

Final Arbovirus Surveillance Report

2017

Mosquito Surveillance

- Eighty-nine mosquito pools+ tested positive for West Nile virus (WNV)
- No mosquito pools tested positive for Eastern equine encephalitis (EEE)

	# of Mosquito	# of EEE	# of WNV	% WNV
	Pools Tested	Positive Pools	Positive Pools	Positive Pools
2017	4,306	0	89	2.1%

Animal Surveillance

No animals in Vermont were tested for WNV or EEE in 2017

Human Surveillance

- Three human cases of WNV were reported: one non-neuroinvasive and one neuroinvasive case in Grand Isle county and one neuroinvasive case in Addison county
- One asymptomatic, viremic blood donor (WNV) was identified in Chittenden county
- No human cases of EEE were reported

Aedes albopictus Surveillance

- The estimated geographic range of the *Aedes albopictus* mosquito, a competent vector for the Zika virus, includes southern Vermont.
- No Aedes albopictus were found at two trapping sites in Southern Vermont

Risk Assessment

<u>West Nile virus:</u> From 2002 to 2017, WNV has been detected in birds, mosquitoes, people and/or animals in all counties of Vermont. Currently, the risk for WNV appears to be widespread in the state.

<u>Eastern equine encephalitis:</u> Two areas of the state are at low risk based on detections of the EEE virus in the past ten years. These areas are western Franklin county and northern Rutland/southern Addison counties.

EEE virus was found in one mosquito pool in 2015, 8 mosquito pools in 2014 and one mosquito pool in 2013. EEE virus has only caused human or animal illnesses in Franklin, Rutland and Addison counties. The last human cases were reported in 2012.

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

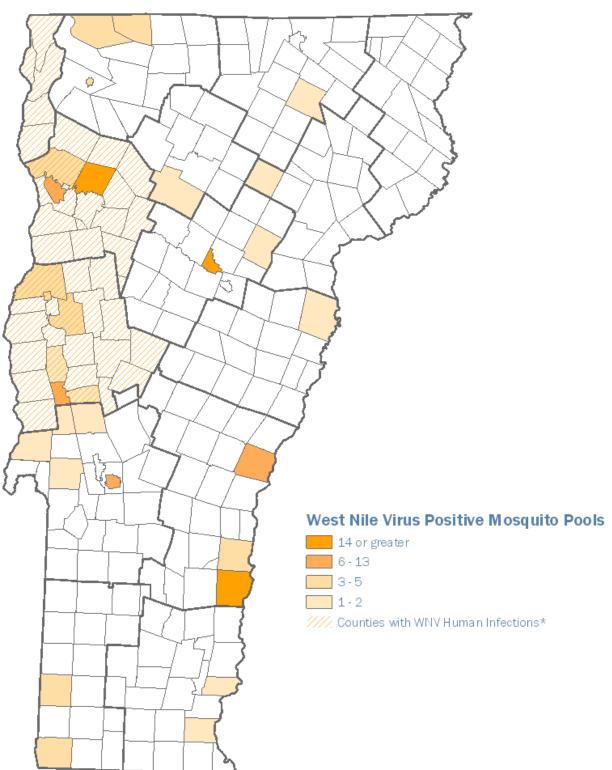


Franklin Berkshire Jay Alburgh Derby Highgate Richford Newport City Swanton St. Albans Fairfield Brighton Ba<u>kersf</u>ield Lowell City Barton Belvidere Ferdinand ∙Grand Isle Fairfax Eden Craftsburg Sutton Milton Cambridge Burke Hyde Park Victory Colchester Morristown Essex Ĥardwick Burlington Stowe Lunehburg Williston) South Concord Danville Burlington Marshfield Charlotte Montpelier Groton Ferrisburg Vergennes Newbury New Haven Addison Brookfield Cornwall Randolph Whiting Leice<u>ste</u>r Thetford Royalton Sudbury Brandon Benson Pittsford Hartford Killington Proctor Castleton Fair Haven Rutland Town Shrewsbury Windsor Weathersfield Danby Weston Springfield Condonderry .Rockingham Legend Manchester Sunderland Westminster Towns with Trap Sites* Stratton ★ Towns with additional Trap Sites for Aedes albopictus Putipey Sha ftsbury Bennington Brattleboro Pownal Whitingham. Guilford ≉∛ejrnon *Trap sites target mosquitoes that carry WNV and EEE

Figure 1: Towns with Mosquito Trap Sites 2017



Arboviral Surveillence Map 2017



*WIIV human infections include human disease cases or presumptive viremic blood donors

Positive West Nile Virus mosquito pools were detected in Barton, Benson, Brandon, Brattleboro, Burlington, Castleton, Colchester, Cornwall, Essex, Ferrisburg, Franklin, Hardwick, Hartford, Highgate, Leicester, Marshfield, Montpelier, New Haven, Newbury, Pownal, Putney, Rutland City, Shaftsbury, Springfield, St. Albans City, Stowe, Sudbury, Vergennes, Weathersfield, and Whiting.



