

# Massachusetts Department of Public Health Arbovirus Surveillance Program Report

## Key Public Risk Communication Messages for This Week:

Last week MDPH reported 10 West Nile virus positive mosquito samples collected in Belchertown, Boston, Brookline, Millbury, Pittsfield and Stockbridge. Due to sustained WNV activity in the City of Boston MDPH has raised the WNV risk levels for the following communities to Moderate Risk, Boston, Brookline, Cambridge, Chelsea, Dedham, Everett, Milton, Needham, Newton, Somerville, Watertown and Winthrop. MDPH and partnering Mosquito Control Projects will continue to increase surveillance activities to ensure early detections. Above average temperatures and precipitation events are likely to support increased mosquito populations. Residents are urged to take appropriate personal protection activities to reduce mosquito bites. Check your risk levels throughout the season by visiting [www.mass.gov/dph/mosquito](http://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](http://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 28 (Sunday, 07/08/2018– Saturday, 07/14/2018)	
<b>Mosquito Surveillance</b>	
Number of Mosquito Samples Tested	1694
Number of WNV Positive Samples	18
Number of EEE Positive Samples	0
<b>Equine/Mammal Surveillance</b>	
Number of Mammal Specimens Tested	0
Number of WNV Positive Horses	0
Number of EEE Positive Horses	0

<b>Number of other EEE Positive Mammals</b>	<b>0</b>
<b>Human Surveillance</b>	
<b>Number of Human Specimens Tested</b>	<b>51</b>
<b>Number of Human WNV Cases</b>	<b>0</b>
<b>Number of Human EEE Cases</b>	<b>0</b>

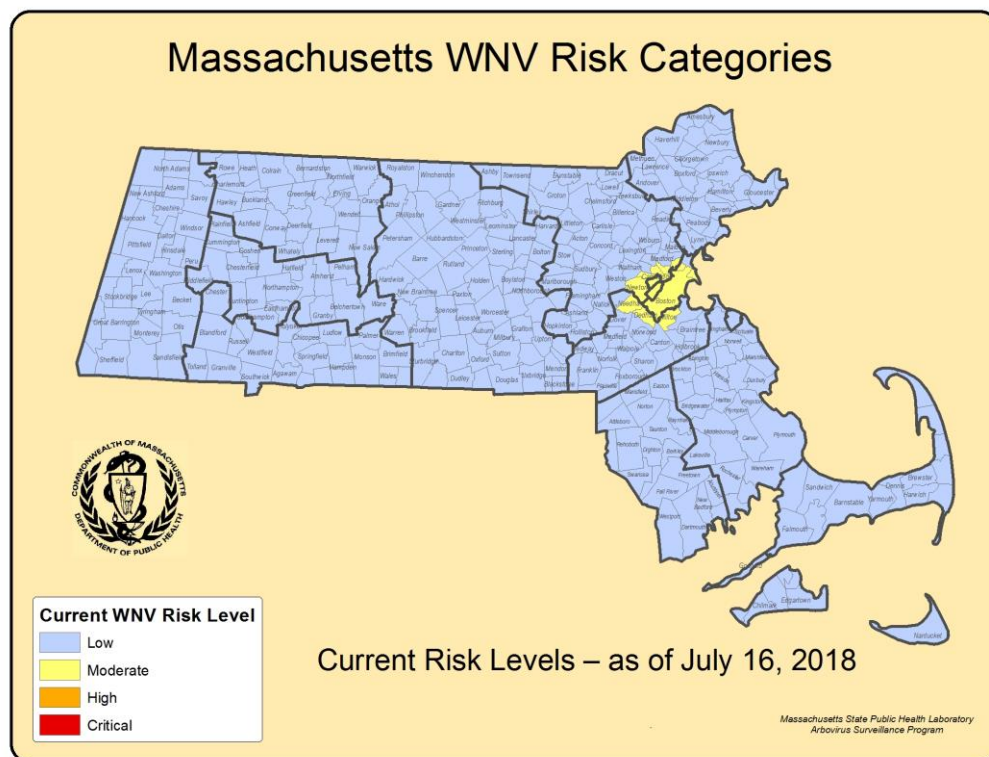
Summary of 2018 Mosquito Samples Tested Massachusetts State Public Health Laboratory												
MMWR Week: (Specimens Tested)	Berkshire County MCP	Bristol County MCP	Cape Cod MCP	Central MA MCP	Dukes County MCP	East Middlesex MCP	Norfolk County MCP	Northeast MA MCP	Plymouth County MCP	SLI	Suffolk County MCP	Total Tested
24 (6/10-6/16/2018)	8	9	11	42	0	0	7	13	8	52	0	150
25 (6/17-6/23/2018)	33	17	23	101	0	0	10	7	34	68	0	293
26 (6/24-6/30/2018)	29	34	25	136	0	0	25	12	38	93	6	398
27 (7/1-7/7/2018)	24	20	0	157	0	11	22	0	0	119	0	353
28 (7/8-7/14/2018)	44	37	48	65	1	13	17	35	75	155	10	500
<b>Total</b>	<b>138</b>	<b>117</b>	<b>107</b>	<b>501</b>	<b>1</b>	<b>24</b>	<b>81</b>	<b>67</b>	<b>155</b>	<b>487</b>	<b>16</b>	<b>1694</b>

