West Nile Virus

Information for Veterinarians

West Nile virus (WNV) is in the genus Flavivirus, which includes Japanese encephalitis and St. Louis encephalitis. It can affect humans, horses, birds and other vertebrates. Infectious mosquitoes transmit WNV. There is no documented evidence of person-to-person, animal-to-animal or animal-to-person transmission of WNV. The clinical presentation cannot be distinguished from other viral encephalitis infections. Most WNV cases occur in the late summer and fall.

<u>Humans</u>

Human cases and outbreaks of WNV infections have been described in Africa, Europe, the Middle East, west and central Asia, and as of August 1999, North America. In 1999 in New York City, an encephalitis outbreak, including 62 cases of severe human illness and 7 deaths, was attributed to WNV infection. This was the first time WNV had been detected in the Western Hemisphere. In 2000, 21 confirmed human cases were reported, including two deaths.

Horses

Twenty-five horse cases of WNV were identified in New York between August and October 1999. All were clinically ill with signs including ataxia, difficulty walking, knuckling over, head tilt, muscle tremors, and some were unable to stand. Nine horses died, while the other 16 fully recovered. Testing of 69 stablemates showed 20 (29%) had WNV titers. Results from a horse serosurvey in New York City showed 5% of horses had been exposed to WNV. In 2000, sixty horse cases were reported from seven Northeastern states.

Horses vaccinated against eastern equine encephalitis (EEE), WEE, and Venezuelan equine encephalitis (VEE) are NOT protected against WNV infection.

<u>Birds</u>

Wild birds infected with WNV in the U.S. can die or become ill. In 1999 WNV was confirmed in nearly 300 dead birds (American crows). A total of 20 native bird species demonstrated morbidity or mortality. In addition to the positive birds, more than 17,000 dead birds were reported to the New York State Department of Health in 1999. More than 4,000 dead wild birds were reported to be WNV-positive in 2000 in twelve states from New Hampshire to Virginia. Several different types of birds in a zoological collection also died of WNV in New York in 1999.

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