

West Nile Virus and the Effect on Horses Preventive Measures

West Nile is a virus that can cause encephalitis. Previously confined to Africa and Western Asia, this virus was discovered in the New York City area in 1999. By 2001, the virus had been reported in 20 states and had spread as far south as Florida and as far west as Louisiana. So far in 2002, the virus has been reported in 41 states and has spread as far west as Montana, Colorado, Wyoming and New Mexico. It is predicted to reach the Pacific Coast before the end of the year.

The virus is spread to humans and horses by bites from infected mosquitoes. Both humans and horses are terminal hosts, meaning that they can not transmit the virus to other humans, livestock, or mosquitoes. However, birds are incidental hosts and *can* transmit the disease. Mosquitoes feed on the birds, ingesting their blood. Thus the life cycle appears to develop from mosquitoes to birds to mosquitoes.

Fort Dodge Animal Health in Overland Park, Kansas has developed a vaccine that was recently approved by the USDA. Please contact your veterinarian or Fort Dodge Animal Health's Professional Services Department at (800) 533-8536 for details.

Along with the vaccine, the best preventative measures are to seek immediate treatment for infected horses as well as reduce the mosquito population and exposure to mosquito bites. The following suggestions are offered from APHIS and veterinarians:

- ◆ Remove potential sources of standing water where mosquitoes breed.
- ◆ Dispose of water holding containers that are kept outside, including old tires.
- ◆ Clean roof gutters every spring.
- ◆ Keep wheelbarrows and wading pools overturned when not in use.
- ◆ Change birdbath water at least twice a week.
- ◆ Make sure puddles do not stand for more than 4 days. Mosquitoes can breed in a puddle of standing water after 4 days. Landscape to fill any standing water in the fields or around the barns.
- ◆ If an outbreak of West Nile Virus is reported in your area, try to keep horses boarded in barns at dusk, night, and dawn. Install mosquito screening in any open areas to ventilate barns and to keep mosquitoes out. Ask your veterinarian about the use of adulticides and fans to control the mosquito population in your barns.
- ◆ Ask your local veterinarian about the use of mosquito repellent on your horses when they are in the pastures.
- ◆ Watch for early signs of the West Nile Virus. They include listlessness, stumbling and incoordination, weakness of the limbs, ataxia, and partial paralysis. The presence of a fever is not usual. Immediate care should be obtained. In many cases the West Nile Virus is treatable and immediate care should prevent death.