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

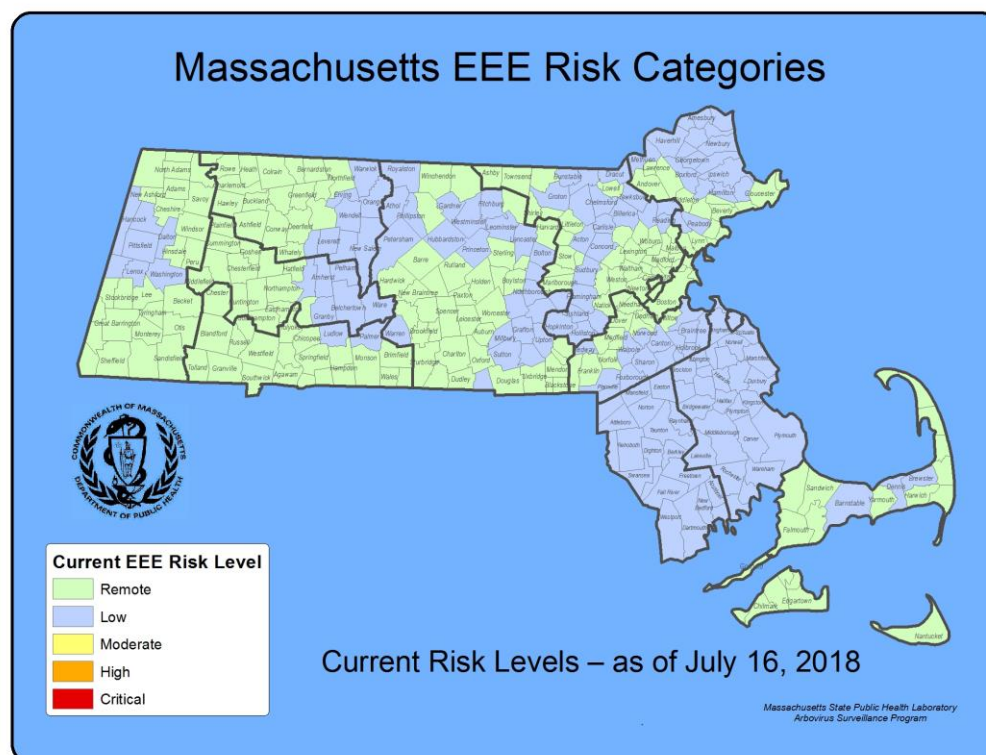
**Cumulative Confirmed and Probable Human Chikungunya Virus Infections and Dengue Fever Cases  
Reported in Massachusetts by County of Residence, 2018**  
(these data are current as of 07/16/2018 and are subject to change)

