

Pioneer Valley MCD Weekly Surveillance Report

Surveillance Summary for EPI Week 33

Week Ending: 8/22/26

EPI Week 33 Target Species Surveillance Summary

Species	# Collected	Pools	WNV+	EEEV+	Cumulative Collected	Cumulative Pools	Cumulative WNV+	Cumulative EEEV+
<i>Cx. pipiens/restuans</i>	638	22	4	0	6406	231	18	0
<i>Cq. perturbans</i>	129	4	0	0	8582	142	0	0
<i>Cs. melanura</i>	0	0	0	0	16	11	0	0
<i>Oc. canadensis</i>	144	1	0	0	562	9	0	0
<i>Oc. japonicus</i>	158	10	1	0	2154	92	2	0
<i>Ps. ferox</i>	211	0	0	0	361	2	0	0
<i>An. quadrimaculatus</i>	43	0	0	0	406	5	0	0
<i>Oc. triseriatus</i>	64	0	0	0	431	2	0	0
<i>Ae. vexans</i>	470	9	0	0	1027	25	0	0
<i>Ae. albopictus</i>	3	0	0	0	14	1	0	0
<i>Cx. salinarius</i>	224	8	1	0	558	28	1	0
<i>An. punctipennis</i>	84	0	0	0	1179	2	0	0
<i>Cx. erraticus</i>	803	3	0	0	830	5	0	0
<i>Ur. sapphirina</i>	55	0	0	0	79	0	0	0
Totals	3026	57	6	0	22605	555	21	0

Positive Mosquito Samples in the Pioneer Valley Region

There were 6 positive samples confirmed during EPI Week 33 in Pioneer Valley. The positive pools were collected from trap sites in Chicopee (3), Granby (2), and Erving.

Most Abundant Species in Pioneer Valley

Among the species of most concern, *Cx. erraticus* were the most prevalent. *Culex erraticus*, a mosquito species typically associated with warmer climates, was recently discovered in Hampden County, with a total of 803 specimens collected during EPI Week 33. Because it acts as a bridge vector for Eastern Equine Encephalitis (EEE) in southern states, its presence in Massachusetts could impact the local transmission cycle and increase the risk of spillover to humans.



Cx. erraticus adult female.

EPI Week 33 Summary by County

Franklin County

- Pools Tested: 24
- Positive Samples: 1
- Most Abundant: *Cx. pipiens/restuans* (419)
- Total Mosquitoes Collected: 979

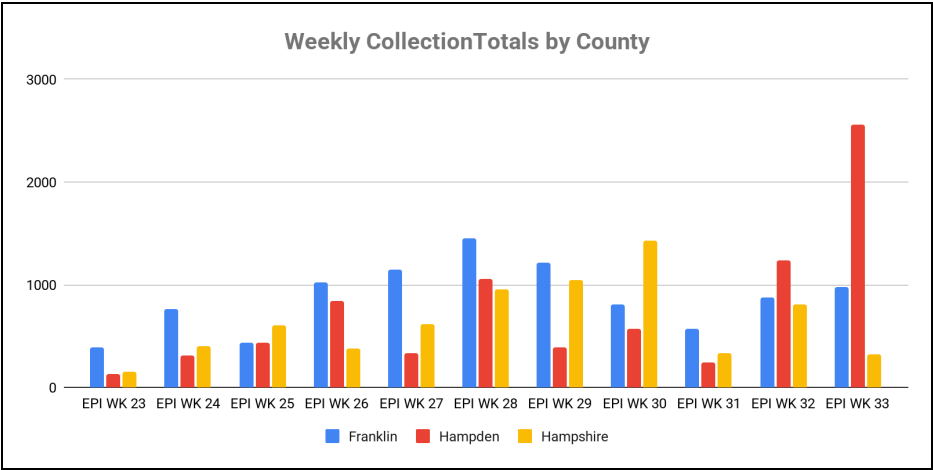
Hampden County

- Pools Tested: 24
- Positive Samples: 3
- Most Abundant: *Cx. erraticus* (803)
- Total Mosquitoes Collected: 2560

Hampshire County

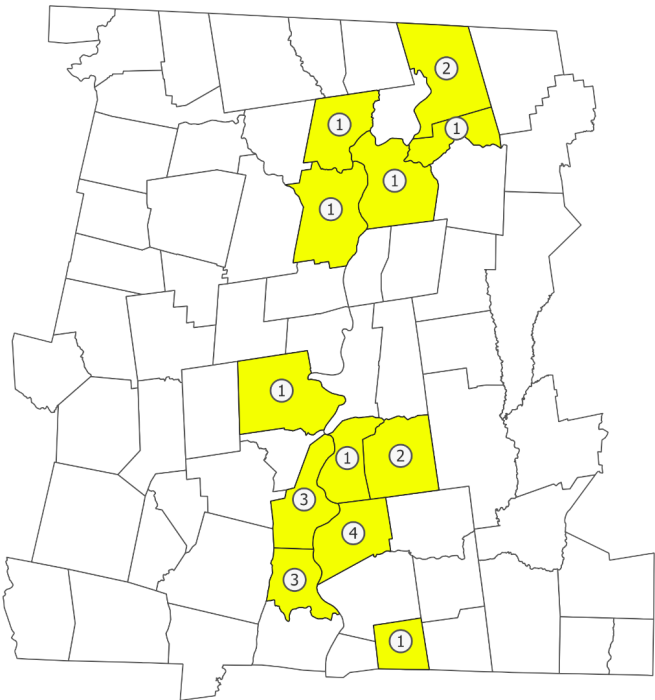
- Pools Tested: 9
- Positive Samples: 2
- Most Abundant: *Cx. pipiens/restuans* (114)
- Total Mosquitoes Collected: 318

