

September 6, 2019

Anthony S. Fauci, M.D. Director National Institute of Allergy and Infectious Diseases 5601 Fishers Lane, MSC 9806 Bethesda, MD 20892

Dear Dr. Fauci.

We write to inquire about research efforts within the National Institute of Allergy and Infectious Diseases (NIAID), and particularly the Laboratory of Malaria and Vector Research, for eastern equine encephalitis (EEE) virus.

EEE is a rare, but potentially fatal condition that can cause brain inflammation. It is transmitted to humans bitten by infected mosquitos, generally in states along the Atlantic Ocean and Gulf Coast. Although an average of seven human EEE cases are reported in the United States each year, 2 approximately one-third of infected individuals who develop the disease will die. 3 Those who recover often live with severe and devastating neurological complications.

Massachusetts has seen a disproportionately high number of EEE cases since 2009, second only to Florida. Outbreaks of EEE in Massachusetts appear to be cyclical, occurring every one to two decades and lasting for several years at a time. 5 There have already been four cases of EEE in Massachusetts this year, including one fatality.<sup>6</sup>

Unfortunately, there is no treatment for EEE. The only way to prevent EEE transmission is to protect against mosquito bites; aerial spraying alone cannot eradicate the danger. As of September 3<sup>rd</sup>, EEE has been detected in 10 Massachusetts counties, with dozens of communities

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention Eastern Equine Encephalitis, https://www.cdc.gov/easternequineencephalitis/index.html (last visited September 3, 2019).  $^{2}$  Id.

<sup>3</sup> Id.

<sup>4</sup> Id.

<sup>&</sup>lt;sup>5</sup> Commonwealth of Massachusetts Fact Sheet on Eastern Equine Encephalitis, https://www.mass.gov/servicedetails/eee-eastern-equine-encephalitis (last visited September 3, 2019).

<sup>&</sup>lt;sup>6</sup> Christopher Gavin, A woman with EEE has died in Massachusetts. Here's what to know about the rare virus, Boston.com (August 26, 2019), https://www.boston.com/news/health/2019/08/26/massachusetts-eee-death

<sup>&</sup>lt;sup>7</sup> Press Release, Commonwealth of Massachusetts, State officials announce plans to conduct aerial spraying for mosquitoes in sections of Worcester and Middlesex counties (August 21, 2019).

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at a high or critical risk for EEE.<sup>8</sup> Though our constituents will continue to take steps to minimize the risk of exposure, it is important to explore different medical options to prevent or treat this reoccurring menace.

To help us better understand the current state of federal research on EEE, please provide an update within 15 business days of existing federal research activity on the disease. In addition, we request information on whether research into other vector-borne viruses could be applicable to better understanding and treating this elusive infection.

Thank you for your attention to this request.

Sincerely,

Edward J. Markey

United States Senator

Elizabeth Warren

United States Senator

<sup>&</sup>lt;sup>8</sup> 2019 Massachusetts Arbovirus Daily Update, Massachusetts Executive Office of Health and Human Services, <a href="http://www.mosquitoresults.com/">http://www.mosquitoresults.com/</a> (last visited September 5, 2019).