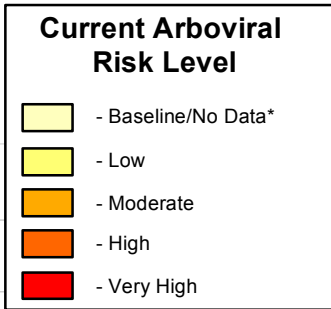


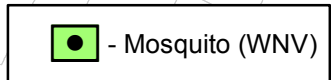
New Hampshire Department of Health and Human Services Division of Public Health Services Bureau of Infectious Disease Control

Arboviral Risk New Hampshire, September 20, 2016

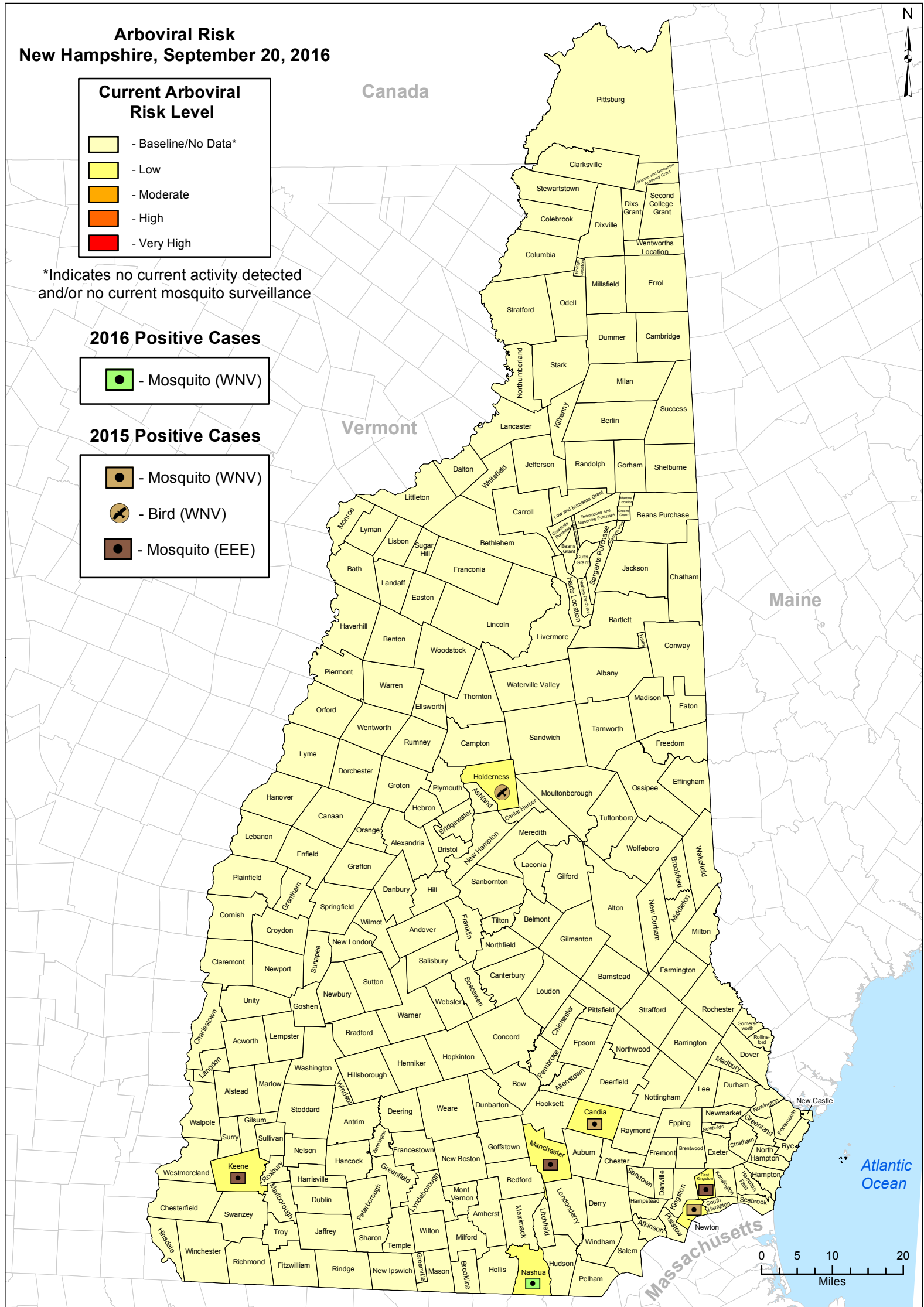
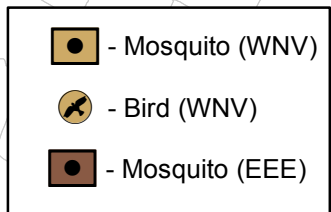


