

Vermont Arbovirus Surveillance Weekly Report

Vermont Department of Health

Division of Health Surveillance

Test Summaries

MMWR Week 31 (8/2/2015 – 8/8/2015)

Mosquitoes

MMWR Week	Pools Tested	EEE Positive	WNV Positive
31	416	0	3
YTD	1997	0	6

*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*, *Coquillettia 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.

Week 31 Positive Results:

- One mosquito pool collected from Hartford on July 30th tested positive for West Nile virus on August 4th.
- A mosquito pool collected from Montpelier on July 31st and one mosquito pool collected from Putney on July 29th, both tested positive for West Nile virus on August 6th.

Summary of All Positive Results

Date of Result	Town	Number of Pools	Date Collected	Mosquito Species	Virus
7/30	Springfield	3	7/22	<i>Culex restauns/pipiens</i> & <i>Ochlerotatus japonicus</i>	WNV
8/4	Hartford	1	7/30	<i>Culex restauns/pipiens</i>	WNV
8/6	Montpelier	1	7/31	<i>Culex restauns/pipiens</i>	WNV
8/6	Putney	1	7/29	<i>Culex restauns/pipiens</i>	WNV

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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.

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	Unknown ²	
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	10		54
Benson			1	1	8		1		6		17
Berkshire		1	1	7	2	8	3	7	2		31
Brandon	7	3	7	6	5	14	5	9	12		68
Brattleboro		2	4	4	7	2	2	2	7		30
Brighton				2		6	1	3			12
Brookfield								1			1
Burke		1	2			2	1				6
Burlington	2	2			13	7	16	4	21		65
Cambridge					8		8		3		19
Castleton		5	4	2	1	5	4		3		24
Charlotte		1			8	5	5	3	9		31
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	2		20
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	11	6	11	7		42
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	6		64
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	2		13
Marshfield							1				1
Milton		8	4		2	6	7	4	15		46
Montpelier		3							5		8
Morrisville			1	1	7	1	4	2	4		20
New Haven	5	1	3	6	1	5	1	4	2		28
Newbury		1						1	1		3
Newport City	2	2	1	2	3	6	8	2			26
Pittsford					2	2	3	1	5		13
Pownal		4	6	1	7	2	8	2	5		35
Proctor			1		3		4		1		9
Putney		7	10	6	9	7	13	12	13		77
Randolph								1	1		2
Richford				1		2		2			5
Rockingham		3	7	7	6	9	16	13	10		71
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	13		65
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		2		26
Sunderland		3	3	5	1	6			1		19
Sutton	1		2		2		3				8
Swanton		4	4	3	3	6	4	14	5		43
Thetford							1	1			2
Vergennes						9	10	10	10		39
Vernon			10	11		10	1	10	1		43
Victory	1		1	7	1	8	2	5			25
Weathersfield		3	4		5				7		19
Weston									1		1
Whiting	7	6	30	16	2	25	45	10	24		165
Whitingham		1	2	1	4	1	3	1	4		17
Williston	1	2		1	6	1	5	3	6		25
Unknown ²										115	115
Grand Total	38	119	183	153	192	302	332	257	306	115	1997

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

² Data has not been provided yet by the Agency of Agriculture for these samples.

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