



Emerging and Reemerging Infectious Diseases, Region of the Americas

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Update on West Nile Virus (WNV) in Belize

On 4 March 2004, the World Organization for Animal Health (OIE) published a report on encephalitis caused by West Nile Virus (WNV) being detected in a four-year-old horse from Indian Creek, Orange Walk district, in the northern part of Belize. On 27 October 2003, the affected animal began to develop symptoms of ataxia, hind-limb paresis, pain, and recumbency. Samples were sent to the National Veterinary Services Laboratory (NVSL) in Ames, Iowa, USA, where tests were carried out for detection of IgM antibodies using capture-ELISA techniques and neutralization for the diagnosis. The samples tested positive, with results received on 23 February 2004.

Active surveillance detected a total of 4 suspect cases of equine encephalitis in the following areas: Corozal (1 case in Little Belize), Orange Walk (1 case in Shipyard and 1 in Blue Creek), and Cayo (1 case in Lower Barton Creek). Two cases (the one from Blue Creek and the one from Barton Creek) turned up positive for Venezuelan Equine Encephalitis (VEE). The other horse tested negative for WNV and VEE.

The VNO-infected horse was subsequently euthanized. In Indian Creek, vector-control measures were carried out, as well as serological screening on horses. Materials were also prepared for public awareness of the disease.

The affected area is located in a place where private horse ownership is common. There also exists a history of arbovirus activity being detected (VEE) in 1996. In addition, the area is a major habitat for migratory birds.

There has been active surveillance to detect the spread of WNV in Belize since 2002. That year, 2,000 samples were gathered, mainly from the northern part of the country. In 2003, another 2,000 samples were studied from the southern part of the country. Results were negative in all cases. Given the results obtained in October 2003, new serological tests were carried out on birds in the affected area. Since this incident, no additional suspect cases have been reported in either horses, birds, or humans.

Sources

- Report to PAHO from the Ministry of Agriculture of Belize.
- [*West Nile Fever in Belize in October 2003*](#) (4 March 2004). Paris: World Organization for Animal Health (OIE).