

The ABC's of EEE and WNV

- A.) Anvil is the brand name of the pesticide routinely used for ground spraying by our local Mosquito Control Program and for aerial sprayings.
Arthropods constitute 90% of the animal kingdom, including many insects.
Arboviruses are causes of encephalitis and are carried by arthropods, such as mosquitoes and ticks.
- B.) Bti is a naturally occurring bacteria that is safe for the environment and kills only mosquito larvae. The Plymouth County Mosquito Control Program does extensive aerial spraying of Bti over the swamps in the spring and in catch basins all summer long.
Bridge vector is a carrier of disease that bites more than one type of animal, thus “bridging” the otherwise separation. Some mosquitoes only bite birds and the diseases stay with the birds. Some mosquitoes bite birds and mammals and these mosquitoes are bridge vectors, increasing the chance that human will become ill with EEE.
- C.) Culiseta melanura is a species of mosquito frequently testing positive for EEE. It is known to be a bird biter.
Crows died easily from WNV when it entered the country. They served as an important sentinel species for this disease.
- D.) DEET is one of the insect repellants recommended by CDC and DPH. Read the labels carefully for instructions on safe use.
- E.) EEE is the acronym for Eastern Equine Encephalitis, a disease that causes inflammation of the brain and can kill large mammals, such as horses and humans.
- F.) Flavivirus is one of three virus families associated with encephalitis. Mosquitoes and some ticks spread this virus.
- G.) Ground spraying is conducted by the Plymouth County Mosquito Control Program. You can request spraying or request your address to be on a “no spray” list by calling 781 585 5450 or faxing them at 781 582 1276.
- H.) Hot spots for EEE have long existed in parts of Plymouth County. These areas have extra mosquito traps and receive extra spraying.
- I.) Entomologists study insects. Their knowledge is critical in understanding diseases spread by insects and how we might best intervene to control disease.
- J.) Junk in our yards and along the roadside such as tin cans, bottles, flowerpots and tires all hold water. Some mosquitoes, particularly the ones carrying WNV, prefer these dirty little pools of water in containers as their breeding site.
- K.) Knowledge is a powerful tool. Stay informed so that you can make your best choice for health and safety.
- L.) Larvicide kills larvae. You can buy Bti “dunks” or pellets for treating ditches and wet spots on your property.
- M.) Mosquitoes: There are at least 50 different species of mosquitoes in our area.
- N.) Numbers: So far in 2019, 164 Mosquito pools (samples) have tested positive for EEE.

- O.) *Ochlerotatus japonicus* were recovered in North America for the first time from light trap collections in Ocean County, NJ Laboratory studies have shown that *Oc. japonicus* is a very efficient vector of West Nile virus and breeds in container water.
- P.) Perturbans are a type of mosquito known to bite both birds and mammals.
Therefore, they play a very important role in the eventual spread of disease to mammals such as horses and humans.
Pesticides: Remember; “cide” means kill, as in homicide. Pesticides are designed to kill insect pests.
“Pools” testing positive for EEE means a sample of mosquitoes that have been separated by species. It is a grouping, such as a carpool. It does not refer to a pool of water.
- Q.) Questions? Call your local board of health or DPH.
- R.) Reclamation Board is comprised of one representative each from the Departments of Environmental Management, Environmental Protection and Food and Agriculture and they oversee nine organized mosquito control projects. They gather scientific information relating to mosquitoes, habitats, and factors involved in the spread of disease and try to determine the least harmful actions with the most benefits.
- S.) Samples of mosquitoes are Separated by Species and tested for EEE and WNV.
- T.) Tree holes are another type of container holding water used by some mosquitoes for laying their eggs. If your trees have water-holding-holes, you can try to drain them, flush them out once a week or treat them with Bti to kill the larvae.
- U.) Using all precautions is especially important in years with high counts of positive results, such as in the years 1982 to 1985 and 2004 to 2006, 2009, 10, 12 and now in 2019.
- V.) Vector is the organism carrying a disease such as mosquitoes being a vector for EEE, WNV and Malaria.
Vulnerable populations for succumbing to EEE are usually the young and the old. The most vulnerable for WNV is people over 50.
- W. WNV stands for West Nile virus which entered the United States in the year 2000.
- X. X marks the spot. Multiple state agencies have worked tirelessly to determine the hotspots for EEE and areas of the environment needing protection. By carefully looking at all that information, a zone can be delineated for aerial spraying because it poses high risk to humans.
- Y. Your help is needed. We need to aggressively campaign against containers holding water, as this is the preferred breeding site for mosquitoes carrying WNV and promote You taking care of You and Yours.
- Z. What we want to catch a few of with the peace of mind that we have done all we can to prevent another case of EEE or WNV.