Pioneer Valley MCD Weekly Surveillance Report

Surveillance Summary for EPI Week 24 — Week Ending: 6/21/26

EPI Week 24 Target Species Surveillance Summary

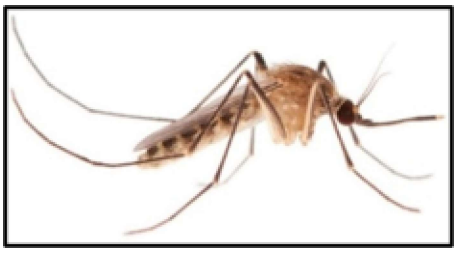
Species	# Collected	Pools	WNV+	EEEV+	Cumulative Collected	Cumulative Pools	Cumulative WNV+	Cumulative EEEV+
Cx. pipiens/restuans	714	26	0	0	1038	43	0	0
Cq. perturbans	171	11	0	0	203	14	0	0
Cs. melanura	1	1	0	0	5	4	0	0
Oc. canadensis	103	0	0	0	161	1	0	0
Oc. japonicus	289	7	0	0	389	10	0	0
Ps. ferox	0	0	0	0	0	0	0	0
An. quadrimaculatus	44	1	0	0	53	1	0	0
Oc. triseriatus	28	1	0	0	28	1	0	0
Ae. vexans	5	0	0	0	5	0	0	0
Ae. albopictus	2	0	0	0	2	0	0	0
Cx. salinarius	6	0	0	0	6	0	0	0
An. punctipennis	47	0	0	0	67	0	0	0
Cx. erraticus	0	0	0	0	0	0	0	0
Ur. sapphirina	0	0	0	0	0	0	0	0
Totals	**1382**	**47**	**0**	**0**	**1929**	**74**	**0**	**0**

Positive Mosquito Samples in the Pioneer Valley Region

There were no positive samples confirmed during EPI week 24.

Most Abundant Species in Pioneer Valley

Among the species of most concern, *Culex pipiens/restuans* were the most prevalent, with a total of 714 specimens collected during EPI week 24. *Cx. pipiens/restuans*, the primary vector for West Nile virus (WNV), breeds in artificial containers such as catch basins, neglected swimming pools, tarps, birdbaths, buckets, discarded tires, and poorly maintained garden ponds. Eliminating standing water around the home is a key step in reducing populations of *Cx. pipiens/restuans* and other mosquito vectors.



Cx. pipiens adult female.

EPI WK 24 Summary by County

Franklin County

- **Pools Tested:** 22
- **Positive Samples:** 0
- **Most Abundant:** *Cx.* pipiens/restuans (423)
- **Total Mosquitoes Collected:** 762

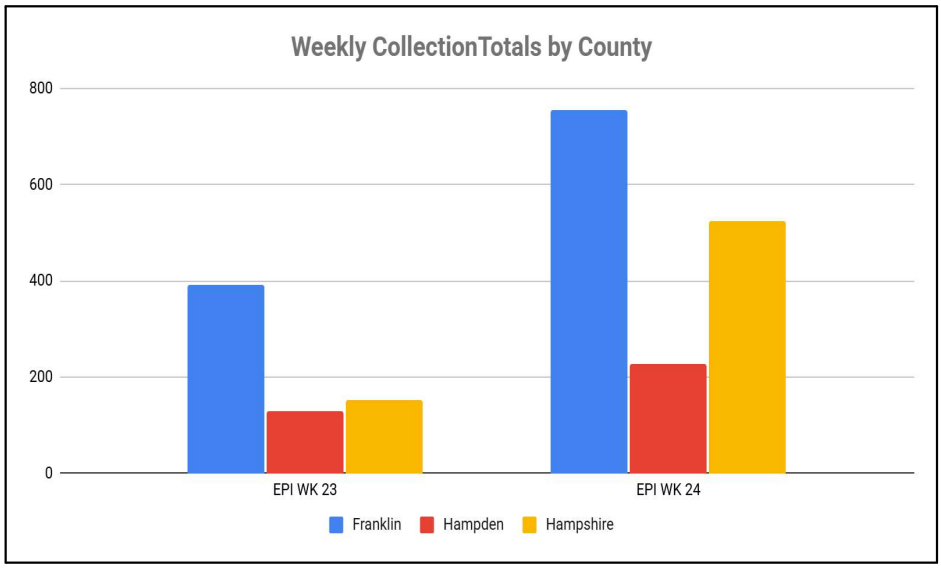
Hampden County

- **Pools Tested:** 11
- **Positive Samples:** 0
- **Most Abundant:** *Cx. pipiens/restuans* (183)
- **Total Mosquitoes Collected:** 310

Hampshire County

- **Pools Tested:** 14
- **Positive Samples:** 0
- **Most Abundant:** *Oc. japonicus* (208)
- **Total Mosquitoes Collected:** 408

