New Hampshire Department of Health and Human Services Infectious Disease Surveillance Section

Arboviral Surveillance Summary, 2011

<u>Summary</u>

The New Hampshire Department of Health and Human Services (NH DHHS) tested human, veterinary, and mosquito specimens for arboviruses in 2011. Testing performed at the NH Public Health Laboratories (PHL) identified West Nile virus (WNV) in nine mosquito batches. No Eastern Equine Encephalitis (EEE) virus was identified. Given the continued arboviral activity detected during the 2011 season, NH DHHS encourages communities to maintain heightened levels of mosquito-borne disease education, surveillance, and control during 2012.

Table 1: Specimens Tested and Arboviral Test Results by Year, 2008-2011*

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Species		2008				2009				2010				2011			
		Tested	WNV+	EEE+		Tested	WNV+	EEE+		Tested	WNV+	EEE+		Tested	WNV+	EEE+	
Mosquito Batches		10020	1	8		3887	0	73		2214	1	0		2733	9	0	
Veterinary		7	0	1		27	0	13		8	0	1		6	0	0	
Humans		205	0	0		95	0	1		32	1	0		44	0	0	

*Comparison between years must consider variations in surveillance criteria.

Human Surveillance

Between January 1 and December 31, 2011, 44 patients were tested for EEE and WNV at the NH PHL. There were no positive human findings.

Animal Surveillance

Between January 1 and December 31, 2011, 6 veterinary specimens were tested for EEE and WNV at the NH PHL. There were no positive veterinary findings.

Mosquito Surveillance

Between January 1 and December 31, 2011, 2733 mosquito batches were tested for EEE and WNV at the NH PHL. Nine batches tested positive for WNV across Hillsborough (6), Rockingham (2), and Cheshire (1) Counties. The species testing positive were *Culex pipiens/restuans* (4), *Culiseta melanura* (2), *Ochlerotatus canadensis* (1), *Culex restuans* (1), and *Culex salinarius* (1).

Public Health Threat Declaration

Based on arboviral activity in 2010, a public health threat declaration was not in effect for 2011.

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Regional Risk Levels

In 2011, 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, and postings to the NH DHHS website. NH DHHS updated the Risk Map weekly throughout the 2011 season to reflect ongoing arboviral surveillance. For 2011, risk levels across the state ranged from "Remote" to "Moderate" depending on current and historical arbovirus detections. For more information on the arboviral test results and to view the final 2011 Risk Map, please visit: <u>http://www.dhhs.nh.gov/dphs/cdcs/arboviral/results.htm</u>.