County	Chikungunya virus infection	Dengue Fever
<b>Barnstable</b>	0	0
<b>Berkshire</b>	0	0
<b>Bristol</b>	0	0
<b>Dukes</b>	0	0
<b>Essex</b>	0	0
<b>Franklin</b>	0	0
<b>Hampden</b>	0	0
<b>Hampshire</b>	0	0
<b>Middlesex</b>	0	0
<b>Nantucket</b>	0	0
<b>Norfolk</b>	0	0
<b>Plymouth</b>	0	0
<b>Suffolk</b>	0	0
<b>Worcester</b>	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**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 2018 MDPH Surveillance and Response Plan**



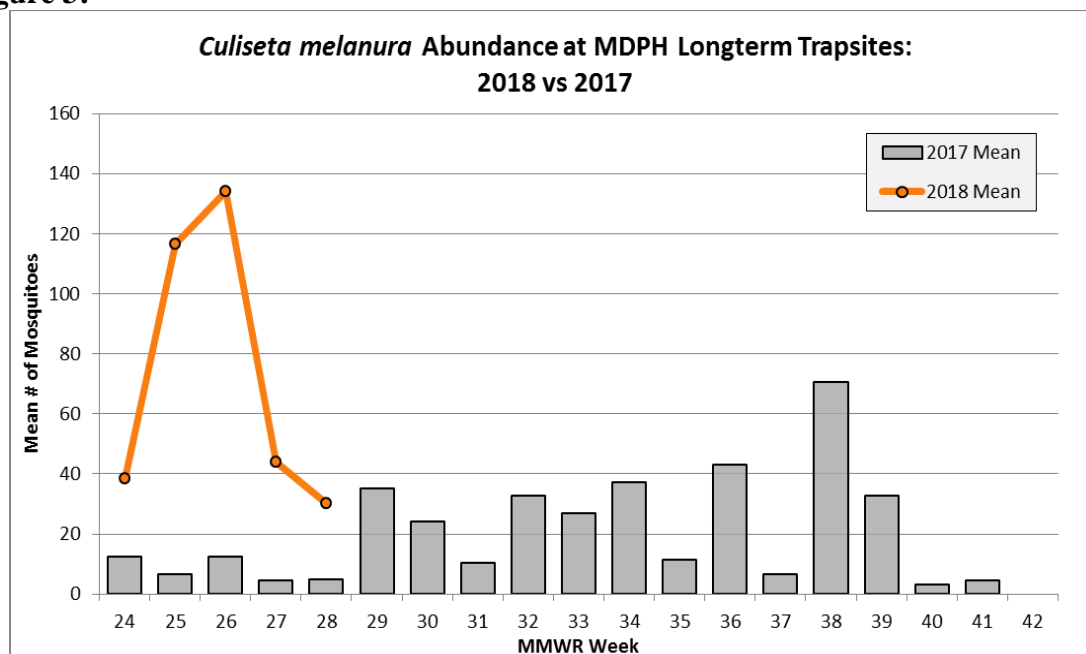
**Figure 2: Current EEE Risk Categories as described in Table 2 of the 2018 MDPH Surveillance and Response Plan**

