



Nine Tips to Keep Your Horse Safe from Pests

Did you remember to shut the lid on your feed barrel this morning? If not, you could be welcoming pests in for a tasty snack. As a horse owner, keeping your horse safe and healthy is a number one priority. Sometimes, just a couple of changes can help keep your horse safe from disease and infection caused by pests.

1. Vaccinate your horse.

This sounds simple, but there are horses that are not up-to-date on their vaccinations. Check with your equine veterinarian to make sure you are not missing any critical vaccinations.

One combination vaccine* helps prevent four of the five diseases for which the AAEP recommends all horses be vaccinated.^{1,2} RECOMBITEK® rWNV-EWT uses advanced technology to help aid in the prevention of West Nile virus (WNV), and combines with inactivated Eastern Equine Encephalomyelitis (EEE), Western Equine Encephalomyelitis (WEE) and tetanus toxoid.

Although rare in horses, rabies should not be ignored because the disease is almost always fatal for the animal that shows clinical signs. Vaccinate your horse each year with IMRAB®, a worldwide leader in rabies prevention. Rabies is usually transmitted through saliva when an infected animal bites an uninfected animal.³ Horses infected with rabies may show numerous signs, including a loss of appetite, depression, lack of coordination, aggressive behavior and paralysis.⁴

2. Maintain fresh and clean water.

Pesky mosquitoes, known to breed in standing water, can transmit dangerous diseases to your horse. Most notably, mosquitoes are known to be carriers of WNV and EEE, which mosquitoes contract after biting an infected bird.⁵ Both potentially deadly diseases affect the central nervous system, and may present clinical signs including facial or limb paralysis, muscle twitching and impaired vision.⁵

3. Protect feed.

Equine Protozoal Myeloencephalitis (EPM) is considered the leading cause of neurologic problems today – almost every part of the country has reported cases of EPM.⁶

More than 50 percent of all horses in the United States may have been exposed to the protozoal parasite called *Sarcocystis neurona*, the organism that causes EPM,⁶ which is spread by the feces of the definitive host – the opossum.⁶ The horse can be infected while grazing, eating contaminated feed, or drinking contaminated water.

Contact your veterinarian if you notice signs of EPM, which can include incoordination, abnormal gaits and lameness, weakness, muscle atrophy, paralysis of muscles of the eyes, face or mouth, difficulty swallowing, seizures or collapse, abnormal sweating, loss of sensation along the face, neck or body, and/or head tilt with poor balance.⁶ MARQUIS® (15% w/w ponazuril) Antiprotozoal Oral Paste can help a horse recover from this disease and stop the infecting parasite from inflicting further damage to the central nervous system.⁷

4. Keep insects at bay.

The best known and most often used protection from mosquitoes and other flying insects is fly spray. There are many types on the market, with a wide variety of ingredients. The one that will work best depends on the horse, use, location, and type of mosquito causing the problem. Rotation between different types may help prevent resistance and maintain effectiveness. Make sure that if you rotate that it is based on different active ingredients rather than different manufacturers.⁸

5. Discourage scavengers.

Clean up any dropped grain immediately to discourage scavengers and limit exposure to areas with high concentrations of wild animals like skunks and raccoons. Though all mammal species are capable of contracting and spreading rabies,³ these are two of the most prevalent carriers. Good horsekeeping practices will discourage unwanted visitors like opossums from contaminating hay, grain and bedding.⁶

6. Restrict your horse's grazing near bodies of water.

Unlike other insect-borne diseases such as WNV and EEE, Potomac Horse Fever (PHF) is not caused by the insect actually biting a horse, but by the horse ingesting infected aquatic insects such as damselflies, caddisflies and mayflies.⁹ These insects can typically be found near rivers or creeks, but horses may also ingest them through water buckets or hay.⁹ Though difficult to diagnose due to its similarities to other diseases, clinical signs of PHF can include fever, decreased intestinal sounds and diarrhea. Further, 40 percent of horses diagnosed with PHF subsequently develop laminitis.¹⁰ Consult your veterinarian about using POTOMAVAC™ to help protect horses against PHF.¹¹

