



Boston Health Notes

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& Mayor Thomas M. Menino*

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Preventing West Nile Virus and Other Mosquito-borne Illness

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Summer is a time for fun, a time to sit back and enjoy the outdoors. However, in the United States, the last few summers have also brought concern about mosquito-borne illness like West Nile Virus (WNV) and Eastern Equine Encephalitis virus (EEEV).

Both viruses, WNV and EEEV, can be transmitted to humans from infected mosquitoes that get the viruses from birds. The risk of WNV infection following a mosquito bite is very low. Most people infected with WNV do not get sick or experience only mild symptoms. However, a small number of people, especially the elderly, develop more serious illness. Last year, one person was diagnosed with WNV in Boston after becoming ill. The risk of serious illness is greater with EEEV, but it is rare to find EEEV in the Boston area.

Mosquitoes are most active between July and September, but if the weather remains warm, the risk period can extend to November.

To prevent mosquito bites, consider taking the following steps:

- Use a mosquito repellent. The most effective repellents contain DEET, but there are several alternatives approved by the Environmental Protection Agency, including oil from lemon eucalyptus tree or soybean-oil-based products. Read the directions on the product label for precautions that need to be taken and to find out how often to reapply the repellent;
- If you use a product containing DEET, adults should use concentrations that are less than 30 percent and the lowest concentration available should be used on children. Apply DEET to exposed skin only (but not the eyes or mouth) and do not use on open cuts or wounds. Do not let children apply DEET themselves. Do not apply DEET on infants (mosquito netting can be used over infant carriers);
- Wear long sleeved shirts, long pants, and socks when mosquitoes may be out;

- Although mosquitoes can bite at any time of day, try to limit time outdoors between dusk and dawn when mosquitoes are most active;
- Make sure window and door screens are in good repair. This will help prevent mosquitoes from getting inside.

Mosquitoes need water to breed and can develop into adults in as little as one week. To keep mosquitoes from breeding, take the following steps.

- Turn over or cover unused flowerpots, buckets, garbage cans, and wheelbarrows;
- Remove leaves and other debris that can clog gutters and trap water;
- Cover unused swimming pools and turn over kiddie pools when not in use. Keep swimming pool covers clear of water and debris;
- Cover or dispose of old tires. They are one of mosquitoes' favorite places to breed.

The city of Boston has a comprehensive plan to reduce the risk of mosquito-borne illness. The first part involves monitoring and testing adult mosquitoes and birds in the area to identify infections. The second focuses on source reduction, such as removing standing water, which mosquitoes need to breed. Several city agencies work together to educate the public about source reduction and to monitor areas that have been identified as potential breeding sites to ensure they are cleaned up. The third step is the placement of larvacide in the city's catch basins, a prime mosquito breeding location.

The Boston Public Health Commission (BPHC) coordinates with the William A. Hinton State Laboratory Institute to follow-up on results of positive mosquito samples or dead birds. If you find a dead bird in Boston, call the Massachusetts reporting number at 1-866- MASS-WNV. Although not all birds will be tested, it is very important that all dead birds are reported. Large numbers of dead birds in an area may be a sign that mosquitoes are carrying disease.

For more information on mosquito-borne illness, contact the Boston Public Health Commission at 617-534-5611, or visit our website at www.bphc.org/cdc.