West Nile Virus Fact Sheet

ORIGINS: West Nile virus (WNV) is a virus transmitted by mosquitoes that affects the nervous system. It has been found in humans, birds, horses, and other animals, in Africa, Eastern Europe, and the Middle East. It first appeared in the US in 1999, and since then it has spread across the country. WNV typically flares up in the summer and continues into the fall.

HOW IT'S SPREAD: West Nile virus is spread through the bite of an infected mosquito. Mosquitoes become infected with West Nile virus when they feed on infected birds. Infected mosquitoes can then transmit West Nile virus to humans and animals when biting to take a blood meal. In rare instances, West Nile virus may be spread from person to person through organ donation, blood transfusion, breastfeeding, or from pregnant mother to fetus.

SYMPTOMS: Approximately 80% of people infected with West Nile virus will not have any symptoms or signs of illness. Some people who develop illness may experience mild symptoms such as fever, headache, and body aches; occasionally a skin rash and swollen lymph glands may be noticed. These symptoms may last a few days or as long as several weeks. Less than 1% of persons infected with WNV may develop more severe disease with symptoms such as high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. These symptoms may last several weeks, and effects on the nervous system may be permanent. People ≥ 50 years of age have the highest risk of developing severe illness. Although most people are at low risk for disease, those who spend a lot of time outdoors have a greater risk of being bitten by an infected mosquito.

TREATMENT: No specific treatment for WNV infection exists at present. In severe cases, infected individuals may require hospitalization, which might include treatment with IV fluids, breathing support, and nursing care.

RISK REDUCTION: Maryland residents can reduce their risk of infection with West Nile virus by taking these steps to protect themselves and to eliminate mosquito breeding sites around their homes and businesses:

1. Limit time spent outdoors between dusk and dawn
2. Wear long-sleeved shirts and long pants when going outdoors
3. Use an EPA-registered insect repellent and follow the instructions on the product label. Repellents containing DEET are safe for use by adults and children when used according to package directions
4. Check that all window screens in your home or business are intact and do not contain holes. Repair any damaged screens
5. Remove all discarded tires from your property. If tire removal is not possible, puncture or cut tires to prevent water from collecting in them
6. Dispose of tin cans, plastic containers, ceramic pots, or similar water-holding containers
7. Make sure roof gutters drain properly. Clean clogged gutters in the spring and fall
8. Drain water from pool covers
9. Change the water in birdbaths at least once a week
10. Turn over plastic wading pools and wheelbarrows when not in use
11. Eliminate any standing water that collects on your property
12. Remind or help neighbors to eliminate breeding sites on their property
13. Check for trapped water in plastic or canvas tarps covering boats, pools, etc. Arrange the tarp to allow water to drain
14. Pump out bilges in boats. Store canoes and small boats upside down
15. Remove outdoor pet food and water dishes that are not being used
16. Flush livestock water troughs twice a week
17. Do not leave garbage can lids upside down. Do not let water collect in the bottom of garbage cans or recycle bins
18. Check ornamental ponds, tree holes, and water-holding low areas for mosquito larvae

Call the MDA Mosquito Control Office at 410-841-5870 or visit http://www.mda.state.md.us if you find mosquito larvae or if you have questions about mosquito control.

For more information about West Nile virus, please contact the Center for Zoonotic and Vector-borne Diseases at (410) 767-5649 or visit our website at http://ideha.dhmh.md.gov/OIDEOR/CZVBD/SitePages/west-nile.aspx .