7. Watch for ticks.

Horses are highly susceptible to Lyme disease, which is transmitted in the U.S. through bacteria carried by deer ticks and black-legged ticks.¹² Lyme disease is difficult to diagnose because of ambiguous and varied clinical signs of the

disease – including limb lameness, weight loss, low-grade fever, generalized stiffness, hypersensitivity to touch and poor performance¹³ – resulting in no definitive statistics regarding the number of horses impacted by Lyme disease. It's still possible to defend your horse against the disease by using a fly spray that has been proven effective on ticks generously, especially on your horse's legs. Evaluate your horse daily and manually remove ticks, if needed.¹⁴

8. Stay informed about potential diseases.

Outbreak Alert, a free online resource created by Merial, tracks confirmed cases of PHF, influenza, WNV, rabies, EEE, WEE and Equine herpesvirus around the country. Horse owners and veterinarians can check www.outbreak-alert.com to view a map of reported cases and sign-up to receive free notification emails or texts when diseases are confirmed in their geographic area or in an area where they may be traveling.

9. Talk to your vet.

Equine veterinarians are the experts when it comes to your horse's health. In 2011, only 53.8 percent of horse owners had veterinary visits for their horses.¹⁴ Contact your veterinarian if your horse is overdue for a visit.

*Following initial two-dose series for unvaccinated horses.

IMPORTANT SAFETY INFORMATION: *The safe use of MARQUIS in horses used for breeding purposes, during pregnancy, or in lactating mares, has not been evaluated. In animal safety studies, loose feces, sporadic inappetence, lost weight, and moderate edema in the uterine epithelium were observed.*

¹ RECOMBITEK rWNV-EWT product label.

² Core Vaccination Guidelines. *American Association of Equine Practitioners*. Accessed June 10, 2015 from <http://www.aaep.org/info/core-vaccination-guidelines>.

³ How is Rabies Transmitted? *Centers for Disease Control and Prevention*. Accessed June 10, 2015 from <http://www.cdc.gov/rabies/transmission/index.html>.

⁴ Overview of Rabies. *Merck Veterinary Manual*. Accessed June 23, 2015 from http://www.merckvetmanual.com/mvm/nervous_system/rabies/overview_of_rabies.html?qt=&sc=&alt.

⁵ Eastern Equine Encephalitis & West Nile Virus. *New Hampshire Department of Health and Human Services*. Accessed June 10, 2015 from <http://www.dhhs.nh.gov/DPHS/cdcs/arboviral/index.htm>.

⁶ EPM: Understanding this Debilitating Disease. *American Association of Equine Practitioners*. Accessed June 10, 2015 from <http://www.aaep.org/info/horse-health?publication=752>.

⁷ Reed S. Neurology is Not a Euphemism for Necropsy: A Review of Selected Neurological Diseases Affecting Horses. *AAEP Proceedings*. 2008:78-109.

⁸ Lord C, Connelly R. Protecting Florida Horses from Mosquitoes. *University of Florida*. Accessed June 10, 2015 from [http://desoto.ifas.ufl.edu/pdf/Insects/Protecting%20Florida%20Horses%20From%20Mosquitoes%20%20IN18100\[1\].pdf](http://desoto.ifas.ufl.edu/pdf/Insects/Protecting%20Florida%20Horses%20From%20Mosquitoes%20%20IN18100[1].pdf).

⁹ Wilson JH, Pusterla N, et al. Incrimination of mayflies as a vector of Potomac horse fever in an outbreak in Minnesota. *AAEP Proceedings*. 2006;52:324-328.

¹⁰ Lenher E. Potomac Horse Fever. *American Association of Equine Practitioners*. Accessed June 10, 2015 from <http://www.aaep.org/info/horse-health?publication=742>.

¹¹ Merial trial ER-8-88-2.

¹² Lyme disease. *American Lyme Disease Foundation, Inc*. Accessed June 10, 2015 from <http://aldf.com/lyme-disease/>.

¹³ Grenager N. What We Know About Lyme Disease in Horses. *Woodside Equine Clinic*. Accessed June 10, 2015 from <http://www.woodsideequineclinic.com/uploaded/files/What%20We%20Know%20About%20Lyme%20Disease%20in%20Horses.pdf>.

¹⁴ Burns K. (Jan. 16, 2013) Vital Statistics. *JAVMA News*. Accessed June 10, 2015 from <https://www.avma.org/News/JAVMANews/Pages/130201a.aspx>.

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