

8-2-19 Unforgettable EEE Returns

How can I forget that August day, on my way to work in 2005, when the police chief called me to tell me that reporters would soon be at my office? “Why?”, I asked. He knew I was driving, and he knew I was a mother. So, he wisely told me to call him as soon as I arrived at the office.

A few minutes later, I learned of the death of five-year-old Adreanna Wing from Eastern Equine Encephalitis (EEE).

A fast-paced learning curve on mosquito-borne viruses ensued. At the time, we health agents were taught that this rare but potentially deadly disease arrives in cycles, for reasons little understood, every ten to fifteen years, for two to three years in a row.

And then, everything changed. Another cycle hit in 2009-2010. Another in 2012. Now, in 2019, we have very high numbers of positive results for EEE not only in bird-biting mosquitoes, but also in “bridge vectors”, mosquitoes known to bite both birds and mammals and in mammal biting mosquitoes also. There is now a very real potential for a human case of EEE.

The Plymouth County Mosquito Control Project is, thus, conducting additional town-wide ground sprayings, by truck. Their entomologist, Ellen Bidlack, is out into the swamps placing additional traps in towns currently considered at “low risk”. What if a map is incorrect? We still make decisions based on it. “Oh, that horrible mosquito disease is over there; not here.” Mosquitoes fly and know nothing of town boundaries. We need to know where this disease is. We are so fortunate to have an informed and active Project.

Massachusetts has a long history with EEE, with the first cycle recognized in 1938 and the rest of the country learning from us. We are fortunate to have their expertise.

Today East Bridgewater was added to the list of towns, now adding up to eleven, with positive results for EEE. This is expected to rise and to rise very quickly.

So, why is this happening and what can we do?

Last fall saw an incredible amount of rain. The swamps were filled to the brim and the *Culiseta melanura* mosquito loved it! Then, a relatively mild winter allowed the larvae to survive the winter. Then came spring of 2019 with lots and

lots and lots more rain. Then the heat arrived, and the mosquitoes were happy. While this was happening, a process called amplification occurred. The disease spread from the bird biting mosquitoes to the bridge vectors and finally, the mammal biters.

People, it is time to take notice and take precautions. The ground spraying will help some by reducing the mosquito population. That reduction happens the night of the spraying. There are no residual effects, as it quickly breaks down, especially in sunlight or water. Reducing the population is very important, as it also reduces the amount of breeding.

We need your help also. We need everyone to take seriously their role and ability to take precautions.

Use EPA approved repellants. Yes, I would like an organic herbal one also, but know that they are not required to submit any data as to efficacy or safety, because we already know garlic and rosemary are safe. But does it kill mosquitoes?

Seal the spaces around your window air conditioners and repair your screens.

If possible, avoid outdoor activities from dusk to dawn.

If we reach the level of “High Risk”, the Massachusetts Department of Public Health, highly recommends that all after-dusk outdoor activities be rescheduled or canceled. I am expecting that to happen this year.

While most mosquitoes are more active from dusk to dawn, different species have different behavioral patterns, and some are active during the day. If you can afford a pedestal fan, they are very useful for outdoor activities. They cool off people and create an air curtain against flies and mosquitoes. Consider fans of any shape and size for outdoor use, as well as indoors.

While I am hoping for a memorable summer, rather than unforgettable in the horrific sense, the mosquitoes are out of my control. It is looking like it is going to be an unforgettable one. I am hoping for no human cases while we all do what we can to prevent the bite. Do all you can to prevent the bite!

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