

**Be prepared to fight equine diseases during warmer weather**

Steamy temperatures aren’t the only thing posing a threat to your horse’s health. Summer and late fall also bring prime mosquito season. This means an increased risk of horses contracting serious and often fatal diseases like eastern and western equine encephalomyelitis (EEE, WEE), and West Nile virus (WNV), which are transmitted by mosquitoes.

Now is the time to vaccinate your horses against these diseases, if you haven’t already. The American Association of Equine Practitioners (AAEP) considers EEE, WEE and WNV core equine vaccinations indicated in the immunization program for all horses. For previously vaccinated horses residing in or traveling to areas where disease is endemic, a booster vaccination also may be recommended.[[1]](#endnote-1) Remember to contact your local veterinarian to advise you on the vaccination plan most effective for your horse and geographic area.

**Know the threats**

There are two types of equine encephalomyelitis seen in North America – EEE and WEE. The more common of these, EEE (also known as “sleeping sickness”), is a virus that is transmitted by mosquitoes that can infect horses, humans and other mammals and causes severe and often fatal neurologic disease. The disease is found as far north as eastern Canada and as far south as Central and South America. In the United States, EEE has been detected in all states east of the Mississippi River, as well as a number of western states.[[2]](#endnote-2) Young horses are most susceptible to infection.

If you see any of the following signs of EEE in your horse, contact your veterinarian as soon as possible.

* High fever
* Severe depression
* Incoordination
* Paralysis
* Seizures
* Coma

Unfortunately, EEE has a fatality rate of nearly 90 percent in most horses. Prevention focuses on appropriate vaccination beginning with initial and booster vaccinations to begin protection followed by revaccination at least once a year, and appropriate mosquito control. In areas with long mosquito seasons or for horses traveling to these areas, veterinarians may recommend horses be vaccinated twice a year against EEE. Older or immune-compromised horses may also benefit from biannual vaccination.

West Nile virus (WNV) is the leading cause of arbovirus encephalitis in horses and humans in the United States. Transmitted by mosquitoes that can infect horses and humans, WNV was first diagnosed in U.S. horses in 1999. Since that time, WNV has been detected in horses in all 48 continental states, as well as most of Canada and Mexico.

The severity and duration of clinical signs can vary greatly with WNV. Talk to your veterinarian immediately if your horse is experiencing:

* Depression
* Low-grade fever
* Change in behavior
* Muscle fasciculations (twitching)
* Incoordination, ataxia
* Cranial nerve deficits (such as head tilt, ear droop, difficulty swallowing)
* Recumbency (inability to rise after laying down)

Once a horse is infected and showing clinical signs, mortality rates can reach over 30 percent. And of the horses that do survive, only 59 to 79 percent may experience a full recovery, with many still exhibiting residual effects, such as gait and behavioral abnormalities, six months after diagnosis.[[3]](#endnote-3)

There is no treatment for the virus itself, just support for the clinical signs. Appropriate vaccination, including initial, booster and annual vaccination, as well as mosquito control (eliminating standing water on property, use mosquito repellents, stable horses at dawn and dusk when mosquitoes are most active) are the best methods of prevention. For high-risk populations, such as horses younger than 5 years and older than 15 years, more frequent vaccination may be indicated.1

According to the [Equine Disease Communication Center (EDCC)](http://equinediseasecc.org/), confirmed disease reports to-date suggest that some areas of the country may be at a higher-than-normal risk of infection due to wet conditions that provide prime mosquito breeding environments. The [EDCC](http://equinediseasecc.org/) is a great resource, particularly if you want to monitor disease in a location where you may be traveling to for a show or event.

**Don’t wait. Vaccinate.**

The good news is that horse owners have options for a safe and effective line of equine vaccines as part of their veterinarian's recommended total healthcare program. Prestige® vaccines have been shown to be effective against EEE, WEE and WNV and feature an exceptional safety profile – shown to be 98 percent reaction-free in field safety trials.[[4]](#endnote-4)

**Take-home message**

While there is no one-size-fits-all vaccination recommendation, it is important to work with your veterinarian to assess disease risk and to create a vaccination protocol that meets the needs of the individual horse. This provides a good opportunity to do a general health check and make sure your horse is at his best for the fall and winter season. For more information, visit [GetVaccinatingRight.com](http://www.getvaccinatingright.com/).

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1. AAEP Vaccination Guidelines (www.aaep.org) [↑](#endnote-ref-1)
2. Gibbs EPJ, Long, MT. Equine Alphaviruses. In: Infectious Diseases of Horses. Eds Sellon DC, Long MT. St. Louis: Saunders Elsevier. 2006:191-197. [↑](#endnote-ref-2)
3. Wilson JH, Davis A, Bender JB, Minicucci, LA. Residual Effects of West Nile Viral Encephalomyelitis in Horses. In: 49th Annual Convention of the American Association of Equine Practitioners, 2003, New Orleans, Louisiana, (Ed.) [↑](#endnote-ref-3)
4. Date on file. Merck Animal Health. [↑](#endnote-ref-4)