

2015 Arboviral Surveillance Summary

Summary

The New Hampshire Department of Health and Human Services (NH DHHS) tested human, veterinary, and mosquito specimens for arboviruses in 2015. Testing performed at the NH Public Health Laboratories (PHL) identified:

- West Nile virus (WNV) in three mosquito batches (group of mosquitoes) and one bird.
- Eastern Equine Encephalitis (EEE) virus in two mosquito batches.

Given the continued arboviral activity detected during the 2015 season (July 1 – September 30), NH DHHS encourages communities to maintain heightened levels of mosquito-borne disease education, surveillance, and control during 2016.

Table 1: Specimens Tested and Arboviral Test Results by Year, 2012-2015*

Species	2012			2013			2014			2015		
	Tested	WNV+	EEE+	Tested	WNV+	EEE+	Tested	WNV+	EEE+	Tested	WNV+	EEE+
Mosquito Batches	4,716	41	9	5,316	14	24	3,964	1	18	3,678	3	2
Veterinary	11	0	4	28	1	3	11	0	3	11	1	0
Humans	37	1	0	34	1	0	38	0	3	65	0	0

*Comparison between years must consider variations in surveillance criteria.

Human Surveillance

Between January 1 and December 31, 2015, 65 patients were tested for EEE and WNV at the NH PHL.

- No human samples tested positive for WNV.
- No human samples tested positive for EEE.

Animal Surveillance

Between January 1 and December 31, 2015, 11 veterinary specimens were tested for EEE and WNV at the NH PHL.

- One raven tested positive for WNV.
- No animals tested positive for EEE.

Mosquito Surveillance

Between January 1 and December 31, 2015, 3,678 mosquito batches were tested for EEE and WNV at the NH PHL.

- Three batches tested positive for WNV in the towns of Manchester (1), East Kingston (1) and Keene (1). The species testing positive were *Culex restuans* (1), *Culiseta morsitans* (1) and *Aedes vexans* (1).
- Two batches tested positive for EEE in the towns of Candia (1) and Newton (1). The species testing positive was *Culiseta melanura* (2).
- Mosquito batches were submitted for testing from Cheshire, Hillsborough, Rockingham, and Strafford Counties.

Public Health Threat Declaration

A NH Public Health Threat Declaration based on arboviral activity was not made in 2015.

Regional Risk Levels

- In 2015, the NH DHHS estimated human risk levels for defined “Focal Areas” in the State. “Focal Areas” may incorporate multiple municipalities and are based on integrating mosquito habitat, mosquito abundance, current and historic virus activity, and weather conditions needed to present risk of human disease.
- During the arboviral transmission season, estimated risk levels were announced to the public, local officials, and state partners through email, press releases, postings to the Bureau of Infectious Disease Control (BIDC) Twitter webpage, and postings to the NH DHHS website.
- NH DHHS updated the Risk Map throughout the 2015 season to reflect changes in risk levels. For 2015, risk levels across the state ranged from “Baseline/No Data” to “Moderate” depending on current and historical arbovirus detections.
- For more information on the arboviral test results and to view the final 2015 Risk Map, please visit: <http://www.dhhs.nh.gov/dphs/cdcs/arboviral/results.htm>.

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