

Massachusetts Department of Public Health Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

Eastern Equine Encephalitis positive mosquitoes have been identified in Barnstable, Bristol, Essex, Hampden, Middlesex, Norfolk, Plymouth, and Worcester counties. These samples include mosquitoes known to bite humans. MDPH has identified and reported twelve human cases and eight animal cases of EEE. Adaptive mosquito surveillance indicates continued EEE activity in mammal biting species. Due to human, animal, and mosquito detections risk levels have been elevated in the Bristol, Central MA, Essex, and Plymouth regions.

While ground and aerial spraying will reduce populations of mosquito species that spread EEE, risk will continue to exist until the first hard frost. Communities designated by MDPH as Critical and High for EEE risk are urged to cancel evening and early morning outdoor events and increase outreach to residents. Peak human EEE transmission occurs in August and September, residents should be cautioned to take personal preventative actions like using repellents and avoiding peak mosquito activity. Check your risk levels and positive findings throughout the season by visiting www.mass.gov/dph/mosquito

Establish good mosquito avoidance habits now

• Teach children to be aware of mosquito activity around them and avoid it	
• Pick a repellent with an EPA-approved active ingredient	• Use long sleeves to cover up when possible
• Remove standing water to help reduce mosquito populations	• Repair screens

Several 30 second PSA videos are available for download and use on your website to help promote prevention activities to your residents. These can be found at www.mass.gov/mosquitoesandticks

NOTE: Zika virus continues to be spread in Africa, Asia, the Caribbean, Central and South America, India, and Mexico. The mosquitoes that spread this disease are active during the day.

Travelers who are pregnant or part of a couple planning on becoming pregnant soon are advised not to travel to areas with ongoing Zika virus transmission. The most current information about locations at risk can be found here <https://wwwnc.cdc.gov/travel/page/zika-information>. If residents choose to travel, prevent mosquito exposure by: using EPA registered mosquito repellents, cover exposed skin by wearing long-sleeved shirts and pants, stay in places with screens and air-conditioning, or sleep under mosquito netting.

In order to avoid sexual transmission of Zika virus from a partner who has recently traveled to an area where Zika transmission is occurring, abstain from sexual contact or use condoms consistently and correctly during all sexual activity. Talk to your healthcare provider for more information.

WNV and EEE Virus Surveillance Summary	
Results contained in this report reflect data inclusive of MMWR Week 39 (Sunday, 09/22/2019– Saturday, 09/28/2019)	
Mosquito Surveillance	
Number of Mosquito Samples Tested	7971
Number of WNV Positive Samples	84
Number of EEE Positive Samples	425
Equine/Mammal Surveillance	
Number of Mammal Specimens Tested	25
Number of WNV Positive Horses	0

Number of EEE Positive Horses	7
Number of other EEE Positive Mammals	1
Human Surveillance	
Number of Human Specimens Tested	445
Number of Human WNV Cases	2
Number of Human EEE Cases	12

Summary of 2019 Mosquito Samples Tested Massachusetts State Public Health Laboratory												
MMWR Week: (Specimens Tested)	Berkshire County MCP	Bristol County MCP	Cape Cod MCP	Central MA MCP	Dukes County MCP	East Middlesex MCP	Norfolk County MCP	Northeast MA MCP	Plymouth County MCP	SLI	Suffolk County MCP	Total Tested
36 (9/1-9/7/2019)	7	31	40	222	2	16	29	105	18	95	0	565
37 (9/8-9/14/2019)	4	16	31	150	3	33	26	57	37	86	14	457
38 (9/15-9/21/2019)	3	21	32	125	1	1	29	51	10	53	14	340
39 (9/22-9/28/2019)	0	19	23	87	3	20	7	78	51	32	8	328
Total	418	497	601	2275	24	319	479	752	696	1815	95	7971

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

**Cumulative Confirmed and Probable Human Chikungunya Virus Infections and Dengue Fever Cases
Reported in Massachusetts by County of Residence, 2019**
(these data are current as of 10/1/2019 and are subject to change)

County	Chikungunya virus infection	Dengue Fever
Barnstable	0	0
Berkshire	0	0
Bristol	0	0
Dukes	0	0
Essex	0	0
Franklin	0	0
Hampden	0	0
Hampshire	0	0
Middlesex	1	1
Nantucket	0	0
Norfolk	1	2
Plymouth	1	1
Suffolk	0	1
Worcester	0	1
Total	3	6

Note: Although local transmission of the mosquito-borne viruses dengue or chikungunya is extremely unlikely at this time due to limited establishment of populations of *Aedes albopictus*, surveillance for cases of human infection with these diseases is occurring. All confirmed and probable cases listed above were travel-acquired unless otherwise noted.

