RUTGERS
New Jersey Agricultural Experiment Station

# VECTOR SURVEILLANCE IN NEW JERSEY
## EEE and WNV
## CDC WEEK 37: September 07 to September 13, 2008

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Supported by funding from the NJ State Mosquito Control Commission.

## *Culiseta melanura* and Eastern Equine Encephalitis

| SITE | Inland / Coastal | Historic Mean | Current Weekly Mean | Total Collected to Date* | Total Pools Submitted | EEE Isolations | MFIR |
|---|---|---|---|---|---|---|---|
| **Green Bank** (Burlington County) | Coastal | 3.7 | 0.5 | 135 | 28 | | |
| **Corbin City** (Atlantic County) | Coastal | 3.0 | 0.2 | 147 | 49 | | |
| **Dennisville** (Cape May County) | Coastal | 6.5 | 0.7 | 471 | 46 | | |
| **Waterford** (Camden County) | Inland | 2.9 | 0 | 0 | 0 | | |
| **Centerton** (Salem County) | Inland | 3.8 | 0.4 | 245 | 40 | 1 | 4.08 |
| **Turkey Swamp** (Monmouth County) | Inland | 2.5 | 0.3 | 255 | 49 | | |
| **Glassboro** (Gloucester County) | Inland | no history | 0.3 | 42 | 18 | | |

*Including trial run last week in May.

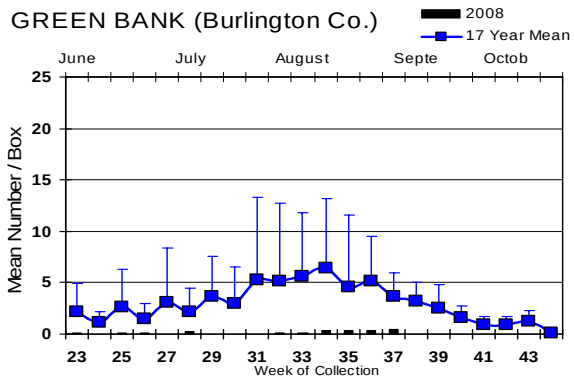
Remarks: Despite low populations of *Culiseta melanura*, eastern equine encephalitis virus was detected in two separate areas last week (additional pool listed next paragraph). A typical season will include detection of virus in at least one mosquito pool and often a horse case (usually with a poor or incomplete vaccination history). Human cases are less likely to occur, but the infrequent epizootic outbreak can produce a dozen or more cases. How do low populations of mosquitoes amplify virus to detection? One possibility is the possible contributions of another amplifying mosquito, *Culex erraticus*. This species appears to be a significant player in the role of EEE transmission and possibly amplification in the southeastern US. Recent years have shown an increase in *Cx. erraticus* populations in southern New Jersey (global warming effects?). Dr. Peter Bosak mentioned that as water levels have been decreasing, pool habitat has been more favorable to *Cx. erraticus* populations (shorter water column to emergent vegetation), contributing to their increase. We recommend that *Cx. erraticus* collected from traps other than resting boxes should be considered for EEE testing in addition to testing for WNV in southern New Jersey.

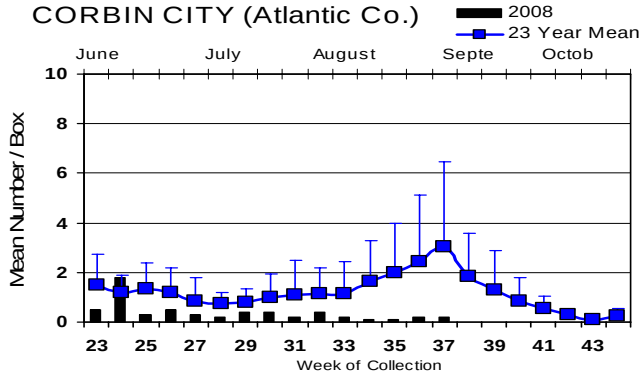
To date, 230 pools from 1295 *Cs. melanura* mosquitoes have been sent for EEE testing from the resting box collections. One EEE positive pool has been detected at the Centerton monitoring site in Salem County. An additional EEE positive pool from Cape May has been detected by the Cape May Mosquito Control Department's lab for a cumulative total of 2 positive pools. No horse or human cases have been reported to date.

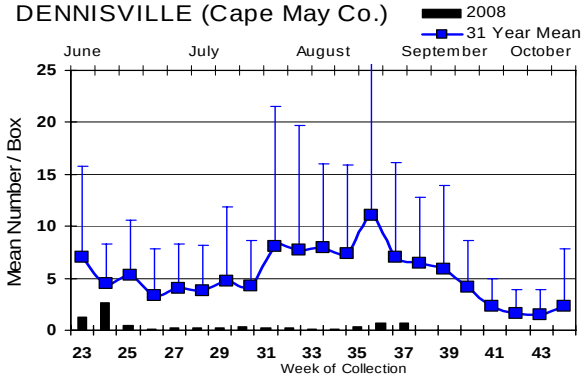
An additional 324 pools of 2852 individual mosquitoes from 31 species other than *Cs. melanura* have also been tested and all pools were found to be negative. These species include: *Aedes albopictus, Ae. canadensis canadensis, Ae. cantator, Ae. cinereus ,Ae. communis, Ae. grossbecki, Ae. japonicus, Ae. sollicitans, Ae. sticticus, Ae. taeniorhynchus, Ae. triseriatus, Ae. trivittatus, Ae. vexans, Anopheles bradleyi, An. crucians, An. punctipennis, An. quadrimaculatus, Coquillettidia perturbans, Culex erraticus, Cx. pipiens, Cx. restuans, Cx., salinarius, Mixed Culex, Cx. territans, Culiseta inornata, Orthopodomyia signifera, Psorophora ciliata, Ps. columbiae, Ps. cyanescens, Ps., ferox, Ps. howardii and Uranotaenia sapphirina.*