Total Mosquitoes Collected in All Counties:
1480 (Total Includes Non-Target Species)



Positive Mosquito Samples Throughout The Commonwealth for 2026

Date	County	Town	Species	Number of Pools
6/16/26	Berkshire	Clarksburg	*Culex* pipiens/restuans	1

Weather Summary

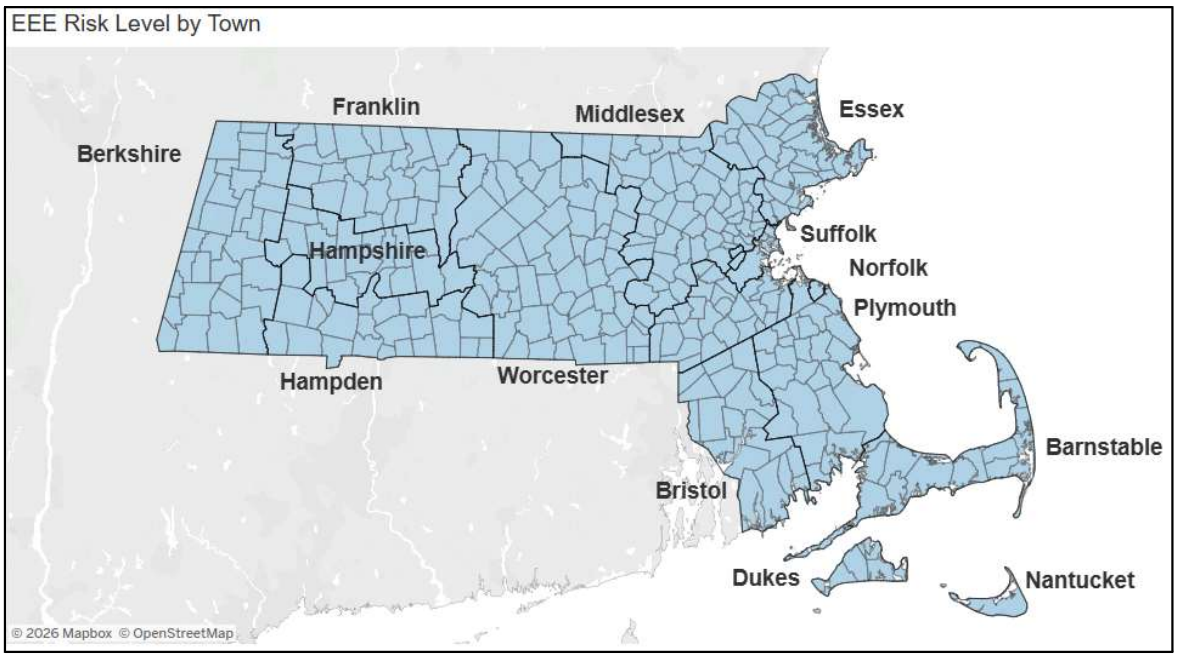
While dry conditions leading up to EPI week 24 limited overall mosquito activity and likely suppressed general collection numbers, *Culex pipiens/restuans* counts increased by 45%. This species is known to maintain high productivity during droughts by exploiting stable, artificial breeding sites that persist despite limited rainfall.