*Indicates no current activity detected and/or no current mosquito surveillance

2016 Positive Cases



2015 Positive Cases



See current Arboviral Illness Surveillance, Prevention and Response Plan:
<http://www.dhhs.nh.gov/dphs/cdcs/arboviral/documents/arboviralresponse.pdf>
 for additional information on the NH DHHS estimates risk levels and community and individual prevention activities to reduce the risk of human illness from arboviral virus.

Table 1. Guidelines for use of Arboviral Surveillance Data to Determine Arboviral Risk Categories

Risk Category	Probability of Human Illness	West Nile Virus Definition for a Focal Area*	Eastern Equine Encephalitis Virus Definition for a Focal Area*
1	Baseline/No Data	All of the following conditions must be met: <u>Prior Year</u> No activity detected in a community or focal area Or <u>Current Year</u> No current surveillance findings indicating WNV activity in the focal area Or Mosquito surveillance not conducted in this community or focal area	All of the following conditions must be met: <u>Prior Year</u> No activity detected in a community or focal area Or <u>Current Year</u> No current surveillance findings indicating EEE activity in the focal area Or Mosquito surveillance not conducted in this community or focal area
2	Low	<u>Prior Year</u> Virus activity detected in mosquitoes Or <u>Current Year</u> Surveillance of mosquitoes collected at a single mosquito trap location testing positive And No human or veterinary cases	<u>Prior Year</u> Virus activity detected in mosquitoes Or <u>Current Year</u> Virus identified in an enzootic mosquito species (e.g., <i>Culiseta melanura</i>) And No human or veterinary cases
3	Moderate	<u>Prior Year</u> Confirmation of human and/or veterinary case(s) Or Sustained WNV activity in mosquitoes Or <u>Current Year</u> Positive mosquitoes at more than one trap location And No human or veterinary cases	<u>Prior Year</u> Confirmation of human and/or veterinary case(s) Or <u>Current Year</u> Multiple EEE virus mosquito isolates; or EEE virus isolated in bridge vectors And No human or veterinary cases
4	High	<u>Current Year</u> Surveillance of sustained or increasing WNV activity in mosquitoes Or A single confirmed veterinary or human case	<u>Current Year</u> EEE virus mosquito isolation rates in an enzootic mosquito species (i.e., <i>Culiseta melanura</i>) are rising and area of EEE virus activity is spreading Or A single confirmed veterinary or human case
5	Very High	<u>Current Year</u> More than one confirmed WNV human case Or More than one confirmed WNV veterinary cases	<u>Current Year</u> More than one confirmed human EEE case Or More than one confirmed EEE veterinary cases Or Multiple measures indicating very high risk of human infection (e.g., multiple isolations from bridge vectors associated in time and space and veterinary case)
<p>* Focal area: May incorporate multiple towns or cities. Designation based on factors including mosquito habitat, current and historic virus activity, timing of current virus activity, current weather and seasonal conditions. Known/suspected location of exposure is used for human and non-human animal cases and not necessarily town of residence.</p> <p>** May include horses, llamas, alpacas, or domesticated birds such as emus.</p>			

