

Massachusetts Department of Public Health Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

West Nile virus activity continues to expand and intensify across the state; MDPH identified 30 WNV positive mosquito samples tested during week 33. MDPH also identified the first WNV human case of 2016. These findings prompted increases to the WNV risk levels for communities in, Essex, Middlesex, Norfolk counties. Above average temperatures and localized precipitation events are continuing to produce large mosquito populations among species most likely to spread West Nile virus (*Culex* species). August and early September is the peak period for WNV human transmission, residents should be urged to avoid mosquito bites regardless of where they live. During week 32 a single mosquito sample from Kingston tested EEE virus positive, this is the second EEE mosquito finding of the year; multiple negative samples and low populations of *Culiseta melanura* indicate that risk is not increased or widespread at this time. Check your risk levels 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

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 very active in the Caribbean, Mexico, 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 33 (Sunday, 08/14/2016– Saturday, 08/20/2016)	
Mosquito Surveillance - Cumulative	
Number of Mosquito Samples Tested	4742
Number of WNV Positive Samples	90
Number of EEE Positive Samples	2
Equine/Mammal Surveillance - Cumulative	
Number of Mammal Specimens Tested	2
Number of WNV Positive Horses	0
Number of EEE Positive Horses	0
Number of other EEE Positive Mammals	0

Human Surveillance - Cumulative	
Number of Human Specimens Tested	130
Number of Human WNV Cases	1
Number of Human EEE Cases	0

Table 1: Summary of 2016 Mosquito Samples Tested Massachusetts State Public Health Laboratory

Summary of 2016 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
24 (6/12-6/18/2016)	6	16	14	50	0	0	12	9	20	41	0	168
25 (6/19-6/25/2016)	20	35	15	90	0	0	23	42	22	95	4	346
26 (6/26-7/2/2016)	32	20	35	100	0	16	48	67	40	81	7	446
27 (7/3-7/09/2016)	26	32	27	82	3	0	61	85	0	121	5	442
28 (7/10-7/16/2016)	29	17	39	82	4	38	48	92	78	320	26	773
29 (7/17-7/23/2016)	36	30	27	89	7	37	56	104	49	114	20	569
30 (7/24-7/30/2016)	27	30	30	95	2	12	62	104	26	92	23	503
31 (7/31-8/06/2016)	26	29	26	108	2	23	54	93	37	134	16	548
32 (8/07-8/13/2016)	28	27	34	84	0	26	50	101	30	66	7	453
33 (8/14-8/20/2016)	29	27	15	94	4	29	41	125	48	69	13	494
Total	259	263	262	874	22	181	455	822	350	1133	121	4742

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

Table 2: Cumulative Confirmed and Probable Human Chikungunya Virus Infections and Dengue Fever Cases Reported in Massachusetts by County of Residence, 2016
(These data are current as of 08/22/2016 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: 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 below were travel-acquired unless otherwise noted.