# *Culiseta melanura* Population Graphs

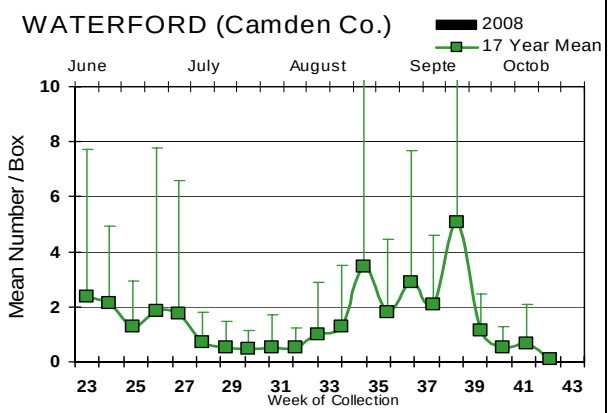
## Coastal

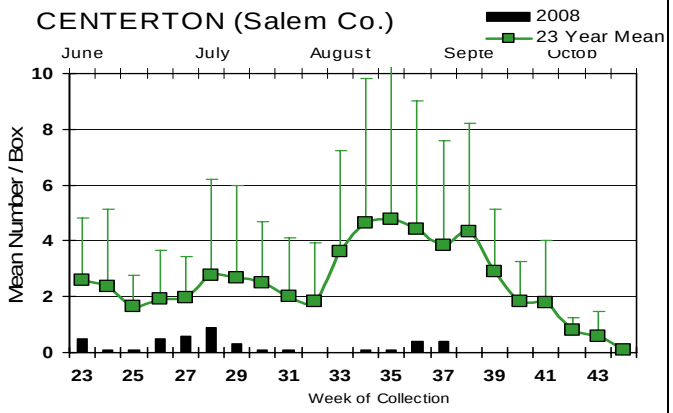


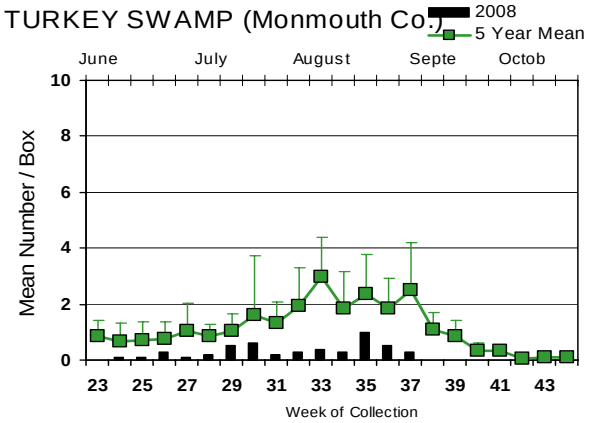




## Inland



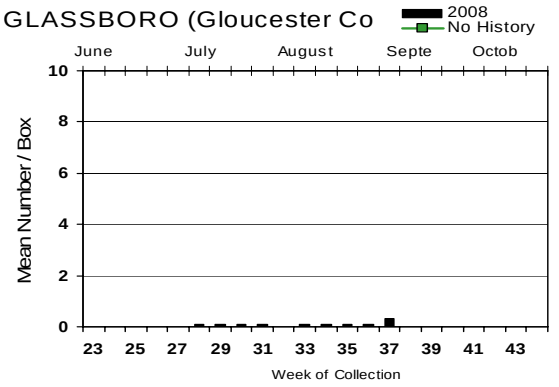




Figures: Inland and coastal resting box sites showing current weekly population levels (in bars) against historical trends (lines with standard deviation). The number of years for historical population levels varies by site.

An additional inland resting box site has been added. This site is located near Glassboro, in Gloucester County. The location is in a wildlife management area, with box location in a mixed forest swamp (Red Maple/White Pine).

*Cs. melanura* populations rose or were maintained from last week at several of the monitoring sites. Turkey Swamp did not increase and Waterford remained at zero.