Total Mosquitoes Collected in All Counties:
3857 (Total Includes Non-Target Species)



West Nile Virus Activity in Pioneer Valley

Updated: 8/26/26



Positive Mosquito Samples: 21
Bird-biting Species: 18
Mammal-biting Species: 3

Cumulative Arbovirus Positives Throughout The Commonwealth for 2026

Virus	Positive Mosquito Samples	Animal Cases	Human Cases
EEE	7	0	0
WNV	227	0	2

Onset	County	Age Range	Sex	Illness
8/3/26	Middlesex	60-69	Male	Meningoencephalitis
8/14/26	Middlesex	90-99	Male	Meningoencephalitis

Weather Summary

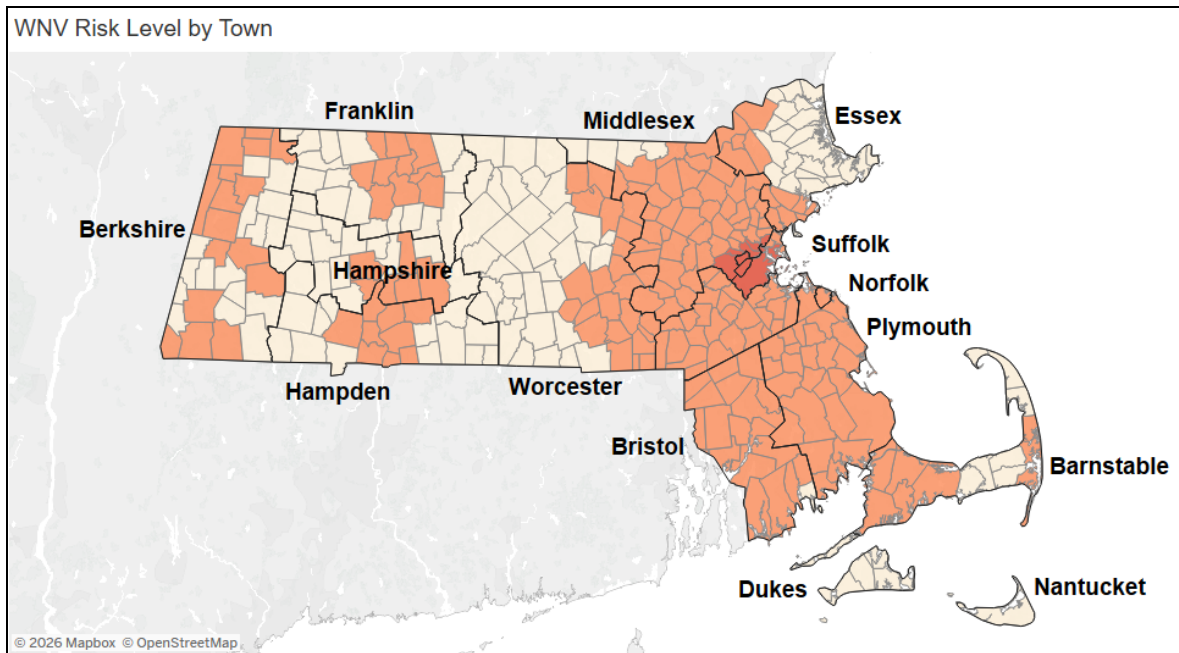
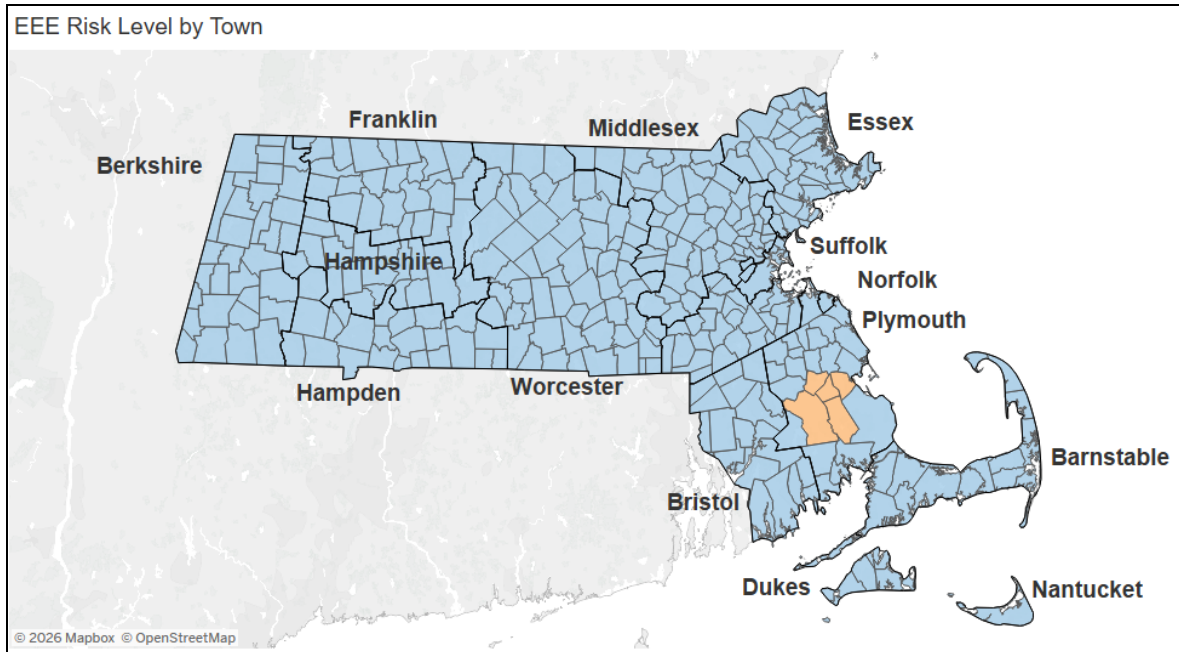
The current weather conditions continue to support mosquito activity.

