



West Nile Update

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A common question we get during the summer is “do I need to vaccinate for West Nile?” Our answer is an emphatic-Yes! In central Missouri, we recommend vaccinating twice yearly, once in the spring, prior to mosquito season (with your horse’s other spring shots), and again mid-summer (late-June or July). While we have not seen any cases of equine West Nile in the past few years, there have been 8 confirmed cases of human West Nile virus in Boone County this year, confirming infected mosquito pools are in our area. Furthermore, the fact we have not seen recent equine infections indicates our current vaccination program is working.

As a short background on the disease, West Nile Virus was first diagnosed in the Northeastern United States in the fall of 1999. Following that first discovery the disease has followed the migratory patterns of infected birds south and west. In October 2001, the first infected crow was found in St. Louis, Missouri. In 2002, we diagnosed over 40 cases of equine West Nile Virus at our clinic and began recommending a vaccination protocol against the disease. Today, with the exception of Maine, Alaska and Hawaii, cases of equine West Nile Virus have been documented in every state. [Click here for maps showing reported equine cases by state, for the years 1999-2007.](#)

West Nile Virus utilizes birds (especially crows, blue jays, and raptors such as hawks) as amplifying hosts off which mosquitoes feed to become vectors in spreading the disease. Horses, humans and other mammals are terminal, or dead-end hosts, meaning once infected, they cannot spread WNV to other animals.

Symptoms of WNV usually appear during the months of August through October. Signs of disease range from subtle illness to acute recumbency and death. Most horses with WNV appear listless and have varying degrees of incoordination and weakness. Other signs include low-grade fever, lack of awareness, stumbling to their knees, and hypersensitivity to touch and sound. Clinical signs appear quickly following infection. While a majority of cases respond to treatment, severely affected animals progress to recumbency, seizures, paralysis and death over a period of 2-9 days. The mortality rate for horses infected with WNV is 39%.

As with other viral disease, there is no specific treatment for horses infected with WNV. Treatment strategies revolve around general nursing care (IV fluids, antibiotics, nutritional support), anti-inflammatories (steroids and NSAIDS) and prevention of injury secondary to ataxia and recumbency. Horses that respond to treatment recover over a period of 5-15 days.

In addition to vaccination, limiting exposure and reducing the mosquito population in and around horse facilities will reduce the risk of WNV infection. Two of the most important management considerations include elimination of standing water (drill holes in containers which accumulate water, clean water troughs monthly, keep gutters free of debris, dispose of old tires) and avoidance of turnout between the hours of dusk and dawn when mosquitoes are most active.