**EEE in US (2008 cumulative cases)**: (Red = new reported cases occurring)

- equine: 2(AL), 81(FL) 20(GA) 3(LA) 6(MS) 6(NC) 1(NH) 3(SC) 1(TN) 1(WI)
- mosquito: 1(AR) 3(FL) 2(GA) 2(LA) 4(MA) 2(NJ) 2(MD) 4(VA)
- sentinel: 3(AL) 83(FL68 wild) 2/emu(NC) emu(NH) 2(VA)
- human: 1(AL) 1(FL)

# West Nile Virus

**West Nile in US (2008 cumulative cases)**: Single black values indicate no change from previous week. Black values / red values equals previous week/New totals. ? denotes probable cases.

| | Birds | Mosquito Pools | Sentinels | Horses | Humans |
|---|---|---|---|---|---|
| Alabama | | | | 1 | 3/7 |
| Alaska | | | | | |
| Arizona | 3 | 133/145 | 33/39 | | 16/29 |
| Arkansas | | 15 | | 1 | 7 |
| California | 1658/1813 | 1518/1628 | 173/196 | 8/15 | 157/198 |
| Colorado | 3/4 | 43/55 | | | 40/62 |
| Connecticut | | 147/164 | | | 2 |
| Delaware | | | + | | |
| Florida | 3? live | | 4 | 1 | 1 |
| Georgia | | 8 | | | |
| Hawaii | | | | | |
| Idaho | 2/3 | 6/7 counties | | 1 | 24/32 |
| Illinois | 15 | 336/459 | | 1 | 5 |
| Indiana | 1/3 | 66/87 | | | 1 |
| Iowa | | 4 | 2 | 2/3 | 6/7 |
| Kansas | | | | | 7/12 |
| Kentucky | 1 | 3/4 | | | |
| Louisiana | | 600 | 9 | 1 | 7 |
| Maine | | | | | |
| Maryland | | 3/5 | | | 2/6 ? |
| Mass. | 46/50 | 90/116 | | | |
| Michigan | 3 | 1 | | | 2 |
| Minnesota | 7 | 10/18 | | | 15/17 |
| Mississippi | | 3 | | 2/3 | 78/84 |
| Missouri | 29 | 184/191 | | 1 | 5/8 |
| Montana | | 5 | | 3/4 | 4 |
| Nebraska | 5 | 67/78 | | 1 | 23/25 |

| | Birds | Mosquito Pools | Sentinels | Horses | Humans |
|---|---|---|---|---|---|
| Nevada | 2/3 | 31/31 | | 1/2 | 10/12 |
| New Hampshire | | 1 | | | |
| New Jersey | 31/34 | 442/477 | | | 2 |
| New Mexico | | 3 | | 1 | 3 |
| New York | 77/89 | 264/297 | | 1 | 13/16 |
| North Carolina | | | | 1 | |
| North Dakota | | | | 1 | 34/36 |
| Ohio | 7 | 129/134 | | | 2 |
| Oklahoma | | 12 | | | 6/8 |
| Oregon | 1 | 12/16 | | | 4 |
| Pennsylvania | 12 | 390/440 | | | 5 |
| Rhode Island | | 1/3 | | | |
| South Carolina | 3 | 5 | | | |
| South Dakota | 1 | 38 | | 3 | 28/34 |
| Tennessee | | 163/523 | | | 8 |
| Texas | 1 | 90/100 | | 1 | 23/34 |
| Utah | 2 | 117/129 | 2/11 | 2/3 | 14/18 |
| Vermont | | | | | |
| Virginia | | 484/571 | 1 | | |
| Washington | 4/6 | 23/41 | | 17/22 | |
| West Virginia | 2 | 10 | | 2 | 1 |
| Wisconsin | 23/27 | | | 2/3 | 3 |
| Wyoming | 1 | 10/14 | | 1 | 2/8 |

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found here.

**Protocol:** New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) tests mosquito pools using RT-PCR Taqman techniques.

**Mosquito Species Submitted for West Nile Virus Testing through 15 September 2008**

| Species | Pools | Mosquitoes | Positives | MFIR |
|---|---|---|---|---|
| *Aedes abserratus* | 1 | 9 | | |
| *Aedes albopictus* | 726 | 6972 | 2 | 0.29 |
| *Aedes atlanticus* | 1 | 4 | | |
| *Aedes atropalpus* | 1 | 1 | | |
| *Aedes canadensis canadensis* | 56 | 1243 | | |
| *Aedes cantator* | 25 | 359 | | |
| *Aedes cinereus* | 3 | 5 | | |
| *Aedes communis* | 1 | 1 | | |
| *Aedes grossbecki* | 3 | 4 | | |
| *Aedes japonicus* | 317 | 1599 | 1 | 0.63 |
| *Aedes sollicitans* | 23 | 246 | | |
| *Aedes sticticus* | 6 | 86 | | |
| *Aedes stimulans* | 1 | 1 | | |

