		
	Anopheles punctipennis	5	28	1	35.714
	Culex spp.	225	4489	42	9.356
Sussex		**341**	**9492**	**39**	**4.109**
	Aedes albopictus	4	4		
	Aedes japonicus	4	45		
	Coquillettidia perturbans	1	43		
	Culex pipiens	5	61		
	Culex restuans	7	187		
	Culex salinarius	1	1		
	Culex spp.	309	9135	39	4.269
	Culiseta melanura	10	16		
Union		**312**	**14118**	**114**	**8.075**
	Aedes albopictus	59	838		
	Aedes japonicus	5	64		
	Aedes triseriatus	1	15		
	Culex spp.	247	13201	114	8.636
Warren		**382**	**7374**	**24**	**3.255**
	Aedes albopictus	6	86		
	Aedes japonicus	42	212		

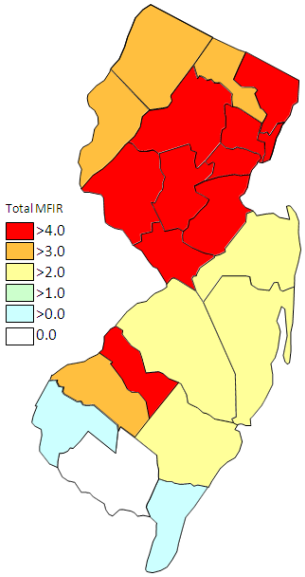
	Aedes triseriatus	28	68		
	Aedes trivittatus	4	8		
	Aedes vexans	8	28		
	Anopheles punctipennis	11	45		
	Anopheles quadrimaculatus	5	5		
	Coquillettidia perturbans	2	5		
	Culex spp.	275	6916	24	3.470
	Culiseta melanura	1	1		
Grand Total		**10174**	**204364**	**994**	**4.864**



Cumulative WNV activity in 2011.



WNV activity to 6 Oct 2012.



WNV activity last week, 2012.

Saint Louis Encephalitis (SLE) through 6 October 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		**273**	**9317**		
	Aedes albopictus	6	107		
	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.	121	4717		
	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		
Salem		**1**	**6**		
	Culex spp.	1	6		
Grand Total		**623**	**20790**		

La Crosse Encephalitis (LAC) through 6 October 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
Burlington		**1**	**39**		
	Aedes triseriatus	1	39		
Cape May		**143**	**266**		
	Aedes taeniorhynchus	1	1		
	Aedes triseriatus	137	258		
	Culex spp.	1	2		
	Orthopodomyia signifera	3	3		
	Psorophora columbiae	1	2		
Cumberland		**8**	**16**		
	Aedes triseriatus	8	16		
Salem		**2**	**3**		
	Aedes triseriatus	2	3		
Union		**1**	**15**		
	Aedes triseriatus	1	15		
Grand Total		**155**	**339**		