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West Nile Virus

West Nile Virus (WNV) is a Flavivirus that can cause encephalomyelitis (inflammation of the nervous system) or potentially death in horses and humans. It was first noted in the United States in 1999 on Long Island, New York. Since that time it has spread across the United States.

While horses become infected with WNV through the bite of infected mosquitoes, not all will show clinical signs associated with the virus once they are bitten. The clinical signs typically associated with infection are due to inflammation of the spinal cord and brain and include ataxia or stumbling, weakness, muscle tremors, depression, difficulty swallowing and potentially death.

The main host or reservoir for the virus is birds. A mosquito takes a blood meal from an infected bird and the virus replicates in the mosquito. Then the mosquito bites the next animal and transmits the virus to the new animal. Horses are dead-end hosts for WNV infection because the virus never replicates enough in the horse for a mosquito to become infected off of the horse when it takes a blood meal.

Testing for WNV in horses is done by sampling the blood and checking for antibodies to the virus. Positive results indicate recent exposure to WNV. A positive antibody titer and clinical signs suggestive of WNV infection would confirm a positive WNV infected horse.

Mosquito control and vaccination are key in the control of WNV infection. Horses are initially vaccinated twice with the WNV vaccine and then annually thereafter. Mosquito control is accomplished by removing any potential sources of water in which mosquitoes can breed and also by applying insect repellent at times of the day when mosquitoes are most active.

Treatment of horses with WNV includes medical management and supportive care. If a horse is suspected of being acutely infected with WNV and is exhibiting early neurological signs, a good addition to medical management and supportive care would be Colorado Serum Company's **West Nile Virus Antibody**. When the West Nile Virus Antibody is administered intravenously it provides immediate WNV antibody in the bloodstream, enhancing the horse's ability to fight and neutralize any virus present in acute cases. The West Nile Virus Antibody is extremely safe, easy to use and could improve the horse's chance of recovery.

Another use for Colorado Serum Company's **West Nile Virus Antibody** would be as a preventative for WNV. For example, if horses in your area are contracting WNV and your horse is not yet vaccinated, you could give your horse the **West Nile Virus Antibody** and vaccinate at the same time. The **West Nile Virus Antibody** would give immediate protection to WNV while the body mounts an immune response to the WNV vaccine to provide longer term protection.