Table 2. Guidelines for Phased Response to Arbovirus Surveillance Data

Risk Category	Probability of Human Illness	Recommended Response for State Agencies and Town Officials	Recommend Response for the Public and Individuals in Affected Areas
1	Baseline /No Data	1. Educational efforts directed to the general public on personal protection and source reduction. 2. Routine human and veterinary surveillance. 3. Assess local ecology for mosquito abundance. 4. Consider larval and adult mosquito monitoring with routine collection and testing of mosquitoes.	1. Repair Screens 2. Dump standing water weekly 3. Wear mosquito repellent when outdoors during peak mosquito hours (from dusk to dawn) 4. Wear long sleeves and long pants when outdoors during peak mosquito hours (from dusk to dawn) 5. Use mosquito netting on baby carriages and playpens when outdoors
2	Low	Incorporates previous category response, plus: 1. Expand community outreach and public education programs focused on risk potential and personal protection, emphasizing source reduction. 2. Assess mosquito populations, monitor larval and adult mosquito abundance, submit samples to PHL for virus testing. 3. Use larvicides at specific sources identified by entomologic survey and targeted at vector species. If appropriate, consider source reduction techniques. If current year activity includes EEE virus isolates in mosquitoes, may consider adulticiding based on current regional epidemiology and surveillance efforts. 4. Enhance human and veterinary surveillance.	6. Arrange neighborhood clean-ups to get rid of mosquito breeding sites 7. Be aware of stagnant water on property (e.g., unused swimming pools) and consult local health officer 8. Clean roof gutters so that rainwater cannot collect in them. 9. Do not attempt to drain or alter natural water bodies such as ponds, marshlands, and wetlands as they are regulated under state law and any alterations may require the approval of state and possibly federal agencies.
3	Moderate	Incorporates previous category response, plus: 1. Increase larval control, source reduction, and public education emphasizing personal protection measures. 2. Actions to prevent disease may include targeted larviciding, and if current year activity, possibly ground adulticiding targeted at likely bridge vector species. 3. Enhance human surveillance and activities to further quantify epizootic activity.	
4	High	Incorporates previous category response, plus: 1. Intensify public education on personal protection measures a. Utilize multimedia messages including press releases, local newspaper articles, cable channel interviews, etc. b. Actively seek out high-risk populations (nursing homes, schools, etc.) and educate them on personal protection. c. Issue advisory information on adulticide spraying. 2. Consider intensifying larviciding and/or adulticiding control measures as indicated by surveillance. 3. DHHS will confer with local health officials to determine if the risk of disease transmission threatens to cause multiple human cases. If surveillance indicates a continuing risk of human disease and potential for an outbreak, intensified ground-based adult mosquito control may be recommended.	Incorporates previous category response, plus: 1. Avoid areas with heavy mosquito activity 2. Adjust outdoor activity to avoid peak mosquito hours (from dusk to dawn)
5	Very High	Incorporates previous category response, plus: 1. Continued highly intensified public outreach messages	Incorporates previous category response, plus: 1. Consider cancelling or rescheduling outdoor

		<p>through community leaders and the media emphasizing the urgency of personal protection.</p> <p>2. If risk of outbreak is widespread and covers multiple jurisdictions, DHHS will confer with local health officials and Arboviral Illness Task Force members to discuss the use of intensive mosquito control methods. A State of Emergency may be declared pursuant to RSA 21-P:35.</p> <p>Factors to be considered in making this decision include the cyclical, seasonal and biological conditions needed to present a continuing high risk of EEE human disease.</p> <p>The declaration of an emergency may trigger application of mosquito adulticide. DHHS may define targeted treatment areas for vector control following the declaration of an emergency.</p> <p>3. Ground-based adulticide applications may be repeated as necessary to achieve adequate control.</p>	<p>gatherings, organized sporting events, etc., during peak mosquito hours</p>
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