

Vermont Arbovirus Surveillance Weekly Report

Vermont Department of Health

Division of Health Surveillance

Test Summaries

MMWR Week 30 (7/26/2015 – 8/1/2015)

Mosquitoes

| MMWR Week | Pools Tested | EEE Positive | WNV Positive |
|-----------|--------------|--------------|--------------|
| 30 | 282 | 0 | 3 |
| YTD | 1581 | 0 | 3 |

*A mosquito pool is a group of 1-50 mosquitoes of the same species, collected at the same trap location, on the same date.

- Mosquito collections started on June 4th this year, and testing began the week of June 14th.
- Mosquito batches have been submitted from all 14 counties in Vermont. In total, 11 different mosquito species have been collected and tested for WNV and EEE, including: *Aedes cinereus*, *Aedes vexans*, *Anopheles punctipennis*, *Anopheles quadrimaculatus*, *Coquillettidia perturbans*, *Culiseta melanura*, *Culiseta morsitans*, *Culex pipiens/restuans*, *Ochlerotatus canadensis*, *Ochlerotatus japonicus*, and *Ochlerotatus trivittatus*.
- The data in the above table includes the number of pools that have been tested and the results finalized.
- Three mosquito pools collected from Springfield on July 22nd tested positive for West Nile Virus (WNV) on July 30th.

Summary of Positive Results

| Town | Number of Pools | Date Collected | Mosquito Species | Virus |
|-------------|-----------------|----------------|---|-------|
| Springfield | 3 | 7/22 | <i>Culex restauns/pipiens</i> & <i>Ochlerotatus japonicus</i> | WNV |

Risk Assessment

West Nile virus: No part of the state appears to be at higher risk for WNV infection. Over the years, WNV activity has been detected in all counties of Vermont in birds, mosquitoes, people and/or animals. The risk for WNV appears to be low but widespread in the state.

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Eastern equine encephalitis: Two areas of the state are at moderate risk based on detections of the EEE virus in the past few years. These areas are western Franklin county and northern Rutland/southern Addison counties. For more details, see the risk maps at <http://healthvermont.gov/prevent/arbovirus/surveillance/index.aspx>. EEE virus was found in 8 mosquito pools in 2014. The EEE positive pools were collected from Colchester, Cornwall, Grand Isle, Swanton, and Whiting. One mosquito pool tested positive for EEE from Milton in 2013. This suggests that the EEE virus is widespread in Vermont, although so far it has only caused human or animal illnesses in Franklin, Rutland and Addison counties.

Recommendations

All Vermonters should take steps to prevent mosquito bites:

- Limit time outside when mosquitoes are most active which is usually from dusk to dawn.
- Wear long-sleeved shirts and long pants outside when mosquitoes are active.
- Use insect repellents that are labeled as being effective against mosquitoes.
 - Effective ingredients include DEET, picaridin, oil of lemon eucalyptus and IR3535.
Always use repellents according to the instructions on the label.
- Cover baby carriages or outdoor play spaces with mosquito netting.
- Fix any holes in the screens in your house and make sure they are tightly attached to the doors and windows.
- Reduce standing water around your home.
- Empty and refill containers such as water troughs and bird baths every 2 to 3 days to stop mosquitoes from breeding in them.

In addition, horses and other susceptible species should be vaccinated against EEE and WNV. People should consult their veterinarians about these vaccinations and the use of appropriate repellents for their animals.

For more information see: <http://healthvermont.gov/prevent/arbovirus/resources.aspx>

This table shows how many pools (batches) of mosquitoes from each town have been submitted for testing at the time of this report.

