West Nile Virus, Mosquitoes and Pesticides

Mosquito-borne diseases affect millions of people worldwide each year. In the U.S., we have 150 species of mosquitoes. Some can transmit diseases such as encephalitis, dengue fever and malaria to humans.

This past summer, New York City and surrounding counties dealt with a second outbreak of the West Nile virus, a mosquito-borne pathogen not seen in the Western Hemisphere before last year. Fourteen people in the New York City metropolitan area were diagnosed with the virus in 2000, and one of those individuals, a New Jersey resident, died from encephalitis -- an inflammation of the brain brought on by the virus. In the summer of 1999, seven people in the New York metropolitan area died from encephalitis. Sixty-two others were made seriously ill.

Many birds – especially crows – die from West Nile infection and are an indicator of the presence of the virus. This year, the West Nile virus was identified in dead birds and mosquitoes throughout the metropolitan area. Although it continues to be a major concern to local and federal health officials, the West Nile virus causes few serious health effects in the general population. The elderly and very young are most at risk for developing severe infection.

To reduce the risk of contracting the virus, health officials recommend that people take certain precautions during the summer months. These include:

- removing potential mosquito breeding sites, such any containers holding standing water, from yards, gardens and windowsills;
- wearing long pants and sleeves when outdoors at dusk and dawn when mosquitoes are most active;
- installing screens in windows and
- using mosquito repellents sparingly and strictly according to the label instructions.

When necessary, county and local officials may use ground and aerial application of pesticides along with non-chemical forms of control to eliminate mosquitoes. Any pesticide sold in the United States, including
those used for mosquito control, must be registered with EPA. The agency reviews health and environmental risk information before deciding whether to register a pesticide.

EPA also reviews the label directions of each pesticide product to ensure that when applied according to the label, the risks of human exposure and adverse health and environmental effects are minimized. However, no pesticide is 100% safe. Great care must be taken to apply pesticides strictly according to the label directions, and people should avoid any unnecessary contact with pesticides.

New: EPA's revised risk assessment indicates that when Malathion is used strictly according to label directions for mosquito control, there exists a very low potential for human exposure and therefore cancer risk from Malathion is not of concern. On November 9, 2000 in Alexandria, VA, EPA held a "technical briefing" to present its revised risk assessment of Malathion.

Technical information

News release on EPA's preliminary findings.

For more information about the West Nile virus, please visit the Centers For Disease Control website at www.cdc.gov/ncidod/dvbid/westnile/q&a.htm

For information about pesticides used to control mosquitoes, including Malathion and synthetic pyrethroids like Anvil and Scourge, go to EPA’s mosquitocide web page at www.epa.gov/pesticides/factsheets/skeeters.htm

For the National Pesticides Telecommunications Network (NPTN) West Nile Virus Resource Guide, go to http://ace.orst.edu/info/nptn/wnv.htm

If you live in New York City and have questions about West Nile in general, dead birds, mosquito breeding grounds or pesticide application schedules, please call the New York City Department of Health’s West Nile Hotline toll-free at (877) 968-4692 or visit the website at www.ci.nyc.ny.us/html/doh/

Outside of New York City, please contact your county Department of Health for more information. Some county contacts are listed below:

NEW YORK

Nassau County Health Department

(516) 571-8707
(516) 571-8708
(516) 573-7055

www.co.nassau.ny.us

Suffolk County Department of Health Services

(516) 852-4900

www.co.suffolk.ny.us/health

Westchester County Health Department

(914) 285-2032

www.co.westchester.ny.us/health

Rockland County Health Department

(914) 364-3736
(914) 364-3737

www.co.rockland.ny.us

Orange County Health Department

(914) 291-2331

www.co.orange.ny.us

NEW JERSEY

Local Health Departments in New Jersey (tel/fax #’s)

www.state.nj.us/health/lh/olh.htm

Mosquito Control Agencies in New Jersey (tel/fax #’s)

www.rci.rutgers.edu/~insects/agencies.htm

State Mosquito Control Commission

(609) 292-3649

Bergen County Division of Mosquito Control

(201) 599-6141

Essex County Mosquito Control

(973) 239-0342

Hudson County Mosquito Control

(201) 915-1373
Middlesex County Mosquito Extermination Comm.
(732) 549-0665

Monmouth County Mosquito Extermination Comm.
(732) 542-3630

Union County Bureau of Mosquito Control
(908) 654-9834

For more information contact: Nina Habib
E-Mail: habib.nina@epamail.epa.gov

URL:
This page last updated on November 13, 2000