| | | | | |
|---|---|---|---|---|
| *Aedes taeniorhynchus* | 18 | 284 | | |
| *Aedes thibaulti* | 5 | 13 | | |
| *Aedes triseriatus* | 164 | 447 | | |
| *Aedes trivittatus* | 11 | 58 | | |
| *Aedes vexans* | 183 | 2847 | | |
| *Anopheles barberi* | 3 | 3 | | |
| *Anopheles bradleyi* | 47 | 857 | | |
| *Anopheles crucians* | 6 | 7 | | |
| *Anopheles earlei* | 1 | 1 | | |
| *Anopheles punctipennis* | 120 | 734 | | |
| *Anopheles quadrimaculatus* | 107 | 1406 | | |
| *Coquillettidia perturbans* | 92 | 910 | | |
| *Culex erraticus* | 70 | 405 | | |
| *Culex pipiens* | 587 | 14425 | 81 | 5.62 |
| *Culex restuans* | 257 | 3762 | 1 | 0.27 |
| *Culex salinarius* | 181 | 6238 | 2 | 0.32 |
| *Culex spp.* | 2261 | 88746 | 390 | 4.39 |
| *Culex territans* | 55 | 184 | | |
| *Culiseta inornata* | 2 | 4 | | |
| *Culiseta melanura* | 262 | 1517 | | |
| *Orthopodomyia signifera* | 11 | 20 | | |
| *Psorophora ciliata* | 7 | 51 | | |
| *Psorophora columbiae* | 21 | 70 | | |
| *Psorophora cyanescens* | 1 | 1 | | |
| *Psorophora ferox* | 24 | 129 | | |
| *Psorophora howardii* | 4 | 11 | | |
| *Uranotaenia sapphirina* | 17 | 78 | | |
| **Grand Total** | 5682 | 133739 | 477 | 3.57 |

**Remarks:** Submitted pools (5,681) comprised of 133,738 individual mosquitoes produced 477 positive pools from 17 different counties.

**Humans, Horses and Wild Birds:** PHEL reported two human cases: one 73 year old male (onset 22 Aug) from Burlington County and one 65 year old male (onset 10 Aug) from Middlesex County. For more details, see the PHEL's summary sheet: http://www.state.nj.us/health/cd/westnile/documents/wnv_summary_sep12_08.pdf

To date, there have been 137 dead birds submitted for West Nile virus testing with 34 positives Last year, there were 27 positive birds from 159 submissions to this point in time.

| 2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted | This time last year |
|---|---|
| 477 / 6,107 | 281 / 5,116 |