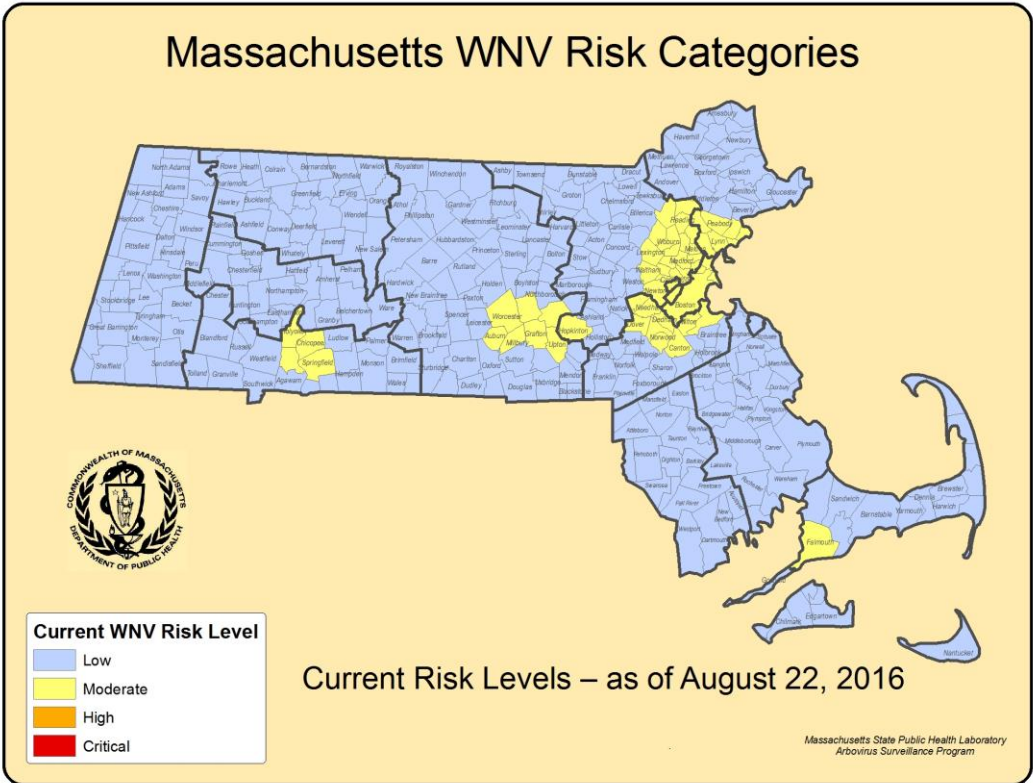


Figure 1: Current WNV Risk Categories as described in Table 1 of the 2016 MDPH Surveillance and Response Plan

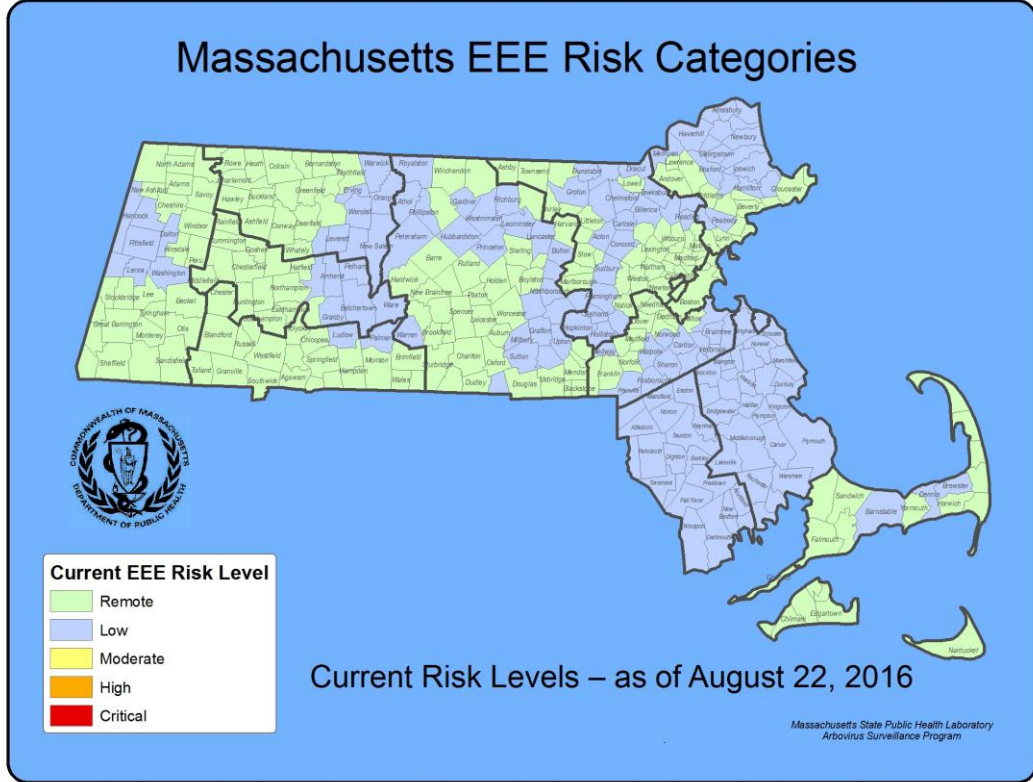


Figure 2: Current EEE Risk Categories as described in Table 2 of the 2016 MDPH Surveillance and Response Plan

END