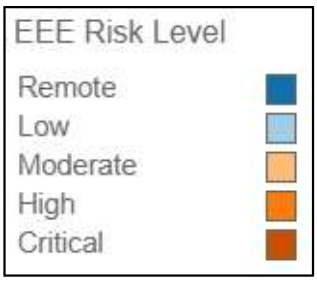
Weekly Changes in Weather

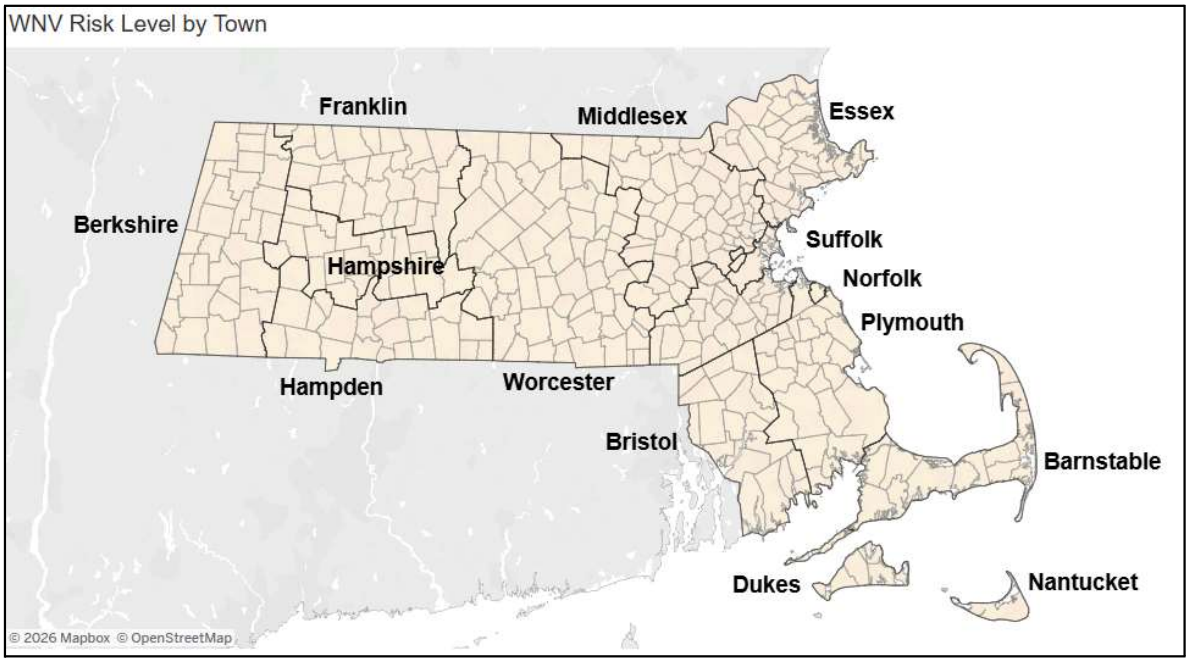
Station ID	Location	EPI Week	Dates	PRCP Total (in.)	TMAX AVG (°F)	TMIN AVG (°F)
USC00190120	AMHERST, MA	22	5/31/26 to 6/6/26	0.28	75.43	44.57
USC00190120	AMHERST, MA	23	6/7/26 to 6/13/26	0.00 (-100%)	84.29 (+11.74%)	57.57 (+29.17%)
USC00190120	AMHERST, MA	24	6/14/26 to 6/21/26	0.85	80.25 (-4.79%)	54.5 (-5.33%)

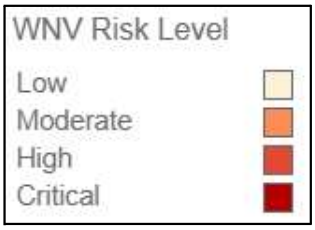
Climate Data Source: https://www.ncei.noaa.gov/cdo-web/search?datasetid=GHCND

Arbovirus Risk Maps as of 6/26/26









Current Risk Maps 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

Targeted Mosquito Species

Species Name	Description	Habitat	Months Active
Aedes albopictus	An invasive species that is an aggressive and relentless day-biter. Ae. albopictus prefer to feed on humans and can transmit chikungunya, dengue, and Zika.	Discarded tires and other containers.	June-October Peak: July
Aedes vexans	An aggressive biter that falls within the “flood water” species. Ae. vexans is a bridge vector for EEE and will feed on both birds and mammals.	Temporary freshwater pools such as flood meadows, retention ponds, and vernal pools.	May-October Peak: Varies and is dependent on precipitation.
Culiseta melanura	*Cs. melanura* mosquitoes are a primary vector for EEE. *Cs. melanura* feed mainly on avian species and are responsible for amplifying the virus to the point that it spills over into bridge vectors.	Tree root cavities or “crypts” covered by peat moss in red maple and cedar swamps.	May-December Peak: July-August and mid-September
Culex pipiens and restuans	These two mosquito species are abundant in Massachusetts and can amplify WNV in the bird population and infect humans. While *Cx. pipiens* is more implicated in WNV transmission, both Cx. pipiens and *restuans* are grouped together because differentiating between the two species with 100% reliability is very difficult.	Artificial containers such as “green” swimming pools, catch basins, discarded tires, buckets, etc.	May-October Peak: July-August
Coquillettidia perturbans	*Cq. perturbans* is one of the most abundant mosquitoes in Massachusetts and are considered a competent bridge vector for both EEE and WNV. *Cq. perturbans* will feed on both birds (reservoir for EEE) and mammals.	Permanent bodies of water with emergent vegetation such as cattails.	May-September Peak: July
Ochlerotatus canadensis	*Oc. canadensis*, is a bridge vector that can transmit both EEE and WNV to humans.	Woodland/vernal pools.	May-October Peak: June
Ochlerotatus japonicus	An invasive species that is a potential bridge vector for WNV and EEE.	Discarded tires and other containers	May-October Peak:
Culex salinarius	*Cx. salinarius* are considered bridge vectors for both EEE and WNV, readily feeding on mammals.	Brackish and freshwater swamps.	May-November Peak: August
Other species	There are many other species that PVMCD staff will submit to the Arbovirus Surveillance Laboratory at DPH for testing. These species are considered potential vectors in transmitting arboviruses.		