**WNV Results by County through 15 September 2008**

| County | Species | Pools | Mosquitoes | Positives | MFIR |
|---|---|---|---|---|---|
| **Atlantic** | | **247** | **5146** | **7** | **1.36** |
| | *Aedes albopictus* | 30 | 711 | | |
| | *Aedes canadensis canadensis* | 3 | 12 | | |
| | *Aedes cantator* | 2 | 16 | | |
| | *Aedes japonicus* | 5 | 6 | | |
| | *Aedes sollicitans* | 5 | 84 | | |
| | *Aedes taeniorhynchus* | 12 | 260 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Aedes thibaulti* | 6 | 15 | | |
| | *Aedes triseriatus* | 12 | 228 | | |
| | *Aedes vexans* | 4 | 8 | | |
| | *Anopheles bradleyi* | 7 | 29 | | |
| | *Anopheles punctipennis* | 3 | 3 | | |
| | *Anopheles quadrimaculatus* | 1 | 1 | | |
| | *Coquillettidia perturbans* | 5 | 42 | | |
| | *Culex erraticus* | 5 | 100 | | |
| | *Culex pipiens* | 1 | 17 | | |
| | *Culex restuans* | 10 | 353 | | |
| | *Culex salinarius* | 3 | 3 | | |
| | *Culex sp.* | 70 | 3072 | 7 | 2.28 |
| | *Culex territans* | 9 | 22 | | |
| | *Culiseta melanura* | 50 | 149 | | |
| | *Orthopodomyia signifera* | 2 | 2 | | |
| | *Psorophora ferox* | 2 | 13 | | |
| **Bergen** | | **486** | **22551** | **119** | **5.28** |
| | *Aedes albopictus* | 23 | 118 | | |
| | *Aedes canadensis candensis* | 1 | 6 | | |
| | *Aedes japonicus* | 25 | 150 | | |
| | *Aedes sollicitans* | 1 | 1 | | |
| | *Aedes triseriatus* | 11 | 39 | | |
| | *Aedes vexans* | 14 | 85 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles bradleyi* | 2 | 4 | | |
| | *Anopheles punctipennis* | 4 | 31 | | |
| | *Coquillettidia perturbans* | 22 | 171 | | |
| | *Culex pipiens* | 79 | 2873 | 14 | 4.87 |
| | *Culex restuans* | 30 | 317 | | |
| | *Culex salinarius* | 83 | 4793 | 1 | 0.21 |
| | *Culex spp.* | 188 | 13960 | 104 | 7.45 |
| | *Culex territans* | 1 | 1 | | |
| | *Orthopodomyia signifera* | 1 | 1 | | |
| **Burlington** | | **353** | **2997** | | |
| | *Aedes albopictus* | 33 | 476 | | |
| | *Aedes canadensis canadensis* | 21 | 598 | | |
| | *Aedes cantator* | 4 | 148 | | |
| | *Aedes cinereus* | 1 | 3 | | |
| | *Aedes grossbecki* | 1 | 1 | | |
| | *Aedes japonicus* | 17 | 56 | | |
| | *Aedes sollicitans* | 1 | 18 | | |
| | *Aedes sticticus* | 2 | 5 | | |
| | *Aedes taeniorhynchus* | 1 | 2 | | |
| | *Aedes triseriatus* | 14 | 41 | | |
| | *Aedes trivittatus* | 1 | 2 | | |
| | *Aedes vexans* | 43 | 419 | | |
| | *Anopheles bradleyi* | 2 | 6 | | |
| | *Anopheles crucians* | 6 | 7 | | |
| | *Anopheles punctipennis* | 17 | 40 | | |
| | *Anopheles quadrimaculatus* | 12 | 22 | | |
| | *Coquillettidia perturbans* | 21 | 236 | | |
| | *Culex erraticus* | 5 | 14 | | |
| | *Culex pipiens* | 3 | 20 | | |
| | *Culex restuans* | 5 | 29 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Culex salinarius* | 3 | 3 | | |
| | *Culex sp.* | 59 | 553 | | |
| | *Culex territans* | 7 | 13 | | |
| | *Culiseta inornata* | 1 | 3 | | |
| | *Culiseta melanura* | 44 | 218 | | |
| | *Orthopodomyia signifera* | 3 | 11 | | |
| | *Psorophora ciliata* | 4 | 7 | | |
| | *Psorophora columbiae* | 9 | 27 | | |
| | *Psorophora cyanescens* | 1 | 1 | | |
| | *Psorophora ferox* | 4 | 5 | | |
| | *Psorophora howardii* | 1 | 3 | | |
| | *Uranotaenia sapphirina* | 7 | 10 | | |
| **Camden** | | **171** | **3088** | **12** | **3.89** |
| | *Aedes albopictus* | 36 | 287 | | |
| | *Aedes canadensis canadensis* | 1 | 19 | | |
| | *Aedes cantator* | 1 | 22 | | |
| | *Aedes japonicus* | 14 | 31 | | |
| | *Aedes triseriatus* | 2 | 2 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 7 | 144 | | |
| | *Anopheles punctipennis* | 7 | 31 | | |
| | *Anopheles quadrimaculatus* | 7 | 12 | | |
| | *Coquillettidia perturbans* | 4 | 16 | | |
| | *Culex erraticus* | 2 | 8 | | |
| | *Culex pipiens* | 13 | 530 | | |
| | *Culex restuans* | 19 | 519 | | |
| | *Culex salinarius* | 4 | 15 | | |
| | *Culex sp.* | 49 | 1446 | 12 | 8.30 |
| | *Culiseta melanura* | 1 | 1 | | |
| | *Orthopodomyia signifera* | 2 | 3 | | |
| | *Psorophora columbiae* | 1 | 1 | | |
| **Cape_May** | | **290** | **4962** | | |
| | *Aedes albopictus* | 3 | 7 | | |
| | *Aedes canadensis canadensis* | 4 | 71 | | |
| | *Aedes cantator* | 8 | 82 | | |
| | *Aedes japonicus* | 6 | 15 | | |
| | *Aedes sollicitans* | 3 | 81 | | |
| | *Aedes taeniorhynchus* | 2 | 8 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Aedes vexans* | 2 | 13 | | |
| | *Anopheles bradleyi* | 19 | 527 | | |
| | *Anopheles punctipennis* | 8 | 103 | | |
| | *Anopheles quadrimaculatus* | 17 | 559 | | |
| | *Coquillettidia perturbans* | 4 | 28 | | |
| | *Culex erraticus* | 5 | 18 | | |
| | *Culex pipiens* | 60 | 1225 | | |
| | *Culex restuans* | 66 | 1011 | | |
| | *Culex salinarius* | 12 | 426 | | |
| | *Culex sp.* | 23 | 335 | | |
| | *Culex territans* | 3 | 11 | | |
| | *Culiseta melanura* | 44 | 441 | | |
| **Cumberland** | | **185** | **1990** | **6** | **3.02** |
| | *Aedes albopictus* | 34 | 128 | | |

