

Animal Facts

West Nile Virus in Horses



What is West Nile Virus?

West Nile Virus is a mosquito borne infection that affects horses every year across the prairies. The virus is carried by *Culex tarsalis* mosquitos which tend to increase in numbers in the early fall months of August and September. Horses are particularly more vulnerable to this infection as they are in nearly constant contact with the mosquitos and their immune system is often weakened to the virus.

West Nile Virus first became a problem for horses in Western Canada around 2002. The virus was first isolated in North America in New York City in the fall of 1999. It has now spread into almost all of Canada and parts of the Caribbean.

Signs of Infection

There are several different clinical syndromes that the virus can produce but most commonly the signs of infection in horses are:

- depression
- going off feed
- fever (temperature >38.5C and typically 40C)
- weakness of the hind legs that progresses to weakness in all four legs leading to recumbency or laying down and unable to rise.

As the disease progresses, the horse will slip into a coma with high fever and often pass away shortly thereafter. From the time of infection to showing clinical signs of the disease varies from 2 to 10 days. Once infected, death can occur in as little as 48 hours. The virus primarily affects the brain and spinal cord/cerebral spinal fluid.

Animal Facts

West Nile Virus in Horses

The disease is diagnosed based on the clinical signs and testing for antibodies or testing for virus particles in the blood.

Treatment for the disease is supportive only. If a horse develops weakness in the hind end and is diagnosed with West Nile Virus, the vet will give medications to help decrease the inflammation in the central nervous system and will give intravenous (IV) fluids.

Unfortunately, there is no specific cure or treatment for the virus in horses. Not all horses will die from infection but many that live will have long term side effects.



Vaccination Prevention

The main means to protect your horses from West Nile Virus is through routine vaccination. Since the first outbreaks, several good vaccines have been developed for horses. Veterinarians highly recommend including West Nile Virus vaccination as part of the preventative health plan for your horse. Spring vaccination followed by a booster vaccine in August/September each year will help to prevent your horse from contracting this dangerous disease.

Speak with your vet for more information and to get your horse vaccinated this August.

*Dr. Chris Bell BSc, DVM, MVetSc
Diplomate of the American College of Veterinary Surgeons
Equine Surgery, Lameness and Sports Medicine
Surgeon and Practice Owner Elders Equine Veterinary Service*