

Massachusetts Department of Public Health Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

Last week, three samples of West Nile virus positive mosquitoes were collected from communities in Bristol, Hampden and Middlesex Counties. Additional West Nile virus detections may occur this week. The first mosquito detection of Eastern Equine Encephalitis (EEE) was made in Bristol County on 8/16/17. Average daily temperatures have begun to decline across the state, residents should continue to avoid mosquito bites regardless of where they live until the first hard frost. While the risk for human transmission of West Nile virus is highest in the months of August and September; residents should be urged to take personal protective steps to avoid mosquito bites regardless of where they live until a hard frost occurs. Check your risk levels throughout the season by going to the website www.mass.gov/dph/mosquito. Mosquito testing at the State Public Health Laboratory ends on 10/6/17 and mosquito surveillance activities will end on 10/13/17.

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

Remember that 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, the Caribbean, Mexico, India, and Central and South America. 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 <http://www.cdc.gov/zika/geo/active-countries.html>. 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, 09/24/2017– Saturday, 09/30/2017)	
Mosquito Surveillance	
Number of Mosquito Pools Tested	5409
Number of WNV Positive Pools	289
Number of EEE Positive Pools	1
Equine/Mammal Surveillance	
Number of Mammal Specimens Tested	3
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	235
Number of Human WNV Cases	2
Number of Human EEE Cases	0

**Summary of 2017 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 (6/11-6/17/2017)	3	7	23	38	0	0	0	15	10	7	0	103
25 (6/18-6/24/2017)	2	19	16	81	0	0	12	10	7	97	0	244
26 (6/25-7/1/2017)	21	25	18	79	0	0	12	8	10	44	0	217
27 (7/2-7/8/2017)	0	27	20	64	4	0	20	0	0	85	6	226
28 (7/9-7/15/2017)	61	24	33	54	0	27	16	26	38	115	10	404
29 (7/16-7/22/2017)	31	48	23	90	3	34	29	22	47	127	16	470
30 (7/23-7/29/2017)	35	52	14	85	0	0	28	32	35	135	0	416
31 (7/30-8/5/2017)	33	47	23	95	1	36	18	42	42	184	11	532
32 (8/6-8/12/2017)	31	57	30	116	2	37	23	62	52	131	0	541
33 (8/13-8/19/2017)	31	53	26	98	2	30	27	68	56	132	11	534
34 (8/20-8/26/2017)	30	45	21	98	3	22	17	80	41	44	27	428
35 (8/27-9/2/2017)	24	37	7	92	0	15	16	63	28	80	6	368
36 (9/3-9/9/2017)	25	24	27	73	3	13	8	61	0	34	13	281
37 (9/10-9/16/2017)	0	15	19	73	1	7	14	45	40	55	4	273
38 (9/17-9/23/2017)	13	17	9	78	0	6	7	18	11	42	0	201
39 (9/24-9/30/2017)	3	7	0	66	2	10	2	44	10	27	0	171
Total	343	504	309	1280	21	237	249	596	427	1339	104	5409

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, 2017**

(these data are current as of 10/02/2017 and are subject to change)

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

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.

