# EPI Week 27

# Surveillance Summary

EPI Week 27 Target Species Surveillance Summary				Cumulative Totals: EPI Weeks 24-27				
Species	#	Pools	WNV+	EEEV+	Cumulative	Cumulative	Cumulative	Cumulative
	Collected				Specimens	Pools	WNV+	EEEV+
Cx. pipiens/restuans	121	11	0	0	1579	72	0	0
Cq. perturbans	670	21	0	0	1249	45	0	0
Cs. melanura	0	0	0	0	5	3	0	0
Oc. canadensis	173	4	0	0	617	18	0	0
Oc. japonicus	58	4	0	0	240	16	0	0
Ps. ferox	11	0	0	0	36	0	0	0
An. quadrimaculatus	90	3	0	0	103	4	0	0
Ae. vexans	18	1	0	0	95	7	0	0
Ae. Albopictus	21	1	0	0	21	1	0	0
Totals	1162	45	0	0	3945	166	0	0

### Positive Mosquito Samples in the Pioneer Valley Region

• There were no arbovirus detections during EPI week 27 in The Pioneer Valley. See statewide results here and risk maps here.

### Most Abundant Species in Pioneer Valley

• Among the species of most concern, Cq. *perturbans* continued to be the most prevalent during EPI week 27, with a total of 670 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 27 Summary by County**

#### • Franklin County

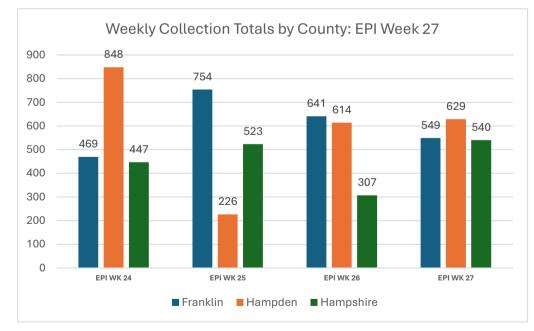
- o EPI WK 27 Pools Tested: 16
- Positive Samples: 0
- Most Abundant Species: Cq. *perturbans* (274)
- Total Mosquitoes Collected: 549

#### Hampden County

- o EPI WK 27 Pools Tested: 16
- Positive Samples: 0
- Most Abundant Species: Cq. perturbans (179)
- Total Mosquitoes
  Collected: 629

#### Hampshire County

- EPI WK 27 Pools Tested: 13
- Positive Samples:
- Most Abundant Species:
- Cx. pipiens/restuans (217)
- Total Mosquitoes
  Collected: 540
- Total Mosquitoes Collected (All Counties): **1718**
- Total Pools Submitted for Testing (All Counties): **45**



## Weather Summary

Weather conditions during EPI Week 27 continued to support mosquito activity, with temperatures and precipitation remaining slightly 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%)

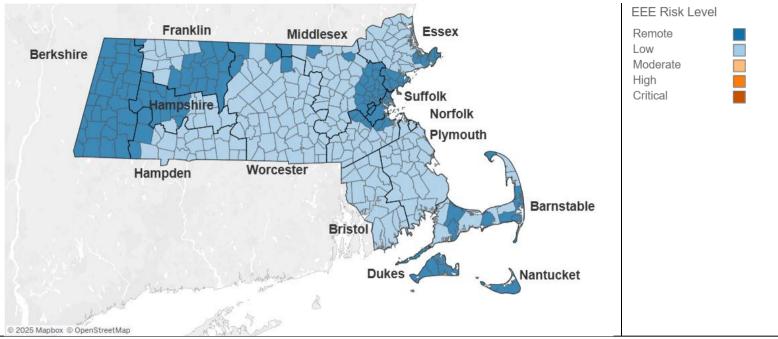
#### Statewide Cumulative Arbovirus Positives as of 7/3/25

Virus	Positive Mosquito Samples	Animal Cases	Human Cases	
EEE	0	0	0	
WNV	10	0	0	

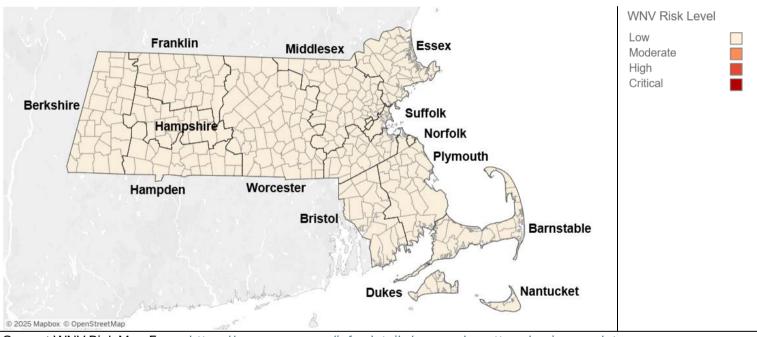
## Positive Mosquito Samples as of 7/11/25

Date	County	City/Town	Species
June 13, 2025	Worcester	Shrewsbury	Coquillettidia perturbans
June 24, 2025	Barnstable	Falmouth	Culex pipiens/restuans
June 24, 2025	Middlesex	Watertown	Culex pipiens/restuans
July 1, 2025	Suffolk	Chelsea	Culex pipiens/resutans
July 8, 2025	Barnstable	Barnstable	Culex pipiens/resutans
July 8, 2025	Middlesex	Cambridge	Culex pipiens/resutans
July 8, 2025	Middlesex	Malden	Culex pipiens/resutans
July 8, 2025	Suffolk County	Boston	Culex pipiens/resutans
July 8, 2025	Suffolk County	Boston	Culex pipiens/resutans

#### EEE Risk Map as of 7/11/25 – No Change



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



# WNV Risk Map as of 7/11/25 - No Change

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
- <u>Reducing Mosquito Breeding Sites</u>
- <u>CDC Dengue Fever Information</u>
- DPH Mosquito PE Materials: <u>https://www.mass.gov/lists/mosquito-borne-disease-educational-materials</u>
- DPH Tick PE Materials: <u>https://www.mass.gov/info-details/tick-borne-educational-materials</u>