

Massachusetts Department of Public Health

Arbovirus Surveillance Program Report

Key Public Risk Communication Messages for This Week:

Aerial spraying in Plymouth County and ground spraying in Worcester County is scheduled to begin on 8/27/24 to control EEE mosquito vectors in selected communities. For more information and a list of impacted communities, please visit <https://www.mass.gov/info-details/mosquito-control-and-spraying>

Aerial and Ground Spray Maps are available are posted here: <https://massnrc.org/spray-map/Region/List>

MDPH has identified one EEE human case in Worcester County, a single EEE horse case in the town of Plymouth, and 69 EEE positive mosquito samples, from Barnstable, Essex, Middlesex, Norfolk, and Plymouth Counties. MDPH has also identified two WNV human cases from Hampden and Middlesex Counties, and 262 WNV mosquito samples collected statewide.

In response to increasing arbovirus detections, risk levels have been elevated in adjacent communities. Personal protection measures are recommended due to elevated arbovirus detections and average mosquito vector populations across the state. Check your risk levels throughout the season by visiting our interactive site <https://www.mass.gov/info-details/massachusetts-arbovirus-update>

Average regional precipitation events and warm daytime weather will continue to support populations of WNV and EEE mosquito vectors. Avoid mosquito bites by using EPA approved repellents, appropriate clothing and avoiding peak mosquito activity between dusk and dawn. Remove standing water by emptying containers and tarps. Please review the 2024 MDPH Surveillance and Response Plan for updates to risk levels and risk messaging. <https://www.mass.gov/doc/2024-arbovirus-surveillance-and-response-plan/download>

| WNV and EEE Virus Surveillance Summary | |
|--|------|
| Results contained in this report reflect data up to and inclusive of MMWR Week 34 (Sunday, 08/18/2024-Saturday, 08/24/2024) | |
| Mosquito Surveillance | |
| Number of Mosquito Samples Tested | 6645 |
| Number of WNV Positive Samples | 262 |
| Number of EEE Positive Samples | 69 |
| Equine/Mammal Surveillance | |
| Number of Mammal Specimens Tested | 5 |
| Number of WNV Positive Horses | 0 |
| Number of EEE Positive Horses | 1 |
| Number of other WNV Positive Mammals | 0 |
| Human Surveillance | |
| Number of Human Specimens Tested | 93 |
| Number of Human WNV Cases | 2 |
| Number of Human EEE Cases | 1 |

| Summary of 2024 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 | SPHL | Suffolk County MCP | Total Tested |
| 30 (07/21-07/27/2024) | 32 | 29 | 67 | 108 | 9 | 31 | 41 | 35 | 59 | 96 | 186 | 41 | 734 |
| 31 (07/28-08/03/2024) | 39 | 31 | 65 | 117 | 7 | 61 | 35 | 83 | 56 | 128 | 185 | 30 | 837 |
| 32 (08/04-08/10/2024) | 27 | 30 | 63 | 120 | 5 | 46 | 33 | 88 | 44 | 37 | 155 | 28 | 676 |
| 33 (08/11-08/17/2024) | 25 | 34 | 58 | 96 | 5 | 23 | 42 | 41 | 43 | 212 | 94 | 17 | 690 |
| 34 (08/18-08/24/2024) | 27 | 32 | 40 | 66 | 6 | 45 | 15 | 88 | 30 | 0 | 91 | 10 | 450 |
| Total | 393 | 277 | 571 | 1010 | 43 | 359 | 264 | 522 | 465 | 699 | 1835 | 207 | 6645 |

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

Chikungunya and Dengue, Reported in Massachusetts by County of Residence, 2024

(These data are current as of 8/26/2024 and are subject to change)

| County | Chikungunya virus infection | Dengue Fever |
|------------|-----------------------------|--------------|
| Barnstable | 1 | 1 |
| Berkshire | 0 | 0 |
| Bristol | 0 | 2 |
| Dukes | 2 | 0 |
| Essex | 0 | 6 |
| Franklin | 0 | 0 |
| Hampden | 0 | 1 |
| Hampshire | 0 | 2 |
| Middlesex | 8 | 19 |
| Nantucket | 0 | 0 |
| Norfolk | 0 | 12 |
| Plymouth | 0 | 2 |
| Suffolk | 3 | 28 |
| Worcester | 1 | 11 |
| Total | 15 | 84 |

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