



# Preventing West Nile Virus in Horses

*The Educated Horseman: Disease Series*



West Nile Virus is a viral disease that can cause encephalitis or meningitis – an infection of the brain and spinal cord or their protective coverings. The virus is transmitted to horses by the bites of infected mosquitoes.

Horses are considered to be “dead end hosts” for West Nile virus, meaning the virus is not directly contagious from horse to horse. Horses that become infected with West Nile virus may have a loss of appetite, depression, fever, weakness or paralysis of the hind limbs, muscle spasms or twitching, impaired vision, lack of coordination, head pressing, aimless wandering, convulsions, inability to swallow, circling, hyperexcitability or coma.

There is no specific treatment for West Nile virus, and this disease has a 30 percent mortality rate. Since 1999, more than 25,000 cases of West Nile virus have been reported in horses in the United States. Horses affected by the West Nile virus continue to be reported across the state of Louisiana

There currently are four vaccines available to help prevent West Nile virus infection in horses. It is extremely important that horses are vaccinated according to the label and veterinary recommendations. A minimum of a yearly booster is required, while horses that are stressed, travel frequently due to show schedules or live in warm, humid climates should be vaccinated twice a year.

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#### **References**

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Vaccinating your horses against West Nile virus is an inexpensive way to help reduce the possibility of infection, but vaccination alone is not 100 percent effective. There also are some other easy steps you can take to prevent mosquitoes from affecting your horses:

## **Avoidance**

- House horses indoors during peak periods of mosquito activity, if possible (around dusk and dawn).
- Reduce use of lighting during peak periods of mosquito activity.
- Use fans to help keep mosquitoes off horses while they are stabled.
- Use chemical repellents specifically designed for use on horses.

## **Reduction**

- Eliminate areas of standing water on your property. For example, watch for these potential things that can hold water: tires, manure storage areas, drainage areas with stagnant water, wheel barrows, pots and shallow ponds.
- Clean out livestock watering troughs weekly or add a supply of mosquito fish, which will feed on mosquito larvae.
- Clean out storm drains and gutters in areas where horses are kept.

Research has shown that vaccination is a vital component of reducing your horses' chances of becoming infected with West Nile virus. Vaccination should be completed before the peak of mosquito-breeding season, and a multifaceted management approach ensures reduced exposure.

If you believe your horse may be infected with a mosquito-borne virus, or if you would like more information about creating a program to reduce your farm's exposure to such diseases, contact your local veterinarian.

