

Central Mass. Mosquito Control Project
Weekly Report- 8/27/23-9/2/23
EPI Week #35

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	356	540	47	377	948	4725
Total Specimens	5068	24395	119	6501	24804	79535
No. Pools WNV +	0	3 [†]	0	0	5 [†]	8 [†]
No. Pools EEE +	0	0	0	0	0	0

†Pool of WNV+ *Culex* collected in Worcester on 7/7/23

†Pool of WNV+ *Culex* collected in Worcester on 7/20/23

†Pool of WNV+ *Culex* collected in Chelmsford on 8/10/23

†Pool of WNV+ *Culex* collected in Northbridge on 8/10/23

†Pool of WNV+ *Culex* collected in Milford on 8/16/23

†Pool of WNV+ *Coquillettidia perturbans* collected in Lowell on 8/25/23

†Pool of WNV+ *Coquillettidia perturbans* collected in Lowell on 8/25/23

†Pool of WNV+ *Coquillettidia perturbans* collected in Lowell on 8/25/23

Weather Summary (Northborough, MA): The weather for this particular week averaged 67.39°F with a recorded high temperature of 82.90°F and a recorded low temperature of only 48.30°F. For this week there was also a total of 0.22 inches of rain observed. Compared to the previous week, it was approximately 1.68°F cooler on average, and rained about 1.26 inches less. There has been 6.49 inches of rain accumulated in August, after 9.98 inches for the month of July.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	-48.96%	+2696%	Westborough, Clinton, Millbury
<i>Coquillettidia perturbans</i>	-28.88%	-41.44%	Littleton, Sherborn, Sturbridge
<i>Culiseta melanura</i>	+00.00%	-84.16%	Millville, Leominster, Littleton
<i>Ochlerotatus canadensis</i>	-11.22%	+407.6%	Fitchburg, Sturbridge, Gardner
<i>Culex</i> Species	+23.31%	+639.7%	Westborough, Hopedale
All Species	-24.93%	+74.56%	Westborough

The predominant mosquito for the week was *Culex*
followed by *Anopheles punctipennis*.

General narrative:

The temperatures for EPI week 35 averaged approximately 1.68°F cooler than the previous week, with 0.22 inches of precipitation observed. Overall surveillance trap collections decreased this period compared to the last, with all target mosquitoes decreasing except for *Culex*. Only *Coquillettidia perturbans* and *Culiseta melanura* remain at lower levels compared to this point last season. *Culex* is now the most

abundant mosquito species, followed by *Anopheles punctipennis*. *Aedes albopictus* surveillance using ovitraps has continued, with 3,024 eggs previously collected in EPI week 34. Supplemental control measures continue to be taken in response to the collection of *Aedes albopictus* eggs and adult specimens in Ayer. Three mosquito pools submitted to MDPH in EPI week 34 tested positive for West Nile virus. These were all *Coquillettidia perturbans* specimens, collected from Lowell on 8/25/23.

Ae. albopictus egg collections:

Epi week#	# eggs Collected	Epi week#	# eggs Collected
23	0	32	5,246
24	0	33	5,177
25	649	34	3,024
26	3,306	35	
27	4,928	36	
28	3,563	37	
29	8,560	38	
30	5,019	39	
31	7,049	40	
	TOTAL	46,521	
10 ATM detections to date			

Operational notes:

Service requests ended the year 7.26% below the 20-year average and a 1% increase over 2022 numbers. Request numbers dropped significantly from the week prior and the residential spray program will end Aug. 31. Work crews began performing catch basins treatments for *Culex* control on May 22. 2,074 basins were treated in Epi week 35, with 90,988 catch basins treated in total intended to suppress *Culex* populations and lower risk of transmission from WNV by this species.

West Nile Virus was confirmed in Lowell in human-biting species, and after consultation with local health officials these affected areas were ULV sprayed. This brings our total to date to 8 WNV confirmation, 5 in *Culex* and 3 in *Cq. perturbans*.

Ae. albopictus continues to be found in Ayer but the numbers may have peaked. We will continue surveillance and control efforts as long as possible. Barrier spraying was done again on August 30 with several days in the forecast without rain.

EEE in Southbridge and Douglas has raised the risk lever to Moderate in the southern part of our service area. Additional trapping is in place in member communities and MDPH

has submitted additional pools in the non-member towns for testing. We have reached out to Sturbridge and Webster to give them an update on our surveillance efforts and offer control options.