EPI Week 28

Surveillance Summary

EPI Week 28 Target Species Surveillance Summary				Cumulative Totals: EPI Weeks 24-28				
Species	#	Pools	WNV+	EEEV+	Cumulative	Cumulative	Cumulative	Cumulative
	Collected				Specimens	Pools	WNV+	EEEV+
Cx. pipiens/restuans	1788	23	1	0	3367	95	1	0
Cq. perturbans	1051	31	0	0	2300	76	0	0
Cs. melanura	0	0	0	0	5	3	0	0
Oc. canadensis	119	1	0	0	736	19	0	0
Oc. japonicus	165	3	0	0	405	19	0	0
Ps. ferox	8	0	0	0	44	0	0	0
An. quadrimaculatus	8	0	0	0	111	4	0	0
Ae. vexans	6	0	0	0	105	7	0	0
Ae. Albopictus	0	0	0	0	21	1	0	0
Totals	3145	58	0	0	7094	224	1	0

Positive Mosquito Samples in the Pioneer Valley Region

• There was one WNV positive pool of Culex *pipiens/restuans* detected in Chicopee during EPI week 28. See statewide results <u>here</u> and risk maps <u>here</u>.

Most Abundant Species in Pioneer Valley

 Among the species of most concern, Cq. perturbans continued to be the most prevalent during EPI week 28, with a total of 1788 specimens. Cq. perturbans are a bridge vector for EEE and WNV and can be found in permanent swamps with emergent vegetation (e.g. cattails and hummocks/tussocks). Cq. perturbans are aggressive human biters that can fly up to 5 miles for a blood meal and are active during the night.



Cq. perturbans adult female. Image Credit: Northeastern Mosquito Control Association

EPI WK 28 Summary by County

• Franklin County

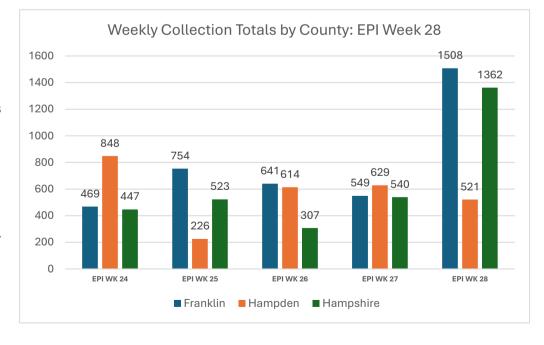
- o EPI WK 28 Pools Tested: 31
- o Positive Samples: 0
- Most Abundant Species:
 Cq. perturbans (882)
- Total Mosquitoes
 Collected: 1508

Hampden County

- o EPI WK 28 Pools Tested: 13
- o Positive Samples: 1
- Most Abundant Species:
 Cx. pipiens/restuans (349)
- Total Mosquitoes
 Collected: 521

Hampshire County

- o EPI WK 28 Pools Tested: 17
- o Positive Samples: 0
- Most Abundant Species:
 Cq. perturbans (825)
- Total MosquitoesCollected: 1362
- Total Mosquitoes Collected (All Counties): 3391 (Total Includes Non-Targeted Species)
- Total Pools Submitted for Testing (All Counties): 58



Weather Summary

Weather conditions during EPI Week 28 continued to support mosquito activity, with temperatures, humidity, and precipitation remaining within favorable ranges.

Weekly Changes in Weather

Station	Name	EPI Week	PRCP Total (in.)	TMAX AVG (°F)	TMIN AVG (°F)
USC00190120	AMHERST, MA US	23	1.53	77.43	51.14
USC00190120	AMHERST, MA US	24	0.69 (-55%)	74.5 (-4%)	56 (+10%)
USC00190120	AMHERST, MA US	25	0.55 (-20%)	74.8 (<1%)	58.5 (+4%)
USC00190120	AMHERST, MA US	26	0.35 (-36%)	87.9 (+17%)	66 (+13%)
USC00190120	AMHERST, MA US	27	0.16 (-54%)	84.1 (-4%)	59.5 (-10%)
USC00190120	AMHERST, MA US	28	0.54 (+238%)	87.6 (+4%)	66.1 (+11%)

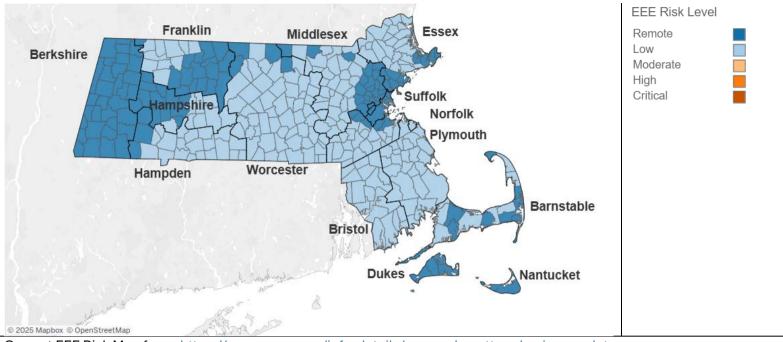
Statewide Cumulative Arbovirus Positives as of 7/17/25

