Equine infectious anemia (EIA) is a potentially fatal blood-borne infectious viral disease that produces a persistent infection among equids nearly worldwide. Although the disease has been recognized for centuries, its prevalence began to rise in the 1930s and reached its destructive peak in the United States between the ’60s and ’70s. In 1975 - 10,371 cases of EIA infection were detected. Today, the majority of equids found with the infection are inapparent carriers, showing no outward signs of disease, and are usually found when testing is required for movement or congregation.

The most common vectors for spreading EIA are biting flies, or tabanids, particularly horseflies. These large blood feeders can carry virus-bearing blood on their mouthparts from an infected horse to others. It is possible though for humans to spread the disease through the use of tools that may come into contact with blood (needles and dental equipment mostly).

If a horse becomes infected, the clinical signs of disease can vary dramatically, from an acute infection with slight to high fever for a few days and perhaps small hemorrhages, to progressive weakness, weight loss, depression, and disorientation. Some cases are characterized by rapid death, but EIA fatalities are not commonly encountered in the horse population today. There is no vaccine or treatment for the disease, and it is often difficult to differentiate EIA from other fever-producing diseases, including influenza and equine encephalitis. The most commonly diagnosed form of the disease is the chronic form, in which the individual has repeated fever episodes and develops other clinical signs including dependent edema (swelling), weight loss, and severe anemia. In horses with the chronic form of the disease, the virus takes up permanent residence in a horse’s tissues, and the horse is always infectious to others, although the virus concentration in blood is much higher in horses with clinical disease. EIA also has an inapparent form; affected horses might only show a slight fever for a day or be totally without clinical signs of the infection.

EIA was difficult to diagnose and identify until 1970, when the agar-gel immunodiffusion test, commonly known as the “Coggins test,” was developed. More recently, enzyme-linked immunosorbent assays (ELISA tests) reduced the time for a lab result from at least 24 hours to less than one hour. These blood tests can confirm the diagnosis of EIA.  Only approved laboratories can perform the EIA test in the United States and Canada. Accurate tests allow us to identify and remove positive reactors from herds and stop the spread of EIA among tested populations. Every positive case of EIA is reported to the Canadian Food Inspection Agency, and a contact trace is performed by the government. Categories of horses that may require testing may include horses going to competitions, going to auction or other horse sales, during a change of ownership or horses that are being moved to another country. Coggin’s test are valid for 6 months from the day they are taken.

As there is no known treatment for EIA and infected horses become lifelong carriers posing a risk to other horses, any horse confirmed positive for EIA must be quarantined and isolated 200 yards away from all other horses. This facility must be approved by the governing body. If appropriate isolation is not available, the government will mandate that the owner euthanize the horse.

Today, the wide availability of the EIA tests, laws and regulations that control movement of equids, and universal precautions taken to avoid spreading contaminated blood to other horses have reduced EIA disease incidence to a manageable level. Horse population losses in the United States dropped from thousands a year in 1975 to minimal losses today. The situation is much the same in Canada. Many recent outbreaks have been traced to transmission by man, especially where needles have been reused. These recent outbreaks remind us to adhere to universal precautions to reduce the role of man in transferring blood-borne pathogens in horses.

Furthermore, not all equid populations are tested regularly. This increases the chances that the virus could be lurking in reservoirs in an unknown number of inapparent carriers that have not yet been identified through testing.

In order to prevent EIA infection, horse owners are encouraged to:

* **Require proof of a recent negative Coggins test at time of purchase or for new horses entering the premises.** Require an EIA test for horses which have spent time at a premise where EIA-positive horses have been identified.
* **Only participate in events that require evidence of a negative Coggins test** for every horse entering the event to prevent disease introduction and spread.
* **Practice good fly control** by regular mucking of stalls, proper disposal of manure away from horse stabling areas and use of fly sprays or natural predators to minimize fly presence.
* **Use a sterile needle and syringe for all injections or treatments.**
* **Disinfect any surgical or dental equipment** thoroughly between horses. Remove all debris and blood with soap and water before disinfection.
* **Use a sterile needle each time when puncturing a multi-dose medication bottle.** Consult a veterinarian to demonstrate how to use sterile technique when drawing up medications.
* **Separate** horses with fevers, reduced feed intake and/or lethargy from your other horses and contact your veterinarian