

Massachusetts Department of Public Health Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

Due to continued EEE detections in Bristol and Plymouth counties MDPH has raised the risk levels for 11 communities to moderate risk for EEE. Please view the maps below for more information. These are considered routine risk level changes due to sustained EEE activity in mosquito species that feed on both birds and mammals. The mosquitoes associated with West Nile virus and Eastern Equine Encephalitis virus are abundant in the environment due to above average temperatures and periodic intense precipitation events. It is likely that populations of these mosquito species will increase in the coming weeks. Please continue to communicate to residents the need 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 30 (Sunday, 07/21/2019– Saturday, 07/27/2019)	
Mosquito Surveillance	
Number of Mosquito Samples Tested	2635
Number of WNV Positive Samples	10
Number of EEE Positive Samples	29
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 2019 Mosquito Samples Tested Massachusetts State Public Health Laboratory												
M M W R 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
24 (6/9-6/15/2019)	19	25	7	73	0	0	11	0	9	44	0	188
25 (6/16-6/22/2019)	26	20	17	67	0	0	14	0	16	62	0	222
26 (6/23-6/29/2019)	23	33	27	110	0	0	25	0	32	91	0	341
27 (6/30-7/6/2019)	40	26	24	159	6	14	23	35	22	147	0	496
28 (7/7-7/13/2019)	46	16	38	58	1	14	20	32	24	79	11	339
29 (7/14-7/20/2019)	40	33	36	148	1	19	24	17	54	160	14	546
30 (7/21-7/27/2019)	41	35	38	147	3	9	38	27	29	129	7	503
Total	235	188	187	762	11	56	155	111	186	712	32	2635

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 07/29/2019 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	0	0
Nantucket	0	0
Norfolk	0	0
Plymouth	1	0
Suffolk	0	0
Worcester	0	0
Total	1	0

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.

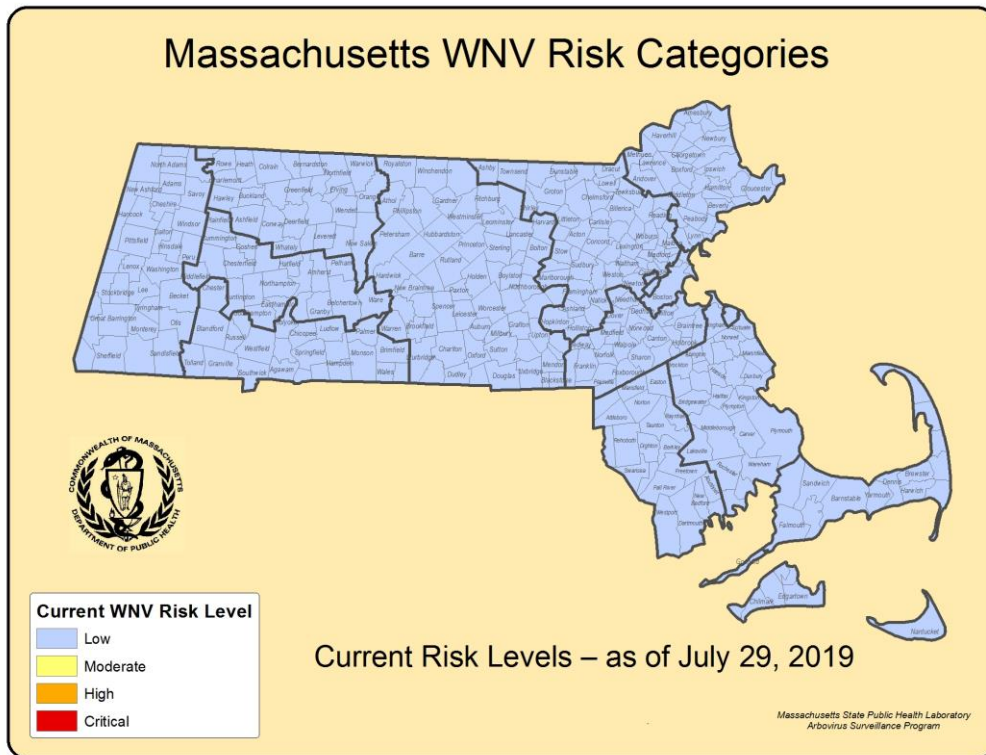


Figure 1: Current WNV Risk Categories as described in Table 1 of the 2019 MDPH Surveillance and Response Plan

