

2018 Arboviral Surveillance Summary

Summary

The New Hampshire Department of Health and Human Services (NH DHHS) tested human, veterinary, and mosquito specimens for arboviruses in 2018. Testing performed at, or in coordination with, the NH Public Health Laboratories (PHL) identified:

- West Nile virus (WNV) in 32 mosquito batches (groups of mosquitoes).
- Eastern Equine Encephalitis (EEE) virus in six mosquito batches.
- Jamestown Canyon Virus (JCV) in one human (likely acquired out of state).
- Powassan virus (POW) was not identified.

Given the continued arboviral activity detected during the 2018 season (July 1 – October 15), NH DHHS encourages communities to maintain heightened levels of mosquito-borne disease education, surveillance, and control during 2019.

Table 1: Specimens Tested and Arboviral Test Results by Year, 2015-2018*

Species	Mosquito Batches			Veterinary			Humans				
	Tested	WNV+	EEE+	Tested	WNV+	EEE+	Tested	WNV+	EEE+	JCV+ [¥]	POW+ [¥]
2015	3,678	2	2	11	1	0	65	0	0	1	0
2016	1,773	1	0	10	0	0	31	0	0	0	1
2017	4,176	9	0	7	0	0	31	1	0	4	1
2018	4,945	32	6	13	4	0	30	0	0	1 [€]	0

*Comparison between years must consider variations in surveillance criteria.

¥Testing completed by the Centers for Disease Control and Prevention (CDC).

€Infection likely acquired out of state.

Human Surveillance

Between January 1 and December 31, 2018, 30 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.

Additionally, between January 1 and December 31, 2018, 1 patient tested positive for JCV at the CDC. No human samples tested positive for POW.

Animal Surveillance

Between January 1 and December 31, 2018, 13 veterinary specimens were tested for EEE and WNV at the NH PHL.

- Four birds tested positive for WNV.
- No animals tested positive for EEE.

Regional Risk Levels

- In 2018, 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) and Division of Public Health Services (DPHS) Twitter and Facebook webpages, and postings to the NH DHHS website.
- NH DHHS updated the Risk Map throughout the 2018 season to reflect changes in risk levels. For 2018, risk levels across the state ranged from “Baseline/No Data” to “High” depending on current and historical arbovirus detections.
- For more information on the arboviral test results and to view the final 2018 Risk Map, please visit: <http://www.dhhs.nh.gov/dphs/cdcs/arboviral/results.htm>.

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