# Disrupted Ecology May Protect La. From West Nile

BY MICHELE G. SULLIVAN
*Mid-Atlantic Bureau*

A mosquito-eradication program is underway in storm-ravaged Gulf coast states, and federal officials hope that effort, combined with the hurricane's impact on the vector cycle, will prevent a surge in West Nile virus and other mosquito-borne diseases.

The aerial spray program began in mid-September and will continue as long as is necessary to control mosquito populations, according to the Louisiana State Department of Health.

Although the huge expanses of standing floodwaters are conducive to a mosquito population explosion, the total disruption of the region's normal ecology may discourage mosquito-borne epidemics, said Jennifer Morcone, a spokesperson for the Centers for Disease Control and Prevention.

"Historically, we have not seen increases in these diseases after a storm like this," she said. "You need a bird population to fuel the transmission cycle and, right now, the bird population in these areas is almost nonexistent."

However, she said, the CDC has deployed entomologists to monitor mosquito populations and to assist with vector control in the affected areas.

The Louisiana Department of Health and Hospitals—in coordination with the Louisiana Department of Agriculture and Forestry, the CDC, the Agency for Toxic Substances and Disease Registry, U.S. Environmental Protection Agency, the Department of Defense, and local mosquito control districts—is implementing a plan to reduce mosquitoes and flies in the areas affected by Hurricane Katrina.

The health and hospitals department had developed a management plan in anticipation of the hatching of mosquitoes and flies due to the massive flooding in the area. Mosquito control is needed to protect public health from the nuisances and diseases they transmit; flies will also be monitored. The plan will continue, based on field monitor of mosquitoes and flies in the region.

People face two types of increased risks for mosquito-borne diseases in the region: the rise in the number of mosquitos and increased exposure to the insects. "People are spending a lot more time outside, and



# New Virus Found To Infect Lower Respiratory Tract

A newly identified parvovirus appears to cause lower respiratory tract infections in children, a team of scientists in Sweden and Singapore reported.

They detected the virus—provisionally named human bocavirus (HBoV)—through a rapid new system for large-scale molecular virus screening of clinical samples without the need for cultures and with minimal hands-on effort. Their method should make it feasible to systematically explore all viruses that affect humans, including unidentified ones, reported Tobias Allander, M.D., of Karolinska University Hospital, Stockholm, and his associates (Proc. Natl. Acad. Sci. USA 2005;102:12891-6).

To assess HBoV's clinical effects, the investigators screened culture-negative nasopharyngeal aspirate samples from 266 pediatric patients and 112 adults seen in clinics. Seven samples from infants and children were positive for HBoV. A subsequent retrospective study of all 540 aspirates available from the pediatric infectious diseases ward at the hospital found HBoV in 17 patients (3%), and 14 of these had no other viruses present. HBoV is the likely cause of the respiratory distress and fever in these patients, the investigators concluded.

Seven of the 14 patients underwent chest x-ray, and results showed interstitial bilateral infiltrates in 6 patients.

Approximately 250,000 infants and young children are hospitalized each year in the United States for lower respiratory tract infection, and no etiologic agent is found in 12%-39% of cases.

The virus screening system that detected HBoV employs host DNA depletion, random polymerase chain reaction amplification, large-scale sequencing, and bioinformatics.

**—Sherry Boschert**