West Nile Virus Cases on the Rise, CDC Reports

BY ROBIN SEATON JEFFERSON
Contributing Writer

California reported one-third of the 2005 U.S. total of West Nile virus cases through December 1 and 25% of the cases of the viral neuroinvasive disease, the Centers for Disease Control and Prevention reported.

A total of 2,744 human cases of West Nile virus (WNV) disease were reported in 42 states in 2005, compared with 2,359 in 2004. There was a spread of the disease in both humans and animals into counties not previously affected, as well as recurrence where the disease had previously been reported. "The increase … suggests that endemic transmission of WNV in the United States will continue for the foreseeable future," the CDC said (MMWR 2005;54:1253-6).

WNV infections in humans, birds, mosquitoes, and nonhuman mammals are reported to the CDC through ArboNET, an Internet-based arbovirus surveillance system managed by state health departments and the CDC.

Of the cases reported, 1,165 (43%) were WNV neuroinvasive disease (WNND), which includes meningitis, encephalitis, or acute flaccid paralysis; 1,434 (52%) were West Nile fever (WNF); and 145 (5%) were unspecified illnesses.

WNND had its highest incidence in the central United States, including South Dakota, Nebraska, and North Dakota, but there were also focal outbreaks in Illinois, Texas, and Louisiana.

"Nationally, reports of WNV disease began in late May, peaked during the third week in August, and lasted into November," the CDC said.

The median age of WNND patients was 57 years (range 3 months to 98 years); 85% of the 1,165 patients were hospitalized and 7% died. The median age of those with WNND who died was 75 years (range 36-98 years).

The median age of patients with WNF was 48 years (range 1-92 years); 23% of the 1,434 patients were hospitalized and 0.3% died.

The median age of the four who died was 89 years (range 44-92 years). ■

Better Flu Vaccine Coverage Warranted

One hundred fifty-three laboratory-confirmed influenza-associated deaths in children were reported during the 2003-2004 influenza season; this number may exceed childhood mortality associated with other vaccine-preventable diseases in the United States.

Dr. Niranjan Bhat and Jennifer G. Wright, D.V.M., and their associates at the National Center for Infectious Diseases, Atlanta, reported that high priority should be given to improvements in influenza-vaccine coverage and in the early diagnosis and treatment of influenza to reduce childhood mortality from influenza (N. Engl. J. Med. 2005;353:2559-67).

In the study, mortality was highest among children younger than 6 months and next highest among those 6-23 months of age.

Forty state health departments reported 153 influenza-associated deaths with a median age of 3 years between Oct. 11, 2003, and April 13, 2004.

Of 149 children for whom information was available, 33% had an underlying condition known to increase the risk of influenza-related complications, 20% had other chronic conditions, and 47% had previously been healthy.

One-third of the deaths occurred when chronic neurologic or neuromuscular conditions were present. These have not previously been considered a risk for complications, but compromised respiratory function or handling of respiratory secretions might be worth considering in terms of vaccination in some of the disorders identified in this study, the researchers said.

Of the 111 children whose influenza-vaccination status was available, 16% had received at least one dose of vaccine during the season.

The researchers reported that only 8 of the 18 children who had received at least one dose during the season had documentation of full vaccination during that season; 5 had been vaccinated in a previous season, and 3 were older than 9 years.

—Robin Seaton Jefferson