West Nile Virus

West Nile is a mosquito carried virus that can cause *encephalitis* (inflammation of the brain) or *meningitis* (inflammation of the lining surrounding the brain and spinal cord). West Nile virus is spread to humans by the bite of an infected mosquito. A mosquito becomes infected by biting a bird or horse that carries the virus. You or your child cannot get West Nile virus from a person who has the disease. West Nile virus is not thought to be spread by person-to-person contact. This would include touching, kissing, or caring for someone who is infected. People greater than fifty years of age are more likely to become infected and develop more severe disease.

SYMPTOMS (PROBLEMS)

Most people who are infected with West Nile virus either have no symptoms or experience mild illness such as a fever, headache, and body aches before fully recovering. Some persons may also develop a mild rash or swollen lymph glands. In some people, usually the elderly, West Nile virus can cause serious disease that affects brain tissue. At its most serious, it can cause permanent neurological damage and can be fatal. Symptoms of encephalitis and meningitis include the rapid onset of severe headache, high fever, stiff neck, confusion, loss of consciousness (coma), or muscle weakness. It may be fatal.

FACTS ON WEST NILE VIRUS.

- There is currently no evidence that West Nile virus can be spread directly from birds to people. Dead birds can carry a variety of diseases and, should not be handled with bare hands. Use gloves to carefully place dead birds in double-plastic bags and then place in the outdoor trash.
- Infected mosquitoes are the main source of West Nile virus. There is no evidence to suggest that ticks or other insects transmit West Nile virus. Transmission can also occur through blood transfusion and organ transplantation; HOWEVER, this has only been proven in ONE isolated case.
- There is no documented evidence that a pregnant woman or her fetus are at increased risk due to infection with West Nile virus.
- There is no specific therapy. In more severe cases, intensive supportive therapy is indicated, such as hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (breathing supported by a ventilator) if needed, prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.
- A vaccine for West Nile virus does not exist.
- **Being bitten by an infected mosquito will not always make you sick.** Most people who are infected with West Nile virus have no symptoms or experience only mild illness. If illness were to occur, it usually occurs within 3 to15 days of being bitten by an infected mosquito.
- **If you develop signs of encephalitis or meningitis** with severe headache, painful stiff neck, fever, muscle weakness, and confusion, you should seek medical care immediately.

FROM APRIL TO OCTOBER, OR WHEN MOSQUITOES ARE MOST ACTIVE, TAKE THE FOLLOWING PRECAUTIONS:

- Wear protective clothing such as long pants, loose-fitting, long-sleeved shirts, and socks. Consider the use of an insect repellent containing DEET.
- Products with a low concentration of DEET may be appropriate for situations where exposure to mosquitoes is minimal. Higher concentrations of DEET may be useful in highly infested areas or with species that are more difficult to repel. However, the American Academy of Pediatrics recommends that repellents used on children should not contain more than 10% DEET. Concentrations of up to 30% DEET have been shown to be acceptable for adults. **Where appropriate, consider using non-chemical ways to deter biting insects such as protective clothing (as outlined above), window and door screens, and wearable netting when camping.**
- Use DEET according to manufacturer's directions on the label.
- Store DEET out of reach of children.

- Use caution when using repellents containing DEET on children.
- Do not apply DEET directly on to children. Apply to your own hands and then put it on the child.
- Do not apply on hands or near eyes and mouth of young children.
- Do not allow children to apply repellents themselves.
- As with chemical exposure in general, pregnant women should take care to avoid exposures to repellents when practical.
- Wash all treated skin and clothing with soap and water after returning indoors.
- Never use repellents over cuts, wounds, or irritated skin.
- Depending on the concentration of DEET in a product, it can be effective for approximately 3-6 hours. Avoid prolonged or excessive use of DEET. Use sparingly to cover exposed skin and clothing.
- Do not apply to skin covered by clothing.
- Note that vitamin B, ultrasonic devices, and incense have not been shown to be effective in preventing mosquito bites.
- Mosquitoes lay their eggs in standing or slow-moving water such as streams or creeks. Getting rid of stagnant water will decrease mosquito risk. Weeds, tall grass, and bushes also provide an outdoor home for mosquitoes.
- Some stores may carry a product called Mosquito Dunk® that contains a larvicide - Bacillus thuringiensis israelensis (BTI) - for use in areas of standing water around the home. The New York City Department of Health and Mental Hygiene recommends removing standing water around the home to reduce breeding sites for mosquitoes. Direct handling of larvicides may cause skin and eye *irritation* (inflammation). If these products are purchased for home use, careful reading of the hazards label, directions, and details regarding storage and handling is recommended.
- If pesticides are sprayed to control adult mosquitos, risks to people and pets are relatively low. Persons directly exposed to these pesticides may experience short term eye or throat irritation or rash.
- Some individuals are sensitive to pesticides. Persons with asthma or other respiratory conditions are especially encouraged to stay inside during spraying. There is a possibility that spraying could worsen those conditions.
- Air conditioners may remain on in closed or re-circulate vent position.
- If outdoor equipment and toys are exposed to pesticides, they may be washed with soap and water.
- Wash skin and clothing exposed to pesticides with soap and water.
- Illnesses related to mosquito bites are uncommon. However, see a caregiver immediately if you develop symptoms such as high fever, confusion, muscle weakness, severe headaches, stiff neck, or if your eyes become sensitive to light. Patients with mild symptoms should recover completely, and do not require any specific medication or laboratory testing.

Contact your Local or State Health Department with concerns about these issues.
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