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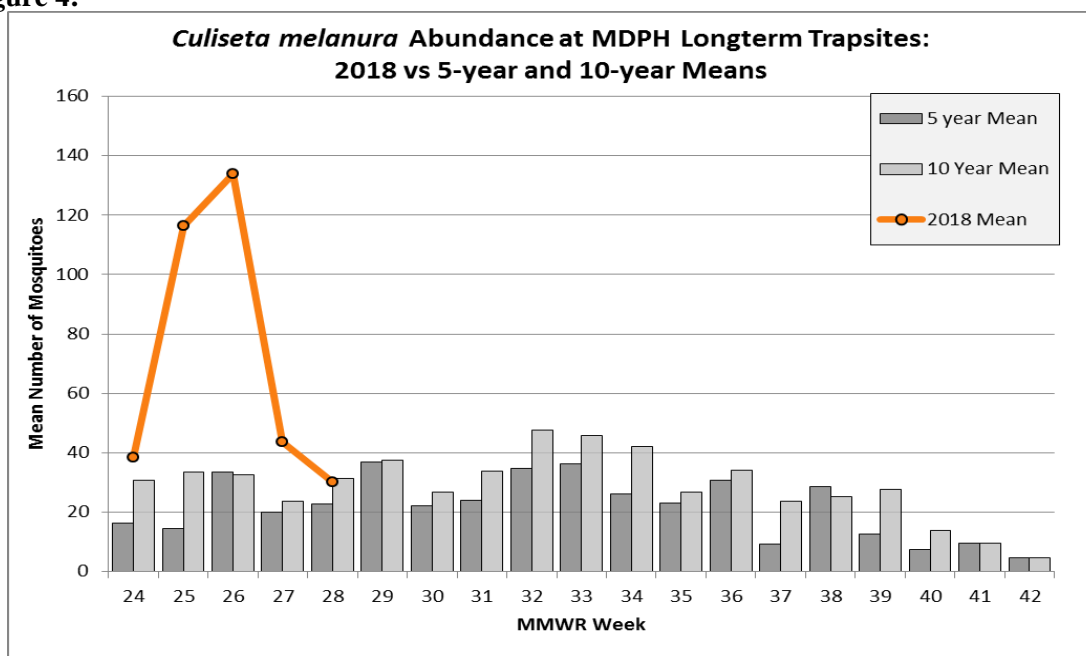
## Mosquito Surveillance Data: 07/16/2018

Predominant mosquito species found at MDPH trap sites for MMWR week 28 was *Coquillettidia perturbans*. See graphs below for weekly abundance, MIR and AIF rates.

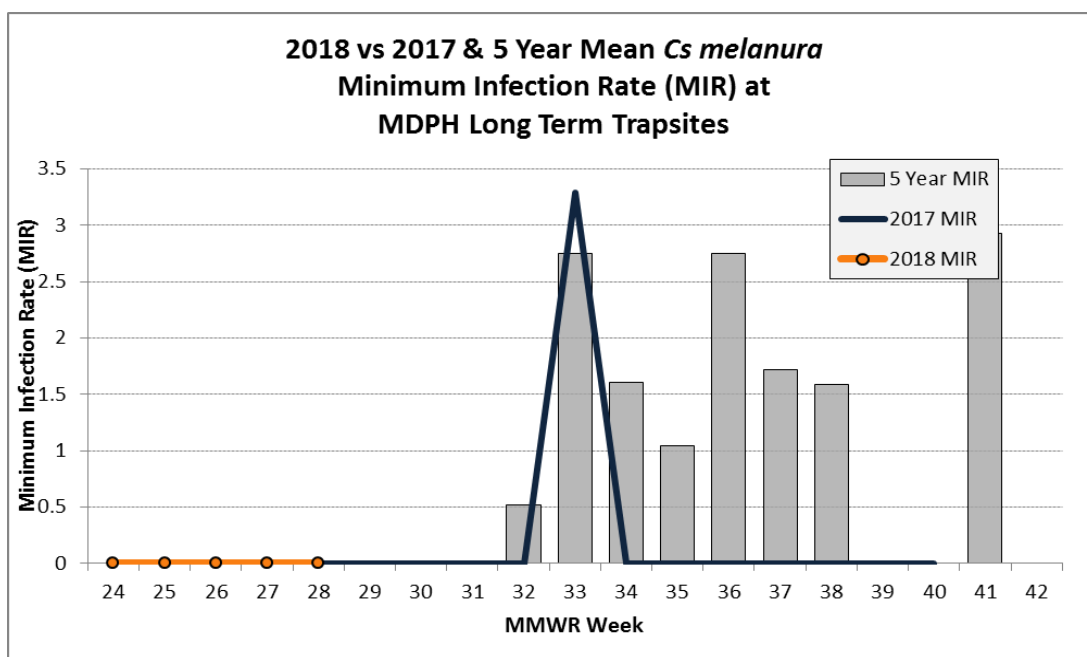
**Figure 3:**



**Figure 4:**



**Figure 5:**



**Figure 6:**