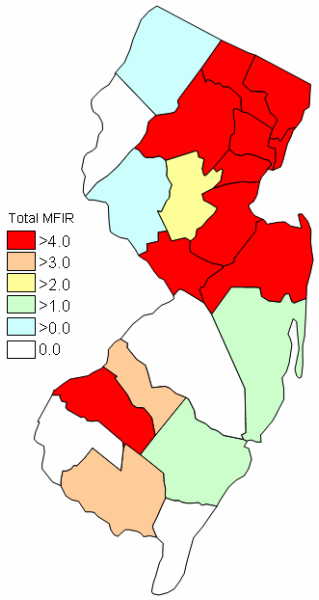
| | | | | | |
|---|---|---|---|---|---|
| | *Aedes japonicus* | 15 | 37 | | |
| | *Aedes triseriatus* | 8 | 12 | | |
| | *Aedes vexans* | 3 | 38 | | |
| | *Anopheles bradleyi* | 1 | 1 | | |
| | *Anopheles punctipennis* | 4 | 10 | | |
| | *Anopheles quadrimaculatus* | 1 | 1 | | |
| | *Coquillettidia perturbans* | 1 | 1 | | |
| | *Culex erraticus* | 12 | 39 | | |
| | *Culex pipiens* | 16 | 175 | 2 | 11.43 |
| | *Culex restuans* | 5 | 72 | 1 | 13.89 |
| | *Culex salinarius* | 2 | 2 | | |
| | *Culex spp.* | 73 | 1383 | 3 | 2.17 |
| | *Culex territans* | 2 | 5 | | |
| | *Culiseta melanura* | 4 | 81 | | |
| | *Psorophora columbiae* | 1 | 2 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Psorophora howardii* | 1 | 1 | | |
| | *Uranotaenia sapphirina* | 1 | 1 | | |
| **Essex** | | **267** | **3645** | **30** | **8.23** |
| | *Aedes albopictus* | 71 | 465 | | |
| | *Aedes japonicus* | 20 | 77 | 1 | 12.99 |
| | *Aedes triseriatus* | 19 | 33 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 10 | 38 | | |
| | *Anopheles punctipennis* | 5 | 5 | | |
| | *Anopheles quadrimaculatus* | 4 | 11 | | |
| | *Coquillettidia perturbans* | 2 | 2 | | |
| | *Culex pipiens* | 1 | 75 | 1 | 13.33 |
| | *Culex restuans* | 1 | 14 | | |
| | *Culex spp.* | 126 | 2913 | 28 | 9.61 |
| | *Culex territans* | 6 | 10 | | |
| | *Psorophora columbiae* | 1 | 1 | | |
| **Gloucester** | | **470** | **9159** | **39** | **4.26** |
| | *Aedes abserratus* | 1 | 9 | | |
| | *Aedes albopictus* | 49 | 399 | | |
| | *Aedes canadensis canadensis* | 7 | 245 | | |
| | *Aedes communis* | 1 | 1 | | |
| | *Aedes japonicus* | 22 | 119 | | |
| | *Aedes sollicitans* | 1 | 2 | | |
| | *Aedes thibaulti* | 1 | 5 | | |
| | *Aedes triseriatus* | 6 | 16 | | |
| | *Aedes vexans* | 8 | 259 | | |
| | *Anopheles bradleyi* | 4 | 86 | | |
| | *Anopheles earlei* | 1 | 1 | | |
| | *Anopheles punctipennis* | 17 | 63 | | |
| | *Anopheles quadrimaculatus* | 20 | 43 | | |
| | *Coquillettidia perturbans* | 7 | 37 | | |
| | *Culex erraticus* | 3 | 39 | | |
| | *Culex pipiens* | 257 | 7043 | 39 | 5.54 |
| | *Culex restuans* | 17 | 584 | | |
| | *Culex salinarius* | 6 | 34 | | |
| | *Culex territans* | 7 | 49 | | |
| | *Culiseta melanura* | 29 | 91 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Psorophora ferox* | 3 | 9 | | |
| | *Uranotaenia sapphirina* | 3 | 25 | | |
| **Hudson** | | **155** | **7696** | **54** | **7.02** |
| | *Culex spp.* | 155 | 7696 | 54 | 7.02 |
| **Hunterdon** | | **210** | **10000** | **3** | **0.30** |
| | *Aedes albopictus* | 3 | 23 | | |
| | *Aedes japonicus* | 1 | 6 | | |
| | *Aedes trivittatus* | 1 | 18 | | |
| | *Aedes vexans* | 2 | 55 | | |
| | *Anopheles punctipennis* | 1 | 50 | | |
| | *Anopheles quadrimaculatus* | 2 | 25 | | |
| | *Culex erraticus* | 1 | 10 | | |
| | *Culex spp.* | 198 | 9812 | 3 | 0.31 |
| | *Culiseta inornata* | 1 | 1 | | |
| **Mercer** | | **377** | **3849** | **28** | **7.27** |
| | *Aedes albopictus* | 159 | 1622 | 1 | 0.62 |
| | *Aedes atropalpus* | 53 | 95 | | |
| | *Aedes japonicus* | 21 | 41 | | |
| | *Aedes stimulans* | 3 | 13 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Aedes vexans* | 1 | 1 | | |
| | *Culex erraticus* | 15 | 43 | | |
| | *Culex pipiens* | 68 | 1473 | 23 | 15.61 |
| | *Culex restuans* | 30 | 127 | | |
| | *Culex salinarius* | 12 | 161 | | |
| | *Culex spp.* | 11 | 267 | 4 | 14.98 |
| | *Culex territans* | 1 | 1 | | |
| | *Orthopodomyia signifera* | 1 | 1 | | |
| | *Psorophora columbiae* | 1 | 3 | | |
| **Middlesex** | | **294** | **7118** | **42** | **5.90** |
| | *Aedes albopictus* | 28 | 276 | | |
| | *Aedes japonicus* | 11 | 52 | | |
| | *Aedes triseriatus* | 4 | 16 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 21 | 512 | | |
| | *Culex erraticus* | 1 | 1 | | |
| | *Culex pipiens* | 22 | 214 | 1 | 4.67 |
| | *Culex restuans* | 10 | 135 | | |
| | *Culex salinarius* | 14 | 324 | 1 | 3.09 |
| | *Culex spp.* | 171 | 5517 | 40 | 7.25 |
| | *Culex territans* | 3 | 10 | | |
| | *Psorophora ciliata* | 3 | 44 | | |
| | *Psorophora columbiae* | 1 | 4 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Psorophora howardii* | 1 | 3 | | |
| | *Uranotaenia sapphirina* | 2 | 8 | | |
| **Monmouth** | | **419** | **4740** | **24** | **5.06** |
| | *Aedes albopictus* | 73 | 450 | | |
| | *Aedes canadensis canadensis* | 3 | 18 | | |
| | *Aedes cantator* | 4 | 5 | | |