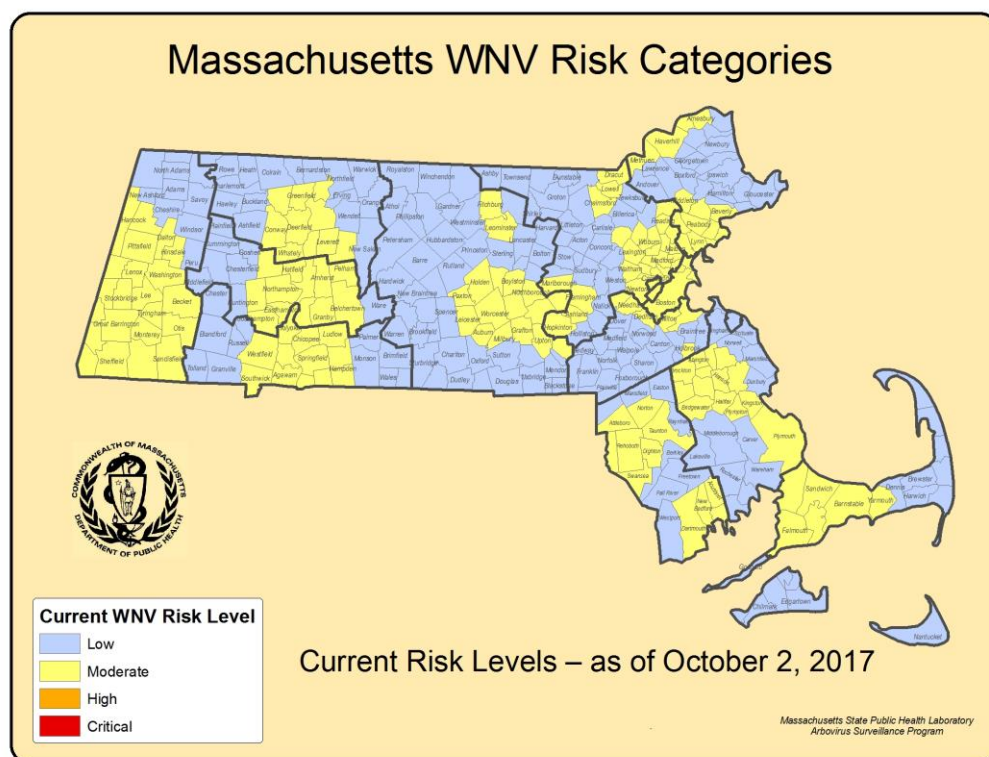


Figure 1: Current WNV Risk Categories as described in Table 1 of the 2017 MDPH Surveillance and Response Plan

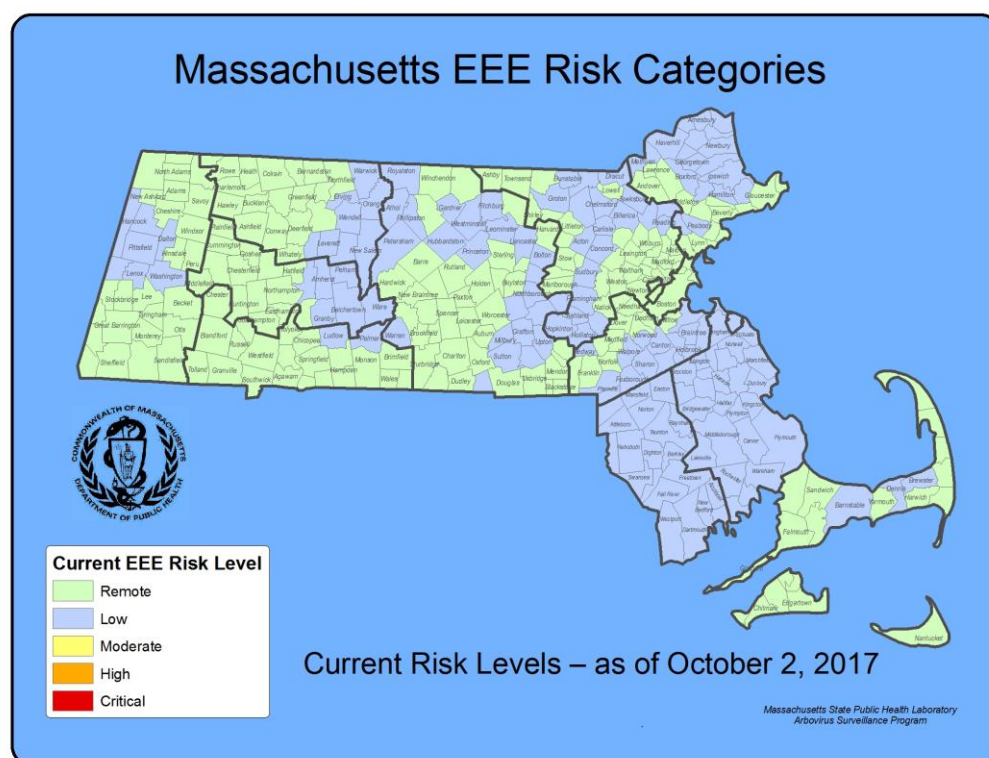


Figure 2: Current EEE Risk Categories as described in Table 2 of the 2017 MDPH Surveillance and Response Plan