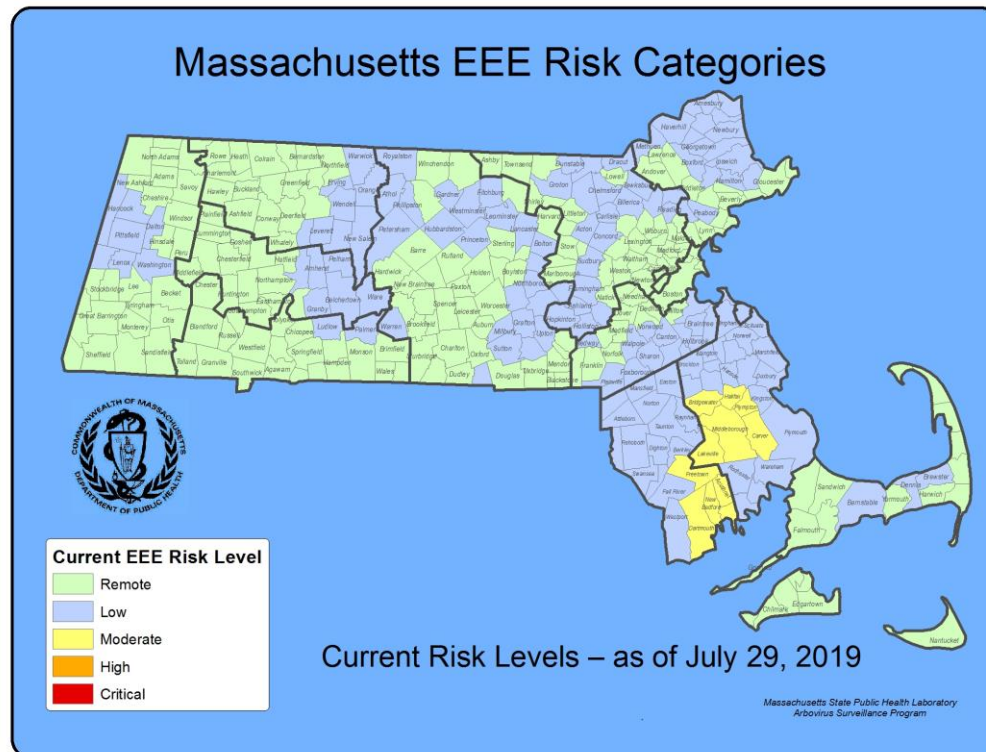


Figure 2: Current EEE Risk Categories as described in Table 2 of the 2019 MDPH Surveillance and Response Plan

Massachusetts Department of Public Health Mosquito Surveillance Data: 07/29/2019

Predominant mosquito species found at MDPH trap sites for MMWR week 30 was *Culiseta melanura*. See graphs below for weekly abundance, MIR and AIF rates.

Figure 3:

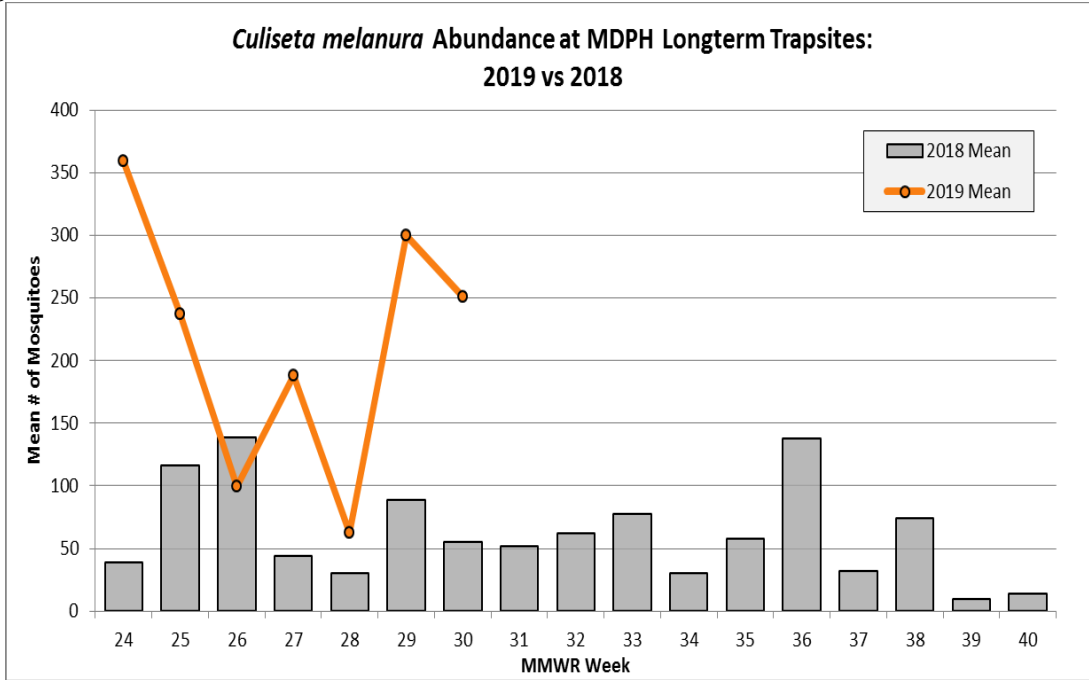


Figure 4:

