# Now that the warm weather is here, so is the mosquito breeding season and the concerns about West Nile Virus. Residents are advised to take precautions to reduce the risk of mosquito bites...

# What is West Nile Encephalitis?

Encephalitis" means an inflammation of the brain and can be caused by viruses and bacteria, including viruses transmitted by mosquitoes. West Nile encephalitis is an infection of the brain caused by West Nile virus, a flavivirus commonly found in Africa, West Asia, and the Middle East. West Nile virus was first detected in the Western Hemisphere in New York City in August, 1999. It is closely related to St. Louis encephalitis virus. West Nile virus is transmitted to people through the bite of a mosquito (primarily the *Culex* species) that is infected with West Nile virus. You **can not** contract West Nile Encephalitis from handling live or dead infected birds.

Studies have shown that normally only a small percentage of humans infected with the virus will show symptoms of disease. Most infections are mild and symptoms include fever, headache, and body aches, often with skin rash and swollen lymph glands. More severe infection may be marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, paralysis and, rarely, death. No human cases of West Nile Encephalitis have been reported in New Jersey

# What can I do to reduce mosquitoes in my yard?

Mosquito populations can be reduced on your property and your neighborhood by eliminating standing water:

- Clean clogged roof gutters & drain flat roofs so no water stays
- Empty and refill bird baths every few days
- Make sure garden pools and ponds are aerated or stocked with fish
- Tilt or cover outdoor containers such as rain barrels and wheel barrels to prevent them from holding water
- Empty watering cans and wading pools after use
- Dispose of old tires or any other junk or debris that holds water
- Electronic repellers, bug zappers and citrosa plants **ARE NOT EFFECTIVE** in controlling mosquitoes.

### How can I protect myself?

- Avoid shaded areas where mosquitoes may be resting. Limit evening outdoor activity when mosquitoes are most active.
- Wear protective clothing such as long-sleeved shirts and pants
- Keep screens and windows repaired to keep mosquitoes out of dwellings.

• Use insect repellents. Repellents that contain DEET can be very effective in preventing insect bites. See recommendations below.

#### What about DEET?

Used as directed insect repellent products containing DEET (N,N-Diethyl-3-Methylbenzamide) can provide effective protection against mosquitoes. DEET was developed by the U.S. Dept. of Agriculture and patented in 1946 by the U.S. Army. It was approved for use by the general public in 1957. The Environmental Protection Agency estimates that more than 38 percent of the U.S. population uses DEET-based repellents each year.

#### **CDC** recommendations for Insect Repellents:

- Apply insect repellent sparingly to exposed skin. An effective repellent will contain 20% to 35% DEET (N,N-diethyl-meta-toluamide). DEET in high concentrations (greater than 35%) may cause side effects, particularly in children; avoid products containing more than 35% DEET.
- Repellents may irritate the eyes and mouth, so avoid applying repellent to the hands of children. Insect repellants should not be applied to very young children (< 3 years old).
- Spray clothing with repellents containing permethrin or DEET, as mosquitoes may bite through thin clothing.
- Whenever you use an insecticide or insect repellent, be sure to read and follow the manufacturer's **DIRECTIONS FOR USE**, as printed on the product.

New Jersey's WNV surveillance, control and prevention efforts involve the coordinated efforts of a number of federal, state and local agencies. These include the New Jersey Departments of Health and Senior Services, Environmental Protection, and Agriculture, the federal Centers for Disease Control and Prevention, the State Mosquito Control Commission, the Rutgers Mosquito Research and Control Unit, and local health and mosquito control agencies.

Essex County residents may report mosquito problems and standing water to the Essex County Mosquito Commission at 973-239-3366 Ext. 2480. In addition, information may be obtained from at CDC web site at

http://www.cdc.gov/westnile/index.html

Or the New Jersey Department of Health web site at

http://www.nj.gov/health/cd/westnile/index.shtml