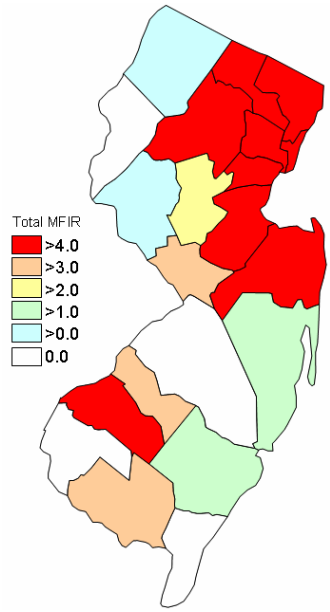
| | | | | | |
|---|---|---|---|---|---|
| | *Aedes japonicus* | 16 | 28 | | |
| | *Aedes sollicitans* | 8 | 36 | | |
| | *Aedes taeniorhynchus* | 3 | 14 | | |
| | *Aedes triseriatus* | 7 | 14 | | |
| | *Aedes trivittatus* | 2 | 3 | | |
| | *Aedes vexans* | 18 | 110 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles punctipennis* | 10 | 13 | | |
| | *Anopheles quadrimaculatus* | 5 | 6 | | |
| | *Coquillettidia perturbans* | 4 | 5 | | |
| | *Culex erraticus* | 4 | 31 | | |
| | *Culex pipiens* | 46 | 475 | | |
| | *Culex restuans* | 33 | 218 | | |
| | *Culex salinarius* | 12 | 36 | | |
| | *Culex spp.* | 120 | 3020 | 24 | 7.95 |
| | *Culex territans* | 8 | 40 | | |
| | *Culiseta melanura* | 42 | 217 | | |
| **Morris** | | **195** | **66729** | **30** | **4.46** |
| | *Aedes japonicus* | 4 | 25 | | |
| | *Aedes triseriatus* | 1 | 3 | | |
| | *Coquillettidia perturbans* | 1 | 50 | | |
| | *Culex spp.* | 188 | 6647 | 30 | 4.51 |
| **Ocean** | | **292** | **5326** | **10** | **1.88** |
| | *Aedes albopictus* | 79 | 1259 | 1 | 0.79 |
| | *Aedes canadensis canadensis* | 6 | 80 | | |
| | *Aedes cantator* | 1 | 9 | | |
| | *Aedes japonicus* | 20 | 45 | | |
| | *Aedes sollicitans* | 3 | 23 | | |
| | *Aedes triseriatus* | 10 | 22 | | |
| | *Aedes vexans* | 12 | 45 | | |
| | *Anopheles bradleyi* | 2 | 2 | | |
| | *Anopheles punctipennis* | 6 | 10 | | |
| | *Anopheles quadrimaculatus* | 2 | 2 | | |
| | *Coquillettidia perturbans* | 4 | 15 | | |
| | *Culex pipiens* | 8 | 248 | 1 | 4.03 |
| | *Culex restuans* | 15 | 245 | | |
| | *Culex salinarius* | 13 | 92 | | |
| | *Culex sp.* | 95 | 3129 | 8 | 2.56 |
| | *Culex territans* | 1 | 1 | | |
| | *Culiseta melanura* | 10 | 84 | | |
| | *Psorophora ferox* | 5 | 15 | | |
| **Passaic** | | **97** | **3433** | **28** | **8.16** |
| | *Aedes albopictus* | 9 | 61 | | |
| | *Aedes japonicus* | 7 | 86 | | |
| | *Aedes triseriatus* | 1 | 2 | | |
| | *Anopheles punctipennis* | 1 | 5 | | |
| | *Culex spp.* | 79 | 3279 | 28 | 8.54 |
| **Salem** | | **303** | **3760** | | |
| | *Aedes albopictus* | 25 | 92 | | |
| | *Aedes atlanticus* | 7 | 181 | | |
| | *Aedes canadensis canadensis* | 5 | 77 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Aedes cantator* | 2 | 3 | | |
| | *Aedes grossbecki* | 11 | 27 | | |
| | *Aedes japonicus* | 1 | 1 | | |
| | *Aedes sollicitans* | 3 | 80 | | |
| | *Aedes sticticus* | 13 | 29 | | |
| | *Aedes triseriatus* | 17 | 839 | | |
| | *Aedes vexans* | 1 | 4 | | |
| | *Anopheles bradleyi* | 10 | 202 | | |
| | *Anopheles punctipennis* | 26 | 349 | | |
| | *Anopheles quadrimaculatus* | 32 | 720 | | |
| | *Coquillettidia perturbans* | 8 | 92 | | |
| | *Culex erraticus* | 17 | 102 | | |
| | *Culex pipiens* | 9 | 31 | | |
| | *Culex restuans* | 9 | 21 | | |
| | *Culex salinarius* | 16 | 345 | | |
| | *Culex spp.* | 33 | 190 | | |
| | *Culex territans* | 7 | 21 | | |
| | *Culiseta melanura* | 38 | 235 | | |
| | *Psorophora columbiae* | 4 | 27 | | |
| | *Psorophora ferox* | 6 | 83 | | |
| | *Psorophora howardii* | 1 | 4 | | |
| | *Uranotaenia sapphirina* | 2 | 5 | | |
| **Somerset** | | **214** | **3592** | **12** | **3.34** |
| | *Aedes albopictus* | 13 | 52 | | |
| | *Aedes canadensis canadensis* | 1 | 2 | | |
| | *Aedes japonicus* | 35 | 285 | | |
| | *Aedes triseriatus* | 32 | 136 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles punctipennis* | 6 | 7 | | |
| | *Anopheles quadrimaculatus* | 3 | 3 | | |
| | *Culex pipiens* | 2 | 22 | | |
| | *Culex restuans* | 2 | 19 | | |
| | *Culex spp.* | 117 | 3063 | 12 | 3.92 |
| | *Orthopodomyia signifera* | 2 | 2 | | |
| **Sussex** | | **278** | **10888** | **4** | **0.37** |
| | *Aedes canadensis canadensis* | 2 | 11 | | |
| | *Aedes cinereus* | 2 | 2 | | |
| | *Aedes japonicus* | 26 | 399 | | |
| | *Aedes sticticus* | 1 | 1 | | |
| | *Aedes triseriatus* | 6 | 23 | | |
| | *Aedes trivittatus* | 4 | 32 | | |
| | *Aedes vexans* | 4 | 32 | | |
| | *Anopheles punctipennis* | 3 | 8 | | |
| | *Anopheles quadrimaculatus* | 1 | 1 | | |
| | *Coquillettidia perturbans* | 9 | 215 | | |
| | *Culex pipiens* | 2 | 4 | | |
| | *Culex restuans* | 4 | 96 | | |
| | *Culex salinarius* | 1 | 4 | | |
| | *Culex spp.* | 210 | 10030 | 4 | 0.40 |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Uranotaenia sapphirina* | 2 | 29 | | |
| **Union** | | **174** | **4102** | **29** | **7.07** |