Virus	Positive Mosquito Samples	Animal Cases	Human Cases
EEE	0	0	0
WNV	24	1	0

Positive Mosquito Samples as of 7/17/25

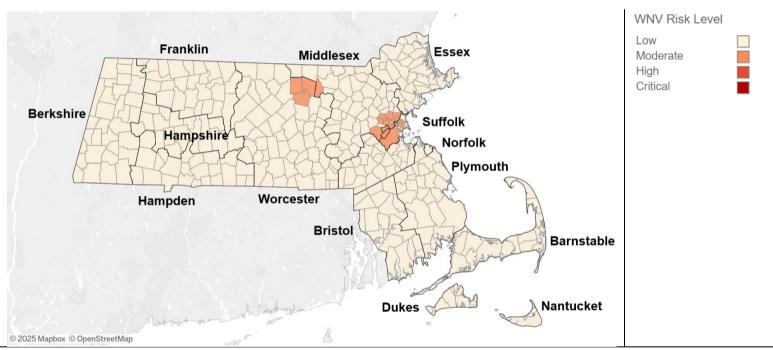
Date	County	City/Town	Species	Positive Samples
June 13, 2025	Worcester	Shrewsbury	Coquillettidia perturbans	1
June 24, 2025	Barnstable	Falmouth	Culex pipiens/restuans	1
June 24, 2025	Middlesex	Watertown	Culex pipiens/restuans	1
July 1, 2025	Suffolk	Chelsea	Culex pipiens/resutans	1
July 2, 2025	Bristol	Swansea	Culex pipiens/resutans	1
July 8, 2025	Barnstable	Barnstable	Culex pipiens/resutans	1
July 8, 2025	Middlesex	Cambridge	Culex pipiens/resutans	1
July 8, 2025	Middlesex	Malden	Culex pipiens/resutans	1
July 8, 2025	Suffolk	Boston	Culex pipiens/resutans	2
July 10, 2025	Hampden	Chicopee	Culex pipiens/resutans	1
July 15, 2025	Middlesex	Arlington	Culex pipiens/resutans	1
July 15, 2025	Middlesex	Belmont	Culex pipiens/resutans	1
July 15, 2025	Middlesex	Medford	Culex pipiens/resutans	3
July 15, 2025	Middlesex	Watertown	Culex pipiens/resutans	2
July 15, 2025	Suffolk	Boston	Culex pipiens/resutans	5
July 15, 2025	Suffolk	Boston	Ochlerotatus japonicus	1

EEE Risk Map as of 7/17/25 - No Change



Current EEE Risk Map from: https://www.mass.gov/info-details/massachusetts-arbovirus-update

WNV Risk Map as of 7/17/25 - Risk Level Raised to Moderate in Parts of Middlesex, Worcester, and Suffolk Counties



Current WNV Risk Map From: https://www.mass.gov/info-details/massachusetts-arbovirus-update

Bite Prevention - Mosquitoes and Ticks

Mosquitoes and ticks can transmit serious diseases, but taking protective measures can go a long way in preventing bites from these common vectors.

Personal Protection Tips

- **Use insect repellent:** Use EPA approved insect repellent with one of the following ingredients: DEET, picaridin, or oil of lemon eucalyptus to keep bugs off.
- **Be mindful of timing and environment:** Mosquitoes are busiest at dawn and dusk, while ticks hide in brushy areas all day. During the colder months, ticks will overwinter in mostly leaf litter and will seek out a blood meal on a warm winter day.
- **Wear proper clothing:** Long sleeves, pants, and shoes help prevent mosquito bites. Although it's not much of a fashion statement, tucking your pants into your socks prevents ticks from migrating up your leg and biting you.
- **Treat your clothes:** Spray gear and clothing with permethrin for extra protection against ticks. Note, permethrin is a pesticide and should be used with caution. Read all product labels before use.
- Tick check: Look over your skin, clothes, and pets carefully after spending time outside.
- Dry your clothes on high heat: Ticks can survive a wash cycle, but 10 minutes in a hot dryer will kill them.
- If possible, take a shower within two hours: It helps wash off unattached ticks before they can latch on. This is also a good opportunity to look over your skin again.

Around the Home

- Prevent artificial habitat: Mosquitoes will seek out water-filled containers to lay their eggs in, so empty buckets,
 birdbaths, kiddy pools, tarps, etc. Clear gutters of debris regularly and dispose of old tires to prevent mosquito breeding.
- Fix doors and screens: Keep mosquitoes out by inspecting and repairing window screens.
- Make a tick-safe yard: Maintain short grass, remove leaf litter, and place a barrier of gravel between wooded areas and the edges of your lawn.

PE Poster Printouts and Helpful Links

- Mosquito Bite Prevention Poster
- Arbovirus Transmission Cycles
- Reducing Mosquito Breeding Sites
- CDC Dengue Fever Information
- DPH Mosquito PE Materials: https://www.mass.gov/lists/mosquito-borne-disease-educational-materials
- DPH Tick PE Materials: https://www.mass.gov/info-details/tick-borne-educational-materials