Massachusetts Public Health Officials Confirm Two New Human Cases of EEE

The Massachusetts Department of Public Health (DPH) today announced that laboratory testing has confirmed two new cases of Eastern Equine Encephalitis (EEE) virus infection, a woman in her 60s from eastern Worcester County and a female under the age of 18 from southwestern Middlesex County. This brings the total number of human cases of EEE to seven this year in Massachusetts. As a result, the risk level in Framingham, Marlborough, Northborough, and Sudbury has been raised to critical and the risk level in Berlin, Boylston, Hudson, Maynard, Stow, and Wayland has been raised to high.

In total, there are 36 communities now at critical risk, 42 at high risk, and 115 at moderate risk for the EEE virus in Massachusetts. A map of the state's current EEE risk levels can be found here.

There have also been nine confirmed cases of EEE this year in animals; eight horses and one goat.

"Even though temperatures have cooled off, it is not unusual to see human EEE cases confirmed in September," said Public Health Commissioner Monica Bharel, MD, MPH. "This is why we continue to urge the public to take seriously the threat that mosquitos can pose and to take steps to avoid being bitten."

All residents throughout the Commonwealth should continue to use mosquito repellent and those in high and critical risk communities should consider staying indoors during the dusk to dawn hours to reduce exposure to mosquitoes. Residents can learn more about EEE and about ways to protect themselves on DPH's website.

EEE is a rare but serious and potentially fatal disease that can affect people of all ages. EEE occurs sporadically in Massachusetts with the most recent outbreak years occurring from 2004-2006 and 2010-2012. There were 22 human cases of EEE infection during those two outbreak periods with 14 cases occurring among residents of Bristol and Plymouth counties.

EEE virus has been found in 400 mosquito samples this year, many of them from species of mosquitoes capable of spreading the virus to people.

Local communities are continuing truck-mounted spraying for mosquitoes. The Massachusetts Department of Agricultural Resources completed aerial mosquito spraying in parts of Bristol, Plymouth, Middlesex, and Worcester counties last month to help reduce the public health risk. Aerial spraying has concluded for the season primarily due to evening temperatures being too low to permit effective aerial application. Spraying for mosquitoes does not eliminate the risk of EEE transmission and the public is asked to continue to follow personal protection practices.

People have an important role to play in protecting themselves and their loved ones from illnesses caused by mosquitoes:

Avoid Mosquito Bites

Apply Insect Repellent when Outdoors. Use a repellent with an EPA-registered ingredient (DEET (N, N-diethyl-m-toluamide), permethrin, picaridin (KBR 3023), oil of lemon eucalyptus [p-methane 3, 8-diol (PMD)] or IR3535) according to the instructions on the product label. DEET products should not be used on infants under two months of age and should be used in concentrations of 30% or less on older children. Oil of lemon eucalyptus should not be used on children under three years of age.

Be Aware of Peak Mosquito Hours. The hours from dusk to dawn are peak biting times for many mosquitoes. Consider

rescheduling outdoor activities that occur during evening or early morning in areas of high risk.

Clothing Can Help Reduce Mosquito Bites. Wearing long-sleeves, long pants and socks when outdoors will help keep mosquitoes away from your skin.

Mosquito-Proof Your Home

Drain Standing Water. Mosquitoes lay their eggs in standing water. Limit the number of places around your home for mosquitoes to breed by draining or discarding items that hold water. Check rain gutters and drains. Empty unused flowerpots and wading pools and change the water in birdbaths frequently.

Install or Repair Screens. Keep mosquitoes outside by having tightly-fitting screens on all of your windows and doors.

Protect Your Animals

Animal owners should reduce potential mosquito breeding sites on their property by eliminating standing water from containers such as buckets, tires, and wading pools — especially after heavy rains. Water troughs should be flushed out at least once a week during the summer months to reduce mosquitoes near paddock areas. Horse owners should keep horses in indoor stalls at night to reduce their risk of exposure to mosquitoes. Owners should also speak with their veterinarian about mosquito repellents approved for use in animals and vaccinations to prevent WNV and EEE. If an animal is suspected of having WNV or EEE, owners are required to report to DAR, Division of Animal Health by calling 617-626-1795 and to the Department of Public Health (DPH) by calling 617-983-6800.

For the most up-to-date information, Q&As, and downloadable fact sheets in multiple languages visit the DPH webpage https://www.mass.gov/guides/eee-in-massachusetts.