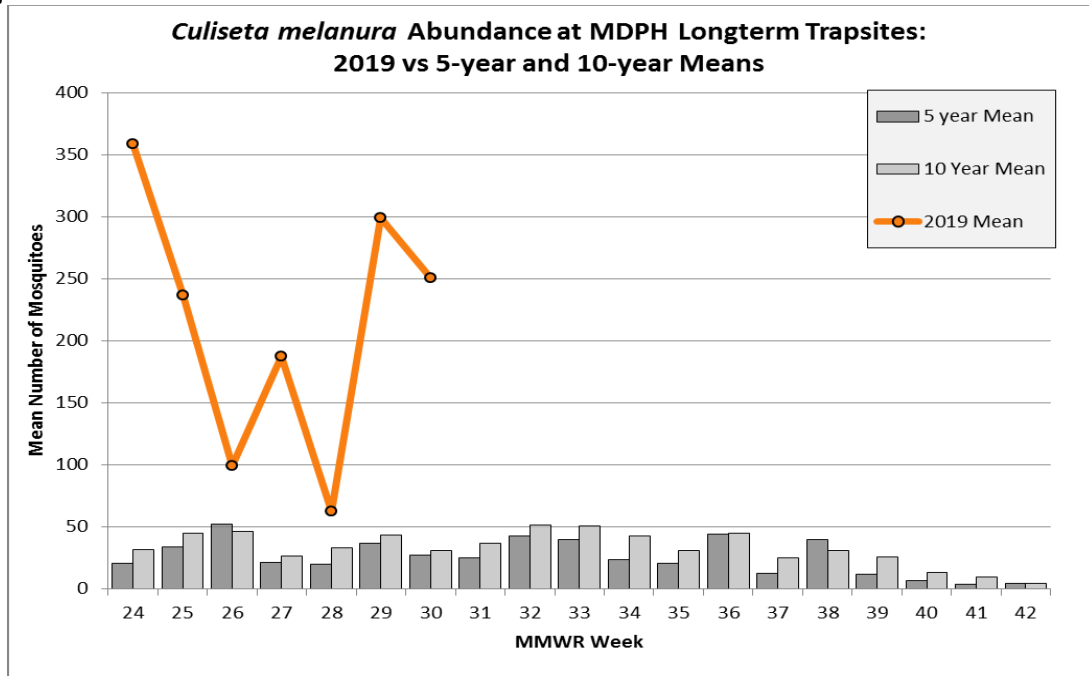


Figure 5:

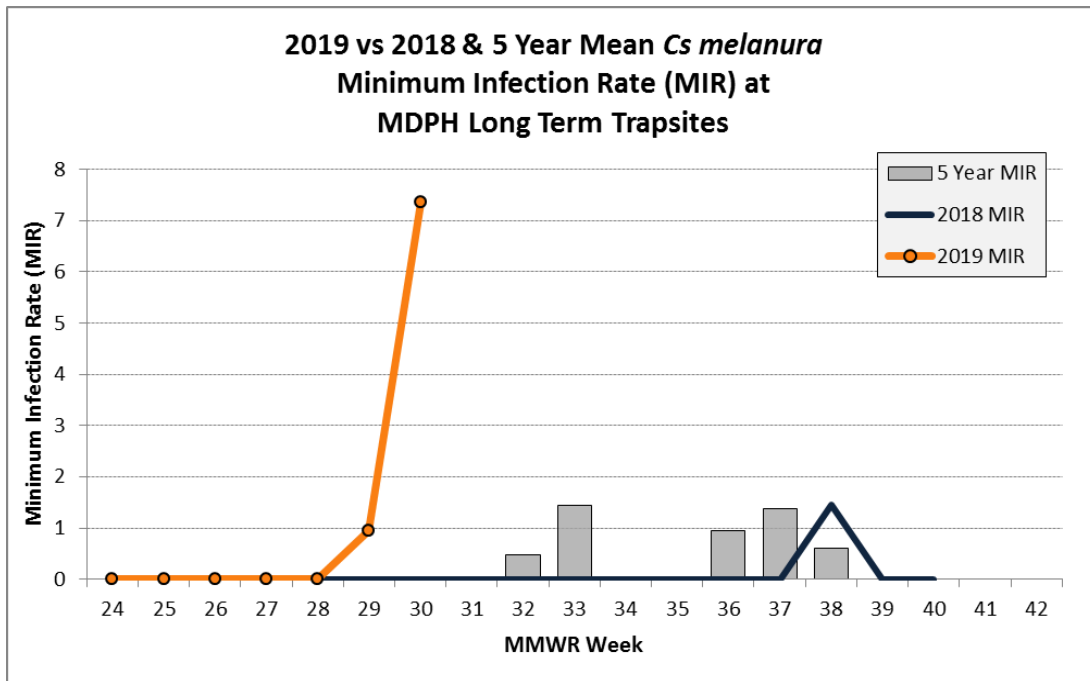


Figure 6:

