Commonwealth of Massachusetts

State Reclamation and Mosquito Control Board

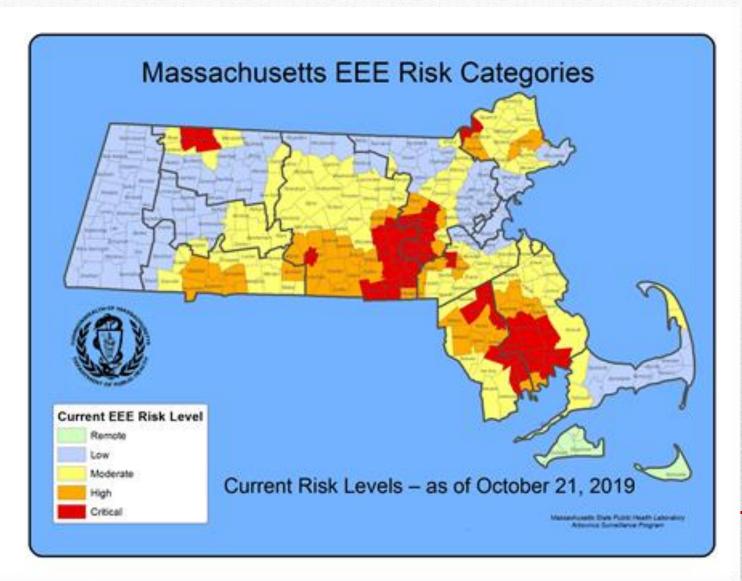


Northeast Massachusetts Mosquito Control and Wetlands Management District

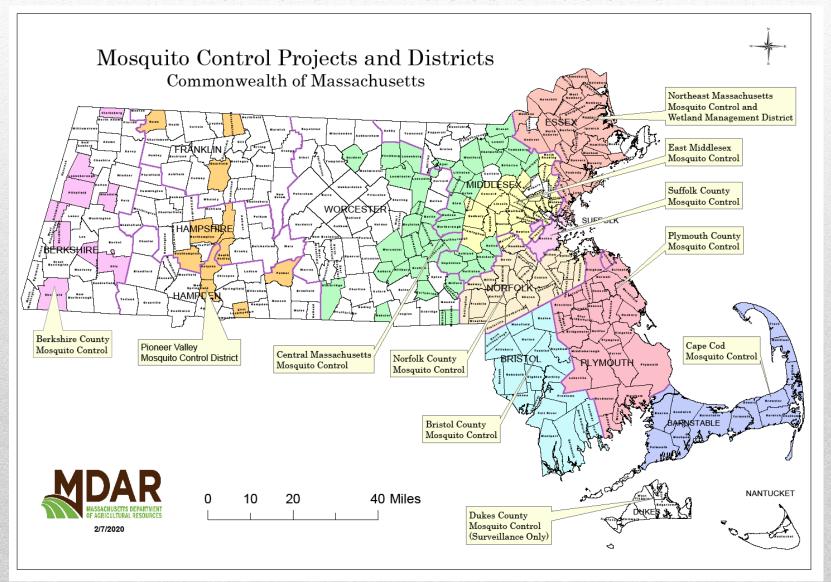
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Massachusetts EEE Risk Level Map as of October 21st, 2019



Map of the Mosquito Control Districts in Massachusetts



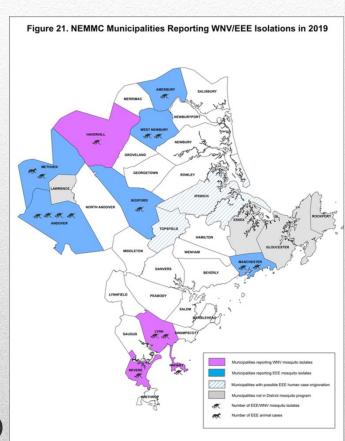
2019 Arbovirus District Summary

EEE Activity

- 11 positive mosquito pools
- 6 municipalities had EEE positive mosquito isolates (Andover, Boxford, Methuen, West Newbury, Manchester, and Amesbury)
- 1 EEE human case
- 1 EEE horse case

