Town of Sharon, MA

90 South Main St., Sharon, MA 02067

FYI WEST NILE VIRUS/MOSQUITO CONCERNS

Public Health Fact Sheet - West Nile Virus

What is West Nile Virus (WNV)?

West Nile virus (WNV) can cause illness varying from a mild fever to more serious disease like encephalitis or meningitis. WNV grows in birds and is spread from bird to bird by infected mosquitoes. If mosquitoes infected with the virus bite horses or humans, the animal or person can become sick. In the United States, WNV was first identified in New York during the summer of 1999. Since then, it has spread throughout most of the continental United States. It is not known how WNV got to the U.S., but it has occurred naturally in Europe, Africa and Asia for many years.

What are the symptoms of WNV?

Most WNV infections do not cause any symptoms. Mild WNV infections can cause fever, headache and body aches, often with a skin rash and swollen lymph glands. In a small percentage of people infected by the virus, the disease can be serious, even fatal. More severe infections can cause headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, paralysis and, sometimes, death. Persons older than 50 years of age have a higher risk of developing severe illness.

Is there any treatment for WNV?

There is no specific treatment for WNV infection. People with mild WNV infections usually recover on their own. Doctors can provide supportive therapy for people who have more serious complications, such as encephalitis or meningitis. However, approximately 10% of people with severe WNV infections die.

How is WNV spread?

WNV usually is spread by adult mosquitoes that are infected with the virus. Mosquitoes spread the virus by biting humans, horses, and other animals. WNV can sometimes be spread in other ways. For example, WNV can be spread to humans during through blood transfusions and organ transplants from infected donors. Also, it is possible that pregnant women or breastfeeding mothers who become infected with WNV may pass the virus to their baby. Because of the unknown risk at this time and the fact that breastfeeding has well established benefits, it is not recommended to discontinue breastfeeding. Horses that have WNV infection cannot spread the disease directly to humans. There is no evidence that a person can get WNV from touching live or dead infected birds. Still, basic safety precautions should be used when handling any dead animals, including a dead bird. If you need to move or dispose of a dead bird, use gloves or a shovel to handle it, and place it into two plastic bags (one inside the other).

How common is WNV in Massachusetts?

Serious illness caused by WNV is uncommon and has been identified in a small number of people in Massachusetts for the past several years. Additionally, WNV has been found in horses, mosquitoes and many species of birds throughout the state. The mosquitoes that carry this virus are common throughout the state, and these mosquitoes are found in the city as well as in the woods and other less populated places.

What can you do to protect yourself?

There is no human vaccine for WNV. The best way to protect yourself is to keep mosquitoes from biting you. The risk of getting WNV is highest from late July **through** September...or mid-October --- until the first killing frost. Follow these steps every summer and fall if you live in or visit an area with mosquitoes:

- Avoid outdoor activities between dusk and dawn, if possible, as this is the time of greatest mosquito activity.
- If you must be outdoors when mosquitoes are active, wear a long-sleeved shirt and long pants. Use a mosquito repellent that contains DEET (the chemical N-N-diethyl-meta-toluamide) and follow the directions on the label. DEET can be poisonous if overused. Never use DEET on infants. Avoid using repellents with DEET concentrations above 10-15% for children and with concentrations above 30-35% for adults. Higher concentrations of DEET may provide protection for a longer period

of time, but do not provide a higher level of protection. If you are concerned about exposures to chemicals, use the lowest concentration of DEET which provides protection for the length of time you will be exposed to mosquitoes, and wash your skin when you return indoors. Cream, lotion or stick formulas are best for use on skin. Avoid products with high amounts of alcohol because these may be absorbed through the skin.

Take special care to cover up the arms and legs of children playing outdoors. When you bring a baby outdoors, cover the baby's carriage or playpen with mosquito netting.

Fix any holes in your screens and make sure they are tightly attached to all your doors and windows.

What can you do to reduce the number of mosquitoes around your home and neighborhood?

To reduce mosquito populations around your home and neighborhood, get rid of any standing water that is available for mosquito breeding. Mosquitoes will begin to breed in any puddle or standing water that lasts for more than four days. Here are some simple steps you can take:

Dispose of or regularly empty any metal cans, plastic containers, ceramic pots, and other water holding containers (including trash cans) on your property.

Pay special attention to discarded tires that may have collected on your property. Stagnant water in tires is a common place for mosquitoes to breed.

Drill holes in the bottom of recycling containers that are left outdoors, so that water can drain out.

Clean clogged roof gutters; remove leaves and debris that may prevent drainage of rainwater.

Turn over plastic wading pools and wheelbarrows when not in use.

Do not allow water to stagnate in birdbaths; aerate ornamental ponds or stock them with fish.

Keep swimming pools clean and properly chlorinated; remove standing water from pool covers.

Use landscaping to eliminate standing water that collects on your property.

What is Massachusetts doing to protect people from WNV?

Every year from June 15 until the first frost, MDPH field staff collect mosquitoes and bring them to the State Laboratory for testing for both WNV and Eastern Equine Encephalitis (EEEV), another virus carried by mosquitoes. The State Laboratory can also test horses and humans suspected of having WNV. MDPH will alert local Boards of Health and hospitals if WNV is detected in their city or town. A statewide surveillance and response plan has been developed to assist local communities in preparing for and responding to the risk of WNV.

Avian surveillance has been discontinued as of 2009. In recent years, the tracking and testing of dead birds has become significantly less useful because so few birds are still susceptible to fatal WNV infections.

For general information about WNV, please call the MDPH Public Information Line toll free at 1-866–MASS-WNV (627-7968)

For more information:

Massachusetts Department of Public Health

Division of Epidemiology and Immunization at (617) 983-6800 or (866) 627-7968 (for general questions about WNV and for health care provider and hospital consultations on WNV)

Bureau of Environmental Health Assessment at (617) 624-5757 (for questions about health effects of pesticides)

Massachusetts Department of Food and Agriculture State Reclamation and Mosquito Control Board at (617) 626-1781 (for questions about regional mosquito control programs)

Your local Board of Health (listed in the telephone directory under "government")