

# Ask A Vet: A Serious Viral Disease with No Vaccine and No Cure

*Sunday, January 1, 2017*

Dear Dr. Weldy's,

I sold several horses this fall and needed them Coggins tested. What is this test for and why is it so important for sales and interstate movement.

-Curious Reader

Dear Reader,

That is a great question that is frequently asked and it is important that you understand why this testing is required by state and federal law in the United States and in many countries around the world. The Coggins test detects Equine Infectious Anemia or Swamp Fever as it is sometimes called. Before the test was developed and put into wide use in the 1970's this disease killed many thousands of horses annually. When testing began it was thought that it would eradicate EIA but researchers soon learned that there are enough carrier horses that show no clinical signs of the disease to continually seed the problem.

There is no useful vaccine and no cure for EIA which is caused by an equine specific lentivirus in the retrovirus family. The human HIV virus which causes AIDS is also a lentivirus which helps explain the difficulty in developing an effective vaccine for EIA. Equine Infectious Anemia does not pose a threat to humans as it is specific to the equine species. It is spread by biting insects, especially the horse-fly and deer-fly that cause pain with the bite and draw a considerable volume of blood, then quickly fly to another horse when the animal reacts. EIA can also be spread by saliva, milk, body secretions, and recycled needles and contaminated surgical equipment. The virus can live up to four hours in the carrier and mares can transmit the disease to their foals through the placenta. Horses can die suddenly with fever, swelling in the lower abdomen and legs, weakness and anemia or they can survive and become normal appearing carriers that must be tested and removed from the horse population to avoid transmission to healthy equids (horses, ponies, donkeys, mules, and other members of the equine family).

Two serology tests are currently used to diagnose EIA, the internationally accepted AGID Coggins test and the ELISA antibody test. The ELISA test can be done in minutes but has a higher rate of false positive results. The AGID Coggins test takes 1-2 days to complete and is used to confirm positive ELISA results before regulatory action is taken. The AGID Coggins test is used for horses that are subject to export at our area sales as many animals from here go to Canada.

Equine Infectious Anemia has no specific treatment and the virus persists in the infected horse for life. These infected animals pose a high risk to the equine industry and the lack of the ability to effectively vaccinate or treat them makes the current strict testing program necessary.

-Dr. Jerry Sellon