



Equine Infectious Anemia in Louisiana

The Educated Horseman: Management Series



Equine Infectious Anemia, commonly referred to as “swamp fever,” due to its prevalence in Gulf Coast states, is an infectious viral disease that affects livestock only of the Equidae family (horses, mules, donkeys and zebras). EIA can present itself in three different degrees of infectiousness: acute, chronic or inapparent. The acute form is the most damaging and the most difficult to diagnose. This form is often associated with the first exposure to the virus and may cause fever and small areas of hemorrhaging on the mucus membranes within seven to 30 days after exposure. If the horse survives the acute stage of EIA, it may progress and develop chronic symptoms of the disease: fever; small patches of hemorrhages on the mucus membranes; depression; weight loss; swelling of legs and abdomen; and anemia. Most horses are inapparent carriers of EIA and appear normal, displaying no clinical abnormalities associated with infection; however, these horses are lifelong carriers of the virus.

EIA transmission

Transmission of the EIA virus from one horse to another is typically caused by the transfer of blood by blood-sucking insects or by using blood-contaminated materials on different horses. Many epidemics of EIA have been linked to the reuse of hypodermic needles or nonsterile surgical equipment. The most significant transmitters of EIA are horseflies and deerflies, but other blood-sucking insects like mosquitoes and gnats can spread the virus as well. It is thought that horses in the acute stage of infection are the major sources of transmission. Research done at Louisiana State University has shown that a single horsefly can transmit the infection from a horse in the acute stage of EIA to another horse.

Diagnosis

Diagnosis of EIA was not possible until the 1970s, when Dr. Leroy Coggins developed a serologic agar-gel immunodiffusion test, now commonly known as the Coggins test. More recently, enzyme-linked immunosorbent assays (ELISA tests) have reduced the time for a lab result from 24 hours to less than one hour. Accurate testing allows timely identification of infected animals and removal of those animals from herds, which potentially prevents the spread of the disease.

Louisiana Requirements

EIA regulations vary from state to state. In Louisiana, all horses are required to have a Coggins test performed annually. Foals are required to be tested no later than one year after the foal is born. Animals testing positive for EIA in Louisiana must be euthanized or sold for slaughter only. All animals located within 200 yards of an animal testing positive for EIA are subject to quarantine and require a minimum 30-day negative test before a quarantine release can be issued. Additionally, horses sold in Louisiana must have a negative test within six months of the transfer date.

Currently there is no effective treatment, cure or vaccine for EIA. Although the survival rate of horses infected with EIA is high, those animals become lifelong carriers and threaten the health of their offspring and other horses. To diminish the effect this contagious disease has on the general horse population, it is important for owners to follow their state’s regulatory laws and to implement proper biosecurity practices.

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Author

Neely Walker, Ph.D.
Associate Professor (Equine Specialist)
School of Animal Sciences, LSU AgCenter

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William B. Richardson, LSU Vice President for Agriculture
Louisiana State University Agricultural Center, Louisiana Agricultural
Experiment Station, Louisiana Cooperative Extension Service and
LSU College of Agriculture

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