WNV Activity

- 5 positive mosquito pools
- 4 municipalities had WNV positive mosquito isolates (Lynn, Nahant, Revere, and Haverhill)
- No WNV human/animal cases in the district for 2019



2019 District Activity Summary

District Summary of Activities

- 63,083 catch basins treated
- 2,554.05 lbs of larvicide
- 2,790 gallons of larvicide applied from aerial larvicing
- 270.3 gallons of adulticide
- 6.625 gallons of pesticide for barrier treatment

District Adulticide Activity

- Emergency block/targeted adulticide: Andover, Methuen, West Newbury, Georgetown, Groveland
- Emergency town-wide adulticides: Manchester, Ipswich, Amesbury, Topsfield

Services and Control Measures

- Regional Adult Mosquito Surveillance
- Larviciding Ground and Aerial (salt marsh)
- Catch Basin Treatments
- Property Inspections
- Truck-based ULV Adulticiding
- Barrier Treatments
- Tire Recycling Program
- Wetlands Management
- Greenhead Program
- NEMMC website



Regional Adult Mosquito Surveillance

- Monitor your town's mosquito activity
- Virus testing every week
- Supplemental trapping



Gravid Trap



CDC CO2/Light Trap

Supplemental Trapping

 After the 1st positive WNV/EEE vector species, portable traps are deployed where infected mosquitoes have been collected

• Supplemental traps are set based on a number of factors

(not limited to):

- Radius of collection

- Distance from historic trap
- Topography
- Historic virus cases
- Human population density
- Breeding sites
- Recreation areas/ schools/ parks
- Surrounding wetlands



Larviciding

- Preventative treatment that kills mosquitoes in larval form
- Regional Aerial Salt Marsh Larviciding Program
- Ipswich to the New Hampshire border (~3,500 acres)
- Freshwater wetlands historic and new sites
- Retention ponds, ditches, containers
- Abandoned properties (swimming pools)





Catch Basin Treatments

- Another form of larviciding
- Hand treat
- Primary breeding area for Culex pipiens and Culex restuans – both vectors for WNV
- Cost effective and long term control over WNV



Property Inspections

- Inspection of a property for mosquito breeding areas, treating if needed
- Resident or Board of Health request
- Non-regulatory agency



Adulticiding

- Adulticiding is the control of adult flying mosquitoes
- Truck-based Ultra Low Volume (ULV)
- Final measure to reduce risk of WNV/EEE infections
- Targeted adulticide in virus response
- Not a preventative only affects mosquitoes flying
 - 1/3 of district allow residents to request
 - 1/3 of district allow Board of Health to request
 - 1/3 of district allow for virus response only



Barrier Treatment

- Application of a product that forms a physical barrier preventing mosquitoes from entering an area
- Truck-based treatment
- Acts as a barrier for flying mosquitoes
- 90-day and 30-day residual to protect public areas such as schools, parks, and recreation areas



Truck applying barrier treatment at dusk

Tire Recycling Program

- Tires without rims are an ideal breeding site for several species of mosquitoes, especially disease vectors
- NEMMC to assist with the collection and disposal of discarded tires
 - Abandoned outdoors/in wetlands
 - Municipal Hazardous Waste Days (education/outreach)



Tire collection in Groveland

Wetlands Management

- Stagnant water is an ideal breeding site for mosquitoes
- NEMMC completes hand and mechanized ditch maintenance to increase water flow = decrease mosquito populations
 - no pesticides applied





Before After

Greenhead Program

• NEMMC is thrilled to have Essex be a part of the Greenhead Program!





NEMMC Website



NEMMC Website

Municipal Toolbox for Board of Health members

- Prevalent mosquito/virus information
- Virus response plans risk levels (low-critical)
- BMPs, IPVMP
- Samples of public notice
- School IPM information
- Virus fact sheets
- And more!

Showcased at the Gould Barn Meeting in Topsfield, MA on April 9th at 9am



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