Massachusetts Department of Public Health Arbovirus Surveillance Program Report Report Date: July 15, 2013

Key Public Risk Communication Messages for This Week:

West Nile Virus

Current weather conditions remain favorable for development of Culex mosquito populations although current population is not particularly large. Culex pipiens and C. restuans are the mosquitoes most associated with WNV transmission in Massachusetts. Fortunately, these are also kinds of mosquitoes that use small accumulations of standing water for breeding so by dumping water from items that accumulate it at least twice per week can reduce Culex populations in your area.

- Drain buckets, barrels, tarps, and wheel barrows to avoid water accumulation
- Change the water twice each week in birdbaths and outdoor pet water dishes
- Keep rain gutters clean of debris
- Check children's outdoor toys for water accumulation

The first WNV infected mosquitoes were identified on June 25, relatively early in the season, although no additional infected mosquitoes have been found to date. Virus levels increase throughout the season so now is the time to start practicing personal protection. Pick a mosquito repellent with an EPA-approved active ingredient and use it regularly when outdoors. EPA-approved ingredients include DEET, permethrin, picaridin, oil of lemon eucalyptus and IR 3535. Always read the label and apply according to the directions. If you need help selecting a repellent, one useful repellent selector tool is available here http://pi.ace.orst.edu/repellents/. Other personal protection actions include using long-sleeved shirts and pants to reduce exposed skin, weather permitting and avoiding areas with obvious mosquito activity.

Eastern Equine Encephalitis

Populations of Culiseta melanura, the bird-biting mosquito that transmits EEE virus between birds, continue to be slightly above average in southeastern Massachusetts. Higher mosquito populations can mean faster amplification of virus IF enough birds carrying virus are already present. Samples tested from SE Massachusetts have been negative for EEE so far. Last year, the first EEE infected mosquitoes were trapped on July 9.

The wet spring and recent warm, humid conditions have supported the development of many different kinds of mosquito species throughout Massachusetts. The kinds of mosquitoes that are most aggressively biting people right now are not likely to be carrying EEE virus. However, they are very noticeable and may lead to questions from residents. It is very important to encourage people to find an effective repellent now and make a habit of using it throughout the season.

WNV and EEE Virus Surveillance Summary Results contained in this report reflect data inclusive of MMWR Week 28 (Sunday, 7/7/13 – Saturday, 7/13/2013)

Mosquito Surveillance						
Number of Mosquito Pools Tested	912					
Number of WNV Positive Pools	1					
Number of EEE Positive Pools	0					
Equine/Mammal Surveillance	·					
Number of Mammal Specimens Tested	0					
Number of WNV Positive Horses	0					
Number of EEE Positive Horses	0					
Number of other EEE Positive Mammals	0					
Human Surveillance	·					
Number of Human Specimens Tested	88					
Number of Human WNV Cases	0					
Number of Human EEE Cases	0					

Summary of 2013 Mosquito Pool Tests William A Hinton State Laboratory Institute												
MMWR Week: (Specimen Tested)	Berkshire County MCP	Bristol County MCP	Cape Cod MCP	Central MA MCP	Dukes County MCP	East Middlesex MCP	Norfolk Country MCP	Northeast MA MCP	Plymouth County MCP	Suffolk County MCP	SLI	Total Tested
25 (06/16-06/22/2013)	5	9	17	32	0	0	0	25	20	0	31	139
26 (06/23-06/29/2013)	14	16	17	30	0	0	0	28	15	0	35	155
27 (06/30-07/06/2013)	21	21	37	68	0	3	45	42	3	7	60	307
28 (07/07-07/13/2013)	17	11	12	58	0	6	48	46	42	10	61	311
Cumulative Season Total	57	57	83	188	0	9	93	141	80	17	187	912

Numbers reflect finalized results; data are subject to change as additional test results are finalized

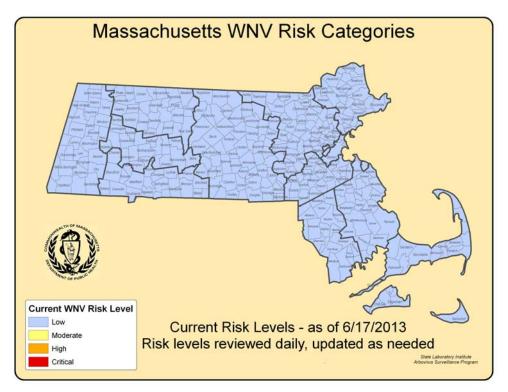
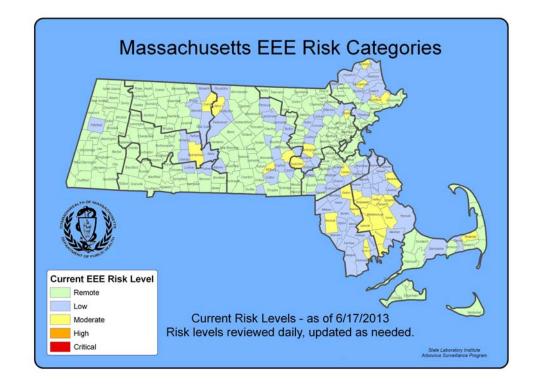


Figure 2: Current EEE Risk Categories as described in Table 2 of the 2013 MDPH Surveillance and Response Plan



Click here for the MDPH Arbovius Website - www.mass.gov/dph/mosquito