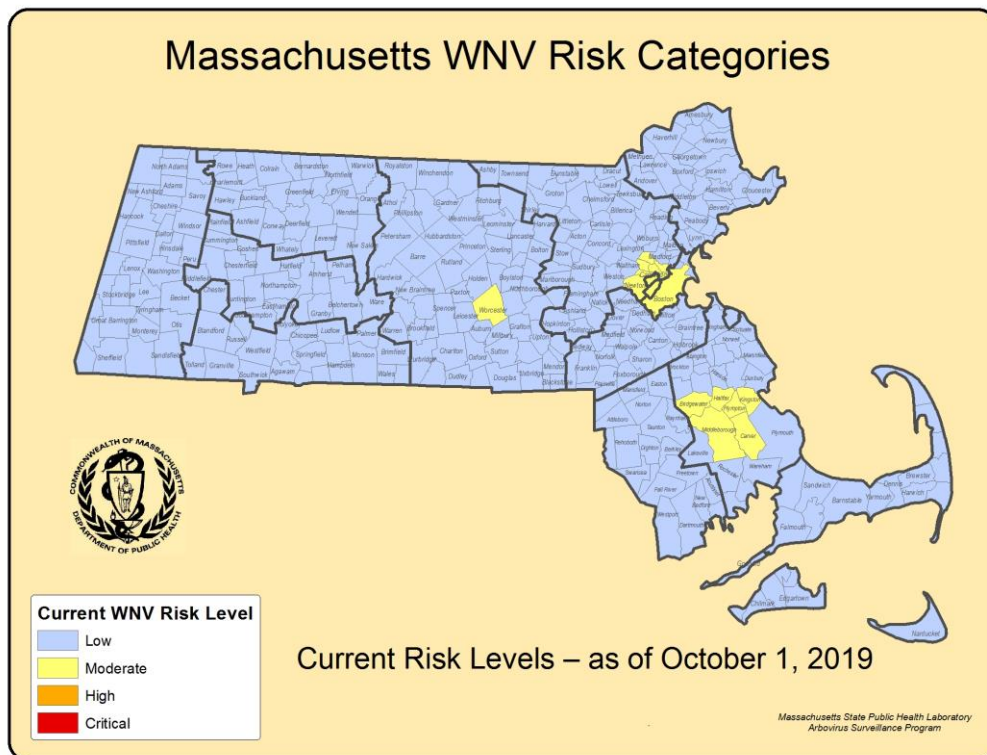


Figure 1: Current WNV Risk Categories as described in Table 1 of the 2019 MDPH Surveillance and Response Plan

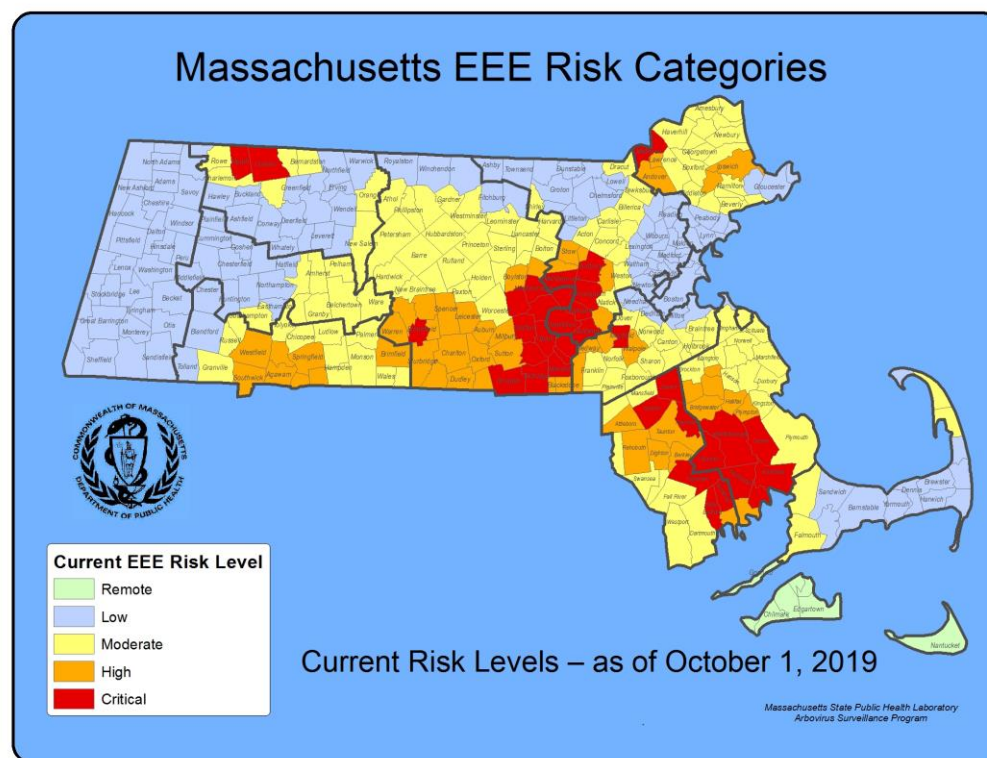


Figure 2: Current EEE Risk Categories as described in Table 2 of the 2019 MDPH Surveillance and Response Plan