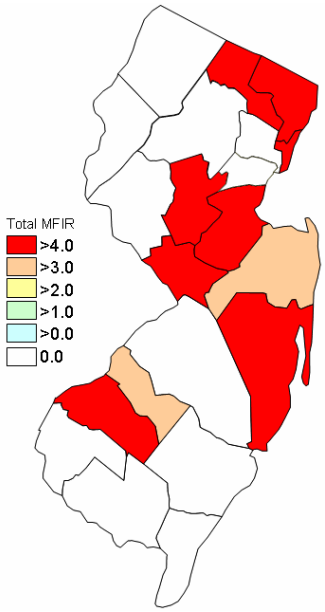
| | | | | | |
|---|---|---|---|---|---|
| | *Aedes albopictus* | 58 | 546 | | |
| | *Aedes japonicus* | 7 | 11 | | |
| | *Aedes triseriatus* | 2 | 2 | | |
| | *Aedes vexans* | 7 | 17 | | |
| | *Anopheles punctipennis* | 1 | 2 | | |
| | *Culex restuans* | 1 | 2 | | |
| | *Culex spp.* | 94 | 3516 | 29 | 8.25 |
| | *Psorophora columbiae* | 3 | 5 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| **Warren** | | **204** | **8967** | | |
| | *Aedes japonicus* | 2 | 49 | | |
| | *Culex spp.* | 202 | 8918 | | |
| **Grand Total** | | **5681** | **133738** | **477** | **3.57** |




Cumulative activity to last week




Cumulative activity to this week




Recent Activity 8/31 to 9/13)

**RAMP (Rapid Analyte Measurement Platform)**. More than half of the counties in New Jersey are incorporating the use of RAMP results in their vector surveillance programs. Counties participate with the PHEL Lab in monitoring the efficacy and sensitivity of the RAMP results by sending in samples to be confirmed. Note that not all samples done by the counties are sent in to PHEL and therefore the number of pools submitted can differ from the number of pools reported by the counties.

Note: PHEL reported additional positive RAMP pools for data not currently in the database. This table will be updated to include those positives when the database is up to date.

**RAMP Results for 15 September 2008**

| County | Species | Pools | Mosquitoes | Positives | PHEL (pools submitted/+/-) |
|---|---|---|---|---|---|
| **Monmouth** | | **75** | **671** | | |
| | *Aedes albopictus* | 4 | 11 | | |
| | *Aedes canadensis* | 8 | 38 | | |
| | *Aedes cantator* | 3 | 13 | | |
| | *Aedes japonicus* | 11 | 42 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Anopheles punctipennis* | 3 | 6 | | |
| | *Coquillettidia perturbans* | 1 | 1 | | |
| | *Culex spp.* | 2 | 2 | | |
| | *Culiseta melanura* | 1 | 1 | | |
| **Warren** | | **51** | **1968** | | |
| | *Aedes japonicus* | 3 | 33 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Aedes vexans* | 1 | 2 | | |
| | *Culex restuans* | 1 | 4 | | |
| | *Culex spp.* | 45 | 1928 | **2** | **9/0/2** |