

West Nile Virus Update 2008- New cases

West Nile is still active in Arizona. We have recently diagnosed two cases in October 2008. Both horses were euthanized. One was unable to stand and the other horse continued to fall and could not get up without assistance. Both horses were not vaccinated. We are recommending to our clients to vaccinate their horses with the West Nile Virus vaccine. The cost is \$30 for the annual Fort Dodge booster and \$40 for the Prevenile vaccine for unvaccinated foals and horses. The Prevenile vaccine does not need a booster. We recommend to vaccinate your horses against West Nile annually in the spring prior to mosquito season. We have had minimal reactions to the vaccination after thousands of shots. Foals must be at least 3 months old. Pregnant mares must be at least 45 days in foal.

As most of you are aware from recent news, West Nile Virus (WNV) has been very active in the U.S. since 1999. The mortality rate is about 30-40%. The reason for the decrease in cases in horses and increase in cases in humans is attributed to the extensive vaccination program of horses in the U.S. During the late summer and fall of



2003, Arizona had its first positive cases of West Nile Virus in horses. As of May 2004, the virus has been proven to be prevalent in our bird and mosquito population. It is here to stay. We continue to have positive cases every year. Except for one, the only cases we have seen at our clinic have been in unvaccinated horses.

The horse pictured is alive but unable to stand due to West Nile disease.

The horses most susceptible are the young and old, especially horses over 25 years old. WNV is a mosquito-borne virus. It is maintained in nature by a bird-mosquito cycle. Thousands of birds nation-wide have died from this disease. Horses and humans can contract the disease from infected mosquitoes only. The disease is not transmissible from horse to human, or vice versa. Moreover, horses are not contagious to each other. Given that mosquitoes are associated with WNV transmission, the key to preventing or controlling outbreaks of WNV is to control mosquito populations and prevent exposure to mosquitoes. This can include dumping stagnate water, using mosquito repellants, and the use of barn fans may help.

The disease affects the nervous system. The most common signs of WNV infection in horses have been incoordination, depression, weakness of the limbs, muscle tremors or twitching in the muzzle, hypersensitivity to touch & sound, and a horse down and unable to stand. Fever is only detected in 25% of positive cases. Diagnosis is based on

clinical signs and a positive blood test. If a horse is positive with clinical signs, they are treated with supportive care and anti-inflammatories. There is now an anti-serum and hyper-immune plasma available for treatment as well. 70% of horses will fully recover; although some may take several months to completely recover.

The WNV vaccine is licensed. There are three companies who now produce the vaccine. We use Fort Dodge's vaccine and Intervet's PreveNile™ vaccine. Study results have indicated approximately 90% protection. The Prevenile vaccine no longer requires a 2nd booster after the initial vaccine which saves you money, has a faster antibody response, and is one less vaccine to give your horse. We are still very happy with the Fort Dodge vaccine as the annual booster. Please be sure to vaccinate your horse as this virus is still prevalent in our area and we see fatalities from this preventable disease.