

# Preventing Disease Spread By Mosquitoes

The Upton Board of Health wishes to remind residents that mosquito season is here once again. With all the rain we have been having, we are predicting it may be worse this year. The information below is provided from the Mass. Dept. of Public Health, which you may find helpful in reducing your exposure to mosquitoes.

- **What diseases can mosquitoes spread?**

In Massachusetts, some mosquitoes can transmit eastern equine encephalitis virus (EEE) and West Nile virus (WNV). Eastern equine encephalitis (EEE) is a rare but serious viral disease. Typical symptoms include high fever, stiff neck, headache, and lack of energy. Inflammation and swelling of the brain, called encephalitis, is the most dangerous result.

- **The best way to prevent both of these illnesses is by avoiding mosquito bites.** Only a small proportion of mosquitoes are infected at any given time. Thus, being bitten by a mosquito does not mean a person will become sick.

- **Be aware of peak mosquito hours.** The hours from dusk to dawn are peak biting times for many mosquitoes. Consider rescheduling outdoor activities that take place during evening or early morning hours. Otherwise, take extra care to use bug spray and protective clothing.

- **What is the best way to avoid mosquito bites?**

The following personal protection measures are effective in reducing contact with mosquitoes:

- Wear long-sleeved shirts and long pants.
- Stay indoors at dawn and dusk when mosquitoes are most active.
- Use mosquito netting on baby carriages or playpens when your baby is outdoors.
- Make sure screens are repaired and that screens are tightly attached to doors and windows.
- Remove standing water from ditches, gutters, old tires, wheelbarrows, and wading pools. Mosquitoes that bite people can begin to grow in any puddle or standing water that lasts for more than four days, so avoid letting water collect around your home.
- Avoid camping overnight near freshwater swamps to reduce your risk of exposure to mosquitoes that carry EEE. If you do go camping, use a tent with mosquito netting and use appropriate repellents.
- Use mosquito repellents, making sure to follow directions on the label.
- Put up a tree swallow or blue bird house on your property. When feeding, these birds can eat several hundred mosquitoes in one evening.

- **Apply Mosquito Repellent when you go outdoors.** The most effective repellents contain DEET (N, N-diethyl-m-toluamide), Picaridin (KBR 3023) or Permethrin. Oil of lemon eucalyptus has also demonstrated efficacy against mosquito bites. Products containing DEET should not be used on children less than 2 months of age and should be used in concentrations of 30% or lower for older children and adults.

- **Repellents containing DEET** can be applied to exposed skin and clothing. DEET is effective in repelling mosquitoes and other insects when used according to the manufacturer's recommendations. Since DEET can be absorbed through the skin, and in rare cases causes illness, do not apply too much, do not apply to broken skin, and do not apply to skin that will be covered by clothing. Avoid applying in closed spaces, like cars or tents. When using repellents on young children, do not apply to their hands or faces, as children often rub their eyes and faces and put their fingers in their mouths. DEET products should not be used on infants. Products with DEET concentrations above 10-15% should be avoided in children, and products with DEET concentrations above 30-35% should be avoided in adults. Higher concentrations of DEET may provide protection for a longer period of time, but they do not provide better protection.

- **Where can I get more information?**

**For further information on EEE and WNV:**

Massachusetts Department of Public Health (MDPH)  
Division of Epidemiology and Immunization  
(617) 983-6800 or toll-free at (888) 658-2850  
<http://www.state.ma.us/dph/>

**For more detailed information on repellents and insecticides:**

Massachusetts Department of Public Health  
Bureau of Environmental Health Assessment  
(617) 624-5757  
Environmental Protection Agency  
<http://www.epa.gov/>