

# SLEEPING SICKNESS

Eastern and western encephalomyelitis, also called sleeping sickness, are viral infections that affect the horse's central nervous system. WEE has been noted throughout North America, while EEE appears only in the east and southeast. VEE, the Venezuelan variety, has not been seen in the United States for many years. However, recent outbreaks of VEE have occurred in Mexico. Encephalomyelitis is transmitted to horses by biting insects, primarily mosquitoes. Wild animals, such as birds and rodents, also become infected but do not develop the disease. These reservoir hosts do, however, keep the virus alive during cold seasons of the year when insects are not prevalent. Because of this cycle in nature (from wild animals to mosquitoes to horses), outbreaks of sleeping sickness are both seasonal and geographic, tending to occur during the summer in warm, moist areas where mosquitoes and reservoir hosts are prevalent.

Humans can also develop encephalomyelitis if they are bitten by mosquitoes which transmit the virus in their salivary glands. The virus can be transmitted to horses or people, but cannot be spread from horse to horse or horse to people.

## Clinical Signs

The early clinical signs of EEE and WEE may be so mild that they go unnoticed, and may include transient fever and depression, lasting up to five days. Many cases of WEE do not progress beyond this stage. However, EEE is more likely to progress to central nervous signs, which may progress from depression and sleepiness to aggression and agitation. Late in the disease affected horses may develop blindness, head pressing, circling, head tilt, quivering face and leg muscles, and paralysis of the throat and tongue. Terminal horses will usually be down for several days before dying. Death from EEE occurs in 75 - 80% of horses that develop neurologic signs,

and in 15-30% of those with WEE. Survivors show gradual improvement over weeks to months, but complete recovery is rare. Horses that recover from sleeping sickness often continue to show depression, abnormal behavior, and difficulty in walking.

## Diagnosis

Diagnosis of EEE and WEE is based on the clinical signs and the occurrence of an epidemiologic pattern that relates to warm weather and mosquitoes. The diagnosis is confirmed by paired-sample blood serologic testing and postmortem examination of the brain and spinal cord.

## Treatment

There is no specific treatment for viral encephalomyelitis. However, supportive care is essential. Anti-inflammatory and anticonvulsant drugs may be used, along with antibiotics to treat secondary complications such as

pneumonia. Intravenous or oral fluids and supplemental feeding help prevent dehydration and malnutrition. Heavy bedding materials, along with head and leg wraps, help protect against injury from falls or convulsions. If the animal goes down, slinging or propping up with bales of hay may be beneficial.

## Prevention

Horses should be vaccinated annually against EEE and WEE before mosquito season begins. In areas where the mosquito season is very long or year-round, vaccines may need to be given twice a year. Pregnant mares can be vaccinated during the last 4-6 weeks of pregnancy to increase antibody levels in their colostrum. In addition to vaccination, mosquito control and reduction of wildlife around pastures and stables should be undertaken. During outbreaks, screened stalls help protect animals from insect bites.

## GET TO KNOW AN EQUINE VETERINARIAN

Equine veterinarians understand the special bond of affection that exists between you and your horse. It is the same bond of caring that led them to choose the field of equine medicine. The professional organization of these veterinarians is the American Association of Equine Practitioners (AAEP), and a vital part of their mission is to improve the health and welfare of the horse.

An equine veterinarian offers the best professional care of your horse in the treatment of injury and disease. And, working closely with you, an equine veterinarian will provide a complete program of preventive care tailored to your horse, taking into account:

- the type and age of your horse
- the work, competition or pleasure activities of your horse
- the health history of your horse
- special disease threats in your area
- new diseases which may be emerging.

*An equine veterinarian is your horse's best friend.*