| Towns | Number of pools collected by week ¹ | | | | | | | | | Grand Total |
|-------------|--|----------|-----------|-----------|----------|----------|-----------|-----------|----------|-------------|
| | 5/31-6/6 | 6/7-6/13 | 6/14-6/20 | 6/21-6/27 | 6/28-7/4 | 7/5-7/11 | 7/12-7/18 | 7/19-7/25 | 7/26-8/1 | |
| Addison | | | | | | 19 | 1 | 7 | | 27 |
| Alburg | | 2 | 6 | 1 | | 5 | 29 | 4 | 20 | 67 |
| Barton | | | | | 2 | 1 | 2 | 1 | | 6 |
| Bennington | | 12 | 11 | 3 | 5 | 3 | 7 | 3 | | 44 |
| Benson | | | 1 | 1 | 8 | | 1 | | 2 | 13 |
| Berkshire | | 1 | 1 | 7 | 2 | 8 | 3 | 7 | 2 | 31 |
| Brandon | 7 | 3 | 7 | 6 | 5 | 14 | 5 | 9 | 6 | 62 |
| Brattleboro | | 2 | 4 | 4 | 7 | 2 | 2 | 2 | | 23 |
| Brighton | | | | 2 | | 6 | 1 | 3 | | 12 |
| Brookfield | | | | | | | | 1 | | 1 |
| Burke | | 1 | 2 | | | 2 | 1 | | | 6 |
| Burlington | 2 | 2 | | | 13 | 7 | 16 | 4 | 16 | 60 |
| Cambridge | | | | | 8 | | 8 | | 3 | 19 |
| Castleton | | 5 | 4 | 2 | 1 | 5 | 4 | | 1 | 22 |
| Charlotte | | 1 | | | 8 | 5 | 5 | 3 | 1 | 23 |
| Colchester | | 3 | 1 | 2 | 2 | 9 | 4 | 8 | 1 | 30 |
| Concord | 1 | | 1 | | 2 | 1 | 1 | | | 6 |
| Cornwall | 6 | 2 | 4 | 11 | 2 | 8 | 3 | 6 | 4 | 46 |
| Danby | | | | 3 | | 5 | | 5 | | 13 |
| Derby | 2 | 2 | 4 | 3 | 2 | 8 | 2 | 2 | | 25 |
| Eden | | | 1 | | 1 | | 4 | 1 | 2 | 9 |
| Enosburg | | | | 5 | 3 | 9 | 1 | 5 | | 23 |
| Fair Haven | | 3 | 1 | 3 | 4 | 1 | 4 | 2 | 1 | 19 |
| Fairfax | | | 1 | | | 4 | | 1 | 1 | 7 |
| Ferdinand | | 1 | 1 | 2 | 1 | 4 | 2 | 3 | | 14 |
| Ferrisburgh | 2 | | | | 14 | 12 | 4 | 10 | 3 | 45 |
| Grand Isle | | 6 | 7 | | | | 11 | 2 | 9 | 35 |
| Groton | | | | | | | | 2 | | 2 |
| Hartford | | | | | | | 8 | 9 | 12 | 29 |
| Highgate | | 4 | 2 | | 1 | 4 | 6 | 11 | 7 | 35 |
| Hyde Park | | | | 1 | 2 | | 4 | 1 | 2 | 10 |
| Jay | | | | 4 | | 3 | | 2 | | 9 |
| Killington | | | | | | 3 | 1 | 3 | 1 | 8 |
| Leicester | 1 | 4 | 9 | 6 | 17 | 8 | 7 | 6 | 4 | 62 |
| Londonderry | | 2 | 1 | 2 | | 2 | | | | 7 |
| Lowell | | | | | 2 | | 3 | 1 | 5 | 11 |

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| | | | | | | | | | | |
|--------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| Lunenburg | | | | 1 | | 2 | 1 | 1 | | 5 |
| Manchester | | 2 | 3 | 2 | | 2 | 1 | 1 | | 11 |
| Marshfield | | | | | | | 1 | | | 1 |
| Milton | | 8 | 4 | | 2 | 6 | 7 | 4 | 15 | 46 |
| Montpelier | | 3 | | | | | | | | 3 |
| Morrisville | | | 1 | 1 | 7 | 1 | 4 | 2 | 4 | 20 |
| New Haven | 5 | 1 | 3 | 6 | 1 | 5 | 1 | 4 | 2 | 28 |
| Newbury | | 1 | | | | | | 1 | | 2 |
| Newport City | 2 | 2 | 1 | 2 | 3 | 6 | 8 | 2 | | 26 |
| Pittsford | | | | | 2 | 2 | 3 | 1 | 2 | 10 |
| Pownal | | 4 | 6 | 1 | 7 | 2 | 8 | 2 | | 30 |
| Proctor | | | 1 | | 3 | | 4 | | 1 | 9 |
| Putney | | 7 | 10 | 6 | 9 | 7 | 13 | 12 | | 64 |
| Randolph | | | | | | | | 1 | | 1 |
| Richford | | | | 1 | | 2 | | 2 | | 5 |
| Rockingham | | 3 | 7 | 7 | 6 | 9 | 16 | 13 | | 61 |
| Rutland | | 2 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 25 |
| Shaftsbury | | 1 | 2 | 2 | | 4 | | 4 | | 13 |
| Springfield | | 4 | 6 | 5 | 5 | 11 | 10 | 11 | | 52 |
| St. Albans City | | 2 | 2 | | | 5 | 5 | 10 | 10 | 34 |
| Stowe | | 2 | 3 | 3 | 3 | 1 | 11 | 5 | 7 | 35 |
| Stratton | | 1 | | | | | 2 | | | 3 |
| Sudbury | | 1 | 6 | | 5 | 2 | 10 | | | 24 |
| Sunderland | | 3 | 3 | 5 | 1 | 6 | | | | 18 |
| Sutton | 1 | | 2 | | 2 | | 3 | | | 8 |
| Swanton | | 4 | 4 | 3 | 3 | 1 | 4 | 14 | 5 | 38 |
| Thetford | | | | | | | 1 | 1 | | 2 |
| Vergennes | | | | | | 9 | 10 | 10 | 10 | 39 |
| Vernon | | | 10 | 11 | | 10 | 1 | 10 | | 42 |
| Victory | 1 | | 1 | 7 | 1 | 8 | 2 | 5 | | 25 |
| Weathersfield | | 3 | 4 | | 5 | | | | | 12 |
| Whiting | 7 | 6 | 30 | 16 | 2 | 25 | 45 | 10 | 12 | 153 |
| Whitingham | | 1 | 2 | 1 | 4 | 1 | 3 | 1 | | 13 |
| Williston | 1 | 2 | | 1 | 6 | 1 | 5 | 3 | 6 | 25 |
| Grand Total | 38 | 119 | 183 | 153 | 192 | 290 | 332 | 257 | 180 | 1744 |

¹ Results may not be available on all of these samples yet.

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