Update: West Nile-Like Viral Encephalitis — New York, 1999

Centers for Disease Control and Prevention

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Influenza and Pneumococcal Vaccinations — Continued


Update: West Nile-Like Viral Encephalitis — New York, 1999

The outbreak of human arboviral encephalitis attributable to a mosquito-transmitted West Nile-like virus (WNLV) continues to wane in the Northeast (Figure 1). As of October 5, the number of laboratory-positive cases had increased to 50 (27 confirmed and 23 probable), including five deaths. The increase in cases is mainly a result of completed retesting with West Nile virus antigen of specimens previously tested with the related St. Louis encephalitis virus antigen and to intensive retrospective case finding in the ongoing epidemiologic investigations (1,2). Of the 50 case-patients, none had onset of illness after September 17. Thirty-eight resided within boroughs of New York City (NYC): 26 from Queens, nine from the Bronx, two from Manhattan, and one from Brooklyn. An additional 12 cases were reported from the adjacent counties of Westchester (eight) and Nassau (four). In NYC, the earliest laboratory-positive case occurred in a patient on August 4, followed by

FIGURE 1. Seropositive cases of West Nile-like virus, by week of onset — New York, 1999
West Nile-Like Viral Encephalitis — Continued

11 cases in patients from Queens with onset dates ranging from August 5 to August 18.

The association of WNV with deaths in crows and domestic and exotic birds was confirmed during September. As a result, CDC, state wildlife veterinarians, and an expanding group of federal agencies are using deaths in crows as sentinel events to define the current geographic distribution of mosquitoes and birds infected with WNV (1). As of October 5, results from selected bird tissue samples tested indicate that WNV has been identified from 41 avian tissue specimens collected in NYC; Nassau, Suffolk, Rockland, and Westchester counties in New York; Fairfield County, Connecticut; and Bergen, Union, Middlesex, and Essex counties in New Jersey. No human cases of encephalitis attributable to WNV have been reported from either Connecticut or New Jersey. Pools of Culex mosquitoes collected in localized areas of Queens, Brooklyn, and the Bronx in mid-September and a pool of Culex pipiens collected from Nassau County in late September have been positive for WNV by reverse transcriptase polymerase chain reaction testing. One pool of Culex pipiens and one pool of Aedes vexans mosquitoes collected from a single trap in Greenwich, Connecticut, on September 13 yielded isolates of WNV.


Editorial Note: Human cases of encephalitis attributable to WNV should continue to decline in areas where WNV activity has been documented because of the application of adulticidal and larvacidal mosquito-control compounds; however, persons in these areas should continue to use personal protective measures, including reducing outdoor exposures at dusk and at night; wearing long-sleeved shirts and pants; and applying to skin and clothing DEET-containing mosquito repellants according to label directions (1). Shorter days and the onset of colder weather eventually will lead to major declines in vector mosquito populations and will reduce human risk for exposure.

Confirmation that these WNVs are virulent in a wide range of domestic and exotic birds has led to the formation of a cooperative federal working group. This working group, in cooperation with state and local health departments, will attempt to define the extent to which WNVs are distributed in mosquito and bird populations outside the Northeast.
West Nile-Like Viral Encephalitis — Continued

The appearance of WNLV in the Western Hemisphere will necessitate enhanced vigilance for this virus during the transmission seasons for the next several years. Enhanced human surveillance for West Nile-like encephalitis will be a fundamental part of determining geographic distribution. To assist states in augmenting surveillance, CDC has distributed surveillance guidelines to state epidemiologists and state health laboratory directors. The guidelines include early warning tools for surveillance of arbovirus activity in nature, such as mosquito trapping for virus isolation and avian serologic and viral surveillance (3).

References
2. CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997; 46(no. RR-10):12-3.

Notice to Readers

International Infection Control Week — October 17–23, 1999

Each year, approximately 2 million health-care–associated infections occur in the United States. As many as one third of these infections is preventable, but prevention requires vigilance on the part of the entire health-care team. International Infection Control Week (October 17–23), observed by health-care facilities around the world, is intended to heighten public awareness of and professional commitment to, infection control. During the fall and winter months, infection-control professionals worldwide emphasize efforts to vaccinate persons against diseases such as influenza and pneumonia while confronting antimicrobial resistance in pathogens and emerging pathogens in the health-care setting. The Association for Professionals in Infection Control and Epidemiology has created an Infection Control Week Resource Kit addressing issues such as needlestick injuries, vaccinations, food safety, Lyme disease, and sexually transmitted diseases. This free kit is available on the World-Wide Web at http://www.apic.org*. Information about health-care–associated diseases also is available on the website of CDC’s Hospital Infections Program, National Center for Infectious Diseases, at http://www.cdc.gov/ncidod/hip.

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