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 6/20/26	0.85	80.25 (-4.79%)	54.5 (-5.33%)
USC00190120	AMHERST, MA	25	6/21/26 to 6/27/26	1.24 (+45.88%)	79.38(-1.08%)	55.13 (+1.16%)
USC00190120	AMHERST, MA	26	6/28/26 to 7/4/26	1.34 (+8.06%)	90 (+13.38%)	63.43 (+15.06%)
USC00190120	AMHERST, MA	27	7/5/26 to 7/11/26	1.53 (+14.18%)	81.57 (-9.37%)	63 (-0.68%)
USC00190120	AMHERST, MA	28	7/12/26 to 7/18/26	0.06 (-96.08%)	85 (+4.20%)	58.57 (-7.03%)
USC00190120	AMHERST, MA	29	7/19/26 to 7/25/26	0.55 (+816.67%)	79.43 (-6.55%)	53.86 (-8.04%)
USC00190120	AMHERST, MA	30	7/26/26 to 8/1/26	2.83 (+414.55%)	80.43 (+1.26%)	58.71 (+9.00%)
USC00190120	AMHERST, MA	31	8/2/26 to 8/8/26	2.09 (-26.15%)	86.14 (+7.10%)	63.86 (+8.77%)
USC00190120	AMHERST, MA	32	8/9/26 to 8/15/26	0.18 (-91.39%)	84.83 (-1.52%)	59.5 (-6.83%)
USC00190120	AMHERST, MA	33	8/16/26 to 8/22/26	0.32 (+77.78%)	80.71 (-4.86%)	59.14 (-0.61%)

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

Arbovirus Risk Maps as of 8/27/26



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, kiddie 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
<i>Aedes albopictus</i>	An invasive species that is an aggressive and relentless day-biter. <i>Ae. albopictus</i> prefer to feed on humans and can transmit chikungunya, dengue, and Zika.	Discarded tires and other containers.	June-October Peak: July
<i>Aedes vexans</i>	An aggressive biter that falls within the “flood water” species. <i>Ae. vexans</i> 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.
<i>Culiseta melanura</i>	<i>Cs. melanura</i> mosquitoes are a primary vector for EEE. <i>Cs. melanura</i> 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
<i>Culex pipiens</i> and <i>restuans</i>	These two mosquito species are abundant in Massachusetts and can amplify WNV in the bird population and infect humans. While <i>Cx. pipiens</i> is more implicated in WNV transmission, both <i>Cx. pipiens</i> and <i>restuans</i> 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
<i>Coquillettidia perturbans</i>	<i>Cq. perturbans</i> is one of the most abundant mosquitoes in Massachusetts and are considered a competent bridge vector for both EEE and WNV. <i>Cq. perturbans</i> will feed on both birds (reservoir for EEE) and mammals.	Permanent bodies of water with emergent vegetation such as cattails.	May-September Peak: July
<i>Ochlerotatus canadensis</i>	<i>Oc. canadensis</i> , is a bridge vector that can transmit both EEE and WNV to humans.	Woodland/vernal pools.	May-October Peak: June
<i>Ochlerotatus japonicus</i>	An invasive species that is a potential bridge vector for WNV and EEE.	Discarded tires and other containers	May-October Peak:
<i>Culex salinarius</i>	<i>Cx. salinarius</i> 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.		