

Massachusetts Department of Public Health Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

MDPH reported the fourth EEE human case, a female in her 60s. Symptom onset occurred on 8/28. The case contracted the disease in Plymouth County. To date MDPH has identified 65 EEE mosquito samples in 2020. The majority of EEE detections in 2020 have been found in *Cq perturbans*, a mammal biting mosquito involved in the transmission to humans.

Aerial spraying to control EEE mosquitoes in Plymouth County was completed on 8/10. MDPH will continue enhanced EEE surveillance activities in Franklin, Hampden, Middlesex and Plymouth counties. 2019 was likely the first year of a two to three-year EEE outbreak cycle.

MDPH has detected three WNV human cases and 83 WNV mosquito samples in 2020. Warm daytime temperature combined with cooler evenings may increase resident’s outdoor activity. Regional precipitation events coupled with warm daytime temperatures may increase abundance of mosquito vectors for both EEE and WNV.

Recommended public health measures include raising awareness among residents and reminding them that it is important to use mosquito repellents with an EPA-registered active ingredient, use long sleeves and pants to reduce exposed skin and be aware of mosquito activity.

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 36 (Sunday, 08/30/2020– Saturday, 09/05/2020)	
Mosquito Surveillance	
Number of Mosquito Samples Tested	6601
Number of WNV Positive Samples	83
Number of EEE Positive Samples	65

Equine/Mammal Surveillance	
Number of Mammal Specimens Tested	9
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	166
Number of Human WNV Cases	3
Number of Human EEE Cases	4

Summary of 2020 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	Pioneer Valley	Plymouth County MCP	SLI	Suffolk County MCP	Total Tested
32 (8/02-8/08/2020)	30	47	72	116	5	57	60	41	40	72	310	67	917
33 (8/09-8/15/2020)	8	50	60	155	2	34	74	34	18	73	125	19	652
34 (8/16-8/22/2020)	6	40	57	116	5	28	51	32	28	59	106	38	566
35 (8/23-8/29/2020)	3	38	34	54	0	22	35	33	14	33	57	0	323
36 (8/30-9/05/2020)	5	31	52	61	3	19	25	19	0	16	35	13	279
Total	217	378	621	1088	25	407	510	279	301	547	2038	190	6601

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, 2020**
(These data are current as of 09/05/2020 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	0	0
Suffolk	0	0
Worcester	0	0
Total	0	0

Note: Cases listed above were travel-acquired unless otherwise noted