

What Texas Horse Owners Should Know about Equine Piroplasmosis

What is equine piroplasmosis?

- Equine piroplasmosis (EP) is a tick-borne disease that affects horses, mules, donkeys and zebras. It is caused by the protozoal blood parasites Babesia caballi or *Theileria equi*. There can be several nonspecific clinical signs, including weakness, incoordination, fever, loss of appetite, colic, poor tolerance for exercise, anemia, jaundice (yellowing) of mucous membranes, swollen abdomen, labored breathing, dark red or dark yellow urine, tearing and swelling of the eye lids, and sometimes death. Mild cases are sometimes difficult to diagnose.
- The incubation period of the disease is 7 to 21 days. Clinical signs may last 8 to 12 days, and horses may die within 24 to 48 hours after the first signs appear. Horses may remain carriers of the disease for as long as 4 years, or for life in the case of T. equi.
- Although EP is transmitted primarily by ticks, it can be transmitted across the placenta from mare to unborn foal. It also can be transmitted between horses during blood transfusions and when dirty needles or surgical equipment are used.

Why is EP important?

- EP affects large numbers of equine species in many parts of the world. The U.S. was declared free of the disease in 1988, but new cases were reported in Florida in 2008, in Missouri in 2009, and in Texas and several other states in 2010. EP is considered a foreign animal disease and must be reported to state and federal animal health officials, so horse owners need to be familiar with the symptoms.
- Since the 2010 outbreak in South Texas, many states have imposed import restrictions on horses from Texas. Diagnostic testing may be required when horses are moved out of state. Horse owners should plan ahead so there is ample time to complete this testing and file all required paperwork.

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Are there diagnostic tests or vaccinations for this disease?

- Approved/certified laboratories can analyze blood samples to diagnose EP. There are nine laboratories approved for EP testing in the U.S. The only two in Texas are the Texas Veterinary Medical Diagnostic Laboratories in College Station and Amarillo. The National Veterinary Services Laboratory is the only laboratory approved for testing animals with clinical signs of the disease and for certifying animals for export from the U.S.
- There are no vaccines for EP. The only way to protect horses is to use the recommended management practices outlined below and to test at-risk horses.

Are there restrictions on transporting my horses to events, races or breeding farms?

- Horses on quarantined premises cannot be moved off the premises. The Texas Animal Health Commission requires that infected horses be permanently identified.
- Non-quarantined horses are free to move within Texas. However, certain events and facilities (such as race tracks) may require that horses have veterinary inspections, negative EP tests, or insecticide treatments for ticks.
- States that have imposed restrictions on horses from Texas have varying requirements for testing and documentation. Contact your veterinarian or local animal health officials to find out what the requirements are for entering other states.

How can I protect my horses from getting EP?

- The most important management practice is controlling ticks in all areas where horses might come in contact with them. Inspect horses for ticks daily. If ticks are found, remove them and spray horses with an approved synthetic pyrethroid product.
- Avoid comingling horses with other horses of unknown origin.
- Avoid housing horses in areas known to have problems with EP.
- Use only horses that have tested negative for EP as blood donors.
- Use a new, sterile needle and syringe for each injection. Clean and thoroughly disinfect all dental, tattoo and surgical equipment used on horses.
- Contact your veterinarian if your horse is sick and showing signs of fever, poor appetite, or lethargy.

For more information:

U.S. Department of Agriculture, Animal and Plant Health Inspection Service/Veterinary Services, National Animal Health Programs www.aphis.usda.gov/animal health/

Texas Animal Health Commission www.tahc.state.tx.us/

Radostits, O.M., C.C. Gay, K.W. Hinchcliff and P.D. Constable. 2007. *Veterinary Medicine*, 10th edition. Elsevier. pp. 1483–1497.

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